# City of Minot

Regular City Council Meeting
Monday, April 15, 2024, at 5:30 PM
City Council Chambers, City Hall (10 3rd Ave SW)
Any person needing special accommodation for the meeting is requested to notify the City
Clerk's office at 857-4752.

1. ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. MAYOR'S REPORT

4. CITY MANAGER'S REPORT

   Documents:

   4-15-2024 CITY MANAGER REPORT.PDF
   03-MARCH 2024 MONTHLY.PDF

5. CONSIDER THE REPORT OF THE PLANNING COMMISSION

   Documents:

   4 (APR) RECOMMENDATIONS 2024.PDF

   5.1. PUBLIC HEARING: ANNEXATION & ZONING MAP AMENDMENT - CHS INC.
        Presented by Doug Diedrichsen

        Public hearing request by Scott McClelland representing CHS, Inc., owner for a
        request of zone change and annexation for Outlots 26 & 27 of the north half of the
        southwest quarter less highway right-of-way Section 21, Township 155, Range 82 and
        Outlot 28 and the West half of Outlot 29 lying in the southeast quarter less highway
        right-of-way Section 21, Township 155, Range 82, County of Ward, North Dakota.  The
        purpose of the request is the construction of a new truck maintenance facility to
        replace the existing facility.

        The subject property address is 4815 Burdick Expressway East and three (3)
        unaddressed parcels to the west of that address.

        **It is recommended City Council approve the following in alignment with the
        Planning Commission recommendation:**

        1. **An ordinance on first reading for a zoning map amendment; and**

        2. **An ordinance on first reading to annex the subject property.**

Documents:

5.2. PUBLIC HEARING: TEXT AMENDMENT - 2024 SPRING ORDINANCE CLEAN-UP
Presented by Doug Diedrichsen

Public hearing request by Brian Billingsley, Community Development Director for a text amendment to the Land Development Ordinance of the City of Minot. The proposed code changes pertain to the following sections: Table 9.1-2 to allow additional sign square footage for building with five (5) or more stories in the "CBD" Central Business District and "P" Public District, Section 4.1-6 C clarifying language regarding Sales or Service of Industrial, Agricultural, and Construction Equipment and Semi-Trucks; Section 10.3-13. B. 3. Clarifying language regarding public utilities easements. Chapter 2.3. Adding a definition for Pet Overnight Boarding Facilities (Up to 5) and Pet Overnight Boarding Facilities (6+), use categories will be added to the Use Table in the Minot Land Development Ordinance for both of these new uses; Section 4.1-6. N-O clarifying language concerning Kennels and Veterinary Clinics with Overnight Boarding Facilities and adding language regarding Pet Boarding Facilities.

**It is recommended City Council approve an ordinance on first reading for a zoning text amendment in alignment with the Planning Commission recommendation.**

Documents:

6. CONSENT ITEMS

6.1. CITY COUNCIL MINUTES
**It is recommended City Council approved the minutes of the April 1, 2024, Regular City Council meeting and the April 9, 2024, Board of Equalization meeting.**

Documents:

6.2. ORDINANCES
**It is recommended City Council approve the following ordinances on second reading:**

1. **Ordinance No 5952 - 2024 BA - 2024 Watermain Replacement Award of Bid**

2. **Ordinance No 5953 - 2024 BA - Hydro-Excavator Jetter**

3. **Ordinance No 5954 - 2024 BA - Transit Transfer Center (2023660001)**

4. **Ordinance No 5955 - Yield Signs to Stop Signs - Multiple Locations**

Documents:

6.3.  ADMINISTRATIVE APPROVALS

**It is recommended City Council ratify the following Administrative Approvals.**

Documents:

6.4.  GAMING SITE AUTHORIZATION – RENEWALS

**It is recommended City Council approve the gaming site authorization for the following organizations to conduct games of chance during the license year of July 1, 2024 through June 30, 2025 at the following locations:**

**Beulah Convention & Visitors Center**
- **Comfort Suites (601 22nd Ave SW)**
- **Uncle Maddio's Pizza (3310 16th St SW #100)**

**Prairie Grit Adaptive Sports**
- **Sammy's Pizza (400 N Broadway)**
- **Applebee's (2302 15th St SW)**

**Aggie Foundation**
- **Off the Vine (15 S Main St)**
- **Arny's 2.0 (12 3rd St SE)**
- **Best Kept Secret (2400 10th St SW)**

**Minot Junior Golf Association**
- **Bootlegerz (515 20th Ave SE Suite 2B)**
- **Rangers Lounge (1218 S Broadway)**
- **Capri Bar (2030 Burdick Expwy E)**
- **Dakota Lounge (1525 31st Ave SW)**
- **Lucky Strike Casino (1901 N Broadway)**

**MSU Beaver Boosters Inc.**
- **Sports on Tap (220 S Broadway)**
- **Poor Farm (201 37th Ave SW)**
- **Lamplighter Lounge (200 16th St SW)**

Documents:

6.5.  MINOR SUBDIVISION PLAT: COMMERCIAL WEST 2ND ADDITION
Presented by Doug Diedrichsen, Principal Planner

**RECOMMENDED ACTION**

**It is recommended City Council approve a minor subdivision plat in ATTACHMENT A to create Commercial West 2nd Addition.**

Documents:

6.6. AUTHORIZE ADVERTISEMENT FOR AUCTION/DEMOLITION OF FLOOD BUYOUT PROPERTIES
Presented by Chris Plank

**RECOMMENDED ACTION**

**It is recommended City Council authorize advertisement for auction and/or demolition of the property located at 1623 8th Ave SE, Minot, ND 58701.**

Documents:

6.7. 2024 STRUCTURE DEMOLITION/SITE RESTORATION CONTRACT AWARD – 309 1ST AVE NE
Presented by Chris Plank

**RECOMMENDED ACTION**

**It is recommended City Council approve and authorize the Mayor to sign a contract with Dig It Up Backhoe Services, Inc. for structure demolition /site restoration located at 309 1st Ave NE, Minot ND 58701 in the amount of $32,400.**

Documents:

6.8. FY2023 LOCAL EDWARD BYRNE JUSTICE ASSISTANCE GRANT
Presented by Captain Justin Sundheim

**RECOMMENDED ACTION**

1. **It is recommended City Council approve the acceptance of the FY 2023 Local Edward Byrne Memorial Justice Assistance Grant (JAG);**

2. **Authorize the Mayor to sign the Memorandum of Understanding;**

**and**

   3. **Pass an ordinance to amend the 2024 annual budget to increase the Police Department operation supplies and capital revenues and expenditures for the FY2023 Edward Byrne JAG Grant.**

Documents:

6.9.  CONSULTING ENGINEERING - PRAIRIE ENGINEERING TASK ORDER (4782)
      Presented by Stephen Joersz

**RECOMMENDED ACTION**

   1. **It is recommended City Council approve a task order for Prairie Engineering to provide engineering support services for street lighting and traffic signals as requested by the Engineering Department;**

   2. **Approve a task order for Prairie Engineering to provide construction engineering services for Street Lighting District 65; and**

   3. **Authorize the Mayor to sign the task orders.**

Documents:

6.10.  NDDOT COMMUNITY WAYFINDING AGREEMENT
      Presented by Stephen Joersz

**RECOMMENDED ACTION**

**It is recommended City Council approve the Community Wayfinding Agreement with the North Dakota Department of Transportation; and authorize the Mayor to sign the agreement.**

Documents:

6.11.  CORRECTED RATES AND CHARGES RESOLUTION
      Presented by Jennifer K, Eckman, Airport Director

**RECOMMENDED ACTION**

**It is recommended City Council approve the corrected rates and charges resolution and authorize the Mayor to sign the corrected resolution.**

Documents:

1. CORRECTED 2024 AIRPORT RATES AND CHARGES RESOLUTION - COUNCIL MEMO.PDF
1 - AIRPORT RATES AND CHARGES CORRECTED RESOLUTION 2024.PDF
1. AIRPORT RATES AND CHARGES CORRECTED RESOLUTION 2024 - REDLINE.PDF

6.12. PROPERTY MAINTENANCE SMALL ARTICULATING LOADER – BUCKET EXCHANGE (4768)
Presented by Jason Sorenson

**RECOMMENDED ACTION**

1. **It is recommended City Council approve the exchange of the small articulating loader winged blade attachment for a bucket attachment; and**

2. **Approve a budget amendment allocating funds for the trade-in value and the purchase of the bucket attachment.**

Documents:

4748 - MEMO TO COUNCIL - SMALL LOADER - BUCKET EXCHANGE.PDF
21. 2024 BA - ARTICULATING LOADER TRADE IN.PDF

7. ACTION ITEMS

7.1. USED FIRE ENGINE BUDGET REQUEST
Presented by Kelli Kronschnabel, Fire Chief

**RECOMMENDED ACTION**

1. **It is recommended City Council approve the purchase of a used fire engine and waive the City of Minot procurement requirements; and**
2. **Approve a budget amendment of $400,000 for the purchase and up fit of a used fire engine on first reading.**

Documents:

BUDGET MEMO FOR RESERVE ENGINE.PDF
23. 2024 BA - USED FIRE ENGINE.PDF

7.2. CAPITAL PURCHASE OF 2025 FORD POLICE UTILITY INTERCEPTORS FROM STATE BID
Presented by Captain Justin Sundheim

**RECOMMENDED ACTION**

1. **It is recommended City Council authorize the purchase of five (5) 2025 Ford Interceptor Utility vehicles using the North Dakota State Contract for a purchase amount of $235,644.75; and**

2. **Approve the proposed ordinance to amend the 2024 annual budget to increase the police capital equipment expenditures for the purchase of patrol vehicles, using fund cash reserves on the first reading.**

Documents:

PATROL VEHICLES FY2024 PURCHASE.PDF
22. 2024 BA - POLICE INTERCEPTOR SUVS.PDF
MINOT PD SSP7-7 K8A GAS 25MY QUOTE.PDF
NELSON AUTO CONTRACT SUMMARY.PDF
376 377 STATE CONTRACT SUMMARY (1).PDF

7.3. APPOINTMENT OF PUBLIC WORKS OPERATIONS DIRECTOR
Presented by Tom Joyce, Assistant City Manager

**RECOMMENDED ACTION**

**It is recommended City Council approve the appointment of Bryan Banfill as the Public Works Operations Director.**

Documents:

COUNCIL MEMO APPOINTMENT OF PW OPERATIONS DIRECTOR.PDF

7.4. ADOPT MINOT HOUSING NEEDS AND MARKET ASSESSMENT STUDY
Presented by Brian Billingsley and Tom Leighton

**RECOMMENDED ACTION**

**It is recommended City Council adopt the Minot Housing Needs and Market Assessment Study as a supplement to the City's housing policy and direct staff to use its strategies as a work plan.**

Documents:

CC MEMO - HOUSING STUDY.PDF
MINOT HOUSING STUDY_FULL REPORT 04-02-2024.PDF

8. PERSONAL APPEARANCES

9. MISCELLANEOUS AND DISCUSSION ITEMS

9.1. CPSM STUDY PRESENTATION

**Representatives of CPSM will present the reports and provide an overview of their findings.**

**Staff contacts are:**

- **Harold Stewart, City Manager**
- **Chief John Klug (will be absent from the meeting)**
- **Chief Kelli Kronschnabel**

Documents:

MINOT.ND_FIRE ANALYSIS_DRAFT FINAL REPORT_04082024.PDF
MINOTPD_OPS_REPORT _FINAL_EDITED26FEB.PDF

10. LIAISON REPORTS

11. ADJOURNMENT

**TO:**        Mayor Tom Ross
                Members of the City Council

**FROM:**     Harold Stewart, City Manager

**DATE:**      April 15, 2024


**City Manager:**

Staff is in full budget preparation mode and that is the primary focus right now.  With the presentations of the Citizen Satisfaction Survey, the Housing Needs Study, the CPSM Police Assessment; and the CPSM Fire Assessment the Council and organization it well poised with valuable data and information to have some very meaningful and important conversations as part of the budget process.  With the identified needs, priorities, and cost inflations preparing the FY 2025 budget will include difficult conversations and decisions.

Meetings attended included: Internal Finance Budget Entry Training; Community Economic and Development Leaders Coordination meeting; Meeting with Excel Energy; ND Month of the Military Child Proclamation event; Public Works Director Finalist interviews; meeting with potential Airport QTA vendor; 2024 Flood Exercise (TTX); Alcohol Ordinance Review and Rewrite Committee; Tracks Communication meeting; meeting with the Minot Youth Soccer Association; KX News interview regarding 2023 Community Satisfaction Survey; meeting with local BSA Scout Committee; monthly update meeting with The Retail Coach; communication meeting with consultant on public Strategic Plan Development meetings; communication meetings with the Mayor; meetings with the Fire Department; Interview with KU public administration student; and various other project and internal staff meetings.

<div align="center">

**Public Works**
**Public Works Interim Director, Jason Sorenson**

</div>

**Public Works Admin:**

PW admin is working on the design of maintenance projects for 2024. This includes water main replacement, sewer lining, and storm sewer projects.

The MOA for NAWS Biota plant operations and maintenance is now signed by all parties.  Work has begun on the Biota Plant budget and how federal reimbursement will take place.  Discussion continues between City, DWR and DEQ on how Biota and Minot Water Plant will operate together and how compliance will be achieved and where.

Work continues on gathering info for the lead service line inventory.  This inventory is due in October of 2024 and will be the basis for lead testing and service line replacement.

The Utilities Director attended the weekly design and construction meeting for the various phases of flood control and NAWS that are under design and construction and provide input for the overall design and operation and long-term maintenance.


**Water Treatment Department:**

# Monthly Water Report For March 2024

| | |
|---|---|
| River Water Treated | 0 gallons |
| Well Water Treated | 167,977,000 gallons |
| Recycle Water | 8,593,000 gallons |
| Facility Water | 8,025,000 gallons |
| **Total Water Treated** | **184,595,000 gallons** |
| Pumped to City | 58,175,000 gallons |
| Pumped to NAWS | 112,169,000 gallons |
| Pumped Total | 170,344,000 gallons |

| | |
|---|---|
| AMMONIUM SULFATE | 5,640 pounds |
| CARBON DIOXIDE | 92,100 pounds |
| CHLORINE | 19,899 pounds |
| COAGULANT | 10,603 gallons |
| FLOURIDE | 8,108 gallons |
| LIME RECEIVED | 719,243 pounds |
| PHOSPHATE | 2,582 pounds |
| | |
| Waste Sludge | 121 loads |
| | 1502.00 tons |
| | |
| Bacteria Samples Taken | 50 total |
| | |
| Finish Water Turbidty | 0.070 NTU |

## WELL FIELD INFORMATION

| WELL # | Hours Run | Gallons per Minute | Gallons Pumped |
|---|---|---|---|
| 5 | 0.0 | | 0 |
| 6 | 0.0 | | 0 |
| 8 | 0.0 | | 0 |
| 11 | 739.2 | 282 | 12,507,000 |
| 12A&12B | 467.1 | 200 | 5,605,000 |
| 13 | 0.0 | | 0 |
| 14 | 0.0 | | 0 |
| 15 | 0.0 | | 0 |
| 16 | 739.2 | 300 | 13,306,000 |
| A | 0.0 | | 0 |
| B | 741.1 | 580 | 25,790,000 |
| C | 0.0 | | 0 |
| D | 506.8 | 1610 | 48,957,000 |
| E | 0.0 | | 0 |
| F | 511.0 | 2270 | 69,598,000 |

175,763,000

March 2024 Influent Raw Water
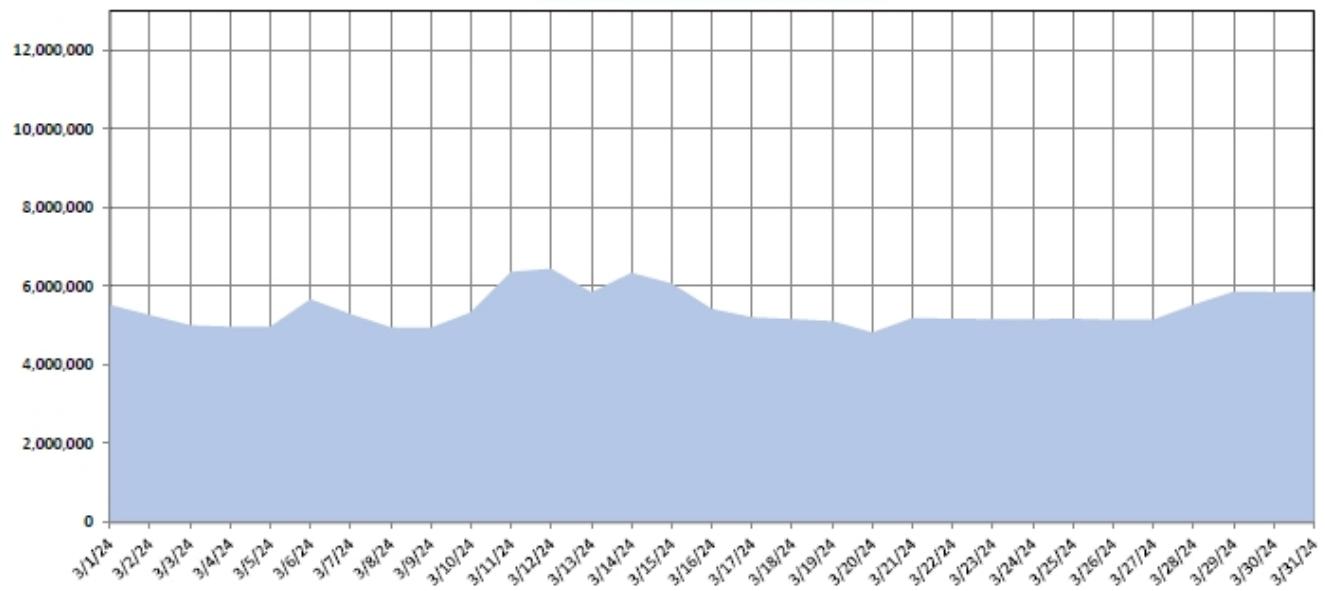
**Water/Sewer Department:**

## CITY OF MINOT
### 2024 Water & Sewer Monthly Report/Task vs. Objectives

| TASK | OBJECTIVE | Jan-24 | Feb-24 | Mar-24 | Apr-24 | May-24 | Jun-24 | Jul-24 | Aug-24 | Sep-24 | Oct-24 | Nov-24 | Dec-24 | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Meetings | | 14 | 21 | 23 | | | | | | | | | | 58 |
| Service Calls | 6,750 | 597 | 694 | 658 | | | | | | | | | | 1,949 |
| Inspections | 150 | | | | | | | | | | | | | 0 |
| After hours Calls (Foremen) | | 30 | 7 | 17 | | | | | | | | | | 54 |
| Lab Tests | 6,500 | 101 | 100 | 125 | | | | | | | | | | 326 |
| **Meters** | | | | | | | | | | | | | | |
| Install New Meters | 100 | 6 | 9 | 5 | | | | | | | | | | 20 |
| Meter Changes | 100 | 28 | 16 | 36 | | | | | | | | | | 80 |
| Delinquent Water Accounts | | 206 | 99 | 173 | | | | | | | | | | 478 |
| MXU Installations | 100 | 17 | 13 | 8 | | | | | | | | | | 38 |
| Locates: water/sewer/storm | 4,000 | 111 | 74 | 107 | | | | | | | | | | 292 |
| **Hydrants** | | | | | | | | | | | | | | |
| Hydrant Inspections | 1,150 | 0 | 0 | 0 | | | | | | | | | | 0 |
| Flow Hydrants(for sewer lines) | | 50 | 78 | 87 | | | | | | | | | | 215 |
| Install Hydrants | 15 | 0 | 0 | 0 | | | | | | | | | | 0 |
| Hydrant Repair | 180 | 4 | 2 | 3 | | | | | | | | | | 9 |
| Hydrant Flow Testing | | 0 | 0 | 0 | | | | | | | | | | 0 |
| Hydrant Meter Set | | 0 | 0 | 0 | | | | | | | | | | 0 |
| Hydrants Painted | | 0 | 0 | 0 | | | | | | | | | | 0 |
| **Water** | | | | | | | | | | | | | | |
| Curb Stop Maintenance | 40 | 5 | 5 | 6 | | | | | | | | | | 16 |
| Curb Box (riser repair) | 100 | 4 | 6 | 8 | | | | | | | | | | 18 |
| GV exercising/inspections | 2,000 | 0 | 10 | 65 | | | | | | | | | | 75 |
| Gate Valve Maintenance | 24 | 0 | 1 | 0 | | | | | | | | | | 1 |
| Gate Valve (riser repair) | 50 | 0 | 1 | 6 | | | | | | | | | | 7 |
| Gate Valves ON/OFF | | 10 | 23 | 19 | | | | | | | | | | 52 |
| Repair Water Main Breaks | 40 | 3 | 2 | 2 | | | | | | | | | | 7 |
| Service Taps | | 0 | 0 | 0 | | | | | | | | | | 0 |
| Service Leaks | | 1 | 0 | 3 | | | | | | | | | | 4 |
| Hydrastopping | 1 | 0 | 0 | 0 | | | | | | | | | | 0 |
| Haul Clay/dirt/gravel/snow | Days | 0 | 0 | 6 | | | | | | | | | | 6 |
| PRV Maintenance | 5 | 0 | 0 | 0 | | | | | | | | | | 0 |
| Install Insta-Valve | 1 | 0 | 0 | 0 | | | | | | | | | | 0 |
| **Sewer** | | | | | | | | | | | | | | |
| Televising (feet) | 60,500 | 200 | 100 | 150 | | | | | | | | | | 450 |
| Clean Sanitary Sewer (feet) | 140,000 | 4,367 | 4,990 | 4,457 | | | | | | | | | | 13,814 |
| Check/Flush Manholes | 5,000 | 236 | 424 | 557 | | | | | | | | | | 1,217 |
| Inspect Sewer Lift Stations | 2,080 | 612 | 609 | 617 | | | | | | | | | | 1,838 |
| Sewer Calls | | 5 | 2 | 0 | | | | | | | | | | 7 |
| Manhole Repair | 50 | 3 | 1 | 0 | | | | | | | | | | 4 |
| Repair Sewers (feet) | 30 | 0 | 0 | 0 | | | | | | | | | | 0 |
| Mowing/Snow Removal Hours | 6,000 | 8 | 10 | 8 | | | | | | | | | | 26 |

**Landfill/Sanitation:**

The following are totals for March 2024

Single Stream Recycling – 85.29 Tons

MSW – 5,479.76 Tons

Inert – 413.04 Tons

Lime – 1502.00 Tons

Trees – 355.77 Tons

Trees Given Away for Firewood – 10.95 tons

Total number of landfill tickets generated – 3069

March's gate collections were $249,633.88 compared to $246,530.12 in 2023. Tracking - 5268.87 from last year

There was a total of 35 C&D roll-off tanks set out for residential use

Sanitation – Pickup 809.89 tons of MSW in the month of March

**Vehicle Maintenance:**

Staff completed 182 work orders in March. 75(41%) were preventive maintenance and 107 (59%) were unscheduled maintenance repairs.

The parts and labor cost for March was $80,161.38.

Our Work Order Turnaround was 53% of work completed within 24 hours and 66% of all work orders were completed in under 72 hours.

**Transit:**



| | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2022 | 5,686 | 6,320 | 6,250 | 5,375 | 6,246 | 2,830 | 2,417 | 4,338 | 9,624 | 7,936 | 7,113 | 4,910 |
| 2023 | 7,827 | 7,256 | 7,775 | 7,095 | 7,609 | 3,380 | 2,064 | 4,998 | 10,165 | 7,730 | 7,720 | 6,444 |
| 2024 | 7,463 | 7,568 | 6,272 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
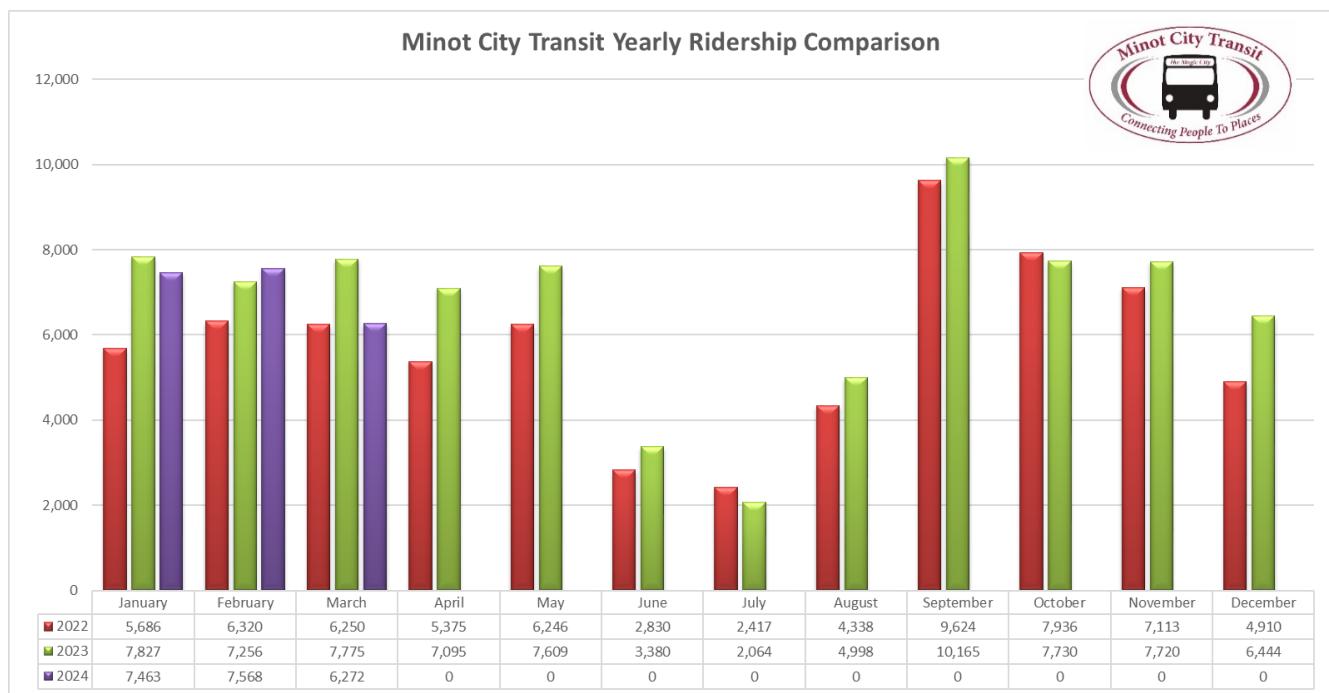
The transit transfer center project is progressing. NDDOT is currently reviewing the contract with Rolac and once they have approved it we will give the notice to proceed. The goal is to have the transfer center operational by September 1st.

Transit staff is in the process of finalizing the contract with TripSpark Technologies to provide the new fixed route software system.

Staff will also be working on writing specifications for a new Low-Floor Transit Bus to be purchased in 2024.

**Cemetery:**

# MONTHLY REPORT

Date: Mar-24
To: Jason Sorenson, Utilities Director
From:
Re: Monthly Report, Acct. #540

| LOT SALES | | | | | | |
|---|---|---|---|---|---|---|
| | REG | Flat Stone | 10 | | | |
| | REG | Monument | 4 | **Columbarium Niches** | | |
| | Niche | Top 3 | 2 | | % SOLD 72.22% | |
| | Niche | Bottom 3 | 0 | | | |
| | Infant | | 0 | | | |
| | | | | | TOTAL | 16 |
| | Sell Back | Reg | 0 | | | |
| | Sell Back | Monument | 1 | | | |
| | Sell Back | Col | 0 | | TOTAL | 15 |

| PERFORM INTERMENTS | Traditional | Cremation | Columbaria |
|---|---|---|---|
| WEEKDAY INTERMENT | 8 | 1 | 0 |
| SATURDAY INTERMENT | 2 | 1 | 0 |
| Social Service | 0 | 0 | |
| Infant | 0 | 0 | |
| | 10 | 2 | 0 |
| HOLIDAY/SUNDAY INTERMENT | 0 | 0 | |

| | | | |
|---|---|---|---|
| Cremation Percentage | 16.67% | TOTAL | 12 |

| SURCHARGES | | |
|---|---|---|
| 2nd Interment / Lot Reuse | | |
| | TOTAL | 0 |

| DISINTERRED | | | | TOTAL | 0 |
|---|---|---|---|---|---|
| | Prior Month Balance | Intake | Removed | | |
| VAULT STORAGE | 11 | 2 | -1 | TOTAL | 12 |

| WORK ORDERS | | Prior Balance | New | Closed | | |
|---|---|---|---|---|---|---|
| | Vase | 5 | 2 | 0 | OPEN | 21 |
| | Grounds | 1 | 0 | 0 | CLOSED | 78 |
| | Monument | 14 | 0 | 0 | | |

| MONUMENT/MARKER INSTALLATION | Single | Double | | |
|---|---|---|---|---|
| Flat | 0 | 0 | | |
| Monuments | 0 | 0 | | |
| Veteran | 0 | | TOTAL | |
| Vase/Yoke | | 0 | | 0 |

ITEMS OF NOTE:

*Started receiving applications for Seasonal positions

**Self Service Utilization Analysis from ADP Year to Date**

ADP's point-in-time snapshot of the City of Minot's self-service utilization by managers and employees, provides the HR department an overview of where there are opportunities for time and cost savings in some administrative functions for personnel information. This tool will be helpful as the department looks to improve in areas and initiatives in the future, such as staff training and engagement.

## Utilization Overview

This graphic compares the percent of changes made by your employees through self service with the percent of changes made by your HR practitioners.

Total
**2.3k**
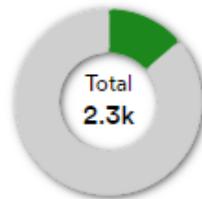
Self Service Changes
● **14%** (320)

Practitioner Changes
● **86%** (2,009)

## Estimated Current Savings

Based on the number of self-service changes made by your employees and the industry standard cost for HR practitioners to make those same changes, we estimate that you've already saved this amount during this time period.

| Self Service Changes | | Average HR Task Cost ❓ | | Estimated Savings |
|---|---|---|---|---|
| 320 | x | $4.51 | = | $1,443.20 |

## Opportunities to Save More

Every change your employees make through self service helps your HR practitioners save time and your organization save money.

Estimated Savings
**$1,443.20**

Estimated Opportunity ❓
**$9,060.59**

Top Saving Areas

Tax Withholdings ›
Emergency Contacts ›
Personal Info ›

Top Opportunity Areas

Employment Info ›
Employee Pay Rate ›
Personal Info ›

**Staff Training -** During the month of March staff conducted several training sessions for various teams and departments related to Team Building and understanding your Retirement programs. Mandatory training for Recognizing Sexual Harassment and Hostile Workplace has been scheduled for June 5th in the City Council Chambers. This training will be conducted by the City's EAP provider Supportlinc.

**Salary/Benefit –** The department has started the annual process for marking salary and benefits. This process will be completed over the next two months in preparation for Annual Pay Plan presentations to Civil Service, Employees and the Public conducted in the month of June. The survey includes a request for market data on 55 benchmark positions and has been forwarded to 15 comparable municipalities/counties for data, as well as 9 airports/airport authorities.

**Recruitment/Current Openings** HR Staff continue their efforts to recruit for the following positions: Economic Development Administrator, Public Works Operations Director, Fleet Management Services Superintendent, Light Equipment Operator, Heavy Equipment Operator, Bus Driver, Utility Operator, Project Civil Engineer, Engineering Technician, Intelligence Analyst, 911 Dispatcher, Police Officer, Engineer Intern, GIS Intern, Library Assistant and Metropolitan Planning Organization Director

**Assessor's Office**
**City Assessor, Ryan Kamrowski**

The following represents the City of Minot's real estate market based on a monthly and year to date basis. The numbers listed below are based on Normal Arm's Length Transactions as determined by extensive review by the City of Minot Assessor's office.

|  | March | | | Year to Date 2024 | | |
|---|---|---|---|---|---|---|
|  | Sales | Median | Average | Sales | Median | Average |
| Residential | 47 | $ 246,900 | $ 251,816 | 144 | $ 238,000 | $ 248,714 |
| Residential Vacant Land | 2 | $ 20,000 | $ 20,000 | 30 | $ 35,000 | $ 34,496 |
| Commercial | 5 | $ 547,500 | $ 622,900 | 16 | $ 571,250 | $ 1,088,532 |
| Commercial Vacant Land | 0 | $ 0 | $ 0 | 0 | $ 0 | $ 0 |

**Community Development Department**
**Director, Brian Billingsley**

**INSPECTIONS DIVISION:**

March 2024 Permit Information (March 2023):

- Total Permits Issued: 128 (220)
- Single-Family Homes: 2 (1)
- Multi-Family Permits: 0 (0)
- New Residential Permit: $347,000 ($174,000)
- Residential Remodels: $19,708 ($21,000)
- New Commercial: $5,864,000 ($0)
- Commercial Remodels: $2,600,000 ($1,159,000)
- Valuations of all Permits: $8,830.708 ($1,354,000)

Notable Building Permits:

- North Star Community C.U. – 2150 15$^{th}$ St. NW – $5,800,000
- H&K Properties – 2080 36$^{th}$ Ave. SW – $2,600,000

**PLANNING DIVISION:**

Planning Commission:

The Planning Commission had a meeting on March 5$^{th}$. All items were approved.

Development Review Team Meetings:

The Minot Development Review Team (DRT) held three (3) DRT meetings during the month of March:

- Walsh and Olson Storage Facility – Nedrose
- Noark Partner Twin Homes – 27$^{th}$ Street NW
- Culver's Drive-Thru Modifications – 3000 S. Broadway

Housing Study Update:

The housing study is on the April 16 city council meeting agenda.

Outdoor Dining Permits:

No permits were issued during the month of March.

Other Projects/Meetings:

- Director participated in one CDBG-DR/NDR meeting.
- Director attended two meetings on alcohol licensing.
- Planning and Inspections staff worked a booth at the Home and Garden Show on March 1-2.
- Director attended a meeting with the consultant hired to do the CDBG Entitlement Plan.
- Director attended two Ward County Commission meetings and one Minot Public School Board meeting to present amendments to the Renaissance Zone Development Plan.
- Director and Assistant City Manager attended the Governor's Main Street Awards ceremony in Bismarck.
- Director and Principal Planner attended a meeting with Souris Basin Joint Board and Minot Park District staff on MI-7.

March 2024

MINOT PUBLIC LIBRARY
CONNECT.ENRICH.INSPIRE

# Minot Public Library Activity Report

## 2024 vs 2023 Cardholders

Children: 4273 (2024), 4658 (2023)
Adult: 15710 (2024), 16093 (2023)

Legend: 2024, 2023

## Total Library Cards = 20,751

Adults (78.62...)
Children (21.3...)

# of Library cards deleted =2562
------------
# of Library cards added = 270

*Remainder of deletion of outdated cards all at one time to increase efficiency.*

## February Traffic 2010-2024

2010: 11409
2011: 11030
2012: 13000
2013: 12480
2014: 11054
2015: 10792
2016: 10557
2017: 11291
2018: 9994
2019: 11568
2020: 5408
2021: 12889
2022: 9044
2023: 9412
2024: 10370

March 2023 Data Usage = 66.14 Mbps

March 2024 Data Usage = 84.1Mbps

March 2023 Wi-Fi Usage =3228

March 2024 Wi-Fi Usage =2704

## 2023 - 2024 Digital Resource Usage

Digital Resources: 12118 (2023), 16641 (2024)

Legend: 2023, 2024

Children's Programs = 1018 (+171)
Teen Programs = 241(+45)
Adult Programs = 123 (-40)

## Library Programs

2023: Children 847, Teen 196, Adult 163
2024: Children 1018, Teen 241, Adult 123

Legend: Children, Teen, Adult

## February Computer Use 2016-2024

2016: 2248
2017: 2256
2018: 1798
2019: 1936
2020: 852
2021: 899
2022: 1095
2023: 1096
2024: 969

## 2024 Monthly Circulation
### Total =16,126

- J Books (48.46%)
- A/YA Books (31.42%)
- J Audio (1.06%)
- A/YA Audio (5.26%)
- AV Kits (0.55%)
- J DVDs (3.55%)
- Magazines (0.22%)
- A/YA DVDs (7.73%)
- MS/Tools/Other (1.74%)

7778
5043
170
845
89
570
35
1241
279
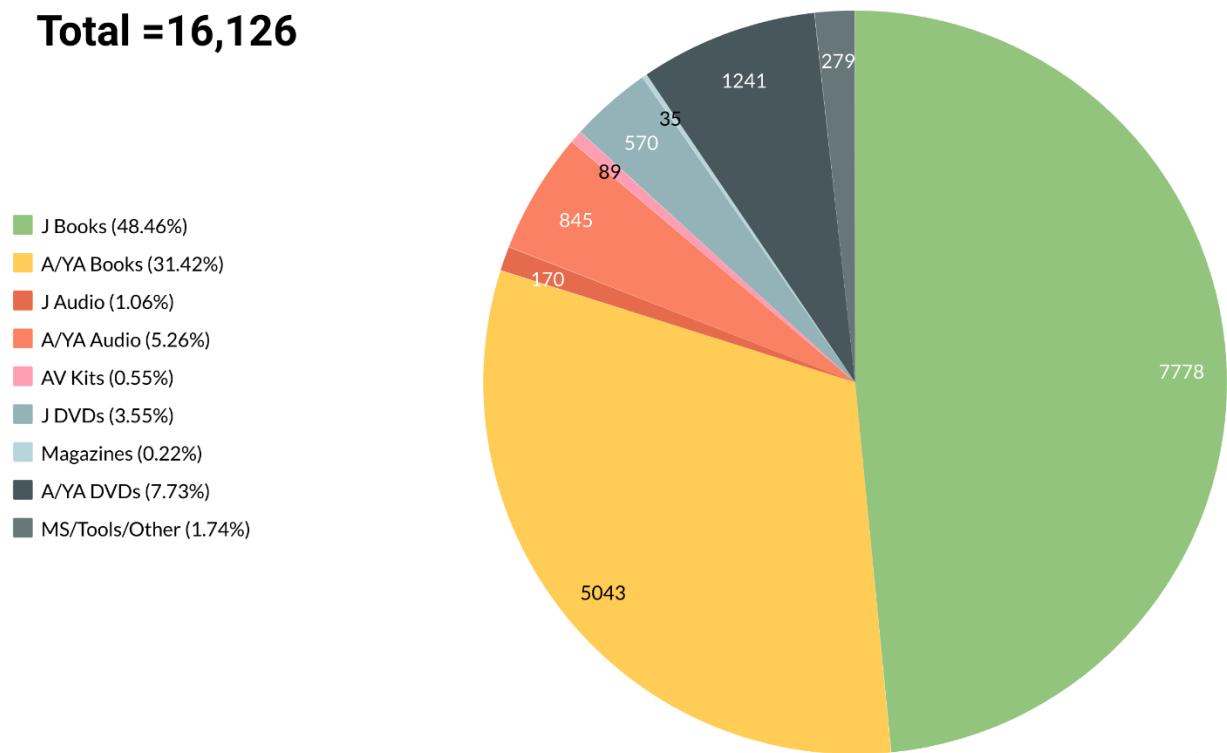
## 2023 Monthly Circulation
### Total =13,037

- J Books (46.41%)
- A/YA Books (35.45%)
- J CDs (0.68%)
- A/YA CDs (1.73%)
- AV Kits (0.56%)
- J DVDs (3.36%)
- Magazines (0.62%)
- A/YA DVDs (10.16%)
- MS/Other (1.02%)

6050
4622
89
73
438
81
1325
133
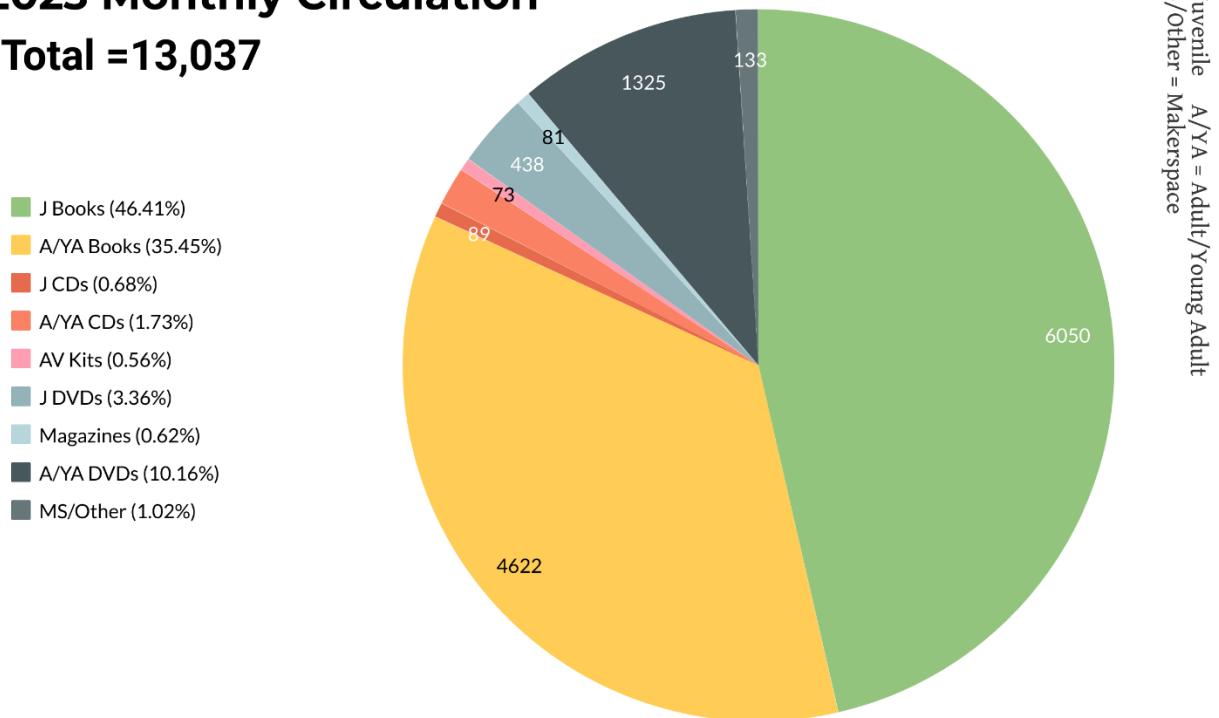
J = Juvenile   A/YA = Adult/Young Adult
MS/Other = Makerspace

- Manager attended Title VI policy meeting
- Manager and Compliance Officer (CO) attended 2 CTE calls
- Manager had 1 on 1 with City Manager
- Manager had 1 on 1 with CO
- Manager and CO attended 2 CDBG Update meetings
- Manager and CO attended 2 Acquisition meetings
- Manger attended 2 Department Head Meetings
- Manager spoke to local Non-profit groups
- Manager and CO did tour of Broadway Circle with Community Action
- Manger attended Budget training
- Manager and CO attended pre-bid demolition meeting
- Manager attended meeting with the F5project

Broadway Circle

Construction continues on the LMI Housing Facility (Building C).  Second story walls and trusses are being set.

Change order for fire suppression in the Family Homeless Shelter (Building B) will be completed at the end of April.  After completion, this will allow sheetrock and flooring to be finished as well as painting.

Work will begin on the installation of the sign on Broadway.  This is all contingent on the weather.

First draft of the RFP is being reviewed and will be advertised when finalized.

Minot Housing Authority

Construction has been completed.

Affordability period begins.  Must show that 51% of residents are of the Low to Moderate Income range.

Acquisition/Demolition

Bids for the demolition of 301 1st Ave NE, Minot ND 58701 were opened on April 5, 2024.  Waiting Council approval of winning bid.

Seeking approval from Council to advertise for the auction and demolition of structures located at 1623 8th Ave SE, Minot, ND 58701.  House will be demolished however the garage will be auctioned off.

CTE

The Center for Technical excellence wrapped up construction on March 29, 2024.  Punchlist items are being completed.

Work Stations



Dental Lab



Locker Rooms
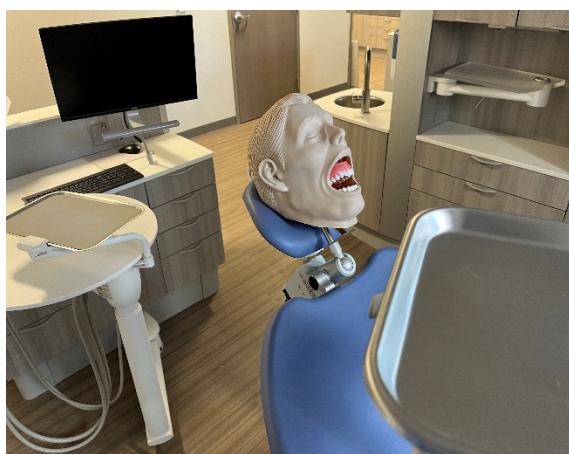


Simulation Lab

Work continues on the development of the Consolidated Plan along with the CDBG Entitlement Policies and Procedures.

# MINOT MUNICIPAL COURT
## MONTHLY REPORT COMPARISONS FOR MARCH 2023/2024

TO: HAROLD STEWART, CITY MANAGER
FROM: MINOT MUNICIPAL COURT

|  | **MARCH 2023** | **MARCH 2024** |
|---|---|---|
| **MUNICIPAL COURT CASES** | | |
| FILED | 377 | 459 |
| DISPOSED | 340 | 457 |
| | | |
| **PARKING TICKETS** | | |
| WRITTEN | 166 | 194 |
| PAID | 142 | 194 |
| | | |
| **REVENUE** | | |
| FINES & FORFEITURES CASH | $ 26,863.82 | $ 29,367.23 |
| SUSPENDED FOR JAIL OR CS | $ 75.00 | $ 0.00 |
| WAIVED | $ 3,430.00 | $ 8,765.00 |
| DISTRICT COURT TRANSFERS | $ 25.00 | $ 0.00 |
| PARKING TICKETS | $ 3,080.00 | $ 3,950.00 |
| COPY FUND | $ 0.00 | $ 0.00 |
| FROM POSTED BOND | $ 20,642.05 | $ 10,424.26 |
| ACCOUNTS RECEIVEABLE BALANCE | $ 686,599.02 | $ 710,092.68* |

BALANCE LAST MONTH: $713,120.59 (A DECREASE OF $ 3,027.91)

| **COLLECTION AGENCY** | | |
|---|---|---|
| TURNED OVER FOR COLLECTION: | $ $0.00 | $ 5,165.00 |
| COLLECTED: | $ 677.50 | $ 1,025.00 |
| UNCOLLECTABLE: | $ 7,657.91 | $ 1,100.00 |

| **ADMIN FEE TO DOM VIOL FUND** | | |
|---|---|---|
| PAID | $ 1,495.92 | $ 1,052.53 |

*Reflects total fees receivables less 80% of total restitution, which is not owed to the City of Minot (80% = $ 198,475.84)

*This document serves two purposes: 1) To provide a summary of the Planning Commission meeting and associated recommendations to City Council; and 2) To act as the Planning Commission minutes of the meeting. The minutes of the Planning Commission meeting are generally adopted at the following Planning Commission with or without changes.*

**Regular Meeting**: Planning Commission.
**Location:** City Hall, Council Chambers, 10 3rd Avenue SW., City of Minot, N.D.
**Meeting Called to Order**: Tuesday, April 2, 2024 @ 5:30 pm.
**Presiding Official**: Chairman Offerdahl.
**Members in Attendance:** Commissioners Offerdahl, Baumann, Dohms, Iverson, Kibler, Mennem, Pontenila.
**Members Absent**: Commissioners Gates, Longtin, Johnson
**City Staff Present**: Brian Billingsley (Community Development Director), Doug Diedrichsen (Principal Planner), Nick Schmitz (Assistant City Attorney), Daniel Falconer (Associate Planner)
**Others Present**: Ryan Ackerman

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**The following are the minutes of the Planning Commission meeting. The minutes are in DRAFT form until formally adopted by the Planning Commission:**

**Meeting Called to Order by Chairman Offerdahl at 5:30 pm**

**Item #1: Roll Call**

**Item #2: Pledge of Allegiance**

**Item #3: Intro & Decorum**

**Item #4: Approval of Minutes**
Motion by Commissioner Baumann to approve the March 5th, 2024 Planning Commission Meeting Minutes. Second by Commissioner Kibler and carried by the following roll call vote: ayes: all, nays: none. **Motion carries.**

**Item #5: 2024-02-03: Zone Change – CHS**
Public hearing request by Scott McClelland representing CHS, Inc., owner for a request of zone change and annexation for a "C2" General Commercial lot. The legal description for the property is Outlots 26 & 27 of the north half of the southwest quarter less highway right-of-way Section 21, Township 155, Range 82 and Outlot 28 and the West half of Outlot 29 lying in the southeast quarter less highway right-of-way Section 21, Township 155 Range 82 to the County of Ward, North Dakota.

The address for the property is 4815 Burdick Expressway East and three (3) unaddressed parcels to the west of that address. Chairman Offerdahl asked for staff report to which Mr. Diedrichsen provided a verbal summary of the written staff report. Mr. Diedrichsen provided an aerial view of the property as well as

the current zoning of the property, C2 General/Commercial. Legal nonconforming. Future Land Use would have to conform to existing underlying zoning. The subject property is designated as "Light Industrial" in our Future Land Use plan. The property is being requested to change to "M1" which would complement the "Light Industrial" that it is given in the Future Land Use map.  Mr. Diedrichsen then showed site photos of the current property, which is the existing CHS property facing north and facing south is the Expressway and HWY 52 interchange. Northwest where they are currently parking their semi-trailers. East is the frontage road that is used for access. Mr. Diedrichsen stated staff recommends Planning Commission adopts staff finding facts and recommends approval.

Commissioner Baumann is concerned of the landscaping that will be done as well as asking if there is a burden to the city of Minot for annexation. Mr. Diedrichsen informs that they would have to meet landscaping requirements for M1 Industrial which included Landscapes Boulevard with street trees and that annexation decision would fall under city council and any additional needs would be their decision, however the surrounding properties have already been annexed in and this wouldn't add any greater burden. Mr. Billingsley also informed that to have city water they would need to be annexed in. Commissioner Kibler is questioning if they will be charged for addition road maintenance? Mr. Diedrichsen informs him that the engineers didn't provide a comment, however it will ultimately depend on City Councils decisions.

**PUBLIC HEARING:**
Chairman Offerdahl opened the public hearing to the public for testimony.
No one appeared to testify.
Chairman Offerdahl closed the public hearing.

**FINDINGS OF FACT:**
The Minot Planning Commission should accept the following findings of facts:
1) The applicants have submitted a complete application for a zoning map amendment.
2) The present zoning is "C2" General Commercial District.
3) The City of Minot 2040 Comprehensive Plan Future Land Use Map designates this area as Light Industrial.
4) Section 9.1-7 H. 1. is satisfied, as the FLU map denotes this area as Light Industrial and the proposal is to zone the property as "M1" Light Industrial in alignment with the FLU map designation.
5) Section 9.1-7 H. 2 is satisfied, as the City and other public agencies will be able to provide services to support the request.
6) Section 9.1-7 H. 3 is satisfied, as there exists no evidence that the proposed development will substantially diminish the condition or value of property in the vicinity.
7) The zoning map amendment is consistent with the purpose of the Minot Land Development Ordinance and other adopted policies of the City per Section 9.1-7 H. 4.
8) The Minot Planning Commission has the authority to hear this case and provide a recommendation to City Council whether it be approved or denied. The public notice requirements were met, the hearing was legally noticed and posted, and the hearing was held and conducted under the requirements of North Dakota Century Code and Minot City ordinances.

**STAFF RECOMMENDATION:**
Staff recommends the Planning Commission adopt the staff findings of fact and recommend approval to City Council for a zoning map amendment from "C2" General Commercial District to "M1" Light Industrial District with the following conditions:

1. Gravel must be removed from the right of way and must be landscaped per zoning ordinance.
2. Parking lots and driveways must be paved.
3. Storm water management plan required.
4. New water connection required and installed by state and city licensed contractor.
5. Annexation is required.
6. Cap existing water service at main.
7. Septic permits are handled by 1st District Health Unit and septic system must comply with their regulations.

**FINAL DECISION:**
Motion made by Commissioner Kibler based on staff's finding of fact and recommendation. Second by Commissioner Iverson. The motion was carried by the following vote: ayes: 7, nays: 0. **Motion carries.**

**Item #6: 2024-02-04: LDO Text Amendments – Community Development Dept.**
Public hearing request by Brian Billingsley, Community Development Director for a text amendment to the Land Development Ordinance of the City of Minot. The proposed code changes pertain to the following sections: Table 9.1-2 to allow additional sign square footage for building with five (5) or more stories in the "CBD" Central Business District and "P" Public District, Section 4.1-6 C clarifying language regarding Sales or Service of Industrial, Agricultural, and Construction Equipment and Semi-Trucks; Section 10.3-13. B. 3. Clarifying language regarding public utilities easements. Chapter 2.3. Adding a definition for Pet Overnight Boarding Facilities (Up to 5) and Pet Overnight Boarding Facilities (6+), use categories will be added to the Use Table in the Minot Land Development Ordinance for both of these new uses; Section 4.1-6. N-O clarifying language concerning Kennels and Veterinary Clinics with Overnight Boarding Facilities and adding language regarding Pet Boarding Facilities;

Chairman Offerdahl asked for staff report to which Mr. Diedrichsen provided a verbal summary of the written staff report. Mr. Diedrichsen discusses the change for altering maximum Mast Sign Plan budgets for buildings taller than 5 stories on properties zoned "Central Business District" and "Public". The next change is on C2 district specifically where sales and service of industrial, agricultural and construction equipment is performed that they are allowed grass or gravel parking lots. Mr. Diedrichsen also covers the amendment of the Dedication of Right of Way, Easements and Street Widths. The City Engineer may waive this requirement if it may cause a detriment to the public or public improvement in any way. And lastly Mr. Diedrichsen discusses the Pet Boarding Facilities changes. Pet Boarding Facilities (Up to 5) and Pet Boarding Facilities (6+) will be added to the Permitted and Conditional Use table. The City Attorney has added recommendations to Chapter 2.3. The City Attorney also asked we removed the word commercial under Section 4.1-6.N, as well as a proposed addition to Section 4.1-6.O. Commissioner Baumann concerned about dust, mud, dirt and water issues with Proposed Change #2 Section 4.1-7. Mr.

Diedrichsen informs him this will be on the specific use only for the sales or services of industrial, agricultural and commercial equipment. Commissioner Baumann and Commissioner Kibler also questioning the right of way change. Mr. Ryan Ackerman covers the Right of Way questions and outlining that it is mainly in effect with the flood project.

Commissioner Baumann points out a typo on Proposed Change #4 Chapter 2.3 and moves to correct the sentence to say "One being facilities that board up to five (5) pets, sex (6) months or older…"

**PUBLIC HEARING:**
Chairman Offerdahl opened the public hearing to the public for testimony.
No one appears to testify.
Chairman Offerdahl closed the public hearing.

**FINDING OF FACT:**
The Minot Planning Commission should accept the following findings of facts:
1. The applicant has submitted a complete application.
2. Section 9.1-8 I. 1., 3., and 4. are applicable and satisfied as noted in the Staff Analysis section of staff's written report.
3. Section 9.1-8 I. 2. is not applicable.
4. The Minot Planning Commission has the authority to hear this case and recommend that it be approved or denied. The public notice requirements were met, the hearing was legally noticed and posted and the hearing was held and conducted under the requirements of North Dakota Century Code and Minot City ordinances.

**STAFF RECOMMENDATION:**
Staff recommends the Planning Commission adopt staff findings of fact and recommend approval to City Council of the zoning text amendment

**FINAL DECISION:**
Motion made by Commissioner Baumann based on staff's finding of fact and recommendation. Second by Commissioner Dohms. The motion was carried by the following vote: ayes: 7, nays: 0. **Motion carries.**

**Item #7: Other Business**
None

**Item #8: Adjornment**
With no further business, Chairman Offerdahl adjourned the meeting at 6:02 pm.

<p style="text-align:center">**ORDINANCE NO. <mark>XXXX</mark>**</p>

<p style="text-align:center">**AN ORDINANCE REZONING OUTLOTS 26, 27, 28 AND THE WEST HALF OF OUTLOT 29, SECTION 21, TOWNSHIP 155 NORTH, RANGE 82 WEST, WARD COUNTY, NORTH DAKOTA.**</p>

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:

Section 1.  That the property described below is hereby zoned **"M1" Light Industrial District:**

<p style="text-align:center">**OUTLOTS 26, 27, 28 AND THE WEST HALF OF OUTLOT 29, SECTION 21, TOWNSHIP 155 NORTH, RANGE 82 WEST, WARD COUNTY, NORTH DAKOTA.**</p>

Section 2.  The **"M1" Light Industrial District** zoning of the above described property and any development thereof shall be in accordance with said zoning district's provisions as set forth in the Land Development Ordinance of the City of Minot.

Section 3.  This ordinance shall be in effect from and after its final passage and approval.


PASSED FIRST READING:

PASSED SECOND READING:



ATTEST:                                                                    APPROVED:


_____                    _____
Mikayla McWilliams, City Clerk                              Thomas Ross, Mayor

**ORDINANCE NO. <mark>XXXX</mark>**

**AN ORDINANCE TO ANNEX INTO THE COPORATE LIMITS OF THE CITY OF MINOT; OUTLOTS 26, 27, 28 AND THE WEST HALF OF OUTLOT 29, SECTION 21, TOWNSHIP 155 NORTH, RANGE 82 WEST, WARD COUNTY, NORTH DAKOTA.**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:

Section 1. That the property described below is hereby annexed into the corporate boundary of the City of Minot, North Dakota:

**OUTLOTS 26, 27, 28 AND THE WEST HALF OF OUTLOT 29, SECTION 21, TOWNSHIP 155 NORTH, RANGE 82 WEST, WARD COUNTY, NORTH DAKOTA.**

Section 2. The annexation of the above described property and any development thereof shall be in accordance with said zoning district's provisions as set forth in the Land Development Ordinance of the City of Minot.

Section 3. This ordinance shall be in effect from and after its final passage and approval.


PASSED FIRST READING:

PASSED SECOND READING:



ATTEST:                                                          APPROVED:


_____                    _____
Mikayla McWilliams, City Clerk                          Thomas Ross, Mayor

# ANNEXATION EXHIBIT

## TO THE CITY OF MINOT, NORTH DAKOTA
### (BEING OUTLOTS 26, 27, 28 AND THE W1/2 OF OUTLOT 29, SECTION 21, TOWNSHIP 155 NORTH, RANGE 82 WEST, WARD COUNTY, NORTH DAKOTA)

- AREA TO BE ANNEXED.

Scale 1" = 300'

0    150'    300'

N

STEIN

2

INDUSTRIAL

3

ADDITION

NODAK

KLASSICS

2

3

2ND

1

ADDITION

OUTLOT 22

OUTLOT 23

OUTLOT 24

OUTLOT 26

OUTLOT 27

OUTLOT 28

WEST 1/2 OUTLOT 29

EAST 1/2 OUTLOT 29

OUTLOT 30

OUTLOT 60

OUTLOT 61

OUTLOT 53

OUTLOT 78

OUTLOT 59

FRONTAGE ROAD

## BURDICK EXPRESSWAY EAST

ACKERMAN SURVEYING
& ASSOCIATES
(701) 838-0786
1907 17TH ST SE, MINOT, N.D. 58701

REGISTERED PROFESSIONAL LAND SURVEYOR
ROBBY MENARD
LS-4727
DATE 2-5-24
NORTH DAKOTA

# ORDINANCE NO: <mark>XXXX</mark>

## AN ORDINANCE AMENDING THE LAND DEVELOPMENT ORDINANCE
## OF THE CITY OF MINOT.

WHEREAS, the City Council has the authority to adopt zoning ordinances under the general powers of municipalities under its home rule charter powers;

WHEREAS, the City Council recognizes the Land Development Ordinance of the City of Minot (LDO) is a living document and it is necessary to make amendments periodically to improve clarity, increase simplicity, and ensure the document reflects best practice and the needs of the community; and

WHEREAS, the LDO will be updated on an annual basis at a minimum to reflect necessary changes for the purposes described immediately above; and


**NOW, THEREFORE, BE IT ORDANED BY THE CITY COUNCIL OF THE CITY OF MINOT:**


**§ 1** That Table 9.1-2. relating to master sign plan budget calculations is **AMENDED** as follows:

| Table 9.1-2 Master Sign Plan Budget Calculation Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Zoning Districts | | | | | | |
| | AG | RR, R1, R1S, R2 | R3C, RM, RH, MH | C1, GMU | C2, C4 | CBD, P | M1, M2, OP |
| Multiplier for Calculated Permited Sign Budget | 0.05 | 1 | 1 | 0.75 | 1.5 | 1.5 | 2 |
| Maximum Permitted Sign Budget | RU: 4 sqft NRU: 200 sqft | RU: 2 sqft NRU: 200 sqft | RU: 2 sqft NRU: 50 sqft | 800 sqft | 800 sqft | 4 stories or shorter 500 sqft; 5 stories or taller 900 sqft | 800 sqft |
| RU - Residential uses: Includes all residential uses plus permitted home based businesses and excludes multi-family and manufactured home park use types. NRU - Non-residential uses: Includes all non-residential uses plus multi-family and manufactured home park use types. | | | | | | | |

**§ 2** That Section 4.1-7. A. 1. relating to sales or service of industrial, agricultural, and construction equipment and semi-trucks is **AMENDED** as follows:

1. C2 District:

a. Shall have a principal structure on the lot. In cases where multiple lots are proposed for open sales, only one of the lots is required to have a principal structure on the lot if all lots are contiguous to one another, under common ownership and used for the same business operating from the principal structure. Typical commercial site development standards, such as, but not limited to such requirements as; hard-surface, grass, or gravel parking, concrete curb and gutter, landscaping, lighting, storm drain, public sidewalks and similar as requested by Staff, Planning Commission and/or City Council shall be required of the adjacent lot(s) to the primary business before the lot(s) can be used for display or storage of inventory, even if no building is required on the lot(s).

**§ 3** That Section 10.3-13. B. 3. relating to dedications of right of ways, easements, and street widths is **AMENDED** as follows:

B. Easement Dedication

3. A public utility easement ten feet (10') wide shall be provided along the front lot line of every lot. The City Engineer may waive this requirement in their sole discretion if the dedication of the easement may cause a detriment to the public or a public improvement. The Waiver determination will be kept on file in the Community Development office.

**§ 4** That Table 2.2. Table of Uses related to uses permitted by right, permitted conditionally, permitted with an interim use permit, or not permitted is **AMENDED** as follows:

*Rural and Agricultural Uses*

**Table 2.2. Table of Uses**

| Use Category | Example Use Types | AG | RR | R1 | R1S | R2 | RM | R3C | RH | MH | C1 | C2 | CBD | M1 | M2 | OP | I1 | I2 | P | GMU | Standards Specific to Uses and Districts |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Agricultural Sales | Livestock Sales | C | | | | | | | | | | | | C | P | | | | | P | 4.1-3.A. |
| Animal Services | Veterinary Clinic (Small Animal) | C | | | | | | | | | | C | | P | | | C | | | | 4.1-6.N. |
| | Veterinary Clinic (Large Animal) | P | C | | | | | | | | | | | P | P | | | | | | 4.1-6.N. |
| | Kennels | P | | | | | | | | | | C | | P | | | | | | | 4.1-6.N. |
| | Dog Grooming/Daycare | P | | | | | | | | | C | P | P | | | | | | | | |
| | Stable (Commercial) | P | C | | | | | | | | | | | | | | | | C | | |
| | Stable (Private) | P | P | | | | | | | | | | | | | | | | | | 4.1-3.B. |
| | Pet Boarding Facility (up to 5) | P | P | P | | | | | | | P | P | | P | | | | | | | 4.1-6.O. |
| | Pet Boarding Facility (6+) | P | C | C | | | | | | | C | C | C | P | | | | | | | 4.1-6.O. |
| Farming and Ranching | Animal Production | P | | | | | | | | | | | | | | | | | | | 4.1-3.A. |
| | Animal Feeding Operation (AFO) | | | | | | | | | | | | | | | | | | | | |
| | Crops and Horticulture | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | |

**§ 5**   That Chapter 2.3.  relating to land use definitions is **AMENDED** as follows:

Pet Boarding Facility: (Use Table Definition): Any building or fenced area where pets that are not owned by the owner of the property are kept for boarding. There are two classifications of boarding facilities. One being facilities that board up to five (5) pets six (6) months or older, and the other are facilities that board six (6) or more pets, six (6) months or older. Boarding can be for the day or overnight but for not more than three (3) consecutive nights.

**§ 6**   That Section 4.1-6. N.  relating to commercial uses is **AMENDED** as follows:

N. Kennels and Veterinary Clinics with Overnight Boarding Facilities
    1. AG, C2, and M1 Districts:
        a)   The minimum lot size shall be two (2) acres.
        b)   No exterior dog runs shall be located nearer than one hundred feet (100')
           from any property line and five hundred feet (500') to the property line of
           any residential use or residential zoning district.
        c)   ~~Commercial~~ Kennels must be connected to public sewer or an onsite
           treatment system to manage and dispose of animal waste.
        d)   Kennels and runs shall provide protection against weather and be
           enclosed. Floors of runs shall be made of impervious material to permit
           proper cleaning and disinfecting.
        e)   All animal quarters and runs are to be kept in a clean, dry, and sanitary
           condition.
        f)   Fencing around animal runs and exercise areas shall be of a sufficient
           height and sufficiently buried to prevent animal escape by leaping or
           digging.
        g)   All kennel facilities shall be screened around such facilities or at property
           lines to prevent distracting or exciting animals. Such screening shall be a
           maximum of six feet (6') in height and shall be completely solid and site
           obscuring so as to aid in noise mitigation.

**§ 7**   That Section 4.1-6. O.  relating to commercial uses is **AMENDED** as follows:

O. Pet Boarding Facilities
    1. All Districts where permitted or allowed by Conditional Use Permit:
        a)   All boarding facilities that house six (6) or more pets, six (6) months or
           older are
           required to apply for a Conditional Use Permit and submit a floor plan,
           site plan, noise mitigation plan, and waste disposal plan to the Community
           Development Department for review as part of the permitting process.
        b)   No exterior dog runs shall be located nearer than ten feet (10') from any
           property line and fifty feet (50') to the property line of any residential use
           or residential zoning district. Article 4: Standards Specific to Uses and
           Districts Page 4-10

c) Pet Boarding facilities not operated out of a single-family home must be connected to public sewer or an onsite treatment system to manage and dispose of animal waste.
d) Animal quarters and runs shall provide protection against weather and be enclosed. Floors of runs shall be made of impervious material to permit proper cleaning and disinfecting.
e) All animal quarters and runs are to be kept in a clean, dry, and sanitary condition.
f) Fencing around animal runs and exercise areas shall be of a sufficient height and sufficiently buried to prevent animal escape by leaping or digging.
g) All yards used for exercise on the property of the boarding facilities shall be screened around such facilities or at property lines to prevent distracting or exciting animals. Such screening shall be six feet (6') in height and shall be completely solid and site obscuring so as to aid in noise mitigation.

**§ 8**     This Ordinance shall become effective upon final passage and approval.


PASSED FIRST READING:          _____

PASSED SECOND READING:          _____


ATTEST:                                              APPROVED:


_____               _____
Mikayla McWilliams, City Clerk                    Thomas Ross, Mayor

**On April 1, 2024, a Regular Meeting of the Minot City Council was held in the Council Chambers at City Hall. Mayor Ross called the meeting to order at 5:30 pm.**

## ROLL CALL

<u>Members Present:</u>

Burlingame, Evans, Jantzer, Olson, Pitner, Podrygula, Ross

<u>Members Absent:</u>

None

Alderman Podrygula arrived at 5:30 pm just following Roll Call.

## PLEDGE OF ALLEGIANCE

Mayor Ross led the City Council in the Pledge of Allegiance.

## MAYOR'S REPORT

Mayor Ross attended the ND League of Cities conference, the Alcohol Ordinance Review and Rewrite Committee meeting, a Task Force 21 meeting, a lunch meeting with Representative Armstrong, a Minot Park District meeting, and multiple one-on-one meetings with the City Manager.

## CITY MANAGER'S REPORT

Harold Stewart submitted a written report to the council. David Lakefield presented to the City Council a financial report.

## CITY ATTORNEY'S REPORT

Stefanie Stalheim submitted a written report to the council.

## CONSENT ITEMS

Alderman Pitner moved the City Council approve consent items 6.1-6.19.

6.1 CITY COUNCIL MINUTES - Approve the minutes of the March 18, 2024, Special City Council meeting and the March 18, 2024, Regular City Council meeting.

6.2 ORDINANCES – Approval of the following ordinances considered for second reading:
      1. Ordinance No 5950 - Ordinance CM updates and ACM
      2. Ordinance No 5951 - 2024 BA - Riverside Park Raw Water Line
(Ordinances are available for inspection and copying at the City Hall City Clerk's Office during normal office hours (generally Mon-Friday 8:00am – 4:30pm))

6.3 ADMINISTRATIVE APPROVALS - Ratify the following Administrative Approvals:
      1. Minot High Football Boosters to conduct a raffle on May 17, 2024 at Erik Jolliffe Residence (2705 Heritage Court).
      2. Gymagic Gymnastics to conduct a raffle on April 7, 2024 at Gymagic Gymnastics(5645 18th Ave SE).
      3. Minot Prairie Quilt Guild to conduct a raffle on April 6, 2024 at the Grand Hotel(1505 N Broadway).
      4. Guns-N-Hoses Charity Game to conduct a raffle on April 13, 2024 at the Maysa Arena (2501 Burdick Exwy W).
      5. Minot Out of the Darkness Walk - AFSP to conduct a raffle on August 5, 2024 at Corbett Field (501 13th St SE).
      6. Special Event Permit for KP2, Inc. dba the Spot (6 2nd St SE).
      7. Special Event Permit for Sports on Tap, Inc. dba Sports on Tap (220 S Broadway).
      8. Special Event Permit for Bricks, Inc. dba the Ranger Lounge (1218 S Broadway).
      9. Special Event Permit for Der Blaue, LLC. dba the Blue Rider (118 1st Ave SE).
      10. Special Event Permit for Duckpond Ventures, LLC dba Saul's (105 1st St SE).

6.4 BILLS, TRANSFERS, AND PAYROLL - Approve the payroll for the period of February 11, 2024, through March 23, 2024, in the amount of $3,917,251.86 and the bills and transfers for March in the amount of $5,450,262.70.

| | | | | | |
|---|---|---|---|---|---|
| WEX HEALTH, INC | $11,304.50 | 100005289 | AMERICAN WELDING & GAS, INC. | $4,456.63 | 299984 |
| 1 CALL SEPTIC SERVICES, INC | $405.00 | 299834 | APEX ENGINEERING GROUP | $1,617.40 | 299985 |
| ACKERMAN ESTVOLD | $2,951.04 | 299835 | AQUA-PURE, INC. | $10,972.00 | 299986 |
| ACME TOOLS | $936.91 | 299836 | ARAMARK | $525.52 | 299987 |

| Vendor | Amount | Check | Vendor | Amount | Check |
|---|---|---|---|---|---|
| ADVANCED BUSINESS METHODS | $1,247.45 | 299837 | BORDER STATES INDUSTRIES, INC. | $597.78 | 299988 |
| AIRSIDE SOLUTIONS | $729.80 | 299838 | BRAVERA BANK | $58,975.72 | 299989 |
| ALL AMERICAN TROPHIES | $36.00 | 299839 | BUTLER MACHINERY CO. | $1,332.11 | 299990 |
| AMANO MCGANN, INC. | $250.93 | 299840 | CHRISTIANSON HEATING & AIR | $540.75 | 299991 |
| AMERICAN PUBLIC WORKS ASSN. | $3,381.00 | 299841 | CITY OF MINOT | $200.00 | 300075 |
| APH/AUTO VALUE | $10.99 | 299842 | CLAREY'S SAFETY EQUIPMENT, INC. | $1,573.99 | 299992 |
| ASSINIBOINE RIVER BASIN INITIATIVE | $250.00 | 299844 | CPS, LTD | $64,867.50 | 299993 |
| ATSI | $749.61 | 299845 | CURALINC, LLC | $2,236.02 | 299994 |
| AXON ENTERPRISE, INC. | $166,739.54 | 299846 | CURT'S STARTER & ALT. SERVICE | $95.00 | 299995 |
| BALCO UNIFORM COMPANY, INC. | $632.00 | 299847 | DACOTAH PAPER CO. | $1,174.31 | 299996 |
| BOOK SYSTEMS, INC. | $1,720.00 | 299848 | DAKOTA FIRE EXTINGUISHER | $184.19 | 299997 |
| BROWN, DEREK | $1,595.00 | 299849 | DAKOTA FLUID POWER, INC. | $293.59 | 299998 |
| BUTLER MACHINERY CO. | $1,878.07 | 299850 | DAKOTA SUPPLY GROUP | $136.68 | 299999 |
| C & C TREE AND SNOW LLC. | $500.00 | 299851 | DAKOTA TRUCK & FARM | $3,454.91 | 300000 |
| CDM SMITH | $71,602.25 | 299852 | DECOMM VENTURES, LP | $1,750.00 | 300001 |
| CENTRAL TRENCHING, INC. | $163.60 | 299853 | DEERE CREDIT, INC. | $86,462.81 | 300058 |
| CITY OF MINOT | $170.00 | 299926 | DOMESTIC VIOLENCE CRISIS CENTER | $13,646.99 | 300002 |
| CIVICPLUS | $6,257.20 | 299854 | DR. ANTHONY TATMAN | $100.00 | 300003 |
| CPS, LTD | $9,658.75 | 299855 | EBSCO | $47.65 | 300004 |
| DACOTAH PAPER CO. | $9,131.01 | 299856 | ECOLAB PEST ELIMINATION DIVISION | $1,102.36 | 300005 |
| DAKOTA FLUID POWER, INC. | $316.91 | 299857 | ELDORADO NATIONAL - CALIFORNIA | $3,108.33 | 300006 |
| DECOMM VENTURES, LP | $3,275.00 | 299858 | ELECTRIC PUMP | $40,367.28 | 300007 |
| DON BESSETTE MOTORS | $9.50 | 299859 | EMERGENCY TECHNICAL DECON | $1,007.25 | 300008 |
| DR. ANTHONY TATMAN | $75.00 | 299860 | Belinda Gladback | $265.50 | 300009 |
| EAPC | $3,497.13 | 299861 | Cody Lockyer | $59.00 | 300010 |
| EBSCO | $2,957.23 | 299862 | Cody Lockyer | $51.25 | 300011 |
| BRIAN HORINKA | $347.21 | 299863 | Duran Bischof | $512.50 | 300012 |
| Chris Plank | $335.23 | 299864 | Jesse Hoffart | $47.20 | 300013 |
| Dakota Urban | $20.00 | 299865 | Krystle Foster | $47.91 | 300014 |
| Gage Baldt | $25.00 | 299866 | Melissa Anderson | $36.85 | 300015 |
| Kyle Schill | $118.00 | 299867 | Randi Monley | $39.46 | 300016 |
| Taylor Foley | $165.20 | 299868 | Rick Walker | $512.50 | 300017 |
| EMPOWER TRUST COMPANY, LLC | $40,213.35 | 100005198 | Stephen Joersz | $278.05 | 300018 |
| ENERBASE | $47,758.72 | 299869 | Stephen Joersz | $47.20 | 300019 |
| ETC INSTITUTE | $4,000.00 | 299870 | Taylor Foley | $47.20 | 300020 |
| FACTORY MOTOR PARTS | $394.00 | 299871 | Taylor Jensen | $295.00 | 300021 |
| FIRE EQUIPMENT CO. | $1,032.50 | 299873 | ENERBASE | $52,794.37 | 300022 |
| FIRST INTERNATIONAL BANK & TRUST | $759.00 | 299874 | ENTERPRISE NATIONAL/ALAMO | $8,674.53 | 300023 |
| FLIGHT LIGHT INC. | $973.60 | 299875 | ENTERPRISE RENT-A-CAR (2144) | $8,843.44 | 300024 |
| GALLS, LLC | $623.11 | 299876 | FACTORY MOTOR PARTS | $332.28 | 300025 |
| BCBS | $25.00 | 299877 | FASTENAL COMPANY | $39.80 | 300027 |
| Cashwise | $48.96 | 299878 | FEDEX | $27.61 | 300028 |
| City of Minot | $50.00 | 299879 | FIRST DISTRICT HEALTH UNIT | $26,500.00 | 300029 |
| City of Minot | $75.00 | 299880 | FIRST INTERNATIONAL BANK & TRUST | $759.00 | 300030 |
| Cody Ceynar | $5.00 | 299881 | FIRST WESTERN INSURANCE | $989.00 | 300031 |
| Jane Ellis | $5.00 | 299882 | FLEXIBLE PIPE TOOLS & EQUIPMENT | $680.60 | 300032 |
| Joeleon Holdings | $15.00 | 299883 | FORCE AMERICA | $1,039.03 | 300033 |
| Katelynn Bowen | $25.00 | 299884 | FUELMASTER SYN-TECH SYSTEMS, INC. | $805.50 | 300034 |
| Lewis & Clark Elementary School | $25.00 | 299885 | G & P COMMERCIAL SALES | $349.46 | 300035 |
| Loaf n Jug | $1.99 | 299886 | GALE | $700.21 | 300036 |
| Motor Vehicle Division | $13.39 | 299887 | GALLS, LLC | $7,063.90 | 300037 |
| North Dakota Child Support | $50.00 | 299888 | GEFROH ELECTRIC | $1,256.30 | 300038 |
| North Dakota Child Support | $100.00 | 299889 | City of Minot | $150.00 | 300039 |
| Penni Cecile King | $2,247.30 | 299890 | Market Place | $20.00 | 300040 |
| Rodney Neuhalfen | $50.00 | 299891 | Marketplace Foods | $10.59 | 300041 |
| Safari Fuels | $4.29 | 299892 | Marketplace Foods | $4.19 | 300042 |
| Schawyn Reinisch | $320.35 | 299893 | Marketplace Liquors | $10.00 | 300043 |
| TeamCare | $598.44 | 299894 | Rondel Roteliuk | $54.94 | 300044 |
| GENERAL TRADING | $172.34 | 299895 | Rondel Roteliuk | $40.87 | 300045 |
| GERDAU RECYCLING | $453.42 | 299896 | Sierra Inn | $20.00 | 300046 |
| GRANITE SPRINGS CO. | $88.00 | 299897 | US Postal Service | $50.00 | 300047 |
| GREAT PLAINS TECHNICAL SERVICES | $1,160.20 | 299898 | GENERAL TRADING | $154.06 | 300048 |
| GROSCHE ELECTRIC INC | $3,095.36 | 299899 | GOETTLE LAW, PLLC | $3,500.00 | 300049 |
| HACH | $67.89 | 299900 | GRAYMONT WESTERN US INC. | $85,876.46 | 300050 |
| HAWKINS, INC. | $8,943.70 | 299901 | GREAT PLAINS TECHNICAL SERVICES | $3,360.60 | 300051 |
| HIGH POINT NETWORKS, LLC | $1,430.00 | 299902 | H.A. THOMPSON & SONS, INC. | $3,985.00 | 300052 |
| HOMESTEADERS RESTAURANT | $295.63 | 299903 | HAWKINS, INC. | $31,462.35 | 300053 |
| HOUSTON ENGINEERING, INC. | $104,970.39 | 299904 | HITS, INC. | $2,100.00 | 300054 |
| HP, INC. | $6,124.00 | 299905 | HOIST AND CRANE SERVICES, INC. | $875.00 | 300055 |
| HYLAND SOFTWARE, INC. | $15,528.87 | 299906 | HOUSTON ENGINEERING, INC. | $1,325.75 | 300056 |
| IFM EFECTOR, INC. | $188.18 | 299907 | INTERNATIONAL CITY MANAGEMENT ASSOCIATION RET. | $624.56 | 300057 |
| INTERNATIONAL CITY MANAGEMENT ASSOCIATION RET. | $631.40 | 299908 | LEARNING OPPORTUNITIES, INC. | $2,001.56 | 300059 |
| INTERSTATE BATTERY SYSTEM | $8.34 | 299909 | LINDE GAS & EQUIPMENT INC | $309.93 | 300060 |
| JLG ARCHITECTS | $245.00 | 299910 | M&T FIRE AND SAFETY, INC. | $4,755.00 | 300061 |
| KALIX | $108.04 | 299911 | MACS, INC. | $38.38 | 300063 |
| LANGUAGE LINE SERVICES | $35.48 | 299912 | MAD DOG BROKERAGE INC | $13,720.03 | 300064 |
| LAVERNE MIKKELSON | $5,000.00 | 299920 | MAIN ELECTRIC CONSTRUCTION | $10,909.56 | 300065 |

| Vendor | Amount | Check # | Vendor | Amount | Check # |
|---|---|---|---|---|---|
| M-B COMPANIES, INC | $4,698.66 | 299913 | MEIER & COMPANY | $6,663.04 | 300066 |
| MAD DOG BROKERAGE INC | $13,362.88 | 299914 | MELANIE MOORE | $45.00 | 300076 |
| MAIN ELECTRIC CONSTRUCTION | $5,114.17 | 299915 | METROHM USA, INC. | $2,846.44 | 300067 |
| MARCO, INC. | $192.50 | 299916 | MIDSTATES WIRELESS, INC. | $405.00 | 300068 |
| MASIMO AMERICAS, INC. | $1,060.13 | 299917 | MIDWEST TAPE | $2,515.68 | 300069 |
| MELANIE MOORE | $100.00 | 299927 | MILLER LAW OFFICE, P.C. | $390.00 | 300070 |
| MENARDS | $59.88 | 299918 | MINOT AREA CHAMBER EDC | $46,637.50 | 300062 |
| MIDWEST TAPE | $26.23 | 299919 | MINOT AREA COUNCIL OF THE ARTS, INC | $3,333.33 | 300071 |
| MILLER LAW OFFICE, P.C. | $1,575.00 | 299921 | MINOT AUTO | $1,473.60 | 300072 |
| MINOT AREA SAFETY ASSOCIATION | $200.00 | 299922 | MINOT EMPLOYEE DONATIONS | $830.67 | 300073 |
| MINOT AUTO | $488.35 | 299923 | MINOT OPTIMIST CLUB | $500.00 | 300074 |
| MINOT EMPLOYEE DONATIONS | $857.92 | 299924 | MOWBRAY & SONS | $723.09 | 300077 |
| MINOT PARK DISTRICT | $75,415.88 | 299925 | NAPA AUTO PARTS | $3,427.62 | 300078 |
| NAPA AUTO PARTS | $6,318.44 | 299928 | ND ONE CALL, INC. | $172.45 | 300079 |
| ND CLERKS ASSOCIATION | $100.00 | 299929 | NDDEQ | $685.86 | 300080 |
| ND DEPT OF WATER RESOURCES | $107,780.04 | 299930 | NORTHERN PLAINS EQUIPMENT CO., INC. | $915.00 | 300081 |
| NDDEQ | $18.54 | 299931 | NORTHERN TESTING | $570.00 | 300082 |
| NEW VISION SECURITY, LLC | $2,020.00 | 299932 | NORTHWEST TIRE AND RETREAD | $12,138.49 | 300083 |
| NEWMAN TRAFFIC SIGNS | $1,806.31 | 299933 | OLSON'S TOWING | $888.00 | 300084 |
| NORTHWEST TIRE AND RETREAD | $3,411.21 | 299934 | ONE CALL CONCEPTS, INC. | $57.95 | 300085 |
| O'REILLY AUTO PARTS | $32.28 | 299935 | OVERHEAD DOOR CO. OF MINOT | $8,247.00 | 300086 |
| OVERHEAD DOOR CO. OF MINOT | $1,495.30 | 299936 | OVERLAND WEST INC | $1,704.12 | 300087 |
| PARKLAND USA CORPORATION | $133.24 | 299872 | PARKLAND USA CORPORATION | $258.94 | 300026 |
| PBBS EQUIPMENT CORP | $126.18 | 299937 | PERFORMANCE KENNELS, INC | $6,500.00 | 300088 |
| PEC SOLUTIONS LLC | $387.09 | 299843 | PITNEY BOWES RESERVE ACCOUNT | $3,000.00 | 300089 |
| PHIL SCHULTZ | $468.00 | 299962 | POSTMASTER | ($1,600.00) | 300121 |
| PRAIRIE SUPPLY | $256.35 | 299938 | PRAIRIE SUPPLY | $405.30 | 300090 |
| PREFERRED CONTROLS CORP | $2,102.50 | 299939 | PREFERRED CONTROLS CORP | $5,922.80 | 300091 |
| PRINGLE & HERIGSTAD, P.C. | $990.00 | 299940 | PRIORITY DISPATCH | $6,190.00 | 300092 |
| PRIORITY DISPATCH | $6,075.00 | 299941 | PROCOLLECT | $922.33 | 300093 |
| PROCOLLECT | $1,185.29 | 299942 | PROTECH INTEGRATIONS, LLC | $255.38 | 300094 |
| PROVIDENT LIFE & ACC INS CO | $363.08 | 299943 | RAILROAD MANAGEMENT COMPANY III,LLC | $379.14 | 300095 |
| RDO EQUIPMENT | $9,888.00 | 299944 | RDO EQUIPMENT CO | $42.49 | 300096 |
| BABICH, ANDREW | $7.65 | 299945 | REDVECTOR.COM, LLC | $2,426.41 | 300097 |
| BLOCKER, CHARLES | $12.21 | 299946 | BENNETT, GARRETT | $6.10 | 300098 |
| CREATIVE PROPERTY | $54.65 | 299947 | CROSBY, CALEB | $20.02 | 300099 |
| DIBRA INV & HOLDINGS LLC | $37.80 | 299948 | FELTNER, NICHOLAS | $28.37 | 300100 |
| KNIGHT, SHELLY | $70.00 | 299949 | MARTER, JACQUELINE | $7.17 | 300101 |
| LABOY, CHARLES | $798.71 | 299950 | TREAT, VIVIANNE | $10.64 | 300102 |
| MARTIN, LAURA | $34.20 | 299951 | RHI SUPPLY | $1,015.17 | 300103 |
| MATTHEWS, DESIREE | $16.66 | 299952 | ROLLKALL TECHNOLOGIES LLC | $18.00 | 300104 |
| MEADOWLARK HOMES | $31.43 | 299953 | SANITATION PRODUCTS | $426.07 | 300105 |
| RIELY, JIM | $1,034.96 | 299954 | SCHOCKS SAFE AND LOCK SERVICE | $138.00 | 300106 |
| SELK, DONNA | $39.90 | 299955 | SHORT ELLIOTT HENDRICKSON, INC | $77,811.44 | 300107 |
| STEPHENS PROPERTY MANAGEMENT | $1,000.00 | 299956 | SOURIS BASIN PLANNING COUNCIL | $5,000.00 | 300108 |
| WEBER, ALLISON | $8.10 | 299957 | SOURIS RIVER JOINT WATER RESOURCE | $57,850.26 | 300109 |
| RIVERSIDE TECHNOLOGIES, INC | $4,374.00 | 299958 | SRF CONSULTING GROUP | $29,755.39 | 300110 |
| ROLAC CONTRACTING | $16,173.90 | 299959 | STEIN'S, INC. | $1,609.00 | 300111 |
| SANITATION PRODUCTS | $7,634.82 | 299960 | STRYKER SALES, LLC | $2,074.80 | 300112 |
| SCHOCKS SAFE AND LOCK SERVICE | $250.00 | 299961 | SWANSTON EQUIPMENT COMPANIES | $1,887.25 | 300113 |
| SOLTIS BUSINESS FORMS CO. | $782.05 | 299963 | TEAM ELECTRONICS, INC. | $179.75 | 300114 |
| SUNDRE SAND & GRAVEL, INC. | $23,676.96 | 299964 | THIRD WATCH COMMUNICATIONS | $1,049.49 | 300115 |
| SWANSTON EQUIPMENT COMPANIES | $3,330.12 | 299965 | THOMSON REUTERS-WEST PAYMENT CENTER | $387.00 | 300116 |
| TRINITY HEALTH | $1,686.24 | 299966 | TIMMONS GROUP | $7,090.00 | 300117 |
| U.S. POST OFFICE | $5,000.00 | 299967 | UNITED MAILING SERVICE | $469.07 | 300118 |
| UNITED MAILING SERVICE | $278.95 | 299968 | UNITED RENTALS | $17,637.98 | 300119 |
| UNUM LIFE INSURANCE | $9,370.50 | 299969 | USA BLUE BOOK | $35.30 | 300120 |
| VISIT MINOT | $4,022.99 | 299970 | VISIT MINOT | $22,701.51 | 300122 |
| WALLWORK TRUCK CENTER | $2,379.80 | 299971 | WALLWORK TRUCK CENTER | $6,752.72 | 300123 |
| WARD COUNTY AUDITOR | $30,355.00 | 299972 | WARD COUNTY RECORDER | $127.00 | 300124 |
| WESTLIE FORD | $538.07 | 299973 | WESTLIE FORD | $790.87 | 300125 |
| WESTLIE TRUCK CENTER | $1,145.25 | 299974 | WESTLIE TRUCK CENTER | $623.18 | 300126 |
| WHITE CAP, LP | $1,944.00 | 299975 | WILO USA, LLC | $350.56 | 300127 |
| ND PUBLIC EMPLOYEES RETIREMENT SYSTEM | $13,052.15 | 100005316 | ALL SEASON ARENA | $52,105.31 | 300128 |
| MINOT PARK DISTRICT | $1,412.85 | 100005317 | FIRST WESTERN INSURANCE | $2,283.00 | 300129 |
| Kolbe Bach | $3,690.00 | 299976 | MATTSON CONSTRUCTION | $394,757.56 | 300130 |
| WORKFORCE SAFETY & INSURANCE | $100,642.36 | 299977 | SOURIS RIVER JOINT WATER RESOURCE | $795,255.78 | 300131 |
| 1 CALL SEPTIC SERVICES, INC | $10,156.40 | 299978 | U.S. POST OFFICE | $5,000.00 | 300132 |
| ABSOLUTE COMFORT, INC. | $518.72 | 299979 | UNUM LIFE INSURANCE | $57,879.79 | 300133 |
| ACKERMAN ESTVOLD | $102,704.68 | 299980 | DAKOTA COLLEGE AT BOTTINEAU | $236,340.90 | 117 |
| ACME TOOLS | $8,052.58 | 299981 | DAKOTA COLLEGE AT BOTTINEAU | $5.00 | 118 |
| ADVANCED BUSINESS METHODS | $4,078.45 | 299982 | MINOT HOUSING AUTHORITY | $5.00 | 120 |
| AMERICAN TRUCK & TRAILER, LLC | $14.08 | 299983 | MINOT HOUSING AUTHORITY | $84,060.00 | 121 |
| | | | | $3,722,619.29 | |

6.5 ALCOHOLIC BEVERAGE LICENSE - BRAKE TIME - Approve the Retail Beer license for Brake Time (810 N Broadway).

6.6 ALCOHOLIC BEVERAGE LICENSE - MINOT HOT TOTS - Approve the Supper Club license for the period of April 1, 2024 through December 31, 2024 for Minot Hot Tots.

6.7 GAMING SITE AUTHORIZATION - Approve the following organizations to conduct games of chance at the following locations:

Companions for Children (April 20, 2024)
• Grand Hotel (1505 N Broadway)
Minot Junior Golf Association (April 1, 2024 through June 30, 2024)
• Trappers Lounge (2401 Elk Drive) Ownership change

6.8 MI-5 STREETLIGHT REPLACEMENT PROCUREMENT AWARD OF BID (4839) - Approve the bid from Main Electric Construction Inc. in the amount of $76,307.00 for an MI-5A Streetlight Replacements.

6.9 2023 PAVEMENT MARKINGS FINAL PAYMENT (4718) - Approve the final payment of $234,796.18 to be paid to West River Striping Company.

6.10 RENEWAL OF BUS ADVERTISING CONTRACT WITH JL BEERS - Renew an advertising agreement with ZZ Food Group, LLC, DBA JL Beers to advertise on the sides of one transit bus and authorize the Mayor to sign the agreement.

6.11 NAWS FINANCE CONTRACT - Approve the NAWS Finance Contract and authorize the Mayor to sign the contract.

6.12 2024 WATERMAIN REPLACEMENT - AWARD OF BID - Award the bid for the 2024 Watermain Replacement Project to Post Construction, Inc. for the lowest bid of $2,473,528.00 which includes Units 1 and 2; authorize the Mayor to sign contract documents on behalf of the City; and approve a budget amendment to allocate the funds.

6.13 APPROVAL OF FLOOD SPECIFIC EMERGENCY ACTION PLAN (3135.1) - Approve the updated Emergency Action Plan.

6.14 TRUCK MOUNTED JETTER/HYDRO-EXCAVATOR – AWARD OF BID (4838) - Award the bid to Jet-Line Sales and Service in the amount of $557,267.00 for the truck mounted jetter/hydro-excavator for the Water/Sewer Department; and approve the budget amendment to allocate the funds for this purchase.

6.15 2024 TRANSIT TRANSFER CENTER AWARD OF BID & BUDGET AMENDMENT (CITY PROJECT NO. 4741) - Award the bid for the 2024 Transit Transfer Center Construction Project to Rolac Contracting Inc. for the lowest bid of $627,100.00; authorize the Mayor to sign contract documents on behalf of the City; and approve the proposed ordinance to increase the transit capital equipment account for unexpected increases in construction costs for this project and approve the use of Sales Tax Improvement Funds for the increase local match requirement.

6.16 US ARMY CORPS OF ENGINEERS - LETTER OF REQUEST FOR PLANNING ASSISTANCE - Authorize sending a request for US Army Corps of Engineers Planning Assistance to States and Tribes (PAS) to investigate seasonal water quality issues with the dead loops in Minot.

6.17 APPROVAL OF THE 2025 BUDGET SCHEDULE - Approve the 2025 budget schedule.

6.18 CITY MANAGER CONTRACT AMENDMENT - Approve the First Amendment to the City Manager's Employment Contract.

6.19 NORTH DAKOTA AERONAUTICS COMMISSION STATE GRANT REQUEST - Direct staff to submit grant requests to NDAC; and if grant(s) are awarded, authorize the Mayor to sign agreement(s).

Motion seconded by Alderwoman Olson and carried by the following roll call vote: ayes: Burlingame, Evans, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

**ACTION ITEMS**

**7.1 POTENTIAL SALE OF CITY LAND – NORTH MINOT ADDITION (4836) – APPROVED**

Alderwoman Olson moved the City Council:
1. Approve the sale of the City owned land described as:
a. NORTH MINOT ADDITION EAST 33' OF NORTH 250' LOT 1 BLOCK 5
b. NORTH MINOT ADDITION LOT 1 LESS NORTH 250' BLOCK 5
2. Approve the terms of the Purchase Agreement;
3. Approve the Request for Bids;

4. Authorize the Mayor to sign the Purchase Agreement and any other documents to complete the bid/auction and transfer of this parcel of land to the highest bidder; and

5. Approve the associated access and utility easements and authorize the Mayor to sign.

Motion seconded by Alderman Jantzer and carried by the following roll call vote: ayes: Burlingame, Evans, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

## 7.2 TRAFFIC CONTROL YIELD TO STOP CONVERSIONS – APPROVED

Alderman Jantzer moved the City Council pass an ordinance on modifying the following approaches from Yield control to Stop control at the corresponding intersecting roadway:

| APPROACHING STREET | AT ITS INTERSECTION WITH |
|---|---|
| 17th Street NW | 5th Avenue NW |
| 17th Street NW | University Avenue |
| 18th Street NW | 2nd Avenue NW |
| 18th Street NW | 5th Avenue NW |
| 18th Street W | W Central Avenue |
| 19th Street W | W Central Avenue |
| 19th Street NW | 5th Avenue NW |
| 19th Street NW | 7th Avenue NW |
| 20th Street W | W Central Avenue |
| 21st Street W | W Central Avenue |
| 21st Street NW | 5th Avenue NW |
| 21st Street NW | 7th Avenue NW |
| 22nd Street W | W Central Avenue |
| 22nd Street NW | 2nd Avenue NW |
| 22nd Street NW | 5th Avenue NW |
| 22nd Street SW | 5th Avenue SW |
| 23rd Street W | W Central Avenue |
| 23rd Street NW | 2nd Avenue NW |
| 24th Street W | W Central Avenue |
| 24th Street NW | 2nd Avenue NW |
| 25th Street W | W Central Avenue |
| 27th Street W | W Central Avenue |
| 2nd Avenue NW | 25th Street NW |
| 5th Avenue NW | 21st Street NW |
| Northwest Avenue | Harrison Drive |
| Northwest Avenue | 19th Street NW |
| University Avenue | 18th Street NW |

Motion seconded by Alderman Pitner and carried by the following roll call vote: ayes: Burlingame, Evans, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

## 7.3 MINOT COMMITTEE ON CHILDCARE REPORT AND RECOMMENDATIONS – APPROVED

The City Council asked Alderman Burlingame as the Chairman of the committee to prioritize the items to include:

- What is the impact of the item?
- Who is responsible for the item?
- What is the cost of the item?
- Is it an actionable item for the City Council?

## PERSONAL APPEARANCES

Billi Gunderson spoke to the City Council about ADA accessibility and requirements.

## MISCELLANEOUS AND DISCUSSION ITEMS

### 9.1 CONSIDER THE REPORT OF THE MAGIC FUND SCREENING COMMITTEE

The City Council was presented the annual compliance report for the MAGIC Fund Screening Committee for review.

### 9.2 2023 CITIZEN SATISFACTION SURVEY RESULTS REPORT AND PRESENTATION

Jason Morado with the ETC Institute and Harold Stewart, City Manager, presented to the City Council the results of the 2023 Citizen Satisfaction survey.

### 9.3 TIP411 INTRODUCTION

Chief Klug introduced the City Council to TIP411.

### ADJOURNMENT

There being no further business, Alderman Pitner moved the City Council meeting be adjourned. Motion seconded by Alderwoman Olson and carried unanimously. Meeting adjourned at 7:13 pm.

For the full April 1, 2024 Regular City Council meeting video, see: Minot City Council Meeting 4/1/24 (youtube.com).


ATTEST: _____          APPROVED: _____
       Mikayla McWilliams, City Clerk                                    Thomas Ross, Mayor

## BOARD OF EQUALIZATION
CITY OF MINOT

The City Council of the City of Minot convened as the 2024 Board of Equalization on April 9, 2024, at 5:30 p.m. in the City Council Chambers of the Minot City Hall.

Members Present:
Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross

Members Absent:
Evans

Others Present:
City Clerk, City Assessor Ryan Kamrowski, Assistant City Assessor Druse, Senior Property Appraisers Schlecht, Maragos, and Lovelace.

Mayor Ross presiding.

REVIEW OF ASSESSMENT TOTALS
The Assessor's Annual Report was presented to council. The report presented to the City Council informs that NDCC-57-02-11 requires that assessments reflect actual market value to include new construction, annexations, and properties coming on the tax roll from a prior exemption.

The city's residential assessments were 8.7% below selling price last year and commercial properties were 8.9% below selling price last year.  The average commercial valuation was increased about 4.1% and the average residential valuation was increased by roughly 4.3%.  The 2024 True and Full Value as of April 1st, 2024, is estimated to be approximately $5,223,059,000 or about a 4.19% increase from last year.

The median residential assessment increased about 3.76% from $213,000 to $221,000 as compared to the 5.45% from $202,000 to $213,000 from 2022 to 2023.  All other classes of commercial building assessments were trended upwards about 4.2% from a median of $550,000 to $573,000. This is compared to a 10.8% increase last year.

There were 802 residential sales that were qualified to be used in the 2023 state board residential sales ratio study.  There were 101 commercial properties that were used in the 2023 state board commercial sales ratio study that would have included all types of commercial properties.

## **PROPERTY OWNER APPEALS**

### **1800 16th St SW; Hoak Media of Dakota, LLC; MI27.953.040.0140**

Invoke Tax Partners, representing HOAK MEDIA OF DAKOTA, LLC; has filed an assessment appeal for the property located at 1800 16th St SW. They are requesting that the 2024 assessment be set at $1,458,752. The City Assessor recommends denial of request based on current market trends and local market data to support the 2024 assessment of $1,624,000. The information provided by the Assessor's office illustrates that the current assessment is at the median sale price per square foot for comparable properties.

Alderman Jantzer moved the Board of Equalization deny appeal and approve staff recommendation.

Motion seconded by Alderwoman Olson and carried by the following roll call vote: ayes: Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

### 2400 10th St SW; Dakota Square Mall CMBS, LLC; MI35.677.000.0110

DuCharme, McMillen & Associates, Inc, representing DAKOTA SQUARE MALL CMBS, LLC; has filed an assessment appeal for the property located at 2400 10thSt SW (DBA: Dakota Square Mall). They are requesting that the 2024 assessment be set between $34,000,000 and $35,000,000.  The City Assessor recommends denial of request based on current market trends and local market data to support the 2024 assessment of $60,804,000. The information provided by the Assessor's office illustrates that the current assessment is well below the median sale price per square foot for retail property. The City Assessor's value considers all three approaches to value; Income, Cost, and Sales Comparison. Whereas the appellants analysis is solely relying on an Income Analysis using nationwide market information and not fully illustrating local market influences.

Alderman Jantzer moved the Board of Equalization deny appeal and approve staff recommendation.

Motion seconded by Alderwoman Olson and carried by the following roll call vote: ayes: Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

### 3301 S Broadway; Cass Oil Co; MI36.D41.010.0030

Delta Property Tax Advisors LLC, representing CASS OIL CO; has filed an assessment appeal for the property located at 3301 S Broadway. They are requesting that the 2024 assessment be set at $1,836,029. The City Assessor recommends denial of request based on current market trends and local market data to support the 2024 assessment of $2,213,000. The information provided by the Assessor's office illustrates that the current assessment is below median sale price per square foot for comparable properties.

Alderman Pitner moved the Board of Equalization deny appeal and approve staff recommendation.

Motion seconded by Alderman Jantzer and carried by the following roll call vote: ayes: Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

### 2125 6th St NW; Alan and Darlene Egeberg

Alan Egeberg, property owner, appeared before the committee to appeal the assessment on the property located at 2125 6th St NW.  Alan mentioned to the home was built in 1977, with no major improvements. He would like to work with the Assessor's Office to do a walk-thru.

Alderman Jantzer moved the Board of Equalization request a no change pending an on-site review.

Motion seconded by Alderwoman Olson and carried by the following roll call vote: ayes: Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

### RESOLUTION EQUALIZING 2024 ASSESSMENTS - ADOPTED
Alderman Pitner moved for adoption of the resolution equalizing assessments for 2024 as adjusted by the 2024 Board of Equalization as follows:

WHEREAS,     members of the City Council of the City of Minot, North Dakota, met to organize as the City of Minot Board of Equalization on Tuesday, April 9, 2024, at 5:30 p.m. in the City Council Chambers and a quorum being present, and

WHEREAS,     the Board of Equalization began the work of equalizing property assessments for the year 2024, until its work was complete, and

WHEREAS,     the Board of Equalization heard applications by aggrieved parties on the assessments shown in the assessment roll, the board acted upon such applications, and

WHEREAS,     the Board of Equalization made any necessary changes in the assessment roll.

NOW, THEREFORE, BE IT RESOLVED, that the assessments made by the City Assessor of the City of Minot, filed with the City Clerk of the City of Minot, reviewed, corrected and adjusted by the City of Minot Board of Equalization, are hereby authorized in accordance with Chapter 57-11 of the North Dakota Century Code and are hereby certified to the Ward County Auditor as the correct and equalized assessment roll for the City of Minot, North Dakota, for the year 2024.

Motion seconded by Alderman Podrygula and carried by the following roll call vote: ayes: Burlingame, Jantzer, Olson, Pitner, Podrygula, Ross; nays: none.

**2024 EQUALIZED TAXABLE VALUATIONS**

The 2024 equalized taxable valuations for the City of Minot were therefore determined to be as follows following adjustment:

| | |
|---|---|
| Commercial | $2,037,589,000 |
| Residential | $3,183,566,000 |
| Agriculture | $      1,904,000 |
| Total | $5,223,059,000 |

**ADJOURNMENT**

There being no further business, Mayor Ross adjourned the 2024 Board of Equalization, sine die, at 6:07 p.m.

ATTEST:                                                          APPROVED:


_____                    _____
Mikayla McWilliams, City Clerk                          Thomas Ross, Mayor

ORDINANCE NO: 5952

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE WATER DISTRIBUTION WATERMAIN REPLACEMENT REVENUES AND EXPENDITURES FOR THE 2024 WATERMAIN REPLACEMENT AWARD OF BID AND APPROVE THE USE OF CASH RESERVES.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1: Amend the 2024 annual budget to increase the water distribution watermain replacement award of bid:

| | | |
|---|---|---|
| 14000000-33400 | | $900,000 |
| 14061000-44501 | | 1,500,000 |

§2: This ordinance shall be in effect from and after its passage and approval.


PASSED FIRST READING:            April 1, 2024


PASSED SECOND READING:           April 15, 2024


                                 APPROVED:


ATTEST:

                                 _____
                                 Thomas Ross, Mayor


_____
Mikayla McWilliams, City Clerk

**ORDINANCE NO: 5953**

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE SEWER CAPITAL EQUIPMENT EXPENSE AND DECREASE THE WATER DISTRIBUTION CAPITAL EQUIPMENT EXPENSE FOR THE PURCHASE OF A NEW TRUCK MOUNTED HYDRO-EXCAVATOR/JETTER.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1:     Amend the 2024 annual budget to increase the sewer capital equipment expense and decrease the water distribution capital equipment expense for the purchase of a new truck mounted hydro-excavator/jetter:

| | | |
|---|---|---|
| 14062000-57500 | 2018590002 | $29,061 |
| 14061000-57500 | | ($29,061) |

§2:     This ordinance shall be in effect from and after its passage and approval.

PASSED FIRST READING:                    April 1, 2024

PASSED SECOND READING:                 April 15, 2024

                                                                         APPROVED:

ATTEST:                                                   _____

                                                             Thomas Ross, Mayor

_____
Mikayla McWilliams, City Clerk

ORDINANCE NO: 5954

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE TRANSIT CAPITAL EQUIPMENT REVENUES AND EXPENDITURES FOR THE TRANSIT TRANFER CENTER AWARD OF BID AND APPROVE THE TRANSFER OF SALES TAX IMPROVEMENTS CASH RESERVES.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1:   Amend the 2024 annual budget to increase the transit capital equipment revenues and expenditures for the Transit Transfer Center award of bid:

| | | |
|---|---|---|
| 42000000-33200 | 2023660001 | $160,000 |
| 42000000-39101 | 2023660001 | 40,000 |
| 42066000-57300 | 2023660001 | 200,000 |
| 25266000-49101 | | 40,000 |
| 10011000-49125 | | 40,000 |

§2:   Approve the transfer of Sales Tax Improvements cash reserves:

| | | |
|---|---|---|
| 25266000-49101 | | $40,000 |
| 10000000-39114 | | (40,000) |
| 10011000-49125 | | 40,000 |
| 42000000-39101 | 2023660001 | (40,000) |

§3:   This ordinance shall be in effect from and after its passage and approval.


PASSED FIRST READING:                  April 1, 2024


PASSED SECOND READING:                 April 15, 2024


                                       APPROVED:


ATTEST:

                                       _____
                                       Thomas Ross, Mayor


_____
Mikayla McWilliams, City Clerk

**ORDINANCE NO. 5955**

**AN ORDINANCE ADDING TO THE LIST OF CITY COUNCIL CREATED TRAFFIC RESTRICTIONS PROVIDED FOR IN SECTION 20-2 OF THE CITY OF MINOT CODE OF ORDINANCES; STOP SIGNS AND YIELD SIGNS.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

Section 1.  The following described intersections are hereby removed to the list of City Council created traffic restrictions provided for in Section 20-2 (a) (2-f) – Yield Signs:

| YIELD STREET | AT ITS INTERSECTION WITH |
|---|---|
| 17th Street NW | 5th Avenue NW |
| 17th Street NW | University Avenue |
| 18th Street W | W Central Avenue |
| 18th Street NW | 2nd Avenue NW |
| 18th Street NW | 5th Avenue NW |
| 19th Street W | W Central Avenue |
| 19th Street NW | 5th Avenue NW |
| 19th Street NW | 7th Avenue NW |
| 20th Street W | W Central Avenue |
| 21st Street W | W Central Avenue |
| 21st Street NW | 5th Avenue NW |
| 21st Street NW | 7th Avenue NW |
| 22nd Street W | W Central Avenue |
| 22nd Street NW | 2nd Avenue NW |
| 22nd Street NW | 5th Avenue NW |
| 22nd Street SW | 5th Avenue SW |
| 23rd Street W | W Central Avenue |
| 23rd Street NW | 2nd Avenue NW |
| 24th Street W | W Central Avenue |
| 24th Street NW | 2nd Avenue NW |
| 25th Street W | W Central Avenue |
| 27th Street W | W Central Avenue |
| 2nd Avenue NW | 25th Street NW |
| 5th Avenue NW | 21st Street NW |
| Northwest Avenue | Harrison Drive |
| Northwest Avenue | 19th Street NW |
| University Avenue | 18th Street NW |

Section 2.  The following described intersections are hereby added to the list of City Council created traffic restrictions provided for in Section 20-2 (a) (2-a) – Stop Signs:

| STOP STREET | AT ITS INTERSECTION WITH |
|---|---|
| 17th Street NW | 5th Avenue NW |
| 17th Street NW | University Avenue |
| 18th Street W | W Central Avenue |

| | |
|---|---|
| 18th Street NW | 2nd Avenue NW |
| 18th Street NW | 5th Avenue NW |
| 19th Street W | W Central Avenue |
| 19th Street NW | 5th Avenue NW |
| 19th Street NW | 7th Avenue NW |
| 20th Street W | W Central Avenue |
| 21st Street W | W Central Avenue |
| 21st Street NW | 5th Avenue NW |
| 21st Street NW | 7th Avenue NW |
| 22nd Street W | W Central Avenue |
| 22nd Street NW | 2nd Avenue NW |
| 22nd Street NW | 5th Avenue NW |
| 22nd Street SW | 5th Avenue SW |
| 23rd Street W | W Central Avenue |
| 23rd Street NW | 2nd Avenue NW |
| 24th Street W | W Central Avenue |
| 24th Street NW | 2nd Avenue NW |
| 25th Street W | W Central Avenue |
| 27th Street W | W Central Avenue |
| 2nd Avenue NW | 25th Street NW |
| 5th Avenue NW | 21st Street NW |
| Northwest Avenue | Harrison Drive |
| Northwest Avenue | 19th Street NW |
| University Avenue | 18th Street NW |

Section 3. This ordinance shall be in full force and effect from and after its approval, passage and proper sign posting.

Section 4. Penalty Clause: The penalty for any violation of the provisions of the ordinance shall be in accordance with Section 1-8 of the City of Minot Code of Ordinances.

PASSED FIRST READING:					April 1, 2024


PASSED SECOND READING:					April 15, 2024


						APPROVED:


						_____
						Thomas Ross, Mayor

ATTEST:


_____
Mikayla McWilliams, City Clerk

# City of Minot

**TO:** Mayor Tom Ross
Members of the City Council

**FROM:** Mikayla McWilliams, City Clerk

**DATE:** April 15, 2024

**SUBJECT:** ADMINISTRATIVE APPROVALS

## I. RECOMMENDED ACTION

It is recommended the City Council ratify the following administratively approved requests:

1. Magic City Youth Baseball to conduct a calendar raffle for June 2024 at Jack Hoeven Baseball Complex (2630 7th Ave SW).
2. NoDak Heat to conduct a raffle on June 11, 2024 at Magic City Day Care Center South (1420 20th Ave SW).
3. Taube Museum of Art to conduct a raffle on April 30, 2024 at the Taube Museum of Art (2 N Main St).
4. Special Event Permit for VennMitchell, Inc. dba The Landing Bar & Bottleshop (2015 N Broadway).
5. Three Special Event Permits for Sports on Tap, Inc. dba Sports on Tap (220 S Broadway).
6. Special Event Permit for Duckpond Ventures, LLC dba Saul's (105 1st St SE).

## II. DEPARTMENT CONTACT PERSONS

John Klug, Police Chief                              857-4715
Mikayla McWilliams, City Clerk                       857-4752

## III. DESCRIPTION

A.    Background
Under the Code of Ordinances, a permit issued pursuant to NDCC 5-02-01.1, to allow an alcoholic beverage sales licensee to operate at premises other than the licensed premises to which the license relates, shall be issued administratively by the city clerk upon the following terms and conditions:

1. The payment by the applicant of a nonrefundable fee of twenty-five dollars ($25.00).
2. The submission by the applicant, as part of the application required by the city clerk, of a brief narrative explaining:
   a. The nature of the occasion for the permit (e.g., wedding dance, trade show or promotion, etc.); and
   b. The steps which will be undertaken by the permittee to restrict the sale to, and consumption of, alcoholic beverages by minors at such occasion.
3. The written approval by the chief of police of the issuance of the permit.
4. A permit issued pursuant to this subsection may not be used for the off-sale of alcoholic beverages.

An application for local authorization pertaining to gaming, other than site approval, shall be issued administratively by the city clerk upon the following terms and conditions:
1. The payment by the applicant of a fee [of $25].
2. The submission by the applicant, as part of the application required by the city clerk, of the following:
    a. The appropriate form and other information prescribed or recommended by the attorney general; or
    b. If there is no prescribed or recommended form, then a brief narrative explaining the particulars whereby the applicant should be considered to be qualified under state law for the particular local authorization sought; what the net proceeds will be expended for; and such other information, if any, as the city clerk may reasonably require to assist him in administering this subsection.
3. The written approval by the chief of police of the issuance of the authorization.

Each month, a report shall be provided to the city council concerning the permits allowed and the permits denied under this subsection subsequent to the last prior such report.

IV. **IMPACT:**
Special Event Permits, Local Permits and Restricted Event Permits are approved administratively each month through the City Clerk's Office. The non-refundable application fee for each permit is $25 and is deposited into the appropriate general fund revenue accounts.

V. **ALTERNATIVES**
N/A - the request is to ratify the applications which have been administratively approved.

VI. **TIME CONSTRAINTS:** N/A

VII. **LIST OF ATTACHMENTS:** None

# City of Minot

**TO:** Mayor Tom Ross
Members of the City Council

**FROM:** Mikayla McWilliams, City Clerk

**DATE:** April 15, 2024

**SUBJECT:** GAMING SITE AUTHORIZATION- OUR REDEEMER'S

## I. RECOMMENDED ACTION

1. It is recommended City Council approve the gaming site authorization for the following organizations to conduct games of chance during the license year of July 1, 2024 through June 30, 2025 at the following locations:

Beulah Convention & Visitors Center

- Comfort Suites (601 22nd Ave SW)
- Uncle Maddio's Pizza (3310 16th St SW #100)

Prairie Grit Adaptive Sports

- Sammy's Pizza (400 N Broadway)
- Applebee's (2302 15th St SW)

Aggie Foundation

- Off the Vine (15 S Main St)
- Arny's 2.0 (12 3rd St SE)
- Best Kept Secret (2400 10th St SW)

Minot Junior Golf Association

- Bootlegerz (515 20th Ave SE Suite 2B)
- Rangers Lounge (1218 S Broadway)
- Capri Bar (2030 Burdick Expwy E)
- Dakota Lounge (1525 31st Ave SW)
- Lucky Strike Casino (1901 N Broadway)

MSU Beaver Boosters Inc.

- Sports on Tap (220 S Broadway)
- Poor Farm (201 37th Ave SW)
- Lamplighter Lounge (200 16th St SW)

## II. DEPARTMENT CONTACT PERSONS

John Klug, Police Chief                                     857-9800
Mikayla McWilliams, City Clerk                       857-4752

## III. DESCRIPTION

Background
Site approval by the City Council is required as a precondition to obtain a state games of chance license.  Each organization submits documentation annually in order to conduct

games of chance at locations throughout the city of Minot. These locations have submitted documentation and received approval from the Police Chief.

   **IV.**    **IMPACT:**
<u>Fiscal Impact:</u>
The City of Minot receives $100 per site authorization, which is deposited into the appropriate general fund revenue account.

   **V.**    **ALTERNATIVES**
The City Council could deny an application if there is reasonable cause to do so and the establishment would not be permitted to conduct games of chance.

   **VI.**    **TIME CONSTRAINTS**
Site authorizations must be approved in a timely manner in order for organizations to submit their approved gaming form to the Attorney General's Office by the expiration deadline.

   **VII.**    **LIST OF ATTACHMENTS**
      A.  None

# City of Minot

**TO:**       Mayor Tom Ross
Members of the City Council

**FROM:**    Doug Diedrichsen, Principal Planner

**DATE:**     April 8, 2024

**SUBJECT:**  **MINOR SUBDIVISION PLAT TO BE KNOWN AS COMMERCIAL WEST 2ND ADDITION TO THE CITY OF MINOT, NORTH DAKOTA**

## I.   RECOMMENDED ACTION

1. Approve the proposed minor subdivision plat as provided in Attachment A

## II.  DEPARTMENT CONTACT PERSONS

Brian Billingsley, Community and Economic
Development Director                    857-4147

Doug Diedrichsen, Principal Planner       857-4108

## III.  DESCRIPTION

1. <u>Background</u>
The applicant seeks to adjust the shared property boundary between three platted lots to create a single lot. The resulting lot conform to the dimensional standards of the underlying zoning district and, where applicable, overlaying zoning district.

2. <u>Proposed Project</u>
Commercial West 2nd Addition

3. <u>Consultant Selection</u>
N/a

## IV.  IMPACT:

1. <u>Strategic Impact:</u>
N/a

2. <u>Service/Delivery Impact:</u>
N/a

3. <u>Fiscal Impact:</u>
   N/a


V.   **ALTERNATIVES**

1. Council may approve with conditions or deny the request. Any denial may delay the development prospects of the applicant to move forward with their development as originally intended.

VI.   **TIME CONSTRAINTS**
   N/a


VII.   **LIST OF ATTACHMENTS**

1. Attachment A – Commercial West 2nd Addition

# COMMERCIAL WEST 2ND ADDITION
## TO THE CITY OF MINOT, NORTH DAKOTA
### (BEING A PORTION OF LOTS 8, 9 AND SE1/2 OF LOT 10, COMMERCIAL WEST ADDITION, TO THE CITY OF MINOT, NORTH DAKOTA)

Scale 1" = 50'

0        50'        100'

⊙ - EXISTING IRON IN PLACE

**NOTES:**

PLAT IS SUBJECT TO ALL PRIOR EASEMENTS OF RECORD.

BEARINGS AND DISTANCES MAY VARY FROM PREVIOUS PLATS DUE TO DIFFERENT METHODS OF MEASUREMENTS.

A 10' UTILITY EASEMENT IS ON THE STREETSIDE OF EVERY LOT UNLESS OTHERWISE NOTED.

COORDINATES SHOWN ARE NORTH DAKOTA STATE PLANE (NORTH ZONE).

COMBINATION FACTOR OF 1.000118666 CONVERT STATE PLANE DISTANCES TO GROUND DISTANCES.

NGS CONTROL USED TO ESTABLISH STATE PLANE COORDINATES: TRANSPORT, LARSON

| LINE | BEARING | DISTANCE |
|------|---------|----------|
| L 1 | N 47°10'46.8" W | 92.98' |

### DESCRIPTION

KNOW ALL MEN BY THESE PRESENTS THAT DAKOTA DENTAL PROPERTIES LLC, BEING OWNERS AND PROPRIETORS OF A PORTION OF LOTS 8, 9 AND SE1/2 LOT 10, COMMERCIAL WEST ADDITION TO THE CITY OF MINOT, NORTH DAKOTA, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS; BEGINNING AT THE NORTHEAST CORNER OF LOT 8, COMMERCIAL WEST ADDITION TO THE CITY OF MINOT, NORTH DAKOTA, A PLAT ON RECORD AT THE WARD COUNTY RECORDERS OFFICE; THENCE S 42°44'18.4" W, A DISTANCE OF 155.82 FEET; THENCE N 89°49'15.0" W, A DISTANCE OF 213.30 FEET; THENCE N 47°10'46.8" W, A DISTANCE OF 92.98 FEET; THENCE N 42°44'41.6" E, A DISTANCE OF 299.81 FEET; THENCE S 47°17'36.8" E, A DISTANCE OF 250.05 FEET TO THE POINT OF BEGINNING. TRACT CONTAINS 1.46 ACRES. HAVE CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON TO BE KNOWN AS COMMERCIAL WEST 2ND ADDITION TO THE CITY OF MINOT, NORTH DAKOTA AND HEREBY DONATE AND DEDICATE THE EASEMENTS AS SHOWN HEREON, TO THE PUBLIC FOR PUBLIC USE, IN WITNESS WHEREOF THE OWNERS HAVE HEREUNTO AFFIXED THEIR SIGNATURES.

_____
DOUGLAS T. BENGSON (MANAGING MEMBER)
DAKOTA DENTAL PROPERTIES LLC

_____
PATTI A BENGSON (MANAGING MEMBER)
DAKOTA DENTAL PROPERTIES LLC

### STATE OF NORTH DAKOTA
### COUNTY OF WARD

ON THIS 22nd DAY OF March, 20 24, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, APPEARED DOUGLAS T. BENGSON AND PATTI A. BENGSON, WELL KNOWN TO ME TO BE THE PERSONS DESCRIBED IN THE FOREGOING DESCRIPTION AND WHO ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME AS THEIR OWN FREE ACT AND DEED.

MY COMMISSION EXPIRES:

> ROBBY L BERARD
> Notary Public
> State of North Dakota
> Commission Expires Dec. 26, 2027

_____
NOTARY PUBLIC, COUNTY OF WARD, STATE OF NORTH DAKOTA

### SURVEYOR'S CERTIFICATE

I, ROBBY L. BERARD, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT I HAVE SURVEYED AND PLATTED THE FOREGOING DESCRIBED TRACT OF LAND, THAT LOTS, DISTANCES, AREAS AND LOCATIONS AS SHOWN ON THE FOREGOING PLAT AND CONTAINED IN THE DESCRIPTION THEREOF, ARE TRUE AND CORRECT TO THE BEST OF MY INFORMATION, KNOWLEDGE AND BELIEF.

_____
ROBBY L. BERARD, RLS NO. 4727

> REGISTERED PROFESSIONAL LAND SURVEYOR
> ROBBY L. BERARD
> RLS-4727
> DATE 9-18-23
> NORTH DAKOTA
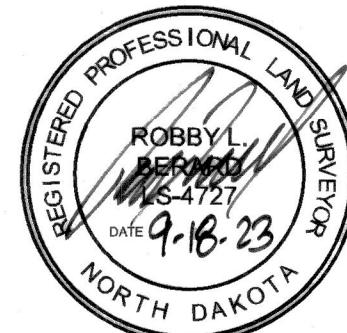
### STATE OF NORTH DAKOTA
### COUNTY OF WARD

ON THIS 18th DAY OF September, 20 23, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, APPEARED ROBBY L. BERARD, REGISTERED LAND SURVEYOR, WELL KNOWN TO ME TO BE SUCH AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE FOREGOING SURVEYOR'S CERTIFICATE AS HIS OWN FREE ACT AND DEED.

MY COMMISSION EXPIRES:

_____
NOTARY PUBLIC, WARD COUNTY, STATE OF NORTH DAKOTA

> CHAD ATTERTON
> Notary Public
> State of North Dakota
> My Commission Expires Nov. 11, 2024

APPROVED: _____ DATE: _____

CITY OF MINOT ENGINEER

---

**Plat drawing labels:**

U.S. HIGHWAY 2 & 52

COMMERCIAL WEST ADDITION

ELK DRIVE

N= 444520.77
E= 1765793.86

N 42°44'41.6" E 299.81'

S 47°17'36.8" E 250.05'

N= 444349.30
E= 1765975.83
POINT OF BEGINNING
NORTHEAST CORNER LOT 8,
COMMERCIAL WEST ADDITION

LOT 1
(63586.74 SQ.FT.)
(1.46 ACRES)

10' UTILITY EASEMENT

S 42°44'18.4" W 155.82'

L1

N 89°49'15.0" W 213.30'

18TH AVENUE SW

ELK RIDGE THIRD ADDITION
UTILITY EASEMENT
LOT 1
10' UTILITY EASEMENT

ELK RIDGE 5TH ADDITION
20' UTILITY EASEMENT

COMMERCIAL WEST ADDITION

4B  5A  5B  6A  6B  7A

ACKERMAN SURVEYING & ASSOCIATES, INC., MINOT, NORTH DAKOTA

JOB #179-23

# City of Minot

**TO:**        Mayor Tom Ross
Members of the City Council

**FROM:**     Chris Plank, NDR Grant Manager

**DATE:**       4/15/2024

**SUBJECT:**  **AUTHORIZE ADVERTISEMENT FOR AUCTION/DEMOLITION OF FLOOD BUYOUT PROPERTIES**

## I. RECOMMENDED ACTION
*Authorize advertisement for auction and/or demolition of the property located at 1623 8th Ave SE, Minot, ND 58701.*

## II. DEPARTMENT CONTACT PERSONS
*Chris Plank, NDR Grant Manager, 701-857-1553*

## III. DESCRIPTION

### A. Background

*City of Minot Buyout Building Auction Policy states that our Technical Support Specialist along with CDM Smith specialist will conduct a walk-through of properties to determine if a structure is eligible for auction by meeting these criteria:*

- *Structurally sound*
- *Suitable to be relocated through moving*
- *Habitable if a home and suitable for reuse if a commercial/non-profit structure*
- *Is code compliant or sufficiently meets code that a move will not result in substantial repair to meet code*

*Structures approved for auction by NDR Program Manager based on the findings of the inspection will then be assigned for environmental inspections for lead based paint and asbestos before going to Council for approval to go to auction. Successful bidders have 90 days to remove structure from the property.*

*City of Minot Demolition Program Salvage Policy follows many of the same steps as the auction policy, however if the structure does not meet auction requirements, there may still be salvageable materials within the property. If the structure is proven not to contain lead-based paint or asbestos, property may be approved by NDR Program Manager to be sent to Council for approval to advertise for salvage. Successful bidders have 90 days to remove materials from the property.*

### B. Proposed Project

*Properties listed for auction include:*
*1623 8th Ave SE – Garage only*

*Property listed for demolition*
*1623 8th Ave SE – House only*

## IV.   IMPACT:

A. <u>Strategic Impact:</u>
*Purchases of auction properties or salvage rights from flood buyout acquisitions generates Program Income, which is used to undertake necessary further acquisitions to support flood projects.*

B. <u>Fiscal Impact:</u>
*Added program income for CDBG-NDR acquisition activities*

## V.   CITY COUNCIL ASPIRATIONS
*This meets the City Council's aspiration of being resilient and prepared.*

## VI.   ALTERNATIVES
*City Council may deny auction or salvage on these properties and proceed straight to demolition.*

## VII.   TIME CONSTRAINTS
*Approving this will allow ample time for advertisements as well as actual demolition to occur before the winter season approaches.*

## VIII.   LIST OF ATTACHMENTS
*N/A*

# City of Minot

**TO:**      Mayor
Members of the City Council

**FROM:**    Chris Plank, NDR Grant Administrator

**DATE:**    4/15/2024

**SUBJECT:**   **2024 STRUCTURE DEMOLITION/SITE RESTORATION CONTRACT AWARD – 309 1ˢᵗ Ave NE**

## I.   RECOMMENDED ACTION

*Staff recommends City Council approve and authorize the Mayor to sign a contract Dig It Up Backhoe Service, Inc. for structure demolition /site restoration located at 309 1ˢᵗ Ave NE, Minot ND 58701 in the amount of $32,400.00*

## II.   DEPARTMENT CONTACT PERSONS

*Chris Plank, NDR Grant Administrator, 701-857-1553*

## III.   DESCRIPTION

Background

*The City of Minot periodically issues demolition/site restoration bids when sufficient properties with structures that have been acquired as part of the acquisition program for flood project controls. The intent is to keep on a schedule which supports timing of flood control projects while removing structures from creating hazards. The engineering estimate for this bid, which is pursuant to HUD procurement rules was required to be prepared prior to bid, was $57,000. Two bids were received, with the lowest responsible bid. The lowest responsible bid received was from Dig It Up Backhoe Services, Inc in the amount of $32,400. The low bid was $$24,600 below the engineer's estimate calculating to roughly an 43.5% underage. CDM Smith has submitted a letter of recommendation of award verifying this meets the HUD Procurement requirements of being necessary and reasonable. The low bidder is registered with SAM.gov which reflects a report of no active exclusions or debarment.*

Contract Selection

*Friday, April 5, 2024 at 10:00am, bids were opened for a Structure Demolition/Site Restoration Contract Award. Below is a copy of the tabulation summary:*

| Bidder | Total Amount Base Bid |
|---|---|
| Dig It Up Backhoe Services, Inc | $32,400 |
| Hanson's Excavating, Inc | $114,000 |

IV. **IMPACT:**

    A. <u>Strategic Impact:</u>
    *Continues the focus on maximizing the use of State Water Commission funds as efficiently and effectively as possible through a timely bidding process.*

    B. <u>Service/Delivery Impact:</u>
    *Assures the City is keeping pace in needed site preparation for flood control projects.*

    C. <u>Fiscal Impact:</u>
    *State Water Commission matching funds will be used to cover the full contract amount.*

V. **CITY COUNCIL ASPIRATIONS**
*Approval of this action achieves the City Council aspiration of being resilient and prepared.*

VI. **ALTERNATIVES**
    *A.. Deny the bid and do not do the project*
    *B. Re-bid the project*

VII. **TIME CONSTRAINTS**
    *Structures need to be demolished to ensure flood control projects can proceed on schedule.*

VIII. **LIST OF ATTACHMENTS**
    A. *CDM Smith Recommendation of Award Letter*
    B. *Agreement between Dig It Up Backhoe Services, Inc*

**CDM Smith**

Arrowhead Shopping Center
1600 2<sup>nd</sup> Avenue SW, Suite 27
Minot, ND 58701
tel: 701-837-5813
fax:701-837-9915
cdmsmith.com

April 9, 2024

City of Minot
Attn: Chris Plank, Disaster Recovery Grant Administrator
10 3<sup>rd</sup> Avenue SW
P.O. Box 5006
Minot, North Dakota 58702

Subject: 309 1<sup>st</sup> Ave NE Structure Demolition and Site Restoration – Project No. 3755.22

Dear Mr. Plank:

On April 5, 2024, bids were received for the 309 1<sup>st</sup> Ave NE Structure Demolition and Site Restoration Project. At the bid opening, two (2) bids were received from the following companies:

- Hanson's Excavating, Inc., Minot, ND

- Dig It Up Backhoe Service, Inc., Minot, ND

The base bids varied from a high of $114,000.00 to a low of $32,400.00. The apparent low bid was submitted by Dig It Up Backhoe Service, Inc., and it was determined that their bid contained the required attachments and documentation and was considered acceptable for further review. A detailed review, which included a bid tabulation, was conducted and it confirmed that Dig It Up Backhoe Service, Inc. was the lowest responsive bidder. The bid of $32,400.00 is $24,600.00 below the engineer estimate of $57,000.00. The low bid is 43.5% lower than the engineer estimate.

CDM Smith checked the System for Award Management website, and it was confirmed that Dig It Up Backhoe Service, Inc. is registered with no active exclusions or debarment status. In addition, a background investigation was conducted and there were no findings of concern.

Therefore, Dig It Up Backhoe Service, Inc. is considered the lowest responsive bidder for this project.

Based on the above information, CDM Smith recommends that the contract be awarded to Dig It Up Backhoe Service, Inc.

Please call me if you have any questions.

Sincerely,

Justin Redding
CDM Smith Inc.

**CDM Smith Disaster Recovery Services Office**

SECTION 00 53 00

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2024, by and between the City of Minot, a municipal corporation in the County of Ward and the State of North Dakota, hereinafter referred to as the CITY; and, _____Dig It Up Backhoe Service, Inc._____ hereinafter referred to as the CONTRACTOR, WITNESSETH:

THAT WHEREAS, the City Council of the City of Minot called for bids for:

**309 1ST Ave NE STRUCTURE DEMOLITION AND SITE RESTORATION, #3755.22**

WHEREAS, the CITY purchased properties that were inundated during the 2011 Souris River Flood, and such properties were purchased with State of North Dakota funds, Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) funds, and Department of Housing and Urban Development National Disaster Resilience (NDR) funds.

WHEREAS, the CITY intends to demolish and dispose of the structures on this property and restore the site in accordance with HUD regulatory requirements.

WHEREAS, the CITY has conducted a competitive sealed bids process to select a contractor to conduct the demolition and site restoration work.

WHEREAS, on the _____15th_____ day of _____April____, 2024, the City Council, being in session, did determine that _____Dig It Up Backhoe Service, Inc._____ was the lowest responsible bidder for the work herein specified and the City Council authorized and directed the Mayor and the City Clerk of the City of Minot to enter into a Contract with the CONTRACTOR for the completion of such work.

NOW, THEREFORE, the CONTRACTOR, in consideration of the premises and the agreements of the CITY, hereinafter set forth, does hereby agree to complete the work herein specified in accordance with the Contract Documents duly approved by the City Council and on file in the office of the City Clerk of the City of Minot, a copy of which the CONTRACTOR acknowledges to having received, and to complete such work herein provided in accordance also with its Bid and offer, which is as follows, to wit:

The CONTRACTOR further agrees to complete said work under the direction and supervision and subject to the approval of the City Program Administrator, or Program Administrator in charge of the project if consulting Program Administrators have been retained for this project.

The CONTRACTOR further agrees that the City Council of the CITY does hereby reserve the right, in case of improper work under this contract, to suspend work thereon at any time, and to re-let said Contract or to order rework of said work or any part thereof improperly done, and that any additional cost occasioned thereby shall be deducted from the amount that would otherwise have been due to the CONTRACTOR under his said Contract herein, and shall be charged against him. The CONTRACTOR further agrees that the work shall be completed no later than June 30, 2024 or any time extensions granted. This Contract shall be subject to liquidated damages of $250.00 per property per day, per Part 26 of the General Conditions, charged against the contractor for each day past the completion date stated in the Contract or as amended by change order.

It is further understood and agreed by and between the CITY and the CONTRACTOR that the said Contract Documents herein referred to on file in the office of the City Clerk of the City of Minot, shall be considered to be and are hereby made a part of the Contract as fully and completely as though written herein at length and the CONTRACTOR acknowledges that he is fully informed as to the contents of the said Contract Documents herein referred to.

Final acceptance shall be deemed to be the date on which the City Council approves final payment.

It is further understood and agreed that upon the CONTRACTOR performing the work designated in this Contract, within the time therein provided, that the City Council of the CITY will from time to time, at its discretion, as the work progresses, pay to the CONTRACTOR upon the estimates made by the City Program Administrator of the amount already earned under this Contract on the said work, ninety percent (90%) of the amount shown by such estimate to have been earned in current funds from the _____$32,400.00_____ (amount of bid) and upon the full completion, and the approval of the same by the City Program Administrator of the City of Minot, and the City Manager, the CITY will pay the balance due therefore at the prices set forth in the Bid Schedule, hereinbefore recited in the manner hereinbefore set forth.

It is further understood and agreed that all of the work under this Contract shall be paid for only in current funds from the funds above mentioned, and the CITY shall in no case be liable

on this or any other Contract for the completion of such work for any sum whatsoever to be paid by money raised by general taxation and that the CITY assumes and incurs no general liability under this contract.

The CONTRACTOR further undertakes and agrees that he will protect, indemnify and save harmless the CITY from any and all damages and liability whatsoever, on account of any accident or injury which may occur or be caused directly or indirectly to any one on account of the completion of said work by CONTRACTOR or by any excavations or obstructions which may be placed in the project area by the CONTRACTOR in connection with the work or otherwise. The CONTRACTOR further agrees to pay all taxes applicable to this work hereunder, keep all employees fully covered by Workers' Compensation Insurance, and pay all premiums promptly when due.

IN WITNESS WHEREOF, the CITY has caused this Contract to be executed by the Mayor in its name and countersigned and attested to by its City Clerk, and its corporate seal to be hereunto affixed, and the CONTRACTOR has hereunto caused this Contract to be executed by its officers thereunto duly authorized.

CITY OF MINOT

(Corporate Seal)

ATTEST:

_____
Tom Ross, Mayor

_____
Mikayla McWilliams, City Clerk

ATTEST:

_____
CONTRACTOR

# City of Minot

**TO:**         Mayor Tom Ross
                    Members of the City Council

**FROM:**     Captain Justin Sundheim

**DATE:**      April 15, 2023

**SUBJECT:**   **FY 2023 LOCAL EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT**

## I.    RECOMMENDED ACTION

1. Recommend authorization to accept the FY 2023 Local Edward Byrne Memorial Justice Assistance Grant (JAG); and
2. Authorize the Mayor to sign the Memorandum of Understanding
3. Recommend the Council pass an ordinance to amend the 2024 annual budget to increase the Police Department operation supplies and capital revenues and expenditures for the FY2023 Edward Byrne JAG Grant.

## II.    DEPARTMENT CONTACT PERSONS

John Klug, Chief of Police                        857-9800
Justin Sundheim, Captain                   857-4717

## III.   DESCRIPTION

A. Background
The Minot Police Department and Ward County Sheriff's Department will purchase items for their departments using approximately half of the funds for each agency. Each agency will maintain custody and control of the item purchased with their portion of the grant funds. Ward County will purchase level 2 air purifier respirator. (APRs). Minot PD will purchase a radar display signage.

B. Proposed Project
The Ward County Sheriff's Department will purchase level 2 air purifier respirators valued at approximately $9,606.50. The Minot Police Department will use the remainder of the funds, approximately $9,60.50, to purchase radar display signage.  The grant period is October 1st, 2022, to September 30th, 2024. Each agency is entitled to fifty percent of the total grant amount; however, any unused portion will be made available to the other agency.

C. Consultant Selection
N/A

## IV.    IMPACT:

A. Strategic Impact:

The proposal for the Ward County Sheriff's Department includes level 2 air purifier respirators (APR). These APR's allow for rapid deployment of deputies in critical incidents

where hazardous materials may be present.  They will allow deputies to respond to areas within the community and provide protection, security, and life-saving measures if necessary.

The purpose of this proposal by the Minot Police Department is to enhance traffic safety through means of static display of motorist's speed.  These signs provide a deterrent, thus enhancing community safety.  Studies have shown that increased speed increases the chance of bodily injury or death in traffic crashes.  Signs will be placed in areas of community concern.

   B.  <u>Service/Delivery Impact:</u>

Providing members of the WCOS with protective equipment will enhance response capabilities while providing safety in potentially dangerous environments.

Radar speed signage will enhance driver awareness of excessive speed, thus ideally deterring the increased risk of crash associated with speed.

   C.  <u>Fiscal Impact:</u>

<u>Project Costs</u>

| | |
|---|---|
| FY 2023 JAG Grant | $19,213 |
| Matching Funds | 0 |
| Total | $19,213 |

<u>Project Funding</u>
N/A

## V.  ALTERNATIVES

The council can refuse acceptance of the grant and direct police department to alternative means to fund listed equipment.

## VI.  TIME CONSTRAINTS

## VII.  LIST OF ATTACHMENTS
   A.  Memorandum of Understanding
   B.  BA-FY23 Edward Byrne JAG

**THE STATE OF NORTH DAKOTA**  **KNOW ALL BY THESE PRESENT**
**COUNTY OF WARD**

### INTERLOCAL AGREEMENT
### BETWEEN THE CITY OF MINOT, ND AND COUNTY OF WARD ND

### 2023 BYRNE JUSTICE ASSISTANCE GRANT (JAG) PROGRAM AWARD
### APPLICATION NUMBER: TBD

This Agreement is made and entered into this ____ day of April 2024, by and between the COUNTY of WARD, acting by and through its governing body, the County Commission, hereinafter referred to as COUNTY, and the CITY of MINOT, acting by and through its governing body, the City Council, hereinafter referred to as CITY, both of Ward County, State of North Dakota, witnesseth:

**WHEREAS**, this Agreement is made under the authority of this Memorandum of Understanding: and

**WHEREAS**, each governing body, in performing governmental functions or in paying for the performance of governmental functions hereunder, shall make that performance or those payments from current revenues legally available to that party: and

**WHEREAS**, each governing body finds that the performance of this Agreement is in the best interests of both parties, that the undertaking will benefit the public, and that the division of costs fairly compensates the performing party for the services or functions under this agreement: and

**WHEREAS**, the CITY agrees to provide the COUNTY with a share of the equipment and / or expenditures from the JAG award for the 2023 Program: and

**WHEREAS**, the CITY and COUNTY believe it to be in their best interests to reallocate the JAG funds.

**NOW THEREFORE, the COUNTY and CITY agree as follows:**

### Section 1.
CITY and COUNTY agree to expend the $19,213 - 2023 JAG grant to purchase the following equipment for each agency. The Minot Police Department will purchase radar speed signage and the County Sheriff's Department will purchase air purifier respirators. The COUNTY allocation for their project is $9,606.50 The CITY allocation for their project is $9,606.50 Any unused portion of grant funds can be used by the other agency if needed to fund their project.

### Section 2.
Each party to this agreement will be responsible for its own actions in providing services under this agreement and shall not be liable for any civil liability that may arise from the furnishing of the services by the other party.

### Section 3.
The parties to this Agreement do not intend for any third party to obtain a right by virtue of this Agreement.

### Section 4.
By entering into this Agreement, the parties do not intend to create any obligations express or implied other than those set out herein; further, this Agreement shall not create any rights in any party not a signatory hereto.

CITY OF MINOT, ND                                        COUNTY OF WARD, ND

_____  _____         _____  _____
City Mayor                     Date                    Commission Chairman              Date

_____  _____         _____  _____
Chief of Police                Date                    Ward County Sheriff             Date

**ORDINANCE NO:**

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE POLICE GRANT DEPARTMENT REVENUES AND EXPENDITURES FOR THE FY23 EDWARD BYRNE JAG GRANT.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1:   An ordinance amending the 2024 annual budget to increase the Police Grant department revenues and expenditures for the Edward Byrne JAG Grant award:

| 10000000-33100 | 2024200009 | $19,213 |
|---|---|---|
| 10020000-46101 | 2024200009 | 19,213 |

§3:   This ordinance shall be in effect from and after its passage and approval.

PASSED FIRST READING:

PASSED SECOND READING:

                                             **APPROVED:**

                                             _____
                                             Thomas Ross, Mayor

**ATTEST:**

_____
Mikayla McWilliams, City Clerk

# City of Minot

**TO:**        Mayor Tom Ross
Members of the City Council

**FROM:**    Stephen Joersz, PE, PTOE, Traffic Engineer

**DATE:**     April 15, 2024

**SUBJECT:**  **CONSULTING ENGINEERING - PRAIRIE ENGINEERING TASK ORDER (4782)**

## I.    RECOMMENDED ACTION

1. Recommend council approve a task order for Prairie Engineering to provide engineering support services for street lighting and traffic signals as requested by the Engineering Department; and,
2. Recommend council approve a task order for Prairie Engineering to provide construction engineering services for Street Lighting District 65; and,
3. Authorize the Mayor to sign the task orders.

## II.   DEPARTMENT CONTACT PERSONS

| | |
|---|---|
| Lance Meyer, City Engineer | 701-857-4100 |
| Stephen Joersz, Traffic Engineer | 701-857-4100 |

## III.  DESCRIPTION

A. <u>Background</u>
On the January 17, 2023 council meeting, council approved consulting engineering services for the Engineering Department based upon staff workload and needs. With an increased workload in capital improvement projects, the department needs additional resources to call upon when needed to complete our tasks.

B. <u>Proposed Project</u>
The Engineering Department is requesting approval for two task orders, as described below, for Prairie Engineering. Prairie Engineering is a consultant firm that specializes, in among others, street lights, traffic signals and electrical engineering.

Task Order 1 involves Prairie Engineering providing general support services for street lighting and traffic signals as requested by the Traffic Division of the Engineering Department.

Task Order 2 involves Prairie Engineering providing construction engineering services for Street Light District 65 Dakota Homes Addition.

C. <u>Consultant Selection</u>
Prairie Engineering was selected as part of a qualifications based selection of firms for a Master Service Agreement contract in the engineering department. This was previously approved by council.

## IV.  IMPACT:

A. <u>Strategic Impact:</u>

Being able to provide engineering services without being constrained by staffing needs will help advance projects faster.

B. Service/Delivery Impact:
Having Prairie Engineering's experienced staff on board will allow the Engineering Department to provide excellent street lighting and traffic signal engineering services for the City of Minot.

C. Fiscal Impact:
Funding for Task Order 1, General Street Light and Traffic Signal Engineering Services, was appropriated in the 2024 budget in the Traffic Division – Engineers line item. $20,000 was budgeted in 2024 for Traffic Division consultant engineering services.

It is anticipated that funding for the Task Order 2, Street Light District 65, will utilize refunding improvement bonds within the capital infrastructure fund. Task Order 2 has a 'not to exceed' amount of $3,200.

V. **CITY COUNCIL ASPIRATIONS**
The work of the engineering department can connect to any of the council's aspirations. This item will allow us to continue our delivery of projects.

VI. **ALTERNATIVES**
Alternate 1: Council could choose not to award the Task Orders for Prairie Engineering. This would leave inexperienced staff observing the Street Light District 65 and potentially backlog miscellaneous street lighting and traffic signal engineering work.

VII. **TIME CONSTRAINTS**
Staff recommends action in a timely manner.

VIII. **LIST OF ATTACHMENTS**
   A. Task Order 1 – General Street Lighting and Traffic Signal Engineering Services
   B. Task Order 2 – Street Light District 65 Construction Engineering Services

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the specific Agreement between Owner and Engineer, and the controlling Laws and Regulations.

EJCDC® E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition, is published in four parts: (1) the Main Agreement (general provisions governing all Task Orders); (2) the Exhibits to Main Agreement; (3) the Task Order Form (see below); and (4) the Exhibits to Task Order. The Main Agreement contains a Guidelines for Use section that pertains to all four parts of E-505.

# AGREEMENT BETWEEN OWNER AND ENGINEER
# FOR PROFESSIONAL SERVICES—
# TASK ORDER EDITION

# PART 3 OF 4: TASK ORDER FORM

Prepared by

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National Society of Professional Engineers

1420 King Street, Alexandria, VA 22314-2794

(703) 684-2882

American Council of Engineering Companies

1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

American Society of Civil Engineers

1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

# TASK ORDER NO. 1

In accordance with Paragraph 1.01, Main Agreement, of the Agreement Between Owner and Engineer for Professional Services—Task Order Edition dated **02/05/2024**, Owner and Engineer agree as follows:

1. **TASK ORDER DATA**

| | | |
|---|---|---|
| a. | Effective Date of Task Order: | **02/05/2024 to 12/31/2024** |
| b. | Owner: | **City of Minot** |
| c. | Engineer: | **Prairie Engineering, P.C.** |
| d. | Specific Project (title) | **Street Lighting – 2024** |
| e. | Specific Project (description): | Engineering support services for Street Lighting and Traffic Signals as requested by the Traffic Division of the City of Minot Engineering Dept. |
| f. | Related Task Orders Supplemented by this Task Order: Superseded by this Task Order: | **NA** |

2. **BASELINE INFORMATION**

**Baseline Information.** Owner has furnished the following Specific Project information to Engineer as of the Effective Date of the Task Order. Engineer's scope of services has been developed based on this information. As the Specific Project moves forward, some of the information may change or be refined, and additional information will become known, resulting in the possible need to change, refine, or supplement the scope of services.

3. **SERVICES OF ENGINEER ("SCOPE")**

A. The specific Basic Services to be provided or furnished by Engineer under this Task Order are as follows: **Engineering support services as requested by the Traffic Division of the City of Minot Engineering Dept.  Services include, but are not limited to:**

   1. **Street Lighting designs, photometric calculations, and associated electrical system designs and calculations.**

   2. **Traffic Signal designs and associated electrical wiring designs.**

3. **Procurement assistance.**

4. **Shop Drawing review.**

5. **Construction Phase inspections.**

4. **DELIVERABLES SCHEDULE**

   A. In submitting required Documents and taking other related actions, Engineer and Owner will mutually agree on schedules of each specific task.

5. **ENGINEER'S COMPENSATION**

   A. The terms of payment are set forth in Article 4 of the Main Agreement.

   B. Owner shall pay Engineer for services rendered under this Task Order on an hourly basis as per Appendix 1 of the Part 2 Exhibits to Main Agreement.

Execution of this Task Order by Owner and Engineer makes it subject to the terms and conditions of the Main Agreement and its exhibits and appendices, which Main Agreement, exhibits, and appendices are incorporated by this reference.

OWNER:                                        ENGINEER:

City of Minot                                 Prairie Engineering, P.C.

By: _____                   By: _____

Print Name:   Thomas Ross                     Print Name:   Jason Hunze

Title:   Mayor                                Title:        President

                                              Engineer's License or Firm's   PE-4879
                                              Certificate No. (if required):
                                              _____

                                              State of:        ND
                                              _____

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the specific Agreement between Owner and Engineer, and the controlling Laws and Regulations.

EJCDC® E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition, is published in four parts: (1) the Main Agreement (general provisions governing all Task Orders); (2) the Exhibits to Main Agreement; (3) the Task Order Form (see below); and (4) the Exhibits to Task Order. The Main Agreement contains a Guidelines for Use section that pertains to all four parts of E-505.

# AGREEMENT BETWEEN OWNER AND ENGINEER
# FOR PROFESSIONAL SERVICES—
# TASK ORDER EDITION

# PART 3 OF 4: TASK ORDER FORM

Prepared by

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1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

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1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

# TASK ORDER NO. 2

In accordance with Paragraph 1.01, Main Agreement, of the Agreement Between Owner and Engineer for Professional Services—Task Order Edition dated **02/05/2024**, Owner and Engineer agree as follows:

1. **TASK ORDER DATA**

| a. | Effective Date of Task Order: | **04/03/2024 to 06/30/2024** |
|---|---|---|
| b. | Owner: | **City of Minot** |
| c. | Engineer: | **Prairie Engineering, P.C.** |
| d. | Specific Project (title) | **Street Lighting District 65 Dakota Homes Addition** |
| e. | Specific Project (description): | Construction phase services for Street Lighting District 65 Dakota Homes Addition Project as requested by the Traffic Division of the City of Minot Engineering Dept. |
| f. | Related Task Orders Supplemented by this Task Order: Superseded by this Task Order: | **NA** |

2. **BASELINE INFORMATION**

**Baseline Information.** Owner has furnished the following Specific Project information to Engineer as of the Effective Date of the Task Order. Engineer's scope of services has been developed based on this information. As the Specific Project moves forward, some of the information may change or be refined, and additional information will become known, resulting in the possible need to change, refine, or supplement the scope of services.

3. **SERVICES OF ENGINEER ("SCOPE")**

   A. The specific Basic Services to be provided or furnished by Engineer under this Task Order are as follows: **Engineering support services as requested by the Traffic Division of the City of Minot Engineering Dept. Services include, but are not limited to:**

   1. **Pre-construction meeting.**
   2. **Construction Staking.**
   3. **Three interim site inspection.**

4. **Final inspection/report.**

5. **As Built drawing production.**

**4. DELIVERABLES SCHEDULE**

A. In submitting required Documents and taking other related actions, Engineer and Owner will mutually agree on schedules of each specific task.

**5. ENGINEER'S COMPENSATION**

A. The terms of payment are set forth in Article 4 of the Main Agreement.

B. Owner shall pay Engineer for services rendered under this Task Order on an hourly basis as per Appendix 1 of the Part 2 Exhibits to Main Agreement, **Not to Exceed $3,200.**

Execution of this Task Order by Owner and Engineer makes it subject to the terms and conditions of the Main Agreement and its exhibits and appendices, which Main Agreement, exhibits, and appendices are incorporated by this reference.

OWNER:                                             ENGINEER:

City of Minot                                      Prairie Engineering, P.C.

By:                                                By:

Print Name:   Thomas Ross                          Print Name:   Jason Hunze

Title:   Mayor                                     Title:        President

                                                   Engineer's License or Firm's   PE-4879
                                                   Certificate No. (if required):

                                                   State of:        ND

# City of Minot

**TO:** Mayor Tom Ross
Members of the City Council

**FROM:** Stephen Joersz, PE, PTOE

**DATE:** April 15, 2024

**SUBJECT:** **NDDOT COMMUNITY WAYFINDING AGREEMENT (4620)**

## I. RECOMMENDED ACTION

1. Recommend council approve the Community Wayfinding Agreement with the North Dakota Department of Transportation; and,
2. Authorize the Mayor to sign the Agreement.

## II. DEPARTMENT CONTACT PERSONS

| | |
|---|---|
| Tom Joyce, Assistant City Manager | 701-857-4100 |
| Stephen Joersz, Traffic Engineer | 701-857-4100 |

## III. DESCRIPTION

A. Background
During the November 20, 2023 council meeting, council elected to accept the bid and move forward with Phase 1 of the Wayfinding project. Phase 1 has since gone through the process of submittals, preconstruction meetings, field staking and structures will start to be construction in mid-to-late April.

B. Proposed Project
The Community Wayfinding Agreement is a standard agreement generated by the NDDOT to detail funding, the master plan, sign placement, construction and maintenance. For the Wayfinding project, the City of Minot is paying 100-percent of the costs.

C. Consultant Selection
Ackerman-Estvold is under contract to complete the engineering and construction inspection for the Wayfinding project.

## IV. IMPACT:

A. Strategic Impact:
This project is consistent with the following items:
1. The City of Minot Economic Development and Planning goals as set forth in IEDC, downtown planning and comprehensive planning documents.
2. The signs will provide a consistent style of signage that will be recognizable at a distance as wayfinding directions and locational signs.
3. The signs will replace older signs with a consistent design that highlights Minot.

B. Service/Delivery Impact:
Tourism directional wayfinding signage drives visitation, and economic impact by pointing people to the areas a municipality wants people to see, explore and experience and connecting existing visitors to discover more. A properly developed and executed Tourism

Wayfinding Plan positively affects the community, both financially and its reputation as being welcoming to visitors and locals alike.

    C. <u>Fiscal Impact:</u>
       N/A

**V.**    **CITY COUNCIL ASPIRATIONS**
This project accomplishes the aspirations of Dynamic and Prosperous; Excellent and Connected.

**VI.**   **ALTERNATIVES**
Alternative 1: The only other alternative is for the Council to deny approving the Community Wayfinding Agreement. By not approving the agreement, the project is essentially cancelled, costs have already been expended by the Contractor since the award approval on November 20, 2023.

**VII.**  **TIME CONSTRAINTS**
Staff recommends action in a timely manner.

**VIII.** **LIST OF ATTACHMENTS**
    A. Community Wayfinding Agreement

**North Dakota Department of Transportation**
**COMMUNITY WAYFINDING AGREEMENT**

This agreement is between the state of North Dakota, acting by and through its Director of Transportation, hereinafter referred to as NDDOT, whose address is 608 East Boulevard Avenue, Bismarck, North Dakota 58505-0700, and the City of Minot, hereafter referred to as the LPA (Local Public Agency), whose address is 1025 31st St, SE Minot ND 58701.

This agreement outlines the LPA responsibilities for Community Wayfinding Signs. The NDDOT is a party to the agreement for signs along a US or ND State Highway. The LPA shall follow the requirements set forth in the attached "Community Wayfinding Signing Guidelines" and this agreement. Because Community Wayfinding Signs work as a system this applies to all signs within the Public Right of Way (ROW).

The LPA hereby agrees to pay 100 percent of all cost associated with installing and maintaining the Community Wayfinding Signs. Furthermore, the LPA agrees to the following conditions for installing Community Wayfinding Signs. The conditions will also apply to the signs placed on the LPA's local road network.

1.  Master Plan – The LPA will have the master plan approved before this agreement is executed.

2.  Sign Placement - Community Wayfinding Signage will be on Public Right of Way

3.  Construction/Installation

    a.  Approval of the Master Plan is required, by NDDOT and FHWA, before any signs in connection with this project are erected. All traffic control devices will be in conformance with the latest edition of the MUTCD.
    b.  Future construction projects on the highway system within the NDDOT ROW may require the Community Wayfinding Signage to be relocated at the LPA's cost. The LPA will remove the Community Wayfinding Signs prior to construction and reinstall after construction as approved by the NDDOT.

4.  Post Construction/Maintenance – The LPA will, at its own expense, maintain or cause to be maintained, all portions of the Community Wayfinding Signs. The maintenance will be in a manner satisfactory to NDDOT. Community Wayfinding Signs operate as a system, so all signs will be held to the standards of signs within NDDOT right of way. This section applies to signs that are allowed to get to a point of disrepair, vandalized, knocked down, etc.

    a.  The District Engineer will provide 30-day written notice of the signs not maintained in a satisfactory manner to the LPA.
    b.  If the LPA does not respond with an acceptable course of action, NDDOT reserves the right to remove the signs and bill the LPA.
    c.  The signs shall meet the retro-reflectivity standards according to the MUTCD.
    d.  Any additional signs and/or modifications to the Community Wayfinding Signs will require an amendment to the Community Wayfinding Master Plan and NDDOT approval.

General:

1.  All temporary traffic control required for construction must meet the requirements of the (MUTCD).

2.  The LPA acknowledges that the NDDOT has no duty to and will not provide for the supervision of activities associated with the Community Wayfinding Signs.

3. The LPA is responsible for securing any necessary permits which may be required as part of the installation or operation of the Community Wayfinding Signs.

4. The Risk Management Appendix, attached, is hereby incorporated into and made a part of this agreement.

5. The NDDOT specifically reserves the right to revoke, or change the terms and conditions of this Agreement with or without cause and upon notice to the LPA. The LPA must adhere to the direction of the district engineer.

6. The LPA, for self, heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the LPA will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities set forth in this Assurance.

   That in the event of breach of any of the above Non discrimination covenants, NDDOT will have the right to terminate this Agreement and to enter or re-enter and repossess said land and the facilities thereon and hold the same as if said Agreement had never been made or issued.

7. NDDOT reserves the right to terminate this agreement with or without cause, upon written notice.

Executed the last date below signed.

APPROVED:                                    *LPA of:_____

_____            _____
LPA ATTORNEY (TYPE OR PRINT)                NAME (TYPE OR PRINT)

_____            _____
SIGNATURE                                   SIGNATURE

_____            _____
DATE                                        TITLE

                                            _____
                                            DATE

ATTEST:                                     NORTH DAKOTA
                                            DEPARTMENT OF TRANSPORTATION

_____            _____
LPA AUDITOR                                 DISTRICT ENGINEER (TYPE OR PRINT)

_____            _____
SIGNATURE                                   SIGNATURE

_____            _____
DATE                                        DATE

*Mayor, President or Chair of LPA Commission


CLA 10094 (Div. 38)
L.D. Approved 1-9-23

# City of Minot

**TO:** Mayor
Members of the City Council

**FROM:** Jennifer Eckman, Airport Director

**DATE:** April 15, 2024

**SUBJECT:** CORRECTED 2024 MOT AIRPORT RATES, FEES, AND CHARGES RESOLUTION

## I. RECOMMENDED ACTION
A. Approve the corrected rates and charges resolution
B. Authorize the Mayor to sign the corrected resolution

## II. DEPARTMENT CONTACT PERSONS

Jennifer Eckman, Airport Director                                     857-4724
Jessica Long, Airport Business and Development Manager               857-4725

## III. DESCRIPTION

A. Background
The original 2024 MOT Airport Rates, Fees, and Charges resolution was approved by City Council on October 9, 2023 with an effective date of January 1, 2024. This resolution included an increase in landing fees of $.03. While updating the monthly billing report, it was discovered that the landing fee for non-signatory aircraft included on the 2024 Airport Rates and Charges resolution was incorrect. The fee was listed as $3.61/1,000 lbs., but should have been $2.93/1,000 lbs. Both landing fees accurately include a $.71 ARFF Fee. The original amount is in exceeds the 125% increase noted in the original 2024 MOT Airport Rates, Fees, and Charges resolution.

Despite the error, MOT reports that billing statements sent to non-signatory companies contained the correct rate – and no company has been overbilled. The only corrective action needed is to adjust the landing fee for non-signatory aircraft to the correct rate.

B. Proposed Project
Adjust the landing fees for non-signatory landings in the 2024 MOT Airport Rates, Fees, and Charges resolution from $3.91/1,000 lbs. to $2.93/1,000 lbs.

C. Consultant Selection
N/A

## IV. IMPACT:

A. Strategic Impact:
Correcting the non-signatory landing rate ensures the Airport is properly conducting business and not overcharging our customers.

B. Service/Delivery Impact:

See paragraph IV.A.

    C. <u>Fiscal Impact:</u>
Landing fees are revenue and have no budgeted expense. Additionally, MOT reports that billing statements sent to non-signatory companies for the months of January, February, March, and April contained the correct rate, and no company has been overbilled.

## V.    CITY COUNCIL ASPIRATIONS
Dynamic and Flourishing

## VI.    ALTERNATIVES
1. City council could reject the correction and leave the landing fees as listed in excess of the 125%. However, this would require another portion of the rates and charges to be amended, and MOT would need to adjust its billing statements.

## VII.    TIME CONSTRAINTS
These changes went into effect on January 1, 2024.

## VIII.    LIST OF ATTACHMENTS
    A. Corrected Rates and Charges.
    B. Corrected Rates and Charges – Redlines.

# City of Minot

**RESOLUTION NO.**

A RESOLUTION BY THE CITY OF MINOT, NORTH DAKOTA, ESTABLISHING
**2024 RATES, FEES, AND CHARGES**
AT THE MINOT INTERNATIONAL AIRPORT (MOT)

WHEREAS, the City of Minot (the "City") owns and operates the Minot International Airport (MOT); and

WHEREAS, pursuant to Minot City Ordinance Sec. 4-25, the City Council may establish uniform rates, fees, and charges at MOT by way of resolution; and

WHEREAS, the City Council desires to establish the corrected 2024 rates, fees, and charges at MOT;

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MINOT, NORTH DAKOTA THAT the following rates, fees and charges are established at the Minot International Airport **EFFECTIVE JANUARY 1, 2024:**

## SECTION 1. TERMINAL AIRLINE RENT AND PER USE FEES

    (a)  Signatory Airline Rental Fees:
          Cost per square foot (Exclusive & Joint Space):      $18.70 / sq. ft.

          *NO CHANGE FROM 2023*

## SECTION 2. RENTAL CAR TERMINAL RENT AND PER USE FEES

          Rental Car Designated Parking Space Fees:      $15.00/parking space

          ***CHANGED FROM $9.00 TO $15.00/PARKING SPACE***

## SECTION 3: AIRPORT GROUND RENT FEES

Airport Ground Rent Fees shall apply to all NEW, EXTENDED OPTION, or RENEWED leases, and are based on lot location and use. Land rent values at similarly situated airports are also taken into consideration. All Airport Ground Rent leases must comply with MOT's Minimum Standards and Requirements.

    (a)  For all new, renewed, or term extension leases, the following annual GROUND RENTAL fees shall apply:

1) Southeast General Aviation Lots
Improved Area (Electricity and Access)                    $0.22/ sq. ft.

2) Southeast General Aviation Lots
Unimproved Area (Bare Land)                              $0.11/ sq. ft.

3) Northwest General Aviation Lots
Improved Area (General utilities and Access)             $0.26/ sq. ft.

4) Northwest General Aviation Lots
Unimproved Area (Bare Land)                              $0.13/ sq. ft.

5) West-Side General Aviation Lots
Improved Area (All Utilities and Accesses)              $0.30/ sq. ft.

(b) Aeronautical Service Providers

1) Single Service Operators
Including Cargo Operators, Multiple Service
Operators, and Full-Service Operators                   $0.30/ sq. ft.

*NO CHANGE FROM 2023*

## SECTION 4: AIRPORT OWNED T-HANGAR RENTAL FEES

(a) Airport Owned T-Hangars                             $75.00/month

T-Hangars are rented on a month-to-month basis.

Unless specified elsewhere in writing, rent must be paid one month in advance, and is due the 10th of each month. Ex: Rent for the month of February must be received by MOT by January 10th.

Tenant may only use the hangar for the purpose of storing aircraft that is owned by Tenant.

*NO CHANGE FROM 2023*

## SECTION 5. LANDING FEES AND ARFF CHARGES

(a)    Signatory Airline Landing Fees

$2.35 / 1,000 lbs. maximum gross landing weight / landing

(b)    Non-signatory Airline Landing Fees

$ 2.93 / 1,000 lbs. maximum gross landing weight/ landing

(c)    ARFF Fees for Signatory

$0.57 / 1,000 lbs. maximum gross landing weight / landing

Airline Landing Fees

***CHANGED FROM $0.54 TO $0.57 PER LANDING***

(d)    ARFF Fees for Non-Signatory

$0.71 / 1,000 lbs. maximum gross landing weight / landing

Airline Landing Fees

***CHANGED FROM $0.68 TO $0.71 PER LANDING***

## SECTION 6. NON-SIGNATORY RATE PREMIUM

All airlines not executing a Signatory Airline Use and Lease Agreement will be charged four-hundred forty-four dollars and forty-two cents ($444.42) per turn for use of the terminal building in addition to 125% of the signatory landing fees and ARFF fees.

*NO CHANGE FROM 2023*

## SECTION 7. LANDING FEES FOR COMMERCIAL GENERAL AVIATION

(a)    All Aircraft weighing 12,500 lbs. maximum gross landing weight or more

125% increase of the signatory landing Fees and ARFF fees.

(b)    All Commercial Air Freight Operator Aircraft and all Commercial Commuter Aircraft weighing LESS than 12,500 lbs. maximum gross landing weight

$23.66/ 1,000 lbs. maximum gross landing weight / landing

*NO CHANGE FROM 2023*

## SECTION 8.  COMMERCIAL AERONAUTICAL SERVICE PROVIDER LICENSE FEE

Commercial Aeronautical Services Providers, including Single Service Operators, Multiple Service Operators, and Full-Service Operators, conducting business at MOT shall pay a yearly license fee as follows:

(a)     All Single Service Operators, Multiple Service Operators, and Full-Service Operators that have leased MOT property and considered "based" at MOT shall pay a license fee of $325 per year.

(b)     All companies not "based" at MOT shall pay the airport a license fee of $1,000 per year per company.

*NO CHANGE FROM 2023*

## SECTION 9. AIRPORT RAMP PARKING FEES

(a)     Airport Ramp Parking Fees shall be as follows:

1)  Aircraft weighing 12,500 pounds maximum gross landed weight or more:                                             $15.00/aircraft/day

a.  Aircraft weighing less than 12,500 pounds maximum gross landed weight:                          $5.00/aircraft/day, up to a maximum of $60.00/month

*NO CHANGE FROM 2023*

## SECTION 10.      AIRPORT PAY PARKING FEES

(a)     Airport Parking Fees shall be as follows:

1)  Short-Term Parking
    Zero (0) - under One (1) Hour              $ 1.00
    One (1) – under (4) hours                  $ 5.00
    Four (4) – under Six (6) Hours             $ 8.00
    Six (6) – Twenty-Four (24) Hours           $ 14.00
    Daily Rate after first Twenty-Four (24) Hours $ 14.00/day

2)  Long-Term Parking
    Daily Rate                                 $ 12.00/day
    Airline Crew Pass (per month)              $ 30.00/month

*CHANGED $72 WEEKLY RATE TO $0*

## SECTION 11.      GROUND TRANSPORTATION FEES

All ground transportation services to bring customers to and from MOT shall be as follows:

(a)     Taxis, Shuttles, Ridehails and Vans      $50/month – $600/year
(b)     Hotel Shuttles and Vans                               $100/year
(c)     Peer to Peer (P2P)/Rideshare                        $ 600/year

*CHANGED TO INCLUDE P2P $600/YEAR*

## SECTION 12: SELF FUELING PERMIT

Self-Fueling Permit                                    $50.00/year

*CHANGED FROM $325.00 to $50.00/PER YEAR*

## SECTION 13: AIRPORT TENANT EMPLOYEE PARKING

MOT tenant employees                          $200/year

*MOT terminal tenant employees must park in MOT employee lot during onsite hours.

*NO CHANGE FROM 2023*

## SECTION 14.  CONFERENCE ROOM RENTAL FEES

MOT Conference Rooms may be available for rent on an hourly basis.  Room rental rates are as follows:

(a)     1st Floor MOT Conference Room                 $20/hour
(b)     2nd Floor MOT Conference Room                 $40/hour

MOT tenants will receive a 50% discount on Conference Room Rental Fees.

*NO CHANGE FROM 2023*

## SECTION 15. BADGE, KEYS AND SECURITY

(a)     MOT Badge Fees are as follows:

1) New Badges

AOA Badge                            $40.00/badge
SIDA Badge                           $80.00/badge
Renewal                              $20.00/year

2) Lost/Stolen/Replacement Badge Fees
1st Replacement                      $50.00/badge
2nd Replacement                      $100.00/badge
3RD Replacement                      $150.00/badge

3)  Damaged Badge Fee                    $30.00/badge

(b)     MOT Key Fees are as follows:

    1)  Post Office Key                        $20.00/key

    2)  Lost/Stolen/Replacement Key Fees
           1$^{st}$ Replacement                $50.00/key
           2$^{nd}$ Replacement             $100.00/key
           3 or more Replacements    $150.00/key

    3)  "Re-key" of door locks             $200.00/occurrence

    4)  Rental Key                          $20.00/year

(c)     MOT charges a fine for security violations. Security Fines are as follows:

    1)  <u>First Fine</u>                      $500.00

    The first three security violations/offenses in 60 days will be punishable as a "first fine."

    2)  <u>Second Fine</u>                $1,500.00

    Subsequent security violations/offenses within 60 days of a first fine, are punishable as a "second fine."

    3)  <u>Third Fine</u>                   $2,500.00

    Subsequent Security violations/offenses within 60 days of a second fine, are punishable as a "third fine."

*NO CHANGE FROM 2023*

## SECTION 16. MISCELLANEOUS CHARGES

(a)     Special Operator Permit Fee          $500.00-
                                         $1,000.00/occurrence

(b)     Security Video Requests             $50.00/video
                                         Labor Rate after 1 hour

(c)     Mobile Runway Closure X Rental Fee    $50.00/day
                                         $1,500.00/month

(d)     Airline Unclaimed Baggage           $50.00/occurrence

***CHANGED FROM $0.00 TO $50.00 / PER OCCURRENCE***

(e)     GSE Repair Area (Maintenance Bay)    $400.00/Per Bay/month

| | | |
|---|---|---|
| (f) | Glycol Storage | $18.70/sq. ft. |
| (g) | MOT Labor Rate | $85.00/hour |
| (h) | MOT Labor with Equipment Usage | $120.00/hour |
| (i) | Advertising Upload Fee | $25.00/occurrence |
| (j) | Airport Administrative Fee | Actual Cost plus 15% |
| (k) | Repair Fees | Actual cost of materials + 15% and MOT labor rates |
| (l) | Sales Tax | Charged when applicable |
| (m) | Finance Charges on Overdue Payments | Based on City of Minot Finance Fee Schedule |

This resolution shall become effective JANUARY 1, 2024

Passed and adopted this _____ day of _____, 2024.

ATTEST:                                                       APPROVED:


_____                    _____
Mikayla McWilliams, City Clerk                    Tom Ross, Mayor

# City of Minot

**RESOLUTION NO.**

A RESOLUTION BY THE CITY OF MINOT, NORTH DAKOTA, ESTABLISHING
<u>**2024 RATES, FEES, AND CHARGES**</u>
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        *NO CHANGE FROM 2023*

## SECTION 2. RENTAL CAR TERMINAL RENT AND PER USE FEES

        Rental Car Designated Parking Space Fees:       $15.00/parking space

        ***CHANGED FROM $9.00 TO $15.00/PARKING SPACE***

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1) Single Service Operators
   Including Cargo Operators, Multiple Service
   Operators, and Full-Service Operators      $0.30/ sq. ft.

*NO CHANGE FROM 2023*

## SECTION 4: AIRPORT OWNED T-HANGAR RENTAL FEES

(a) Airport Owned T-Hangars        $75.00/month

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Tenant may only use the hangar for the purpose of storing aircraft that is owned by Tenant.

*NO CHANGE FROM 2023*

## SECTION 5. LANDING FEES AND ARFF CHARGES

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        $2.35 / 1,000 lbs. maximum gross landing weight / landing

(b)    Non-signatory Airline Landing Fees

        $~~3.61~~ 2.93 / 1,000 lbs. maximum gross landing weight/ landing

(c)   ARFF Fees for Signatory

$0.57 / 1,000 lbs. maximum gross landing weight / landing

Airline Landing Fees

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*NO CHANGE FROM 2023*

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*NO CHANGE FROM 2023*

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          Six (6) – Twenty-Four (24) Hours         $ 14.00
          Daily Rate after first Twenty-Four (24) Hours $ 14.00/day

2)  Long-Term Parking
          Daily Rate                                          $ 12.00/day
          Airline Crew Pass (per month)          $ 30.00/month

***CHANGED $72 WEEKLY RATE TO $0***


## SECTION 11.     GROUND TRANSPORTATION FEES

All ground transportation services to bring customers to and from MOT shall be as follows:

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(b)     Hotel Shuttles and Vans                                              $100/year
(c)     Peer to Peer (P2P)/Rideshare                                    $ 600/year

*CHANGED TO INCLUDE P2P $600/YEAR*

## SECTION 12: SELF FUELING PERMIT

Self-Fueling Permit $50.00/year

*CHANGED FROM $325.00 to $50.00/PER YEAR*

## SECTION 13: AIRPORT TENANT EMPLOYEE PARKING

MOT tenant employees $200/year

\*MOT terminal tenant employees must park in MOT employee lot during onsite hours.

*NO CHANGE FROM 2023*

## SECTION 14.  CONFERENCE ROOM RENTAL FEES

MOT Conference Rooms may be available for rent on an hourly basis.  Room rental rates are as follows:

(a) 1st Floor MOT Conference Room $20/hour
(b) 2nd Floor MOT Conference Room $40/hour

MOT tenants will receive a 50% discount on Conference Room Rental Fees.

*NO CHANGE FROM 2023*

## SECTION 15. BADGE, KEYS AND SECURITY

(a) MOT Badge Fees are as follows:

1) New Badges

AOA Badge $40.00/badge
SIDA Badge $80.00/badge
Renewal $20.00/year

2) Lost/Stolen/Replacement Badge Fees
1st Replacement $50.00/badge
2nd Replacement $100.00/badge
3RD Replacement $150.00/badge

3) Damaged Badge Fee $30.00/badge

(b) MOT Key Fees are as follows:

  1) Post Office Key         $20.00/key

  2) Lost/Stolen/Replacement Key Fees
    1st Replacement       $50.00/key
    2nd Replacement      $100.00/key
    3 or more Replacements   $150.00/key

  3) "Re-key" of door locks     $200.00/occurrence

  4) Rental Key          $20.00/year

(c) MOT charges a fine for security violations. Security Fines are as follows:

  1) <u>First Fine</u>         $500.00

  The first three security violations/offenses in 60 days will be punishable as a "first fine."

  2) <u>Second Fine</u>       $1,500.00

  Subsequent security violations/offenses within 60 days of a first fine, are punishable as a "second fine."

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(c) Mobile Runway Closure X Rental Fee $50.00/day
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(d) Airline Unclaimed Baggage    $50.00/occurrence

***CHANGED FROM $0.00 TO $50.00 / PER OCCURRENCE***

(e) GSE Repair Area (Maintenance Bay) $400.00/Per Bay/month

| (f) | Glycol Storage | $18.70/sq. ft. |
|-----|----------------|----------------|
| (g) | MOT Labor Rate | $85.00/hour |
| (h) | MOT Labor with Equipment Usage | $120.00/hour |
| (i) | Advertising Upload Fee | $25.00/occurrence |
| (j) | Airport Administrative Fee | Actual Cost plus 15% |
| (k) | Repair Fees | Actual cost of materials + 15% and MOT labor rates |
| (l) | Sales Tax | Charged when applicable |
| (m) | Finance Charges on Overdue Payments | Based on City of Minot Finance Fee Schedule |

This resolution shall become effective JANUARY 1, 2024

Passed and adopted this _____ day of _____, 2024.

ATTEST:                                        APPROVED:


_____          _____
Mikayla McWilliams, City Clerk              Tom Ross, Mayor

# City of Minot

**TO:**     Mayor Tom Ross
Members of the City Council

**FROM:**   Jason Sorenson, Utilities Director

**DATE:**   April 15, 2024

**SUBJECT:  PROPERTY MAINTENANCE SMALL ARTICULATING LOADER – BUCKET EXCHANGE (4768)**

## I.     RECOMMENDED ACTION

1. Recommend council approve the exchange of the small articulating loader winged blade attachment for a bucket attachment; and
2. Recommend council approve a budget amendment allocating funds for the trade-in value and the purchase of the bucket attachment.

## II.    DEPARTMENT CONTACT PERSONS

Jason Sorenson, Utilities Director                          857-4140
Kevin Sickler, Property Maintenance Superintendent          857-4140

## III.   DESCRIPTION

A. Background
In August of 2023, Property Maintenance took delivery of a new articulating loader and snow bucket to help with snow removal around the new city hall, parking structures and the old city hall.

B. Proposed Project
The snow bucket that was ordered has hydraulic wings to make snow removal more efficient.  The snow bucket wasn't used until recently due to the low snow fall winter.  When it was used, it did not perform as expected and staff reached out to the vendor for other attachment options for snow removal.  RDO was willing to accept a trade for the winged blade attachment in exchange for a bucket attachment with a $970 credit to the City of Minot.

C. Consultant Selection
N/A

## IV.    IMPACT:

A. Strategic Impact:
The City strives to keep public buildings well maintained and open for business. The loader will enable staff to get parking lots and sidewalks cleaned in a timely manner.

B. Service/Delivery Impact:
N/A

C.  <u>Fiscal Impact:</u>

        <u>Project Costs</u>

        Trade-In Value -     $4,500
        Bucket Attachment - <u>$3,530</u>
        Net Fiscal Impact –    ($970)

        <u>Project Funding</u>

        The purchase of the attachment wasn't originally contemplated in the 2024 budget, so a budget amendment is recommended to appropriate the purchase of the new attachment and the trade-in value of the old attachment.

**V.    ALTERNATIVES**
    N/A

**VI.    TIME CONSTRAINTS**
    N/A

**VII.    LIST OF ATTACHMENTS**
    1.   Budget Amendment
    2.   RDO Purchase Order

**ORDINANCE NO:**

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE PROPERTY MAINTENANCE FURNITURE AND EQUIPMENT REVENUES AND EXPENDITURES FOR THE TRADE-IN OF THE ARTICULATING LOADER BUCKET.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1: Amend the 2024 annual budget to increase the property maintenance furniture and equipment revenues and expenditures for the trade-in of the articulating loader bucket:

| 10000000-39210 | | $4,500 |
|---|---|---|
| 10044000-46102 | | 3,530 |

§2: This ordinance shall be in effect from and after its passage and approval.

PASSED FIRST READING:

PASSED SECOND READING:

APPROVED:

ATTEST:

_____
Thomas Ross, Mayor

_____
Mikayla McWilliams, City Clerk

# City of Minot

**TO:**       Mayor Tom Ross
               Members of the City Council

**FROM:**    Kelli Kronschnabel, Fire Chief

**DATE:**     April 10, 2024

**SUBJECT:**  **USED FIRE ENGINE BUDGET REQUEST**

## I.   RECOMMENDED ACTION

1. It is recommended City Council approve the purchase of a used fire engine and waive the City of Minot procurement requirements; and
2. Approve a budget amendment of $400,000 for the purchase and up fit of a used fire engine on first reading.

## II.   DEPARTMENT CONTACT PERSONS

Kelli Kronschnabel, Fire Chief   701-857-4740

## III.   DESCRIPTION

### A.  Background

It has been identified that there is a need for an additional reserve engine within the Minot Fire Department. We currently have only one true reserve engine, with five stations open. With the complexities of vehicles these days, parts availabilities, and supply chain delays, there have been multiple times over the last year where we have had two apparatus in need of repairs at the same time and no reserve units available within the MFD if another apparatus were to have had mechanical or electrical issues. This may lead to a time where we don't have an apparatus available.

We had to destroy one of our engines to get one of our new front-line engines, per the parameters of the Volkswagen grant. This kept us from rolling that truck into reserve status. This truck had some issues that needed to be addressed, so the benefits outweighed the negatives at the time.

### B.  Proposed Project

We are requesting that the City Council approve a budget of $400,000 to allow us to purchase and upfit a used fire engine. This will allow us to have an additional engine available in the event we have vehicles that are unusable. Used engines are available through a variety of vendors but it is difficult to compare apples to apples. We would like to request that we have the ability to purchase the best apparatus found, that is within budget and meets our department's needs. We will be having our fleet mechanic verify how mechanically sound of the apparatus, review maintenance records and that it meets pump test requirements.

### C.  Consultant Selection

## IV.   IMPACT:

A.  Strategic Impact:

By obtaining an additional reserve engine, our mechanic can still perform preventative maintenance (PM) on the other apparatus if one is down for major repairs and waiting on parts. Currently, the PM has to wait until the apparatus is fixed, due to not having an additional engine to put online for the apparatus needing PM. This will slowly degrade the quality and life expectancy of our current fleet.  This will also help with the need for an additional apparatus for callback personnel to cover the city during large-scale emergencies.

B.  Service/Delivery Impact:

This would be a reserve engine for us, but must meet all the requirements and pass an annual pump test.

C.  Fiscal Impact:

While researching used apparatus for sale through brokers and other departments directly, the average cost for an apparatus that would complement our fleet is roughly $350-400K, just for the apparatus, no equipment included. This is roughly a third to half of what a new engine would cost.  The recommended budget amendment includes money coming from general fund reserves.

V.  **CITY COUNCIL ASPIRATIONS**
*safe and welcoming; resilient and prepared*

VI.  **ALTERNATIVES**

Council can deny the request and we will be looking to put the request to order a new engine in 2025 budget.

VII.  **TIME CONSTRAINTS**

We would like to purchase an apparatus as soon as possible, with September being a hard deadline. Our personnel need time to stock and install equipment on the truck, install the radio and Opticom, and then train and familiarize themselves with the apparatus prior to freezing weather.

VIII.  **LIST OF ATTACHMENTS**
1. Budget Amendment

**ORDINANCE NO:**

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE FIRE CAPITAL EQUIPMENT EXPENDITURES FOR THE PURCHASE OF A USED FIRE ENGINE AND APPROVE THE TRANSFER AND USE OF GENERAL FUND CASH RESERVES.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1:    Amend the 2024 annual budget to increase the fire capital equipment expenditures for the purchase of a used fire engine:

| | | |
|---|---|---|
| 42031000-57500 | | $400,000 |
| 10031000-49125 | | 400,000 |

§2:    Approve the transfer of general fund reserves:

| | | |
|---|---|---|
| 10031000-49125 | | $400,000 |
| 42000000-39101 | | (400,000) |

§3:    This ordinance shall be in effect from and after its passage and approval.

PASSED FIRST READING:

PASSED SECOND READING:

                                                APPROVED:

ATTEST:

                                                _____
                                                Thomas Ross, Mayor

_____
Mikayla McWilliams, City Clerk

# City of Minot

**TO:**      Mayor
             Members of the City Council

**FROM:**    Justin Sundheim, Police Captain

**DATE:**    April 15, 2024

**SUBJECT:**  **PURCHASE OF FIVE (5) POLICE INTERCEPTOR UTILITY VEHICLES**

## I.    RECOMMENDED ACTION

- Recommend the purchase of five (5) 2025 Ford Interceptor Utility vehicles using the North Dakota State Contract for a purchase amount of $235,644.75.
- Recommend approval of the proposed ordinance to amend the 2024 budget on first reading.

## II.   DEPARTMENT CONTACT PERSONS

John Klug, Police Chief | 701-857-9800
Justin Sundheim, Police Captain | 701-857-4717

## III.  DESCRIPTION

A. Background
The police department budgeted for five (5) Police Intercept Utility (PIU) vehicles in 2024.  The police department is requesting a total of five (5) vehicles from Nelson Auto Center of Fergus Falls MN, who was awarded the ND state contract.

B. Proposed Project
The purchase of the five (5) patrol vehicles will replace vehicles in the fleet used by officers for normal patrol and emergency responses to calls. All 5 vehicles will be assigned to the patrol division, with old vehicles reassigned to other police department needs or city department needs.

C. Consultant Selection
Nelson Auto Center was awarded the ND state contract for law enforcement vehicles to include Ford Sport Utility vehicles, which is the current make/model of our fleet.  Nelson Auto Center has been awarded state contract and police department purchases in the past.

## IV.   IMPACT:

A. Strategic Impact:
The purchase of all 5 (five) Ford utility vehicles allows the department to replace vehicles that are nearing the end of life for emergency operations.  It is critical to maintain a fleet of emergency vehicles that will perform consistently without mechanical issues.

B. Service/Delivery Impact:
Purchasing the vehicles will maintain the delivery of law enforcement services to the citizens of Minot. Delaying purchases will result in an unknown purchasing

date, delivery date, and in-service date.  Due to accrued mileage and engine hours, Patrol vehicles are on an approximate 4-year rotation.

C.  Fiscal Impact:

Project Costs
Cost per vehicle                                                    $47,128.95
Total cost for five (5) vehicles                          $235,644.75

Project Funding
Capital equipment budget:
    Sales tax improvements                          $212,500

Recommended budget amendment (capital equipment reserves) $23,145

V.    **CITY COUNCIL ASPIRATIONS**
Maintaining fiscal responsibility while ensuring public safety services are not negatively impacted.

VI.    **ALTERNATIVES**
The Council could delay the purchase of vehicles to an unknown date in 2024, resulting in potentially higher costs and an unknown delivery date.

The Council could purchase four (4) patrol vehicles instead of five (5) which would affect the current fleet rotation, increasing wear and usage of multiple patrol vehicles.

The Council could authorize the purchase of (5) patrol vehicles and delay the purchase of the FY24 budgeted ($39,000) parking control vehicle until FY25.

VII.    **TIME CONSTRAINTS**
Council's approval of the recommendation will allow for the vehicles to be received and invoiced.

VIII.    **LIST OF ATTACHMENTS**
A.  Proposed Ordinance
B.  Nelson Auto Center Quotes
C.  ND State Contract for Police SUV

**ORDINANCE NO:**

**AN ORDINANCE AMENDING THE 2024 ANNUAL BUDGET TO INCREASE THE POLICE CAPITAL EQUIPMENT EXPENDITURES FOR THE PURCHASE OF FIVE (5) POLICE INTERCEPTOR SUVS AND APPROVE THE USE OF CAPITAL EQUIPMENT FUND RESERVES.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MINOT:**

§1: Amend the 2024 annual budget to increase the police capital equipment expenditures for the purchase of five (5) police interceptor SUVs, using cash reserves:

| 42021000-57500 | | $23,145 |
|---|---|---|

§2: This ordinance shall be in effect from and after its passage and approval.

PASSED FIRST READING:

PASSED SECOND READING:

APPROVED:

ATTEST:

_____
Thomas Ross, Mayor

_____
Mikayla McWilliams, City Clerk

# NELSON Auto Center

**FLEET DEPARTMENT**
**2228 COLLEGE WAY, PO BOX 338**
**FERGUS FALLS, MN 56538-0338**
**PHONE: 218-998-8827**
**TOLL FREE: 800-477-3013 EXT. 8827**
jpatelski@nelsonfleet.com

## VEHICLE QUOTE NUMBER Minot PD SSP7-7 Gas

| | |
|---|---|
| **Sold To:** City Of Minot, ND | **Date:** 4/1/2024 |
| **Attn:** Justin Sundheim, Captain | **Phone:** 701-857-4717 |
| **Address:** PO Box 5006 | **FAX:** |
| Minot, ND 58702-5006 | **Salesperson:** Jessica Patelski |
| | **Key Code:** |

| Stock No: | Year | Make | Model | New/Used | Vehicle ID Number |
|---|---|---|---|---|---|
| Minot PD SSP7-7 | 2025 | Ford | Police Interceptor Gas | New | |
| | | | Color: Black/Black Cloth/Vinyl | | |

| | | |
|---|---|---|
| Price of Vehicle: | *Per ND Spec: SSP7-7* | $45,460.00 |
| Options & Extras: | | $1,558.95 |

| | |
|---|---|
| Add (18D) Global Lock/Unlock Feature | $0.00 |
| Add (21L) Front Warning Auxiliary LED Lights | $562.38 |
| Add (63L) Rear Quarter Glass Side Marker LED Lights | $562.38 |
| Add (66C) Rear Lighting Solution | $444.96 |
| Add (85R) Rear Console Plate | $57.68 |
| Add (92R) 2nd Row Only Solar Tint Glass | $87.55 |
| Remove (68G) Rear door Inoperable | ($71.00) |
| Remove (41H) Engine Block Heater | ($85.00) |

==OPTION FOR CAMERA IN REAR VIEW MIRROR NO LONGER AVAILABLE==

| | |
|---|---|
| *Additional Delivery Expense Required* | $110.00 |
| Subtotal: | $47,128.95 |
| Trade - In: | |
| Total Cash Price: | |
| Total for One | **$47,128.95** |
| Total for Five | **$235,644.75** |

***Terms: Net 30 days***

**Your Purchase Order #**          **Project #**    **Contract # 376**

***Thanks for your business!***

| | | |
|---|---|---|
| Ship To / Lessee / End User: | City Of Minot, ND | FAX: |
| Attn: | Justin Sundheim, Captain | Phone: 701-857-4717 |
| | Police Department | email: justin.sundheim@minotnd.org |
| Address: | PO Box 5006 | |
| | Minot, ND 58702-5006 | |

Signed:

Printed Name:                    Date:

# INVITATION FOR BID
State of North Dakota
OMB/Central Services Division

**Purchasing Agency:**
State Procurement Office
14th Floor Capitol Tower – Dept 012
600 East Boulevard Avenue
Bismarck, ND 58505-0310

| | |
|---|---|
| **Bid Number:** 110.7-23-054 | **Bid Title:** State Contract 376 - Police Vehicle – 377-Pickups- Current Production Year |

| | | |
|---|---|---|
| **Date Issued:** June 14, 2023 | **Procurement Officer:** Chad Keech | |
| **Deadline for Questions:** June 21, 2023, 12:00 PM CT | **Telephone:** 701-328-2767 | **Fax:** 701-328-1615 |
| **Bid Opening Date and Time:** July 07, 2023, 2:00 PM CT | **E-mail:** ckeech@nd.gov | |

**Contract period: Approximately 07/14/2023 thru 09/30/2024**

You are invited to participate in this Invitation for Bid. Please submit your bid to the Purchasing Agency. The bidder shall fully perform the contract in accordance with the all specifications, terms and conditions, and requirements contained in the Invitation for Bid and shall comply with all applicable provisions of the North Dakota Century Code Chapters 54-44.4, 46-02, 44-08 and North Dakota Administrative Code Chapter 4-12, made a part of the Invitation for Bid and contract by reference.

Written acceptance of the bidder's bid response by the State, by issuance of a purchase order or contract, constitutes a binding contract made and entered into by and between the State of North Dakota, acting through the Purchasing Agency named above, and the bidder named below:

| **Bidder Company Name:** Nelson Auto Center, Inc | | | |
|---|---|---|---|
| **Street Address:** 2228 College Way | | | |
| **P.O. Box:** 338 | **City** Fergus Falls | **State:** MN | **Zip Code:** 56538-0338 |
| **Toll Free Telephone:** 800-477-3013 | **Telephone:** 218-998-8865 | **Fax:** 218-998-8813 | |
| **Federal I.D. or Social Security No.:** 46-0419193 | **E-Mail:** miarson@neisonfieet.com | | |
| **Type or Print Name of Person Signing:** Melissa Larson | **Title:** Fleet Sales Manager | | |
| **Authorized Signature:** | | | |
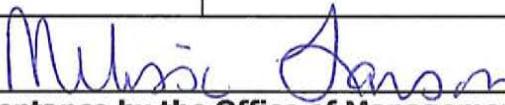
**(For State Use Only) Acceptance by the Office of Management and Budget, State Procurement**
Bid response accepted and contract awarded by:

By ___Chad Keech___ Title ___State Procurement Officer___

Signature ___Chad Keech___ Date ___7/19/2023___

**STATE OF NORTH DAKOTA**
**State Procurement Office**
**14th Floor Capitol Tower Dept. 012**
**600 East Boulevard Avenue**
**Bismarck, ND 58505-0310**

**SOLICITATION AMENDMENT #1**

6/26/2023

Solicitation Number: 110.7-23-054
Title: State Contract 376 - Police Vehicle – 377-Pickups- Current Production Year
Deadline for Receipt of Bids: July 07, 2023 @ 2:00 PM CT
Solicitation Issued: June 14, 2023

Section 15 established a Deadline for Submission of Questions and Requests for Clarification. The responses, including any necessary amendments, are as follows:

1. Question: For SSP8-4- Will you accept a 40/blank/40 front seat? This would leave the center section open for installing equipment or an after market console.

   Response:  We would accept 40 blank 40 front seat.
   Amendment: See below

2. Question: For SSP8-4- Wil you accept a vinyl rear seat? Front would be cloth.

   Response: If the only way to meet the specification is with a vinyl rear seat, than a vinyl rear seat is acceptable.

   Amendment: "Cloth 40-20-40 split bench seat with center folding arm rest, power driver seat with lumbar, cloth rear seat, folding" is deleted in its entirety and replaced with "Cloth 40-20-40 split bench seat or 40 blank 40 front seat with center folding arm rest, power driver seat with lumbar, cloth rear seat or vinyl rear seat folding"

Questions regarding this amendment must be submitted in writing to the Procurement Officer.

Chad Keech
Procurement Officer
E-mail: ckeech@nd.gov
Telephone: 701-328-2767
TTY Users call: 7-1-1

# AMENDMENT ACKNOWLEDGEMENT

Solicitation Number: 110.7-23-054
Title: State Contract 376 - Police Vehicle – 377-Pickups- Current Production Year
Solicitation Amendment Number: 1

By my signature below, I hereby acknowledge receipt of and compliance with this amendment.

| COMPANY NAME |
| --- |
| Nelson Auto Center, Inc |
| SIGNATURE |
| *Melissa Larson* (signature) |
| PRINTED NAME |
| Melissa Larson |
| TITLE |
| Fleet Sales Manager |
| DATE |
| 7/7/2023 |
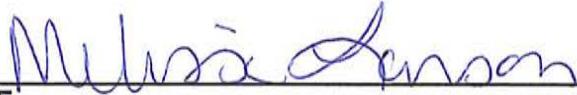
**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6600 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➢ Indicate Make and Model being bid in the space provided.
➢ Indicate compliance to the minimum specifications by checking the box on the left.
➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: __Ford F-150__     MODEL: __F1E / F1L__

**Cab**

- ☒ Conventional cab
- ☒ 8' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior mirrors
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ Power Windows
- ☒ AM/FM radio and digital media auxiliary jack and/or bluetooth
- ☒ USB and/or 12-Volt power point(s)
- ☒ Cloth split bench seat with folding back

**Chassis**

- ☒ 6600 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – Electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
- ➤ Indicate Make and Model being bid in the space provided.
- ➤ Indicate compliance to the minimum specifications by checking the box on the left.
- ➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
- ➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150 _____    MODEL: X1E / X1L _____

**Cab**
- ☒ Extended cab – four doors (not crew cab)
- ☒ 8' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Power door locks with remote keyless entry
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio and/or auxiliary input jack and/or bluetooth
- ☒ Power point/cigar lighter type
- ☒ Cloth split bench seat
    - ☒ Driver seat with lumbar
    - ☒ Cloth rear seat

**Chassis**

- ☒ 7000 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**FORD F150 4X4 POLICE RESPONDER**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➢ Indicate Make and Model being bid in the space provided.
➢ Indicate compliance to the minimum specifications by checking the box on the left.
➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150 _____ MODEL: W1P _____ (Police Responder)

**2024 Ford F150 4X4 Police Responder**

- ☒ Four-Wheel Drive
- ☒ Exterior Color: Agate Black Metallic
- ☒ Interior Color: Black
- ☒ Remote Keyless Entry w/Four Fobs
- ☒ 4 Sets of Keys, All Four Must Start the Vehicle
- ☒ Each Vehicle to be Individually Keyed
- ☒ Front License Plate Bracket
- ☒ Platform Running Boards, Black
- ☒ Engine Block Heater
- ☒ Police Engine Idle Feature
- ☒ Backup Alarm System
- ☒ Fixed Rear Window w/Privacy Glass and Defroster

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4DR CREW CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➤ Indicate Make and Model being bid in the space provided.
➤ Indicate compliance to the minimum specifications by checking the box on the left.
➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150 _____  MODEL: W1T _____

**Cab**
- ☒ Crew cab - six passenger
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Carpeted floor covering, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote with three sets of keys
- ☒ Cabin air filter system
- ☒ Interior day/night and two exterior power mirrors
- ☒ Back up camera with rear park assist or reverse sensing system
- ☒ Power windows
- ☒ Deep tinted glass - rear
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel with column shift
- ☒ Steering wheel controls to include cruise, audio and phone
- ☒ AM/FM radio with digital media auxiliary jack and Bluetooth
- ☒ Power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Power driver seat with lumbar
  - ☒ Cloth rear seat, folding

**Chassis**
- ☒ 7000 lb GVWR minimum
- ☒ Four-wheel drive
- ☒ 18" Wheels
- ☒ All-terrain steel belted radial tires (not mud tires), maximum traction/ply available (may be dealer provided)
- ☒ Jack
- ☒ Engine, minimum 8-cylinder, 5.0 liter
  - ☒ Block heater
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Hill decent control
- ☒ Off road package – to include off road suspension
- ☒ Metal skid plates – fuel tank, transfer case and front differential
- ☒ Rear wheelhouse liners
- ☒ Limited slip or electronic locking rear axle
  - ☒ 3.31 minimum ratio

- ☒ Rear bumper
- ☒ Class IV receiver hitch
- ☒ Manual open tail gate
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Spray-in Bedliner
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
- ➢ Indicate Make and Model being bid in the space provided.
- ➢ Indicate compliance to the minimum specifications by checking the box on the left.
- ➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
- ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150 _____ MODEL: X1E / X1L _____

**Cab**
- ☒ Extended cab - Four doors (not crew cab)
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
  - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Driver seat with lumbar
  - ☒ Cloth fold-up rear seat

**Chassis**
- ☒ 6900 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR CREW CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
 ➤ Indicate Make and Model being bid in the space provided.
 ➤ Indicate compliance to the minimum specifications by checking the box on the left.
 ➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
 ➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ford F-150_____     MODEL: _W1E / W1L_____

**Cab**
- ☒ Crew cab - six passenger
- ☒ 5.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ USB and/or 12-volt power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Driver seat with lumbar
  - ☒ Cloth rear seat, folding

**Chassis**
- ☒ 6900 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
  - ☒ 3.55 minimum ratio
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

## NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
## SPECIFICATION COMPLIANCE FORM
## FOR
## 6800 GVWR 4DR CREW CAB 4X4 PICKUP
## MODEL 1500/F150
## CURRENT PRODUCTION YEAR

### BIDDERS INSTRUCTIONS:
- ➢ Indicate Make and Model being bid in the space provided.
- ➢ Indicate compliance to the minimum specifications by checking the box on the left.
- ➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
- ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150          MODEL: W1E / W1L

### Cab
- ☒ Crew cab - six passenger
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
  - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Driver seat with lumbar
  - ☒ Cloth rear seat, folding

### Chassis
- ☒ 6800 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
  - ☒ 3.55 minimum ratio
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6300 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
- ➢ Indicate Make and Model being bid in the space provided.
- ➢ Indicate compliance to the minimum specifications by checking the box on the left.
- ➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
- ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150          MODEL: F1E / F1L

## Cab

- ☒ Conventional cab
- ☒ 8' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior mirrors
- ☒ Air conditioning
- ☒ Tilt steering wheel
- ☒ AM/FM radio
- ☒ USB and/or 12-volt power point
- ☒ Cloth split bench seat with folding back

## Chassis

- ☒ 6300 lb GVWR minimum
- ☒ Four wheel drive
- ☒ Steel belted all terrain radial tires
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 6 cylinder
- ☒ Automatic transmission with overdrive
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6500 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➢ Indicate Make and Model being bid in the space provided.
➢ Indicate compliance to the minimum specifications by checking the box on the left.
➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ford F-150___    MODEL: _X1E / X1L_____

**Cab**
- ☒ Extended cab - Four doors
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior power mirrors
- ☒ Air conditioning
- ☒ Tilt steering wheel
- ☒ AM/FM radio
- ☒ USB and/or 12-volt power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Cloth fold-up rear seat

**Chassis**
- ☒ 6500 lb GVWR minimum
- ☒ Four wheel drive
- ☒ Steel belted all terrain radial tires
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 6 cylinder
- ☒ Automatic transmission with overdrive
- ☒ Class III receiver hitch
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➢ Indicate Make and Model being bid in the space provided.
➢ Indicate compliance to the minimum specifications by checking the box on the left.
➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ford F-150 _____ MODEL: X1E / X1L _____

**Cab**

- ☒ Extended cab – four doors (not crew cab)
- ☒ 8' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior power mirrors
- ☒ Air conditioning
- ☒ Tilt steering wheel
- ☒ AM/FM radio
- ☒ Power point/cigar lighter type
- ☒ Cloth split bench seat
    - ☒ Cloth rear seat, folding

**Chassis**

- ☒ 7000 lb GVWR minimum
- ☒ Four wheel drive
- ☒ Steel belted all terrain radial tires
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 6 cylinder
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6600 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➤ **Indicate Make and Model being bid in the space provided.**
➤ **Indicate compliance to the minimum specifications by checking the box on the left.**
➤ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
➤ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE:  GMC Sierra 1500          MODEL: TK10903

**Cab**

- ☒ Conventional cab
- ☒ 8' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior mirrors
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ Power Windows
- ☒ AM/FM radio and digital media auxiliary jack and/or bluetooth
- ☒ USB and/or 12-Volt power point(s)
- ☒ Cloth split bench seat with folding back

**Chassis**

- ☒ 6600 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – Electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
  ➢ **Indicate Make and Model being bid in the space provided.**
  ➢ **Indicate compliance to the minimum specifications by checking the box on the left.**
  ➢ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
  ➢ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: GMC                MODEL: NO BID

## Cab

- ⊔ Extended cab – four doors (not crew cab)
- ⊔ 8' Long (+/- manufacturer variance), wide box
- ⊔ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ⊔ Interior day/night and two exterior power mirrors
- ⊔ Power windows
- ⊔ Power door locks with remote keyless entry
- ⊔ Air conditioning
- ⊔ Cruise control
- ⊔ Tilt steering wheel
- ⊔ AM/FM radio and/or auxiliary input jack and/or bluetooth
- ⊔ Power point/cigar lighter type
- ⊔ Cloth split bench seat
  - o Driver seat with lumbar
  - o Cloth rear seat

## Chassis

- ⊔ 7000 lb GVWR minimum
- ⊔ Four wheel drive
- ⊔ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ⊔ Full size spare tire and wheel
- ⊔ Jack
- ⊔ Engine, minimum 8 cylinder, 5.0 liter
- ⊔ Automatic transmission with overdrive
- ⊔ Transfer case – electronic shift control
- ⊔ Skid plate package
- ⊔ Limited slip or electronic locking rear axle
- ⊔ Factory rear bumper
- ⊔ Class III receiver hitch
- ⊔ Trailer tow package-transmission cooler
  - o Seven terminal trailer plug installed
  - o Integrated trailer brake controller
- ⊔ Front OEM, factory/dealer installed tow hooks
- ⊔ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**FORD F150 4X4 POLICE RESPONDER**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➤ Indicate Make and Model being bid in the space provided.
➤ Indicate compliance to the minimum specifications by checking the box on the left.
➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: <u>GMC</u>          MODEL: <u>NO BID</u>

**2024 Ford F150 4X4 Police Responder**

- ☐ Four-Wheel Drive
- ☐ Exterior Color: Agate Black Metallic
- ☐ Interior Color: Black
- ☐ Remote Keyless Entry w/Four Fobs
- ☐ 4 Sets of Keys, All Four Must Start the Vehicle
- ☐ Each Vehicle to be Individually Keyed
- ☐ Front License Plate Bracket
- ☐ Platform Running Boards, Black
- ☐ Engine Block Heater
- ☐ Police Engine Idle Feature
- ☐ Backup Alarm System
- ☐ Fixed Rear Window w/Privacy Glass and Defroster

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4DR CREW CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➤ **Indicate Make and Model being bid in the space provided.**
➤ **Indicate compliance to the minimum specifications by checking the box on the left.**
➤ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
➤ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE:  GMC Sierra 1500          MODEL: TK10743

**Cab**

- ☒ Crew cab - six passenger
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Carpeted floor covering, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote with three sets of keys
- ☒ Cabin air filter system
- ☒ Interior day/night and two exterior power mirrors
- ☒ Back up camera with rear park assist or reverse sensing system
- ☒ Power windows
- ☒ Deep tinted glass - rear
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel with column shift
- ☒ Steering wheel controls to include cruise, audio and phone
- ☒ AM/FM radio with digital media auxiliary jack and Bluetooth
- ☒ Power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Power driver seat with lumbar
  - ☒ Cloth rear seat, folding

**Chassis**

- ☒ 7000 lb GVWR minimum
- ☒ Four-wheel drive
- ☒ 18" Wheels
- ☒ All-terrain steel belted radial tires (not mud tires), maximum traction/ply available (may be dealer provided)
- ☒ Jack
- ☒ Engine, minimum 8-cylinder, 5.0 liter
  - ☒ Block heater
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Hill decent control
- ☒ Off road package – to include off road suspension
- ☒ Metal skid plates – fuel tank, transfer case and front differential
- ☒ Rear wheelhouse liners
- ☐ Limited slip or electronic locking rear axle
  - o 3.31 minimum ratio 3.23 Rear Axle Ratio  <mark>Does not meet</mark>

- ☒ Rear bumper
- ☒ Class IV receiver hitch
- ☒ Manual open tail gate
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Spray-in Bedliner
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
 ➢ Indicate Make and Model being bid in the space provided.
 ➢ Indicate compliance to the minimum specifications by checking the box on the left.
 ➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
 ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: __GMC Sierra 1500__          MODEL: __TK10753__

**Cab**
- ☒ Extended cab - Four doors (not crew cab)
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
    - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
    - ☒ Driver seat with lumbar
    - ☒ Cloth fold-up rear seat

**Chassis**
- ☒ 6900 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR CREW CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

<u>**BIDDERS INSTRUCTIONS:**</u>
 ➤ **Indicate Make and Model being bid in the space provided.**
 ➤ **Indicate compliance to the minimum specifications by checking the box on the left.**
 ➤ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
 ➤ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___GMC Sierra 1500___     MODEL: _TK10543_____

<u>**Cab**</u>
 ☒ Crew cab - six passenger
 ☒ 5.5' Long (+/- manufacturer variance), wide box
 ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
 ☒ Power door locks with keyless remote
 ☒ Interior day/night and two exterior power mirrors
 ☒ Power windows
 ☒ Air conditioning
 ☒ Cruise control
 ☒ Tilt steering wheel
 ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
 ☒ USB and/or 12-volt power points, minimum of 2
 ☒ Cloth 40-20-40 split bench seat with center folding arm rest
    ☒ Driver seat with lumbar
    ☒ Cloth rear seat, folding

<u>**Chassis**</u>
 ☒ 6900 lb GVWR minimum
 ☒ Four wheel drive
 ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
 ☒ Full size spare tire and wheel
 ☒ Jack
 ☒ Engine, minimum 8 cylinder, 5.0 liter
 ☒ Automatic transmission with overdrive
 ☒ Transfer case – electronic shift control
 ☒ Skid plate package
 ☒ Limited slip or electronic locking rear axle
    ○ 3.55 minimum ratio 3.23 Rear Axle Ratio <mark>Does not meet</mark>
 ☒ Factory rear bumper
 ☒ Class III receiver hitch
 ☒ Trailer tow package-transmission cooler
    ☒ Seven terminal trailer plug installed
    ☒ Integrated trailer brake controller
 ☒ Front OEM, factory/dealer installed tow hooks
 ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6800 GVWR 4DR CREW CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

## BIDDERS INSTRUCTIONS:

- ➢ **Indicate Make and Model being bid in the space provided.**
- ➢ **Indicate compliance to the minimum specifications by checking the box on the left.**
- ➢ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
- ➢ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
**Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:**

MAKE: __GMC Sierra 1500__          MODEL: __TK10743__

## Cab

- ☒ Crew cab - six passenger
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
    - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
    - ☒ Driver seat with lumbar
    - ☒ Cloth rear seat, folding

## Chassis

- ☒ 6800 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
    - ○ 3.55 minimum ratio   3.23 Rear Axle Ratio <mark>Does not meet</mark>
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6300 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
  ➢ Indicate Make and Model being bid in the space provided.
  ➢ Indicate compliance to the minimum specifications by checking the box on the left.
  ➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
  ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: GMC Sierra 1500     MODEL: TK10903

**Cab**

  ☒ Conventional cab
  ☒ 8' Long (+/- manufacturer variance), wide box
  ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
  ☒ Interior day/night and two exterior mirrors
  ☒ Air conditioning
  ☒ Tilt steering wheel
  ☒ AM/FM radio
  ☒ USB and/or 12-volt power point
  ☒ Cloth split bench seat with folding back

**Chassis**

  ☒ 6300 lb GVWR minimum
  ☒ Four wheel drive
  ☒ Steel belted all terrain radial tires
  ☒ Full size spare tire and wheel
  ☒ Jack
  ☒ Engine, minimum 6 cylinder
  ☒ Automatic transmission with overdrive
  ☒ Factory rear bumper
  ☒ Class III receiver hitch
  ☒ Front OEM, factory/dealer installed tow hooks
  ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6500 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➤ Indicate Make and Model being bid in the space provided.
➤ Indicate compliance to the minimum specifications by checking the box on the left.
➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___GMC Sierra 1500___ MODEL: TK10753_____

**Cab**
- ☒ Extended cab - Four doors
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior power mirrors
- ☒ Air conditioning
- ☒ Tilt steering wheel
- ☒ AM/FM radio
- ☒ USB and/or 12-volt power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
    - ☒ Cloth fold-up rear seat

**Chassis**
- ☒ 6500 lb GVWR minimum
- ☒ Four wheel drive
- ☒ Steel belted all terrain radial tires
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 6 cylinder
- ☒ Automatic transmission with overdrive
- ☒ Class III receiver hitch
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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- ➢ Indicate compliance to the minimum specifications by checking the box on the left.
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- ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: __GMC_____     MODEL: __NO BID_____

**Cab**
- ☐ Extended cab – four doors (not crew cab)
- ☐ 8' Long (+/- manufacturer variance), wide box
- ☐ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☐ Interior day/night and two exterior power mirrors
- ☐ Air conditioning
- ☐ Tilt steering wheel
- ☐ AM/FM radio
- ☐ Power point/cigar lighter type
- ☐ Cloth split bench seat
    - o Cloth rear seat, folding

**Chassis**

- ☐ 7000 lb GVWR minimum
- ☐ Four wheel drive
- ☐ Steel belted all terrain radial tires
- ☐ Full size spare tire and wheel
- ☐ Jack
- ☐ Engine, minimum 6 cylinder
- ☐ Factory rear bumper
- ☐ Class III receiver hitch
- ☐ Front OEM, factory/dealer installed tow hooks
- ☐ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6600 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ram_____ MODEL: _NO BID_____

**Cab**

- ☐ Conventional cab
- ☐ 8' Long (+/- manufacturer variance), wide box
- ☐ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☐ Interior day/night and two exterior mirrors
- ☐ Air conditioning
- ☐ Cruise control
- ☐ Tilt steering wheel
- ☐ Power Windows
- ☐ AM/FM radio and digital media auxiliary jack and/or bluetooth
- ☐ USB and/or 12-Volt power point(s)
- ☐ Cloth split bench seat with folding back

**Chassis**

- ☐ 6600 lb GVWR minimum
- ☐ Four wheel drive
- ☐ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ☐ Full size spare tire and wheel
- ☐ Jack
- ☐ Engine, minimum 8 cylinder, 5.0 liter
- ☐ Automatic transmission with overdrive
- ☐ Transfer case – Electronic shift control
- ☐ Skid plate package
- ☐ Limited slip or electronic locking rear axle
- ☐ Factory rear bumper
- ☐ Class III receiver hitch
- ☐ Trailer tow package-transmission cooler
  - o Seven terminal trailer plug installed
  - o Integrated trailer brake controller
- ☐ Front OEM, factory/dealer installed tow hooks
- ☐ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: _____Ram_____     MODEL: _NO BID_____

**Cab**
- ☐ Extended cab – four doors (not crew cab)
- ☐ 8' Long (+/- manufacturer variance), wide box
- ☐ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☐ Interior day/night and two exterior power mirrors
- ☐ Power windows
- ☐ Power door locks with remote keyless entry
- ☐ Air conditioning
- ☐ Cruise control
- ☐ Tilt steering wheel
- ☐ AM/FM radio and/or auxiliary input jack and/or bluetooth
- ☐ Power point/cigar lighter type
- ☐ Cloth split bench seat
  - o Driver seat with lumbar
  - o Cloth rear seat

**Chassis**

- ☐ 7000 lb GVWR minimum
- ☐ Four wheel drive
- ☐ LT Steel belted radial tires, 6 ply all terrain (on/off-road application)
- ☐ Full size spare tire and wheel
- ☐ Jack
- ☐ Engine, minimum 8 cylinder, 5.0 liter
- ☐ Automatic transmission with overdrive
- ☐ Transfer case – electronic shift control
- ☐ Skid plate package
- ☐ Limited slip or electronic locking rear axle
- ☐ Factory rear bumper
- ☐ Class III receiver hitch
- ☐ Trailer tow package-transmission cooler
  - o Seven terminal trailer plug installed
  - o Integrated trailer brake controller
- ☐ Front OEM, factory/dealer installed tow hooks
- ☐ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIFICATION COMPLIANCE FORM
FOR
FORD F150 4X4 POLICE RESPONDER
CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
➢ Indicate Make and Model being bid in the space provided.
➢ Indicate compliance to the minimum specifications by checking the box on the left.
➢ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ram_____     MODEL: NO BID_____

**2024 Ford F150 4X4 Police Responder**

- ☐ Four-Wheel Drive
- ☐ Exterior Color: Agate Black Metallic
- ☐ Interior Color: Black
- ☐ Remote Keyless Entry w/Four Fobs
- ☐ 4 Sets of Keys, All Four Must Start the Vehicle
- ☐ Each Vehicle to be Individually Keyed
- ☐ Front License Plate Bracket
- ☐ Platform Running Boards, Black
- ☐ Engine Block Heater
- ☐ Police Engine Idle Feature
- ☐ Backup Alarm System
- ☐ Fixed Rear Window w/Privacy Glass and Defroster

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4DR CREW CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
- ➢ **Indicate Make and Model being bid in the space provided.**
- ➢ **Indicate compliance to the minimum specifications by checking the box on the left.**
- ➢ **If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.**
- ➢ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ram_____ MODEL: NO BID_____

## Cab
- ☐ Crew cab - six passenger
- ☐ 6.5' Long (+/- manufacturer variance), wide box
- ☐ Carpeted floor covering, must provide heavy duty non-carpet floor mats
- ☐ Power door locks with keyless remote with three sets of keys
- ☐ Cabin air filter system
- ☐ Interior day/night and two exterior power mirrors
- ☐ Back up camera with rear park assist or reverse sensing system
- ☐ Power windows
- ☐ Deep tinted glass - rear
- ☐ Air conditioning
- ☐ Cruise control
- ☐ Tilt steering wheel with column shift
- ☐ Steering wheel controls to include cruise, audio and phone
- ☐ AM/FM radio with digital media auxiliary jack and Bluetooth
- ☐ Power points, minimum of 2
- ☐ Cloth 40-20-40 split bench seat with center folding arm rest
  - o Power driver seat with lumbar
  - o Cloth rear seat, folding

## Chassis
- ☐ 7000 lb GVWR minimum
- ☐ Four-wheel drive
- ☐ 18" Wheels
- ☐ All-terrain steel belted radial tires (not mud tires), maximum traction/ply available (may be dealer provided)
- ☐ Jack
- ☐ Engine, minimum 8-cylinder, 5.0 liter
  - o Block heater
- ☐ Automatic transmission with overdrive
- ☐ Transfer case – electronic shift control
- ☐ Hill decent control
- ☐ Off road package – to include off road suspension
- ☐ Metal skid plates – fuel tank, transfer case and front differential
- ☐ Rear wheelhouse liners
- ☐ Limited slip or electronic locking rear axle
  - o 3.31 minimum ratio

- ⊔ Rear bumper
- ⊔ Class IV receiver hitch
- ⊔ Manual open tail gate
- ⊔ Trailer tow package-transmission cooler
  - o Seven terminal trailer plug installed
  - o Integrated trailer brake controller
- ⊔ Front OEM, factory/dealer installed tow hooks
- ⊔ Spray-in Bedliner
- ⊔ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

<u>**BIDDERS INSTRUCTIONS:**</u>
➤ Indicate Make and Model being bid in the space provided.
➤ Indicate compliance to the minimum specifications by checking the box on the left.
➤ If the make and model being bid does not comply with the below specification contact the Procurement Officer PRIOR TO the deadline for questions for clarification or possible amendment.
➤ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: <u>Ram 1500</u>          MODEL: <u>DT6H41</u>

<u>**Cab**</u>
- ☒ Extended cab - Four doors (not crew cab)
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
  - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Driver seat with lumbar
  - ☒ Cloth fold-up rear seat

<u>**Chassis**</u>
- ☒ 6900 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6900 GVWR 4DR CREW CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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- ➢ RETURN THIS FORM WITH BID RESPONSE SHEET.

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ram 1500___   MODEL: ___DT6H98___

**Cab**
- ☒ Crew cab - six passenger
- ☒ 5.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ USB and/or 12-volt power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
    - ☒ Driver seat with lumbar
    - ☒ Cloth rear seat, folding

**Chassis**
- ☒ 6900 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
    - ☒ 3.55 minimum ratio
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
    - ☒ Seven terminal trailer plug installed
    - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6800 GVWR 4DR CREW CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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- ➤ **Indicate compliance to the minimum specifications by checking the box on the left.**
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- ➤ **RETURN THIS FORM WITH BID RESPONSE SHEET.**

Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: Ram 1500 _____ MODEL: DT6H91 _____

**Cab**
- ☒ Crew cab - six passenger
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Power door locks with keyless remote
- ☒ Interior day/night and two exterior power mirrors
- ☒ Power windows
- ☒ Air conditioning
- ☒ Cruise control
- ☒ Tilt steering wheel
- ☒ AM/FM radio with digital media auxiliary jack and/or bluetooth
- ☒ Power points, minimum of 2
  - ☒ To include 400-Watt or 120-Volt onboard outlet
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Driver seat with lumbar
  - ☒ Cloth rear seat, folding

**Chassis**
- ☒ 6800 lb GVWR minimum
- ☒ Four wheel drive
- ☒ LT Steel belted radial tires, maximum traction available, 6 ply (off-road application)
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 8 cylinder, 5.0 liter
- ☒ Automatic transmission with overdrive
- ☒ Transfer case – electronic shift control
- ☒ Skid plate package
- ☒ Limited slip or electronic locking rear axle
  - ☒ 3.55 minimum ratio
- ☒ Factory rear bumper
- ☒ Class III receiver hitch
- ☒ Trailer tow package-transmission cooler
  - ☒ Seven terminal trailer plug installed
  - ☒ Integrated trailer brake controller
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6300 GVWR REG CAB 4X4 PICKUP**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: _____Ram_____          MODEL: NO BID_____

**Cab**

- ☐ Conventional cab
- ☐ 8' Long (+/- manufacturer variance), wide box
- ☐ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☐ Interior day/night and two exterior mirrors
- ☐ Air conditioning
- ☐ Tilt steering wheel
- ☐ AM/FM radio
- ☐ USB and/or 12-volt power point
- ☐ Cloth split bench seat with folding back

**Chassis**

- ☐ 6300 lb GVWR minimum
- ☐ Four wheel drive
- ☐ Steel belted all terrain radial tires
- ☐ Full size spare tire and wheel
- ☐ Jack
- ☐ Engine, minimum 6 cylinder
- ☐ Automatic transmission with overdrive
- ☐ Factory rear bumper
- ☐ Class III receiver hitch
- ☐ Front OEM, factory/dealer installed tow hooks
- ☐ Warranty, minimum 5yr/60,000 miles on engine and power train

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**6500 GVWR 4DR EXT CAB 4X4 PICKUP SB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: __Ram 1500__    MODEL: __DT6H41__

**Cab**
- ☒ Extended cab - Four doors
- ☒ 6.5' Long (+/- manufacturer variance), wide box
- ☒ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☒ Interior day/night and two exterior power mirrors
- ☒ Air conditioning
- ☒ Tilt steering wheel
- ☒ AM/FM radio
- ☒ USB and/or 12-volt power points, minimum of 2
- ☒ Cloth 40-20-40 split bench seat with center folding arm rest
  - ☒ Cloth fold-up rear seat

**Chassis**
- ☒ 6500 lb GVWR minimum
- ☒ Four wheel drive
- ☒ Steel belted all terrain radial tires
- ☒ Full size spare tire and wheel
- ☒ Jack
- ☒ Engine, minimum 6 cylinder
- ☒ Automatic transmission with overdrive
- ☒ Class III receiver hitch
- ☒ Front OEM, factory/dealer installed tow hooks
- ☒ Warranty, minimum 5yr/60,000 miles on engine and power

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATION COMPLIANCE FORM**
**FOR**
**7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB**
**MODEL 1500/F150**
**CURRENT PRODUCTION YEAR**

**BIDDERS INSTRUCTIONS:**
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➢ Indicate compliance to the minimum specifications by checking the box on the left.
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Awarded bidder will provide dealer invoice pricing on all additional vehicle options.
Vehicles shall meet Federal Government requirements and be equipped with all advertised standard factory equipment in addition to, but not limited to, the equipment specified below:

MAKE: ___Ram_____    MODEL: NO BID_____

**Cab**
- ☐ Extended cab – four doors (not crew cab)
- ☐ 8' Long (+/- manufacturer variance), wide box
- ☐ Non-carpet floor covering, if carpeted, must provide heavy duty non-carpet floor mats
- ☐ Interior day/night and two exterior power mirrors
- ☐ Air conditioning
- ☐ Tilt steering wheel
- ☐ AM/FM radio
- ☐ Power point/cigar lighter type
- ☐ Cloth split bench seat
  - o Cloth rear seat, folding

**Chassis**
- ☐ 7000 lb GVWR minimum
- ☐ Four wheel drive
- ☐ Steel belted all terrain radial tires
- ☐ Full size spare tire and wheel
- ☐ Jack
- ☐ Engine, minimum 6 cylinder
- ☐ Factory rear bumper
- ☐ Class III receiver hitch
- ☐ Front OEM, factory/dealer installed tow hooks
- ☐ Warranty, minimum 5yr/60,000 miles on engine and power train

| **BID RESPONSE FORM** | | | | | |
|---|---|---|---|---|---|
| **SC 376B - Police Vehicles  377- Pickups Current Production Year** | | | | | |
| **IFB 110.7-23-054** | | | | | |
| **Bidder Name:** | | **Nelson Auto Center, Inc.** | | | |
| **ITEM** | **QTY** | **UNIT** | **SPECS** | **Make/ Model** | **Unit Price** |
| **SSP3-2** | | **2024 6600 GVWR REG CAB 4X4 PICKUP MODEL 1500/F150** | | | |
| **1** | 2 | each | Bismarck | GMC Sierra 1500 TK10903 | $43,034.00 |
| **2** | 4 | each | Grand Forks | GMC Sierra 1500 TK10903 | $42,990.00 |
| **3** | 1 | each | Fargo | GMC Sierra 1500 TK10903 | $42,920.00 |
| **SSP3-3** | | **2024 7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB MODEL 1500/F150** | | | |
| **4** | 2 | each | Bismarck | Ford F150 X1E/X1L | 46,862.00 |
| **5** | 1 | each | Valley City | Ford F150 X1E/X1L | 46,778.00 |
| **6** | 1 | each | Grand Forks | Ford F150 X1E/X1L | 46,818.00 |
| **7** | 1 | each | Fargo | Ford F150 X1E/X1L | 46,748.00 |
| **SSP8-4** | | **2024 7000 GVWR 4DR CREW CAB 4X4 PICKUP MODEL 1500/F150** | | | |
| **8** | 5 | each | Bismarck | GMC Sierra 1500 TK10743 | $49,123.00 |
| **9** | 1 | each | Fargo | GMC Sierra 1500 TK10743 | $49,009.00 |
| **SSP9-1** | | **2024 6900 GVWR 4DR EXT CAB 4X4 PICKUP SB MODEL 1500/F150** | | | |
| **10** | 30 | each | Bismarck | GMC Sierra 1500 TK10753 | $43,728.00 |
| **11** | 1 | each | Valley City | GMC Sierra 1500 TK10753 | $43,644.00 |
| **12** | 4 | each | Devils Lake | GMC Sierra 1500 TK10753 | $43,719.00 |
| **13** | 6 | each | Minot | GMC Sierra 1500 TK10753 | $43,801.00 |
| **14** | 2 | each | Grand Forks | GMC Sierra 1500 TK10753 | $43,684.00 |
| **15** | 7 | each | Fargo | GMC Sierra 1500 TK10753 | $43,614.00 |
| **SSP9-2** | | **2024 6900 GVWR 4DR CREW CAB 4X4 PICKUP SB MODEL** | | | |
| **16** | 3 | each | Bismarck | GMC Sierra 1500 TK10543 | $45,882.00 |
| **17** | 1 | each | Valley City | GMC Sierra 1500 TK10543 | $45,798.00 |
| **18** | 1 | each | Devils Lake | GMC Sierra 1500 TK10543 | $45,873.00 |
| **19** | 1 | each | Minot | GMC Sierra 1500 TK10543 | $45,955.00 |
| **20** | 1 | each | Grand Forks | GMC Sierra 1500 TK10543 | $45,838.00 |
| **21** | 1 | each | Fargo | GMC Sierra 1500 TK10543 | $45,768.00 |
| **SSP9-3** | | **2024 GVWR 4DR CREW CAB 4X4 PICKUP MODEL 1500/F150** | | | |
| **22** | 2 | each | Bismarck | GMC Sierra 1500 TK10743 | $46,164.00 |
| **23** | 1 | each | Valley City | GMC Sierra 1500 TK10743 | $46,080.00 |
| **24** | 2 | each | Minot | GMC Sierra 1500 TK10743 | $46,155.00 |
| **25** | 1 | each | Devils Lake | GMC Sierra 1500 TK10743 | $46,237.00 |
| **26** | 1 | each | Grand Forks | GMC Sierra 1500 TK10743 | $46,120.00 |
| **27** | 1 | each | Fargo | GMC Sierra 1500 TK10743 | $46,050.00 |
| **SSP12-7** | | **2024 6300 GVWR REG CAB 4X4 PICKUP MODEL 1500/F150** | | | |
| **28** | 1 | each | Fargo | Ford F150 F1E/F1L | $40,779.00 |
| **SSP12-8** | | **2024 6500 GVWR 4DR EXT CAB 4X4 PICKUP SB MODEL 1500/F150** | | | |
| **29** | 1 | each | Fargo | Ram 1500 DT6H41 | $40,957.00 |
| **SSP12-9** | | **2024 7000 GVWR 4 DR EXT CAB 4X4 PICKUP LB MODEL 1500/F150** | | | |
| **30** | 1 | each | Fargo | Ford F150 X1E/X1L | $45,248.00 |
| **SSP7-11** | | **2024 Ford F-150 Police Responder** | | | |
| **31** | 3 | each | Bismarck | Ford F150 Police Responder W1P | $48,849.00 |

| | | |
|---|---|---|
| **Delivery time ARO:** | Approximately 16-26 Weeks | |
| Subject to Manufacturers' Schedules | | |

| **SERVICE REPRESENTATIVE RESPONSE FORM** | |
|---|---|
| **Service Representative Name:** | Melissa Larson |
| **Toll Free Telephone Number:** | 800-477-3013 ext 8865 |
| **Telephone Number:** | 218-998-8865 |
| **Fax Number:** | 218-998-8813 |
| **Email Address:** | mlarson@nelsonfleet.com |
| | |

## ND STATE CONTRACT INFORMATION

| Term Contract Name: | Vehicles- 376 Police 377 Pickups |
|---|---|
| Term Contract Number: | 376-377 |

## CONTRACT INTRODUCTION

This contract is for the purchase of pickups and police vehicles.

## CONTRACTOR INFORMATION

Check the State contract website for the contractor and contract administrator information.

## COOPERATIVE PURCHASING

This contract is a cooperative purchasing contract established pursuant to North Dakota Century Code (NDCC) sections 54-44.4-13. This contract is made available to state entities, institutions under the jurisdiction of the State Board of Higher Education, other government entities (including counties, cities, townships, public primary and secondary educational entities, governmental boards and commissions), nonprofit entities established on behalf of public entities, tribal agencies, transportation providers under N.D.C.C  chapter 39-04.2, and the International Peace Garden.  Participation in this open-ended contract is not mandated; therefore, the estimated volume of this contract is not known.

## PRICING

Pricing can be found under the attachments of the state contract listing.

## F.O.B. POINT AND FREIGHT

Delivery will be F.O.B. Destination to the location specified.  The freight is to be included in the price of the products. Title will pass to Purchasing Agency or entity upon delivery to the specified destination.

## DELIVERY REQUIREMENTS

DOCUMENTS THAT MUST BE FURNISHED AT TIME OF DELIVERY TO ND DOT STATE FLEET SERVICES:

a) Certificate of origin (MCO)
b) Dealer Invoice (with contract pricing)
c) Damage Disclosure
d) Send to State Fleet at:

North Dakota Transportation Bldg.
Attn: Lisa Mathwich, State Fleet Manager
State Fleet Services

608 E. Blvd.

Bismarck, ND 58505-0700

DOCUMENTS THAT MUST BE FURNISHED AT TIME OF DELIVERY TO A COOPERATIVE PURCHASING ENTITY:

a) Certificate of origin (MCO)
b) Dealer Invoice (with contract pricing)
c) Damage Disclosure

The following must accompany the vehicle when it is delivered:

I.   Warranty, warranty book and identification plate (if needed)
II.  Key number

## DELIVERY LEAD TIME AND ORDERING

Delivery must be made within 90-120 days after the contractor receives an order from the Purchasing Agency or Cooperative Entity.  If after receiving the order, the contractor learns that the delivery requirements cannot be met, the contractor must immediately notify ND State Fleet or the Purchasing Entity or State Agency by telephone or by e-mail or mail of the delay and the approximate date delivery may be expected.

# City of Minot

**TO:**      Mayor Thomas Ross
            Members of the City Council

**FROM:**    Tom Joyce, Assistant City Manager

**DATE:**    April 15, 2024

**SUBJECT:** APPOINTMENT OF PUBLIC WORKS OPERATIONS DIRECTOR

## I.   RECOMMENDED ACTION
Recommend Council approve the appointment of Bryan Banfill as the Public Works Operations Director.

## II.  DEPARTMENT CONTACT PERSONS
Tom Joyce, Assistant City Manager                        857-4750
Lisa Jundt, Human Resources Director                     857-4753

## III. DESCRIPTION

   A. Background
      At a Special Council Meeting on June 2, 2023 the City Council approved a restructuring of the Public Works Department, to include the position of Utilities Director and Public Works Director. Since retitled as Public Works Operations Director, but assuming the same responsibilities as originally designed the position, this position would work directly for the newly created Assistant City Manager position.

      The Public Works Operations Director position was extensively advertised by using the City's website, LinkedIn, Zip Recruiter, and Indeed.  18 applications were received, of which 3 received a second interview.  The 1st round interview was conducted by City department heads, a Public Works department head from the City of Bismarck, and the Assistant City Manager.  Second round interviews of 3 finalists were conducted by the Mayor, the City Manager, and the Assistant City Manager.

      As a result of the recruitment process and interview process, the Assistant City Manager selected and offered the position to Bryan Banfill.  Mr. Banfill has accepted the position pending Council approval with a start date of May 6, 2024. Current ordinance requires Council ratification of all department head hiring/terminations.

## IV.  IMPACT:

   A. Fiscal Impact:
      The position has been offered/accepted within the salary range approved for this position.

   B. Service/Delivery Impact:
      Mr. Banfill has the knowledge, skills, behaviors, and abilities to succeed in this very important leadership role and be instrumental in leading the department by

focusing on the city's mission, aspirations, and values, and building the appropriate plans, programs, and execution strategies to meet the city's short-term and long-term requirements.

V.  **CITY COUNCIL ASPIRATIONS**
   A.  This proposal will help meet all the City's aspirations of Dynamic and Flourishing, Resilient and Prepared, Safe and Welcoming, and Excellent and Connected.

VI.  **ALTERNATIVES**
   A. Council could choose not to ratify the appointment, and the Assistant City Manager could offer the position to another candidate.

VII.  **TIME CONSTRAINTS**
   A.  There are no specific time constraints, however, getting the position filled will assist in redistributing internal workloads and finalizing restructuring previously approved by Council.

VIII.  **LIST OF ATTACHMENTS**
   A.  None.

# City of Minot

**TO:**     Mayor Ross and City Council
**FROM:**  Brian Billingsley, AICP, Community & Economic Development Director
**DATE:**   April 9, 2024
**SUBJECT:**  **ADOPT MINOT HOUSING NEEDS AND MARKET ASSESSMENT STUDY**

### I.   RECOMMENDED ACTION

City Council should adopt the Minot Housing Needs and Market Assessment Study as a supplement to the City's housing policy and direct staff to use its strategies as a work plan.

### II.   DEPARTMENT CONTACT PERSONS

Brian Billingsley, Comm. & Economic Dev. Director     857-4147
Doug Diedrichsen, Principal Planner     857-4108

### III.   DESCRIPTION

A. <u>Background</u>

At the January 17, 2023 City Council meeting, the Council adopted a budget amendment to fund a housing study of the Minot housing market. In May of 2023, a screening committee selected Stantec to conduct the study. The study focuses on current and future housing needs, conditions, and affordability.

B. <u>Proposed Project</u>

On June 5, 2023, the City entered into a contract with Stantec to prepare a housing study and a story map for $144,824.

### IV.   IMPACT:

A. <u>Strategic Impact:</u>

The housing study advises staff on changes the City should make to our Land Development Ordinance and land developers on the different types of housing that Minot will need over the next ten years.

B. <u>Service/Delivery Impact:</u>

After its adoption, City staff will distribute the Study to anyone wanting to develop residential property within the City. Staff will also start working on any implementation items, including adjustments to city codes and policies.

C. <u>Fiscal Impact:</u>

There shouldn't be any immediate fiscal impact on the City, but some implementation items may require the services of a consultant.

**V. CITY COUNCIL ASPIRATIONS**
Dynamic and Prosperous, Resilient and Prepared, Safe and Welcoming, Excellent and Connected

**VI. ALTERNATIVES**
A. City Council could offer amendments to the Housing Study.
B. City Council could decline to pass the Housing Study.
C. City Council could direct staff or the consultant to bring back additional research and information for its consideration.

**VII. TIME CONSTRAINTS**
A. None

**VIII. LIST OF ATTACHMENTS**
A. Final Draft of Housing Study and Story Map

# Minot Housing Needs & Market Study

City of Minot
North Dakota

Stantec

March 4, 2024

# CONTENTS

**01**
**INTRODUCTION**

# INTRODUCTION

**Minot.**  Minot is a uniquely dynamic city in north central North Dakota boasting three powerful economic drivers.  It is a regional center for surrounding communities.  It is a close  neighbor to the vital Minot Air Force Base.  And it serves as a gateway city to the North Dakota oil fields.

These drivers have shaped Minot's economy and had tremendous impact on its housing stock.  The first two drivers have long contributed to a stable economic foundation.  The third makes it subject to the heavy swings of the petroleum economy. The 2011 Mouse River flood was an additional destabilizing event, resulting in the displacement of many families and the demolition of numerous homes.  This economic and historical backdrop has left its mark in Minot's housing landscape.

Minot faces housing challenges that are common to communities across North Dakota

and the nation, as well as those that are unique to its economic and natural context. Housing production boomed during the oil boom in the early 2010s—after which time population growth stagnated, and even declined on a county-wide basis.  As a result, housing growth has been modest in the intervening years, and only now have the market fundamentals recovered to the point that new housing production can start to be leveraged to address languishing needs.

**The housing needs and market study.**  The Minot Housing Needs and Market analysis was initiated in response to this distinctive context.  Its goal is to more clearly understand Minot's housing conditions and market context, and the housing related needs of the Minot community.  It identifies strategies that can be employed to address Minot's present and future housing challenges and meet community needs.

The following pages document an analysis of:
- The economic and demographic factors that shape housing demand
- The market context for new housing development
- Minot's existing housing inventory, and
- The "gap" between the housing needs of the community and the housing that is available to meet those needs

This deep analysis provides essential information for City staff and elected officials as they shape housing related policies that meet community needs and advance the City's economic and human progress.  It also offers critical intelligence to builders and developers that seek to understand the nature of Minot's local housing market and sources of housing demand.

# INTRODUCTION

The final section of this study is focused on strategic action.  It offers a menu of housing strategies that are relevant to and viable in Minot's market context—taking into consideration what was learned about its unique challenges and opportunities, and the needs of the Minot community.  The strategies are a kit of ideas that can inform the City's housing-related action plan in the years to come.

**Community engagement.**  The insights of stakeholders and community members have sharpened this analysis and informed its strategic guidance. Input was gathered through several means.

- Focus groups and structured interviews were conducted over the course of the study, many of which occurred during consultant site visits in November 2023 and January 2024.

- Broader community engagement utilized a Story Map on a dedicated website that conveyed all of the key findings and recommendations of the study to the public.

- A housing survey generated 859 responses from people who provided information on their personal housing situations.

**Appreciation.**  We are grateful for our interaction with Minot's staff and elected officials, and appreciate the dedication they have demonstrated to the needs of the Minot community.

**02**

**DEVELOPMENT DRIVERS**

# Minot's Population Grew by 35% since 2009, Outpacing the Region and Comparable Cities

Upper midwestern comparable locations have all witnessed strong population growth, however, the fracking revolution and consequent exploitation of the Bakken oil field has been a strong determinant of growth in the region, especially from 2010-2015.

## Indexed Population Growth, 2009-2021
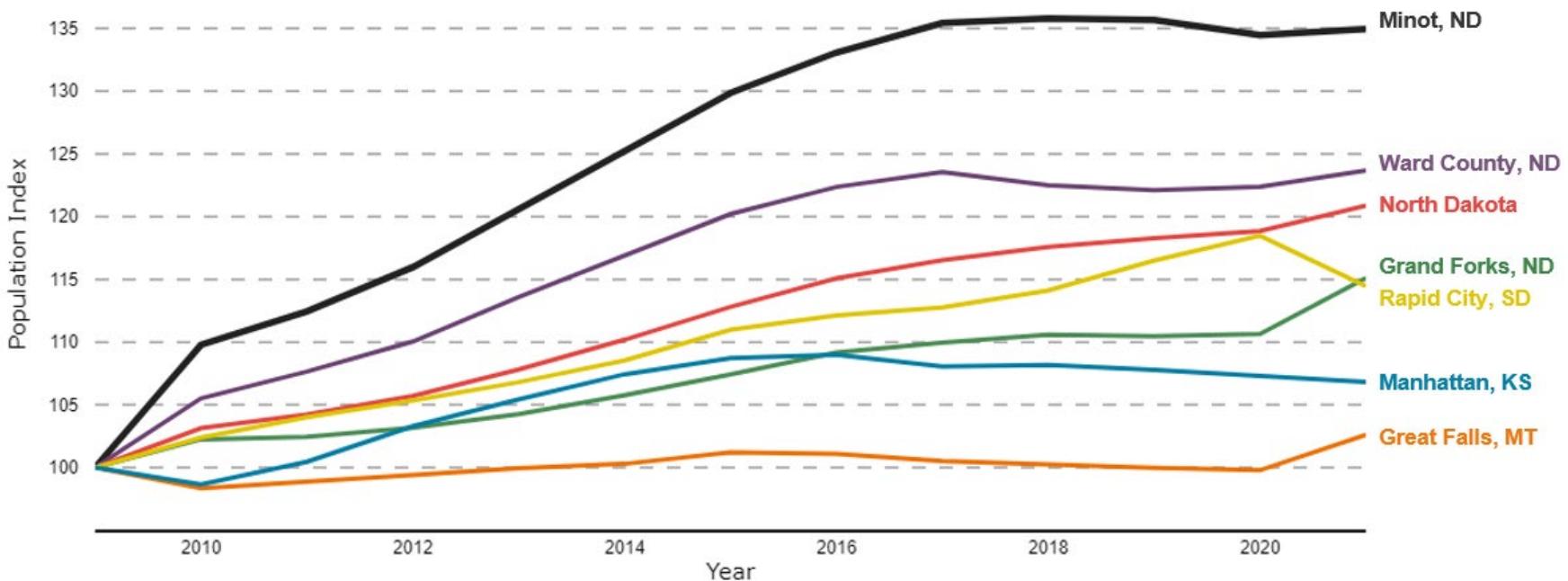


Note on Indexes: Indexed values are to a base of 100, with 2009 being the base year in this graph. Each integer above 100 represents 1% percent growth relative to the 2009 value. For example, 135 represents 35% growth since 2009. Indexes are helpful when assessing the rate of change rather than absolute numbers.

*Source(s): US Census*

## Migration Remains Boom and Bust in Ward County

Migration is the primary determinant of population change. In-migration peaked during the oil boom, only to decline as the development of new wells dried up.

**Net Population Change in Ward County, 2000-2023**

## Population Growth is tightly related to the Bakken Oil Boom

New well creation started in 2010, and rapidly accelerated through 2015 before abruptly tapering as oil prices fell. New wells require more labor than maintaining wells, thereby generating growth. Mountrail and Williams Counties are the major seat of production, with Ward serving as a commuter city serving the oil fields. New well creation is still occurring, albeit sporadically.

**Bakken Growth Continues, but at Less of a Breakneck Pace**
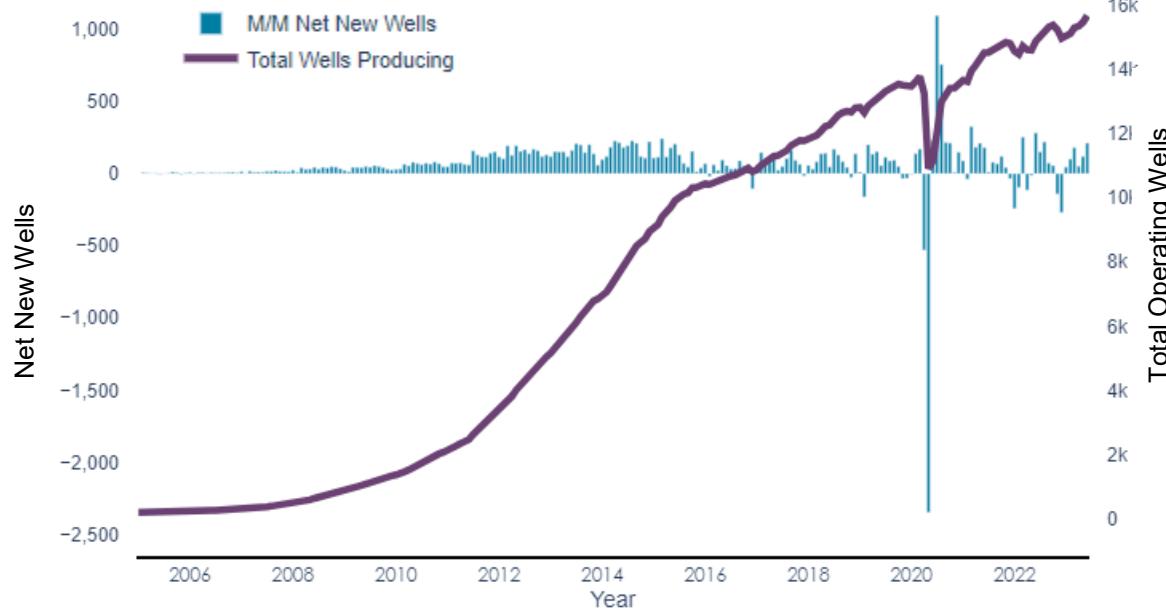
**North Dakota Crude Oil Production is Stabilizing**



*Source(s): OnTheMap 2002-2020*
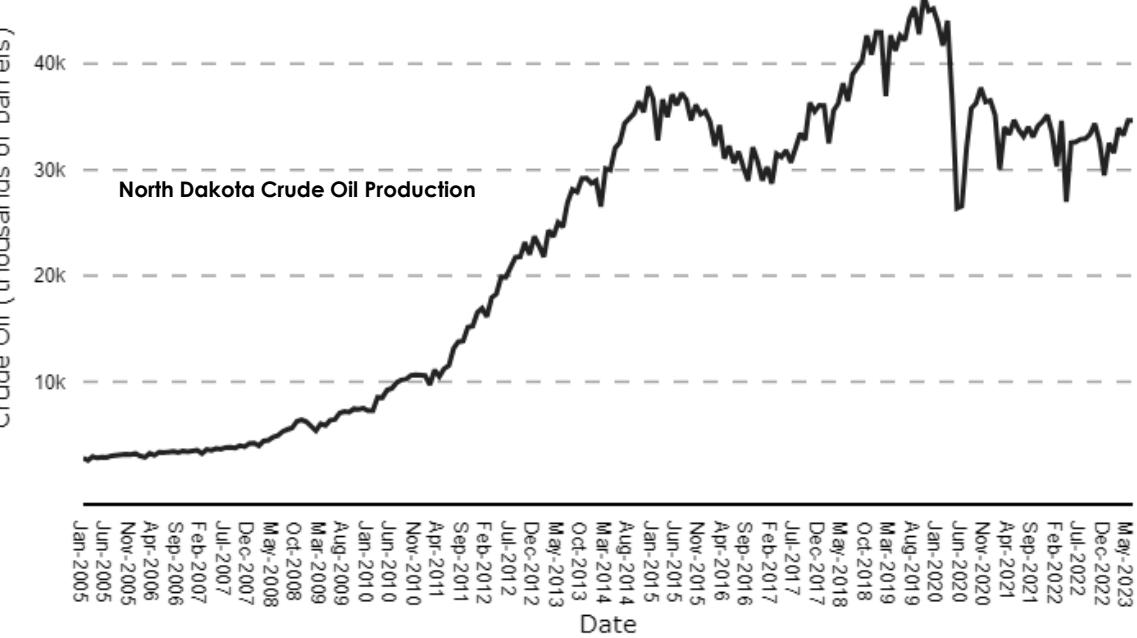
# GDP Grew Rapidly in the 2000s, only to plateau and decline as drilling stabilized

Ward County and North Dakota grew rapidly through the 2000s, with Gross Domestic Product (GDP) reversing course as oil prices fell in 2015. The decline has since stabilized.

**Total GDP Output by County and Select Metropolitan Areas**
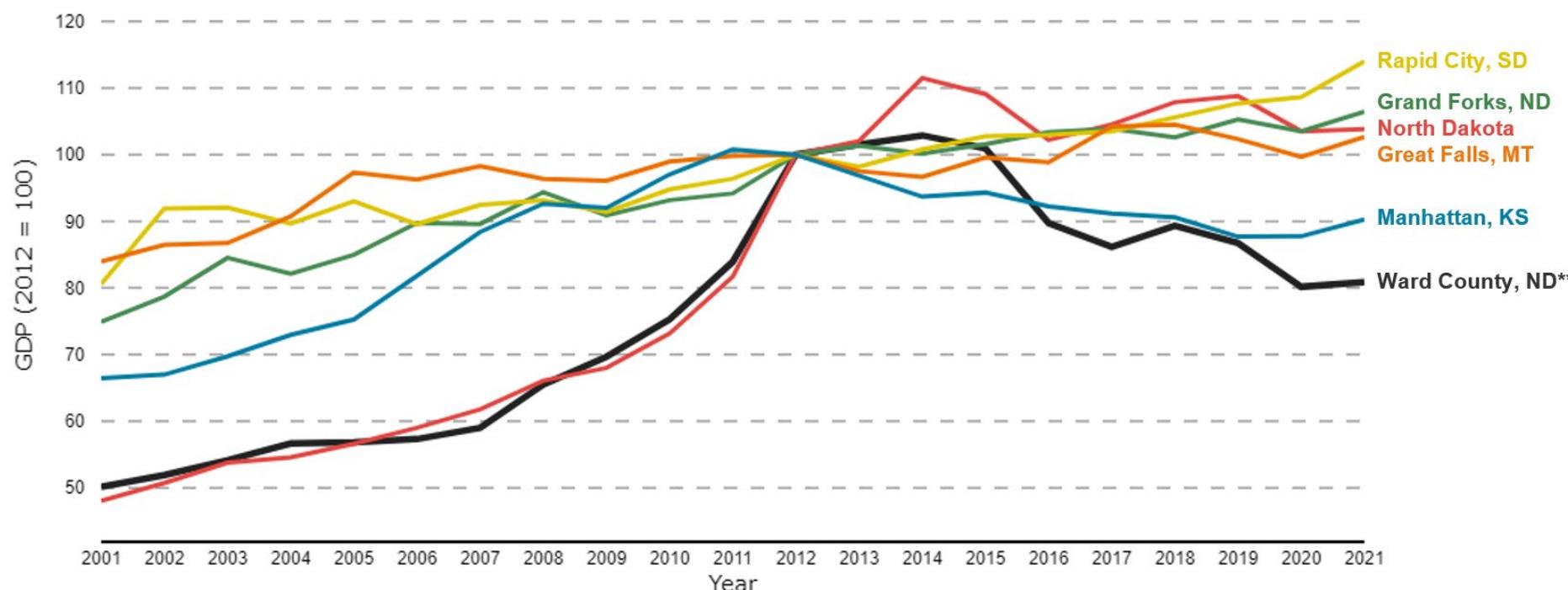


\* Indexed values are set to a base of 100, with 2012 being the base year. Each integer above 100 represents 1% percent growth relative to 2012 GDP. For example, 50 would equal 50% below 2012 economic output. Indexed values are based on 2021 dollars.

\*\* Minot is a Micropolitan Statistical Area. GDP data is only given for MSA and County level geographies. Ward County is used here to approximate growth.

# Total GDP in Ward County is dominated by the Armed Forces and Other Public Sector activity

Oil production is largely situated outside of Ward County, with Ward County operating as a residential center serving the outskirts. Within Ward, the local economy is dominated by the public sector and traditional 'regional services' common to a county seat.

## GDP by Industry in Ward County
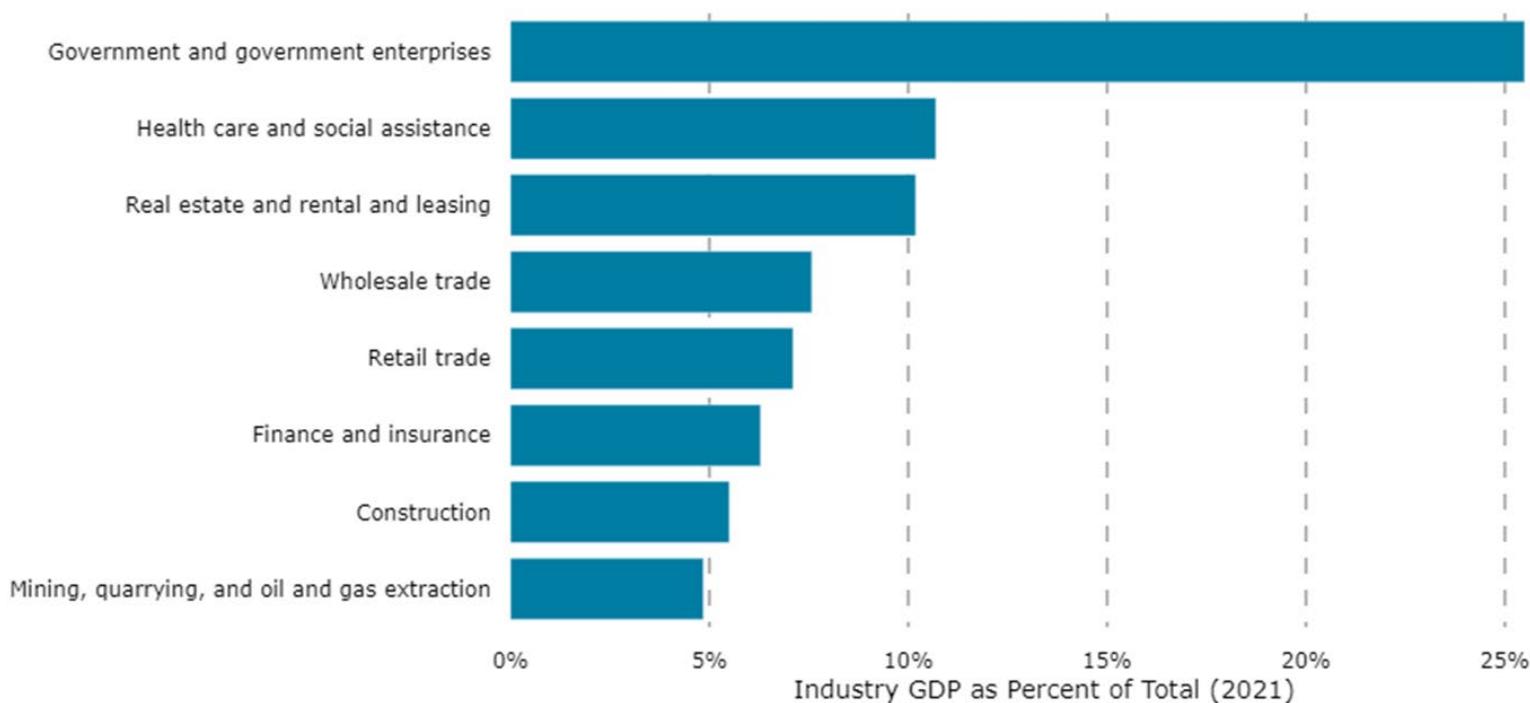


GDP is generally driven by tradeable goods. Tradeable goods often include durable manufactured goods and 'knowledge' based services such as corporate management, financial activities, or professional services.

Ward County's industrial profile, however, largely reflects it's two major industries: 1) The public sector, including the Air Force Base and regionally oriented public management, and 2) Minot's general role as a regional trade center for central North Dakota, which is reflected in the higher levels of economic output driven by services (trade, healthcare, and public management) and real estate.

*Source(s): Bureau of Economic Analysis*

# Ward County employment is concentrated in services

Ward County's employment is also concentrated in sectors associated with being a regional hub and a major Air Force base. Oil extraction employment remains a smaller portion of the total employment base despite its growth.

## Employment by Industry: Ward County
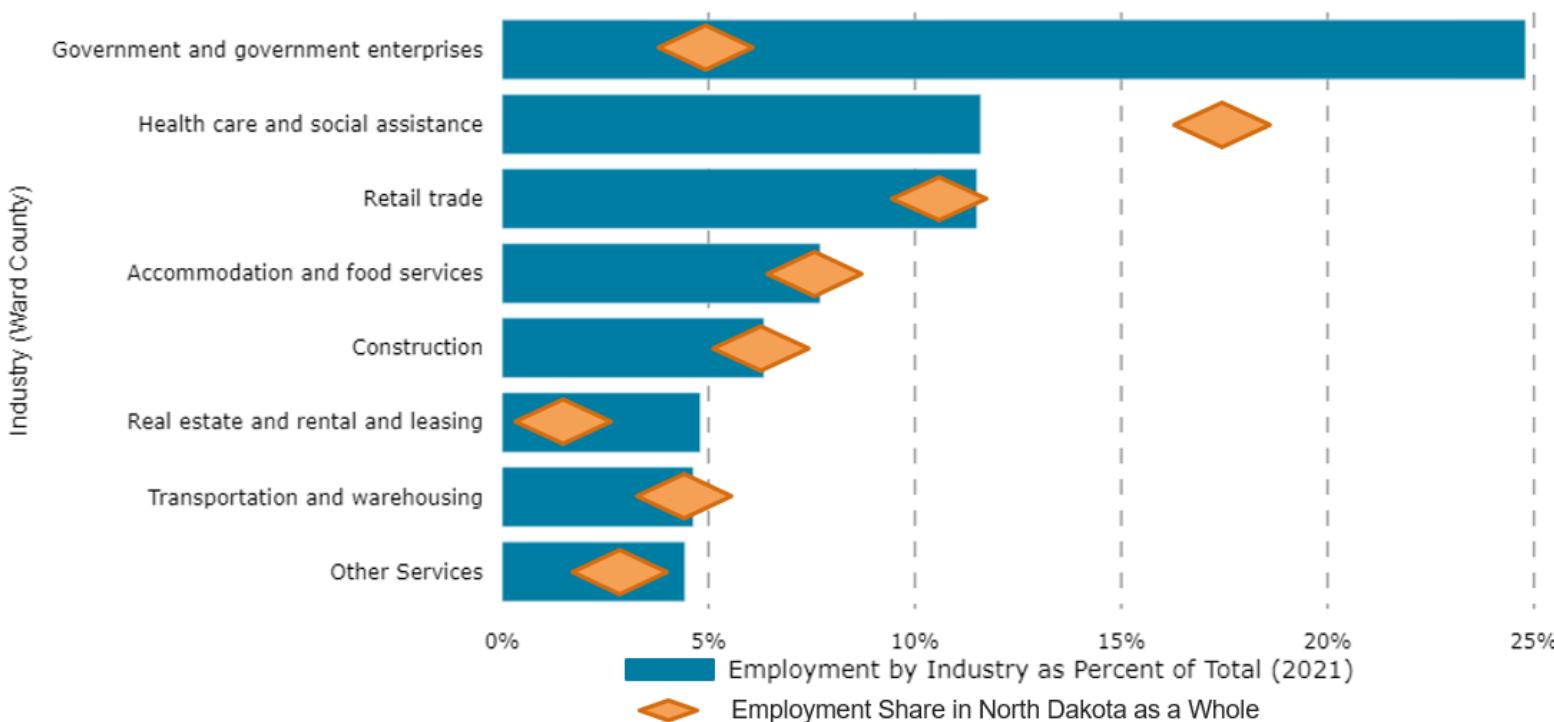


Employment often does not closely align with GDP. A region is driven by GDP output and creates the effective demand for services (ie: retail, wholesale, healthcare, education, construction) . The employment structure of a community, however, has different dynamics. Employment is a function of industry productivity and its size. Capital-intensive industries such as mining or manufacturing may have an outsized impact on GDP relative to employment. However, many services and construction are resistant to industrial automation, limiting output per worker. Consequently, to scale up production, industries with lower productivity must add additional labor. Low productivity per worker is one major factor that limits wages, especially in the service industry.

A consequence of this dynamic is that any local labor-market will contain relatively high proportions of lower-wage jobs. Outside of recent moments of labor market contraction, wage growth in these industries remains limited, even as the cost of living increases.

*Source(s):  Bureau of Economic Analysis*

## Situating the New Economy

The New Economy refers to transitions in the North American industrial structure post-globalization and the central drivers of regional economic development.

**New Economy High Wage** sectors are knowledge-based jobs that remain concentrated in urban centers and are historically less prone to geographical relocation. These industries remain the main catalyst for agglomeration – or spatial concentration – of industries. Knowledge production is a tradeable good that often drives urban development. Wages in these sectors drive effective demand for other service-based industries, medical services, and education.

**Blue Collar** sectors contain industries historically central to a manufacturing-based economy and contain tradeable goods that benefit from economies of scale. Manufacturing – in particular – is less geographically sticky in an era of globalization. These jobs often have lower educational requirements, but due to higher productivity, skill demands, and union density, wages remain higher than service sector work. They, likewise, are major drivers of regional economic development.

**New Economy Low Wage** sectors grow in proportion to other regional economic drivers. They are non-tradeable sectors and are 'geographically sticky.' Due to lower labor productivity, growth in demand is met with increased labor. Wages remain low, although exceptions exist (such as Wholesale Trade). These are generally non-tradeable goods, but often a sizeable sector in a regional economy.

**Eds, Meds and Gov** contain industries have higher proportions of middle-income wage earners due to educational requirements. These jobs concentrate both in regional hubs driven by New Economy High Wage jobs and in historic regional centers. They are non-tradeable goods and place-bound, but in the case of higher education institutions or sizeable public sector installations (Army Bases or State governance), can drive regional economic development.

| Analytical Category | NAICS Sectors |
|---|---|
| New Economy: High Wage | Finance and Insurance |
| | Real Estate and Rental and Leasing |
| | Information |
| | Managment of Corporations |
| | Professional and Business Services |
| New Economy: Low Wage | Transportation and Warehouse |
| | Wholesale Trade |
| | Retail Trade |
| | Arts, Entertainment and Recreation |
| | Accomodation and Food Services |
| | Other Services |
| Blue Collar | Construction |
| | Manufacturing |
| | Utilities |
| | Agriculture, Forestry, Fishing and Hunting |
| | Mining, Quarrying, and Oil and Gas Extraction |
| Eds, Meds and Gov | Educational Services |
| | Health Care and Social Assistance |
| | Public Administration |

# Minot's industrial composition is reflective of a regional commercial center

The fastest growing segments of the economy are in 'Blue Collar' jobs in extraction and construction related industries, however these jobs remain a small part of the overall employment structure. New Economy Low Wage jobs and Eds, Meds and Gov – or jobs central to being a regional commercial center – predominate.

**Indexed Growth by Industrial Category**

**Job Share by Industrial Category**

# Minot is a relatively self-contained economy, with resident jobs reflecting jobs in the area

While the charts on the preceding page showed the industry mix of the jobs in Minot, these charts reflect the mix of jobs that Minot <u>residents</u> hold.  The number of residents working in Blue Collar and New Economy High Wage jobs has grown most rapidly, but remain proportionately smaller than New Economy Low Wage and Eds, Meds & Government jobs.

**Indexed Growth by Industrial Category for Minot Residents**



**Job Share by Industrial Category for Minot Residents**



*Source(s):  OnTheMap 2002-2020*
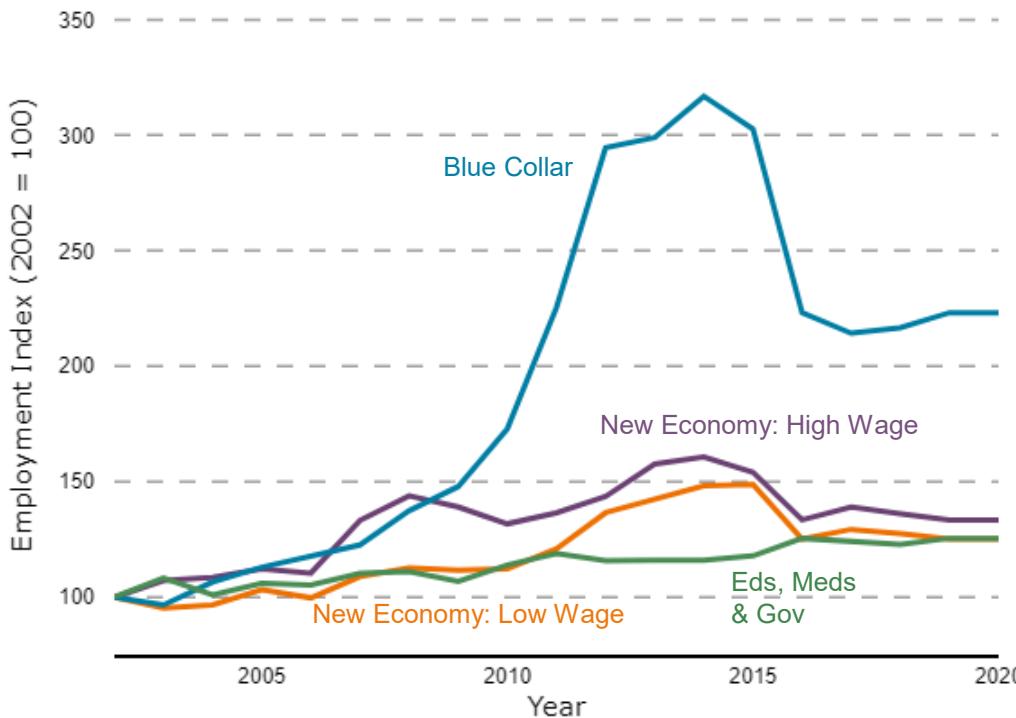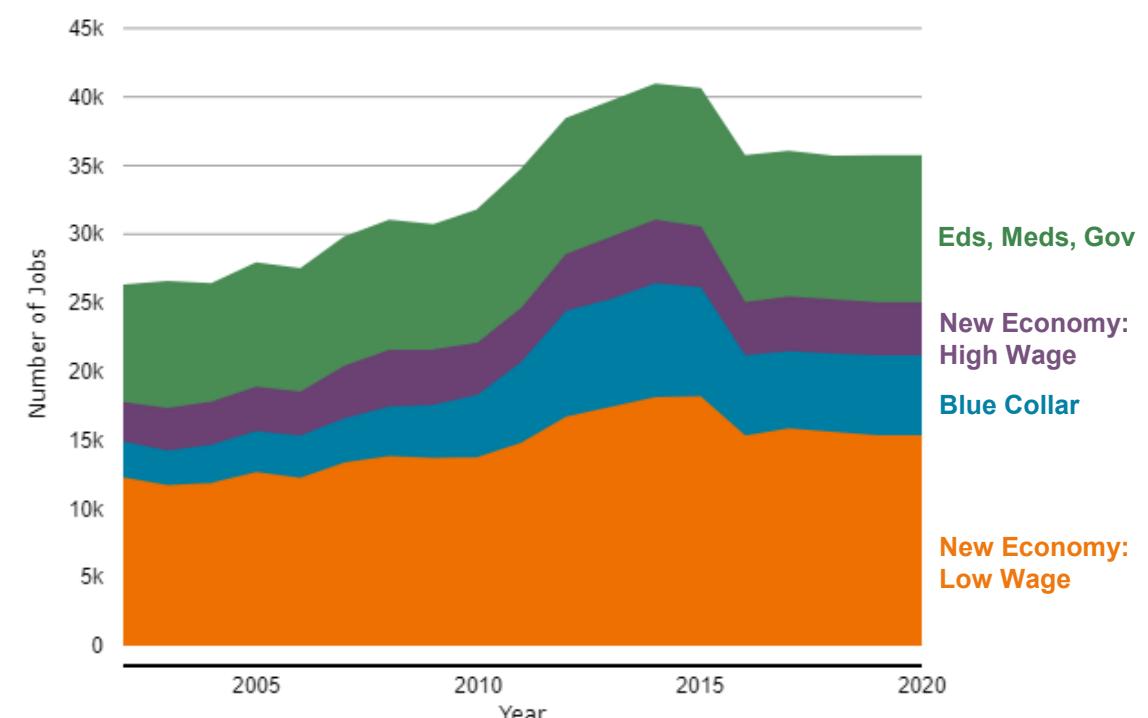
# Minot has a high proportion of *out-commuters* to both the base and the oil fields

62.6% of Minot residents live and work in Minot. This ratio has fallen over time as more people commute in to Minot from the broader county, and more people commute out of Minot for work. The former is a consequence of sprawl, the latter of the growth of the oil industry outside of city boundaries.

**Inflow and Outflow from Minot Over Time**
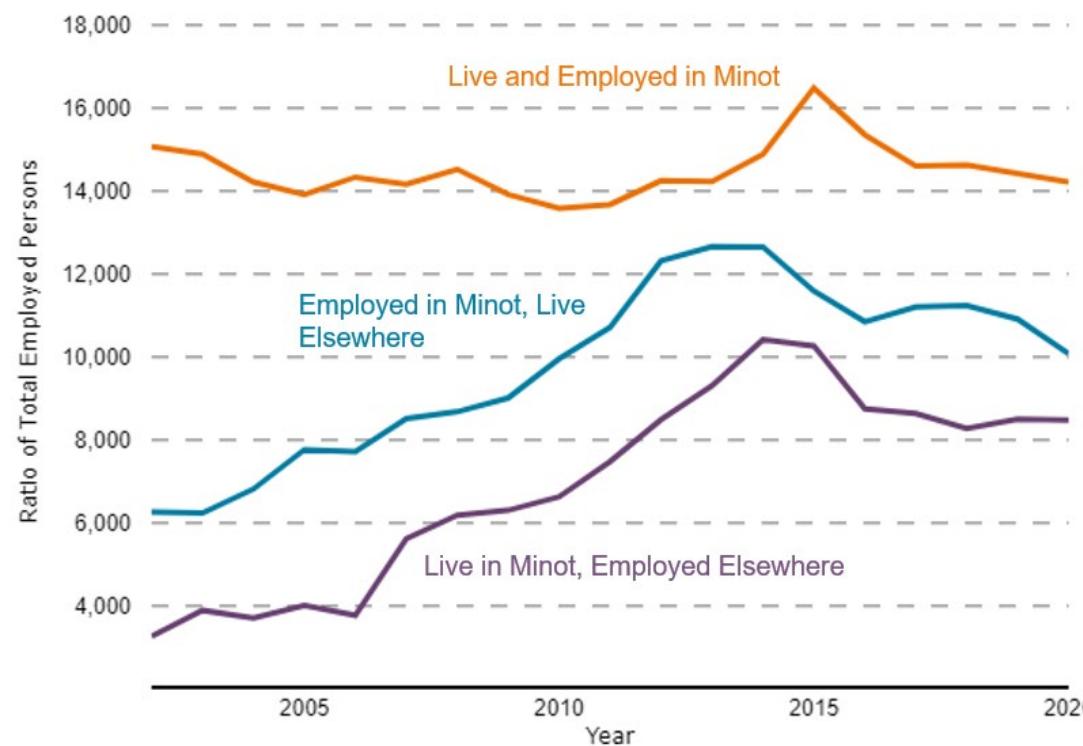


**Job Growth/Share by Industrial Category**



| 10078 | 14218 | 8479 |
|-------|-------|------|
| Work in Minot, Live Elsewhere | Live and Work in Minot | Live in Minot, Work Elsewhere |

# New Economy High Wage Industry: Breakdown

Minot is still a regional banking and insurance center. A growing segment, however, includes professional service firms, many of which serve as consultants for the extraction industry.

**New Economy High Wage: By 5-Digit NAICS Code with Wages**

**New Economy High Wage Industry Share**



*Source(s): OnTheMap 2002-2020*
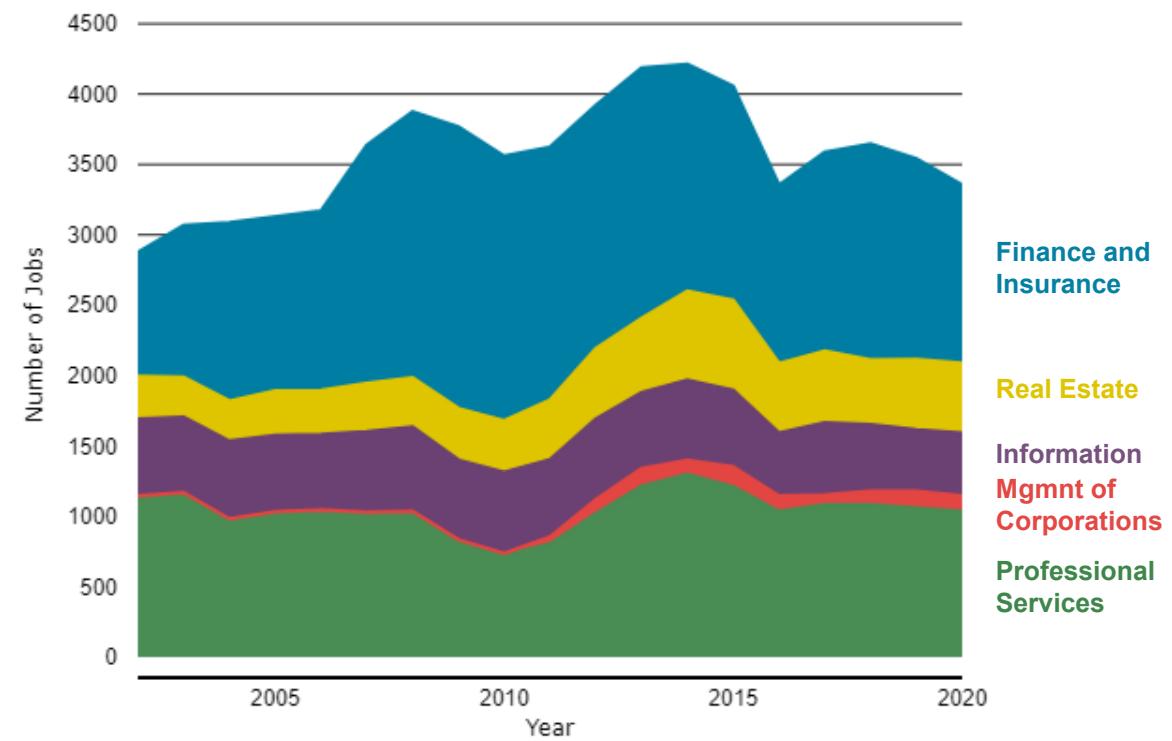
# New Economy High Wage Jobs

New Economy High Wage jobs typically cluster in commercial districts as many are office-based. Downtown Minot contains some of the more distinct commercial office clusters, but in general the distribution is quite scattered.
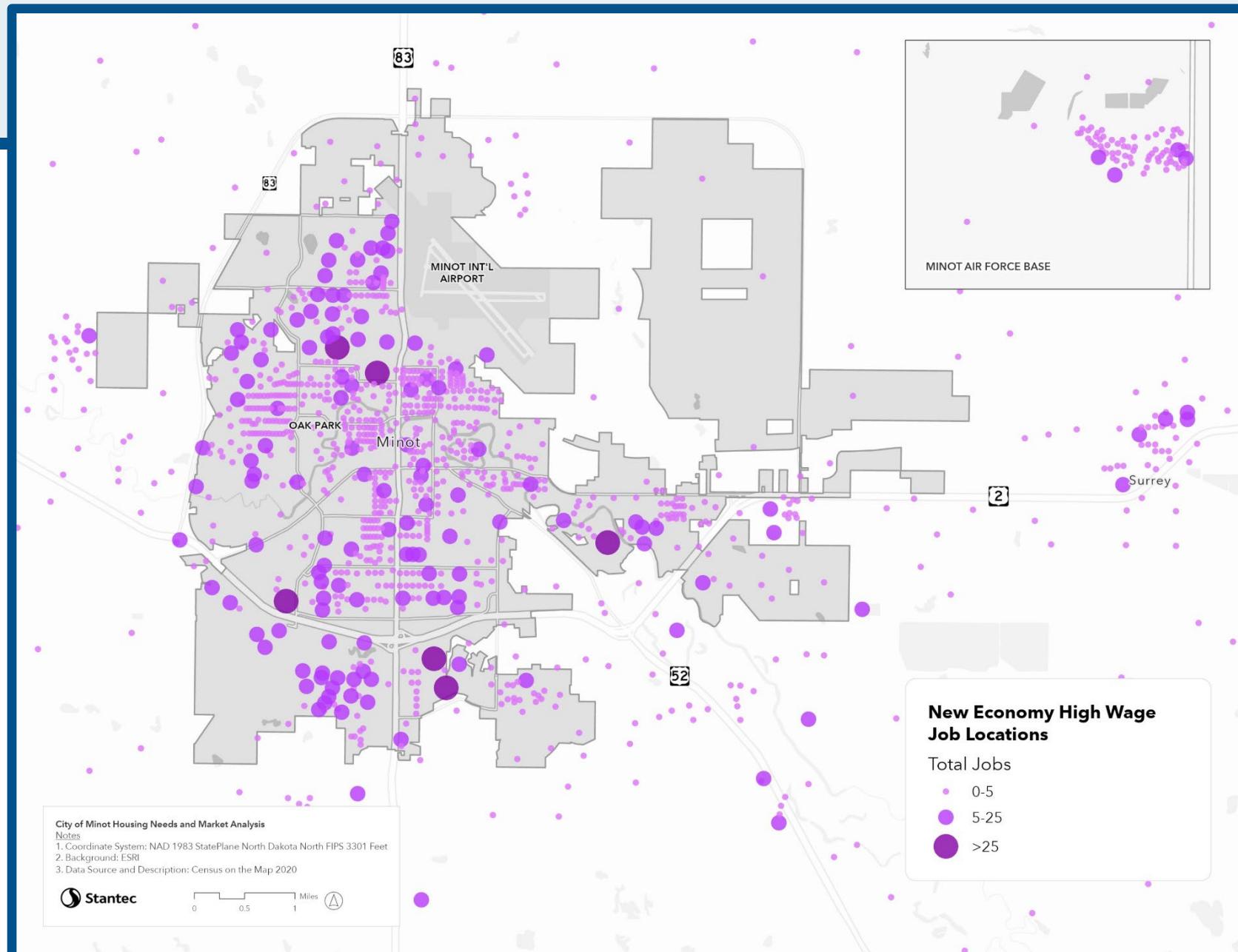


**New Economy High Wage Job Locations**

Total Jobs

· 0-5

· 5-25

● >25

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source and Description: Census on the Map 2020

# New Economy Low Wage Industry: Breakdown

Minot is a major service center for the region. Low productivity usually generates higher proportions of low-wage jobs, such as in restaurants and grocery stores. Wholesale retail tends to have higher wages.

**New Economy Low Wage: By 5-Digit NAICS Code with Wages**

**New Economy Low Wage Industry Share**
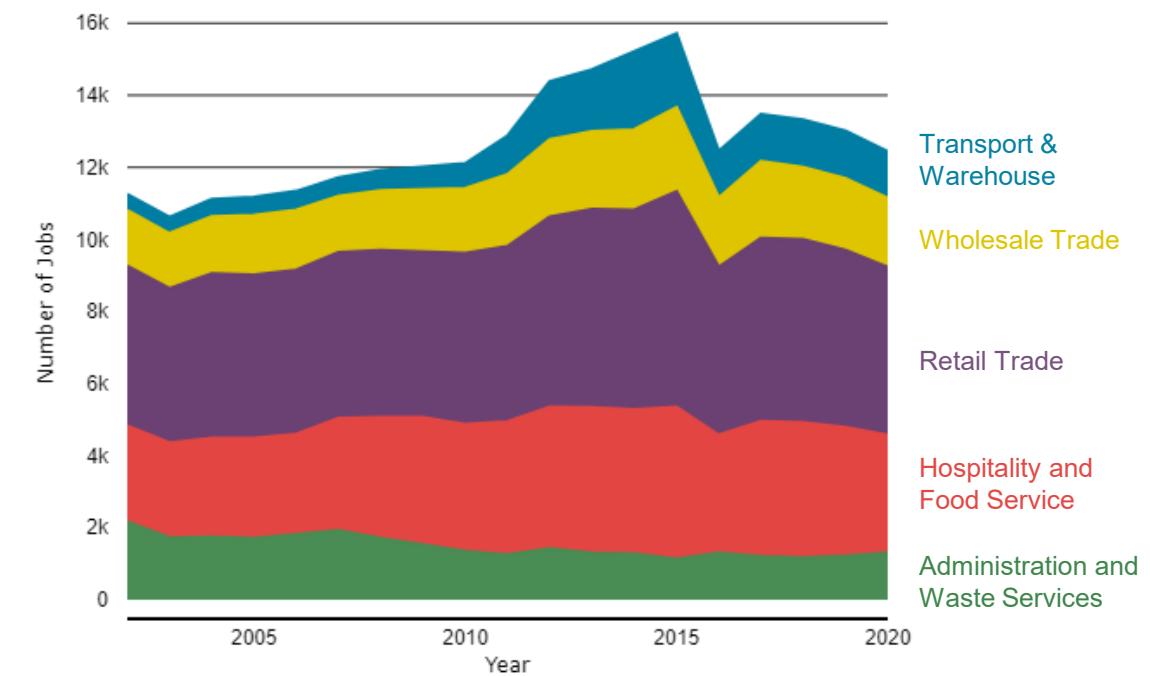
# New Economy Low Wage Jobs

New Economy Low Wage jobs, as a whole, tend to be distributed across an urban location. Logistics jobs in trucking, warehousing, and wholesaling tend to be concentrated in or near key transportation arteries and in industrial parks. Retail, restaurants, and hospitality are broadly distributed, but here can be seen concentration in the northwest and southern parts of the city.



*Source(s): On The Map (2020)*
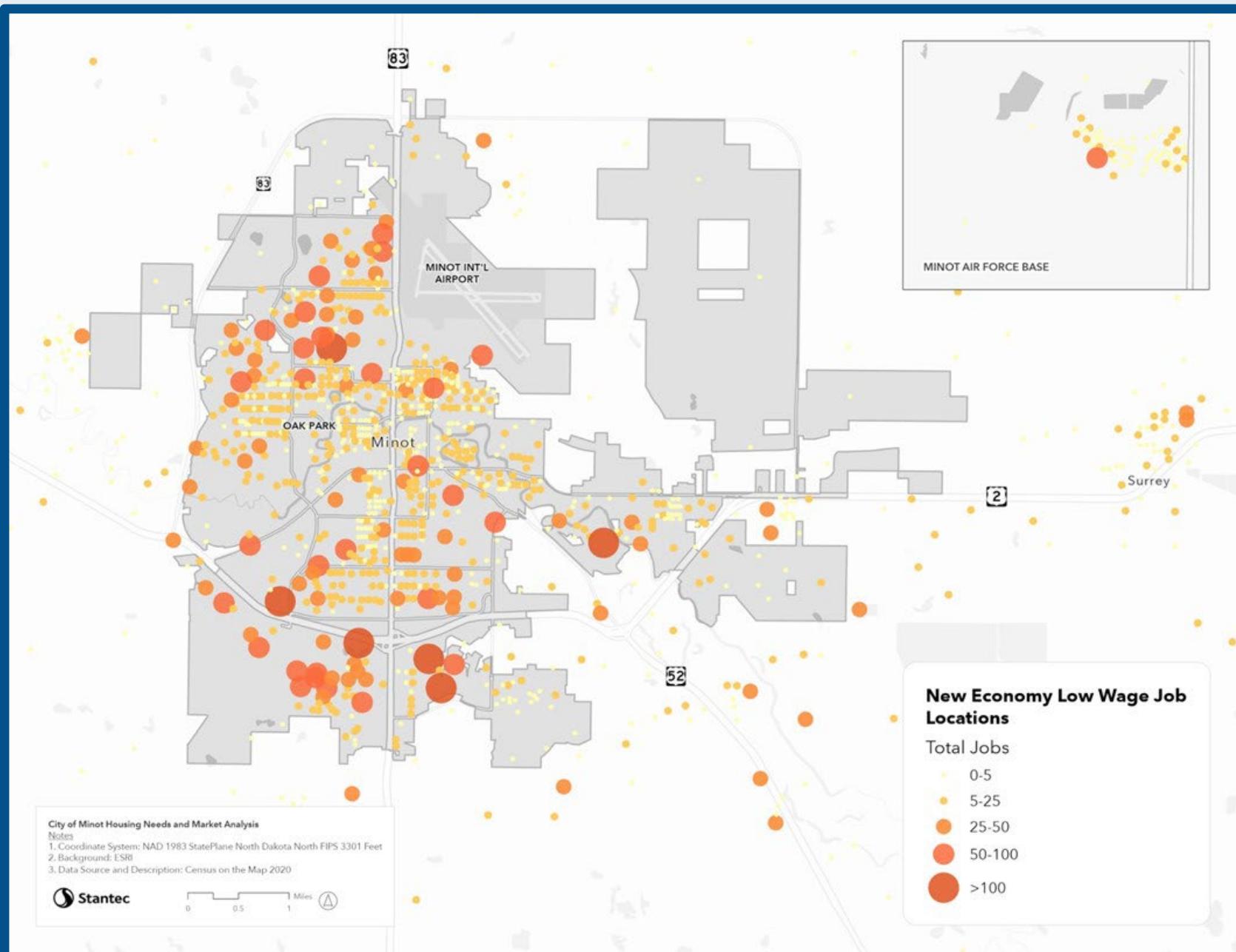
# Blue Collar Industries: Breakdown

Oil, Gas and Mining grew precipitously with the boom. Average annual wages are above $100,000. The oil boom and the flood both helped drive construction and utility jobs, which pay well due to the skilled nature of the work and the higher rates of union density which increase market power.

## Blue Collar: By 5-Digit NAICS Code with Wages
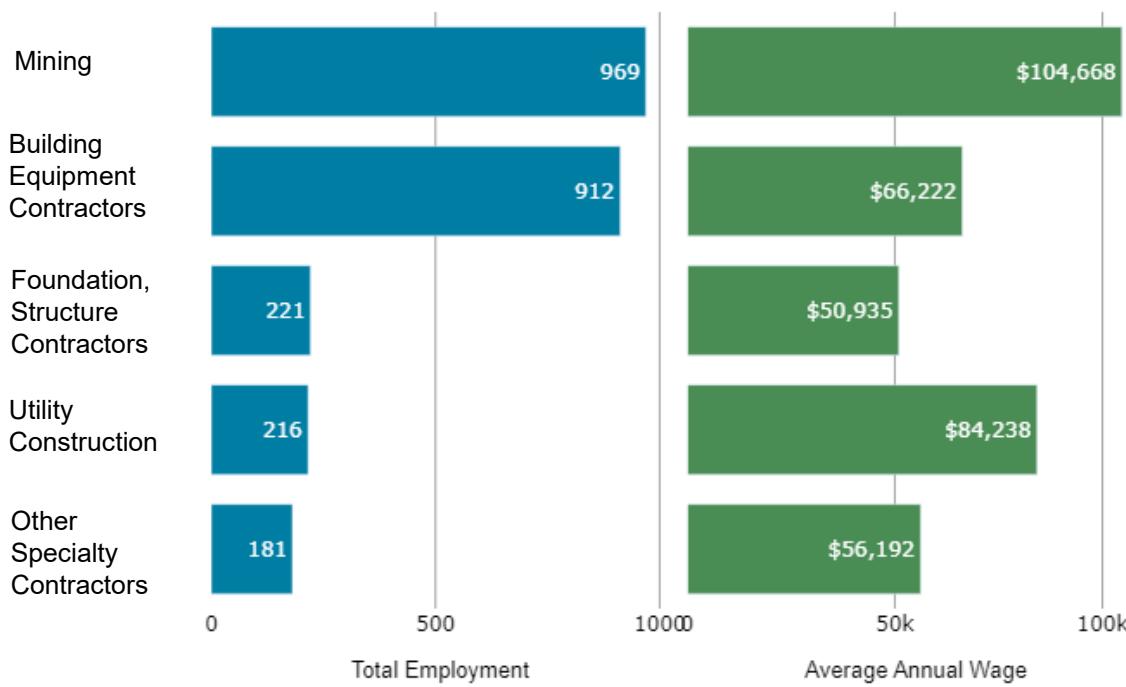


## Blue Collar Industry Share
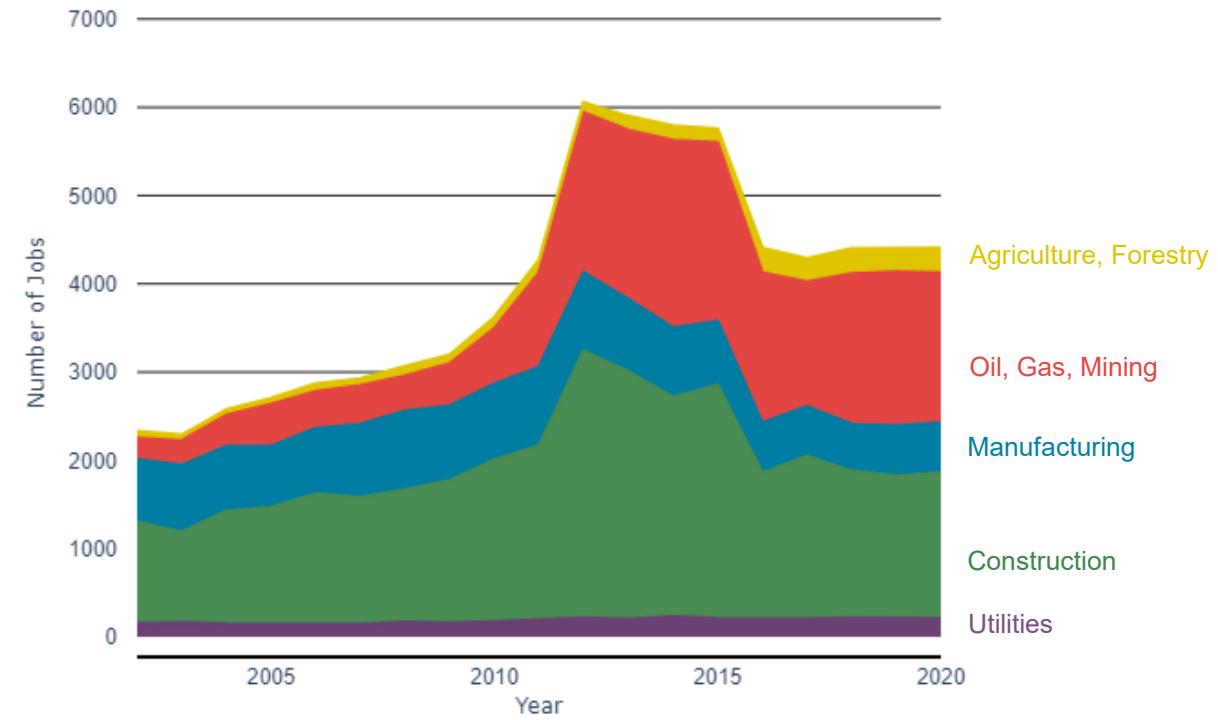
# Blue Collar Jobs

Blue collar manufacturing jobs tend to be concentrated in industrial parks, which tend to be in specifically zones areas of the city and more on the general periphery. In Minot, blue collar jobs are less concentrated in the urban core, with broader distribution in industrial parks to the east, south and north. Construction jobs are 'located' by company office. Within Minot, firms working in the mining industry are likely to be in flex office/industrial spaces.



**Blue Collar Job Locations**

Total Jobs

- 0-5
- 5-10
- 10-25
- 25-50
- >50

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source and Description: Census on the Map 2020

Stantec
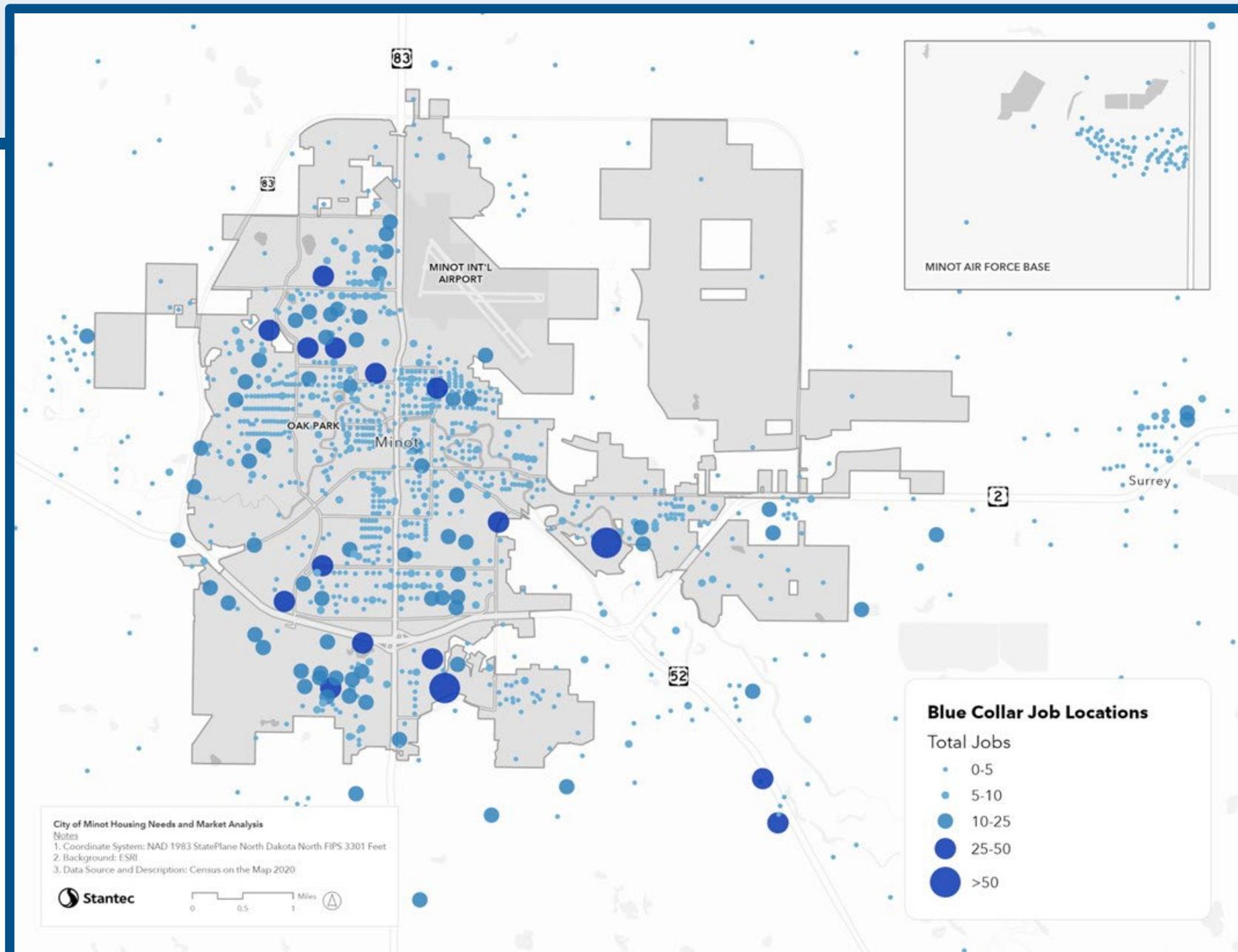
## Eds, Meds and Gov: Breakdown

Minot remains the regional center for medical services. Growth has been limited. Education and public service are also important segments. Eds, Meds and Government jobs contain occupations that earn high and low salaries, however the mean trends higher than lower wage services due to higher levels of education/skill required.

**Eds, Meds and Government: By 5-Digit NAICS Code with Wages**



Total Employment / Average Annual Wage

| | Total Employment | Average Annual Wage |
|---|---|---|
| Elementary & Secondary Schools | 2,234 | $47,665 |
| General Government Support | 760 | $60,156 |
| National Security | 651 | $81,678 |
| Vocational Rehabilitation | 526 | $42,331 |
| Higher Education Institutes | 519 | $50,482 |
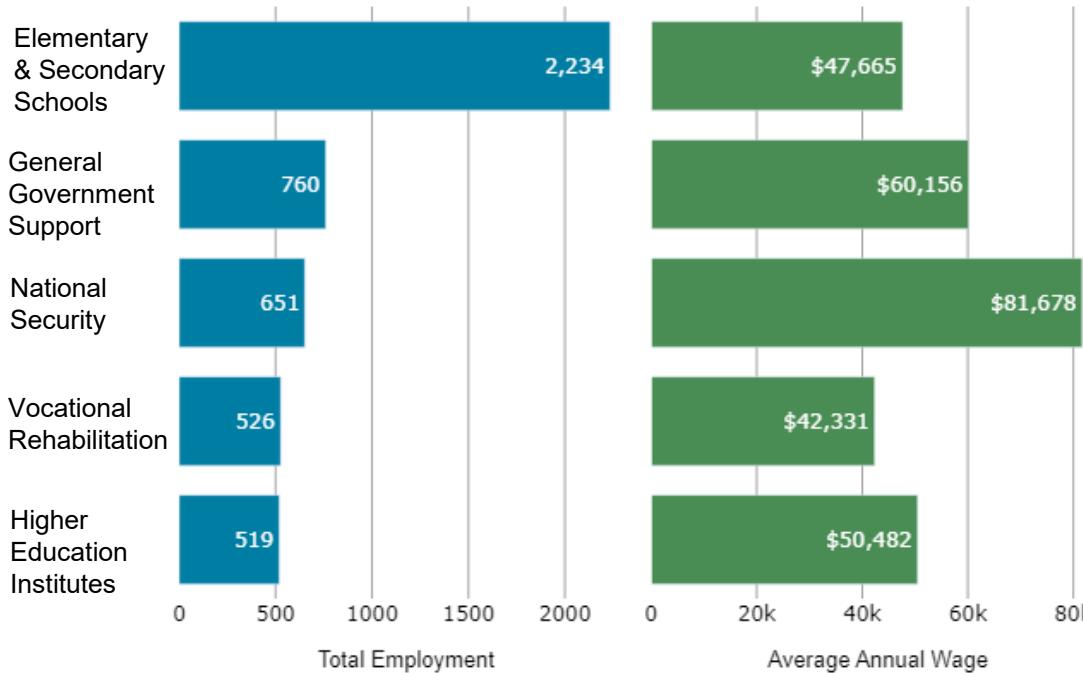
**Eds, Meds and Government Industry Share**
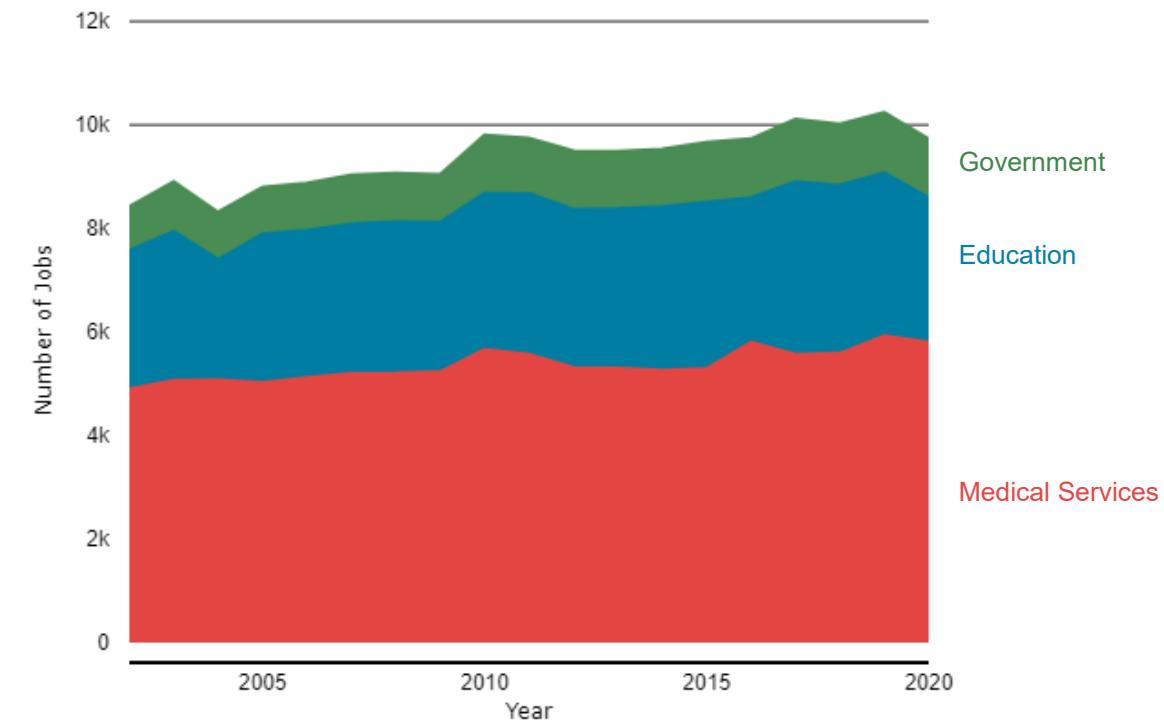


Government / Education / Medical Services — Number of Jobs by Year (2005–2020)

# Eds, Meds and Gov

Education, medical services and government generally will have high proportions in downtown office districts where administrative jobs are often located, in and around hospitals where medical offices cluster, and near locations of higher education.
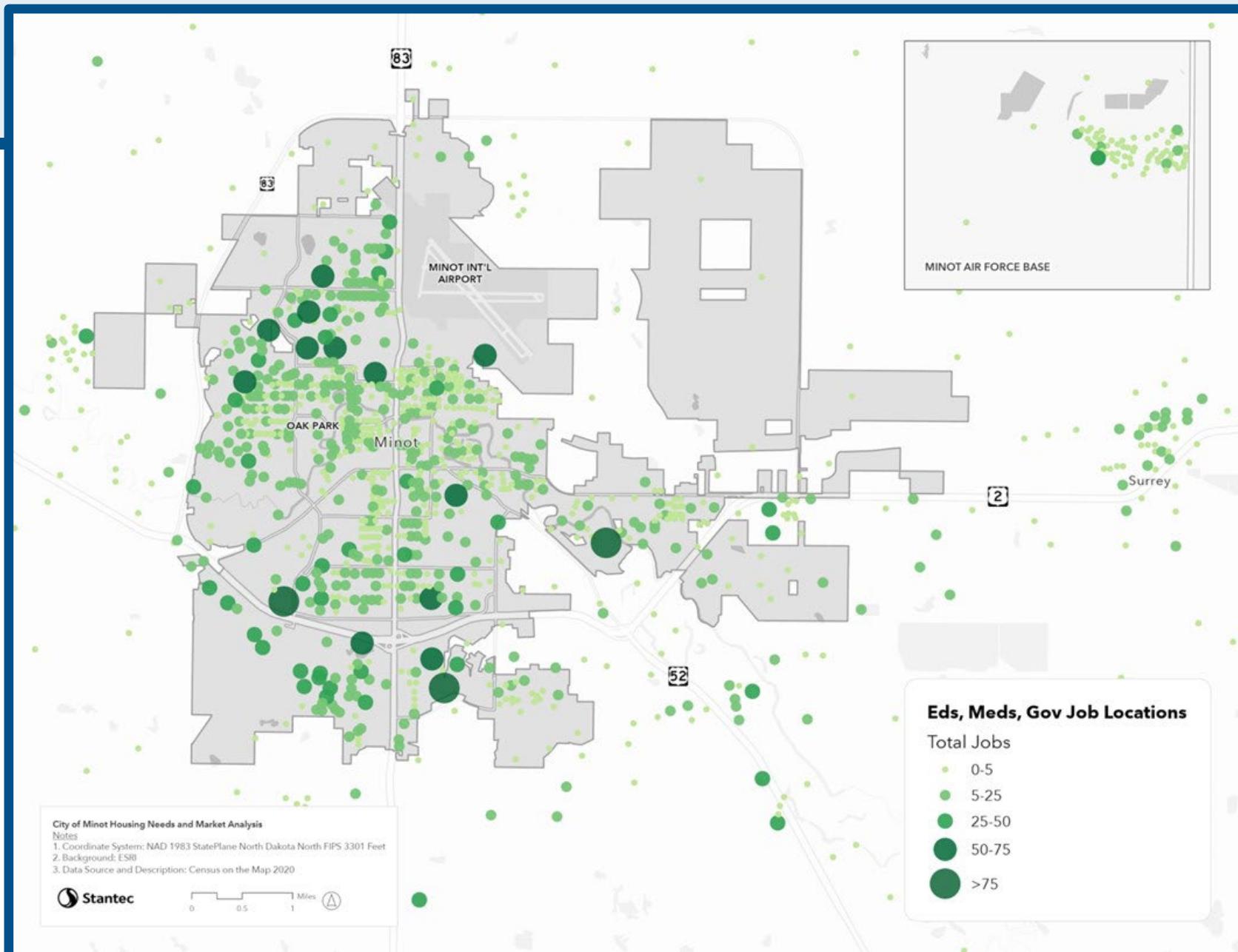


**Eds, Meds, Gov Job Locations**

Total Jobs

- 0-5
- 5-25
- 25-50
- 50-75
- >75

City of Minot Housing Needs and Market Analysis
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2. Background: ESRI
3. Data Source and Description: Census on the Map 2020

Stantec

Miles
0      0.5      1

**Minot has a healthy and diversified economic foundation that encompasses three major planks.**

1.  **A Regional Commercial Center:** Much of Minot's economic activity stems from its role as a regional commercial center, serving as a retail and healthcare destination, and wholesale distribution node for a broad multi-county region.

2.  **Oil Turbulence:** The Bakken shale oil boom drove a short-term burst in employment that has slowed and stabilized. The oil boom has been the main contributor to economic growth, driving demand for housing and services.

3.  **Air Force Base:** The Air Force base is a stable economic anchor to the regional economy. Base personnel are paid by the federal government, but spend much of their income at local businesses, supporting the local economy. Special projects such as the anticipated Sentinel project will result in short-term economic benefits.

4.  **Projection.** Of these foundational elements, the oil industry has the most uncertain future. In the short to medium term, we expect oil-based economic growth to be less aggressive than during its boom phase, as the industry enters a more mature development trajectory.

**03**
**DEMOGRAPHIC TRENDS**

## Introductory Notes

Demographics are organized through snapshots and trendline data. Snapshots provide a more detailed breakdown of the most recent ACS year at the time the study was conducted, whereas trend data helps understand shifts in the local economy.

Minot's demographics are juxtaposed against two different geographical segments. The first examine 'nested' geographies, including Ward County and North Dakota. The second examine Minot alongside comparable cities. The cities were selected with city staff based on their similar attributes – primarily being regional commercial centers with proximate military bases and higher education. The cities contain similar populations. They include:

1) Grand Forks, ND - Grand Forks, like Minot, is a regional trade center, with an economy further driven by the University of North Dakota and the Grand Forks Air Force Base.

2) Rapid City, SD – Rapid City is the county seat of Pennington County, is a regional trading center, and also is home to the Ellsworth Air Force Base and Camp Rapid. Regional tourism plays a larger role in the local economy.

3) Great Falls, MT – Great Falls, Montana is a regional trade and commercial center and home to Malmstrom Air Force Base and the Montana National Guard. Regional tourism also plays a larger role than it does in Minot.

4) Manhattan, KS – Manhattan, Kansas is a regional and commercial center with a regional economy driven by Kansas State University, and, to a lesser extent, Fort Riley.

# Minot's population is rooted in younger, working age households

Minot's population contains higher proportions of working-age people in their 20-50s than the comparison geographies, landing closer in age distribution to cities driven by Universities. Military base demographics skew younger, and the oil boom attracted additional working age households during the Great Recession when unemployment skyrocketed nationwide.

## Total GDP Output by County and Select Metropolitan Areas



*Source(s): ACS, 5-year estimates, 2021*
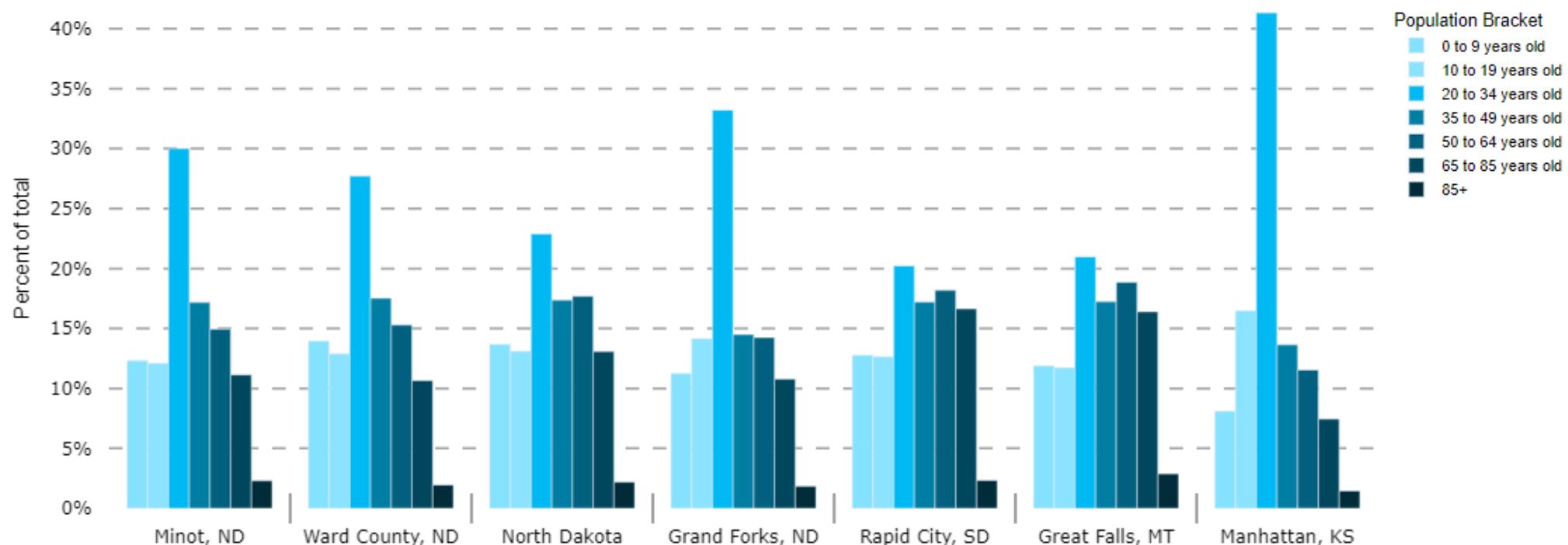
# Minot Added Younger Households, and Household Size Grew

Minot, Ward County, and North Dakota added younger, workforce aged persons during the oil boom. Simultaneously, household size grew dramatically before falling to more comparative norms.



**Median Age Trendline**
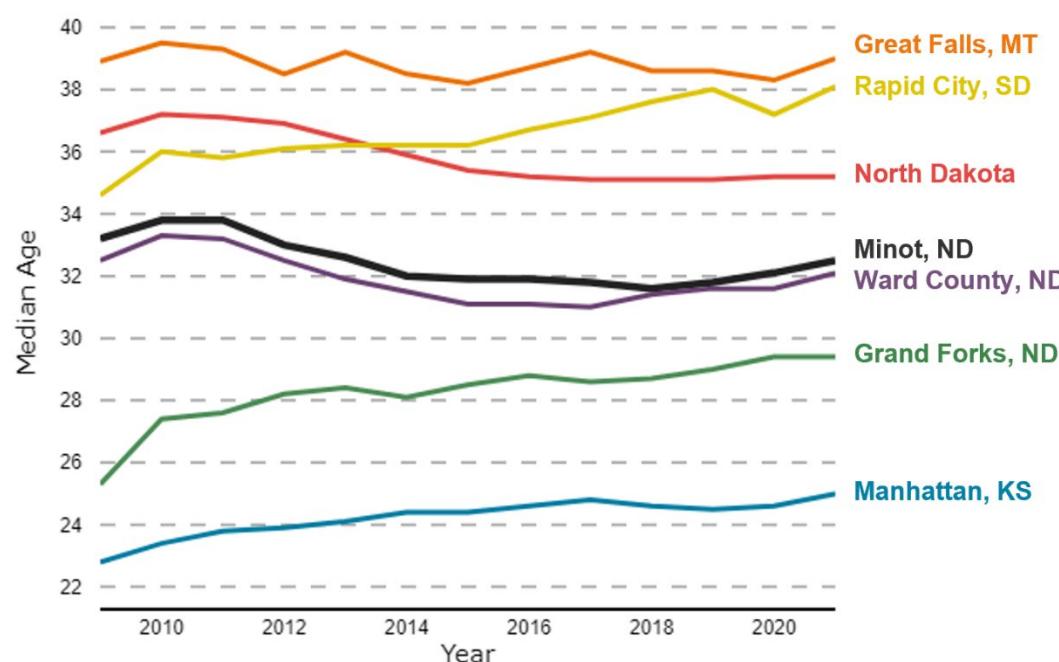
**Household Size Trendline**
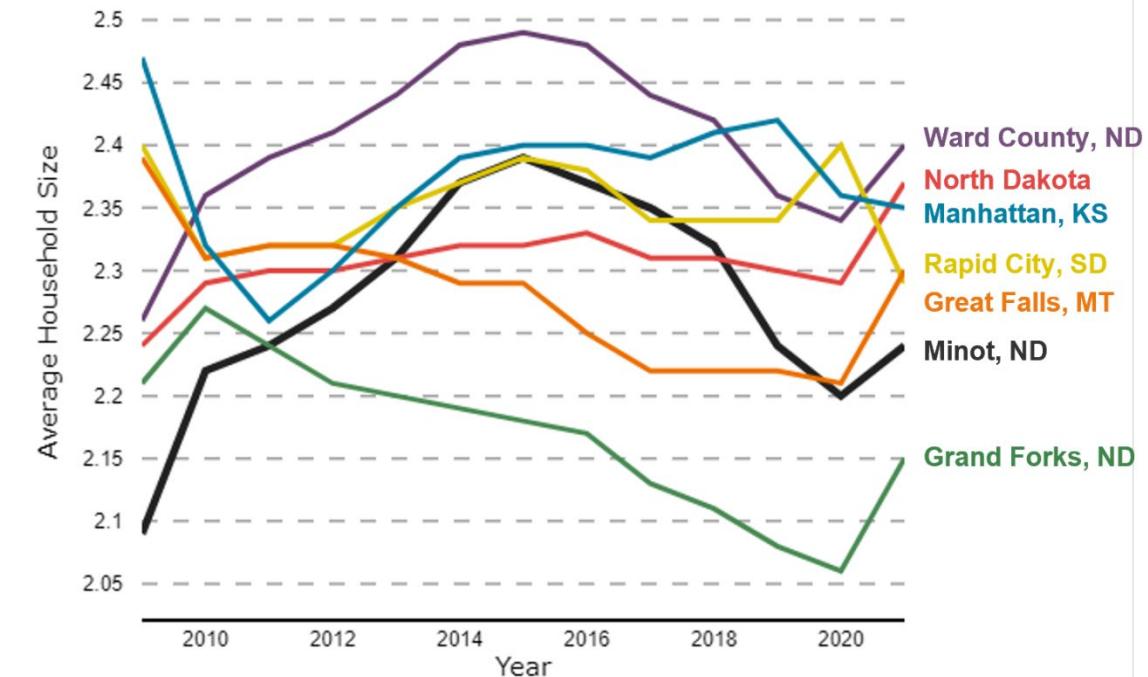
# Minot's population is rooted in younger, working age households

Again, Minot's population is in the middle between a 'College' town that contains more cohabitating younger persons and people living alone, and more trade-oriented regional centers that have higher proportions of 'empty nesters'. Minot also tends to have higher rates of households with children for an urban center, although more live outside Minot in Ward County.

## Household Structure by Household Type
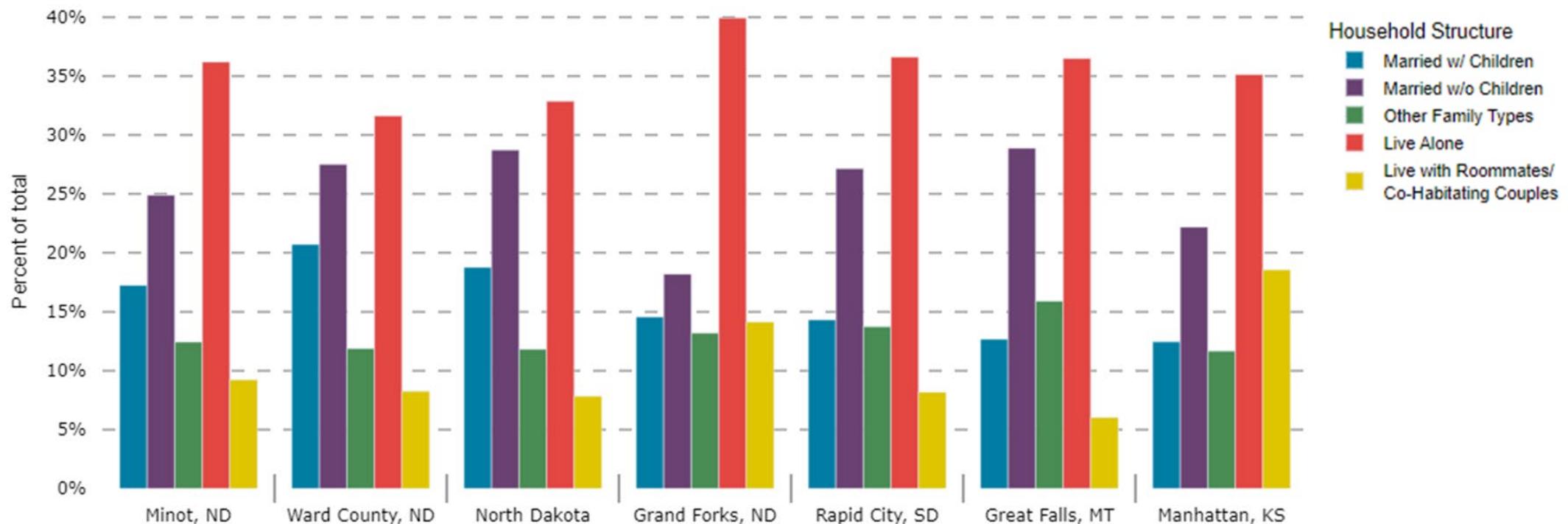
## More Cohabitating Households

The flood and the oil boom both may have impacted family structures. In Minot, the fastest growing family structure are people cohabitating (living with others), or living alone. Many younger workers and military personnel may prefer room-sharing to save on housing costs, while the flood may have driven more families to cohabitate. The trend stabilized, however by 2014.

### Trends in Household Structure
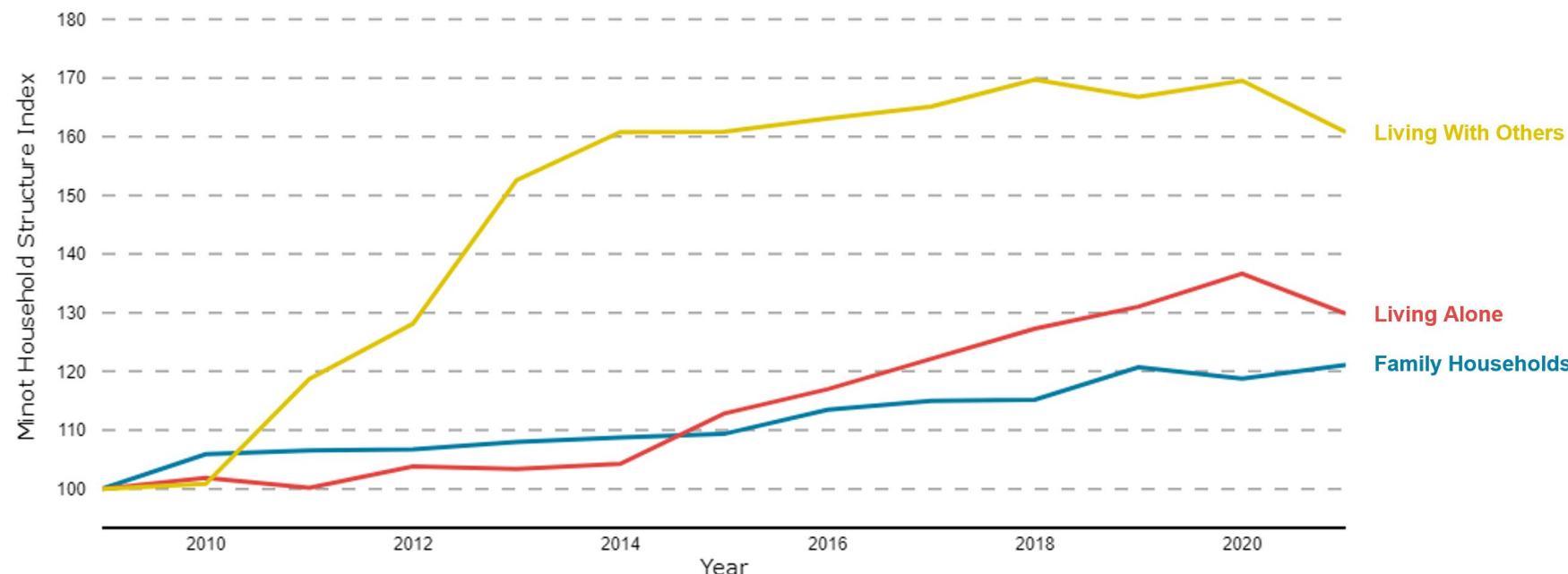
# Minot contains higher proportions of middle and upper-middle income households

Household incomes are higher in Minot than the comparison cities. The balanced distribution derives from the higher proportion of blue collar and healthcare occupations that pay middle to upper-middle incomes (a consequence of a lower proportion of lower-income college students, or less dependence on low wage new economy industries than comparison cities).

## Household Income by Income Bracket
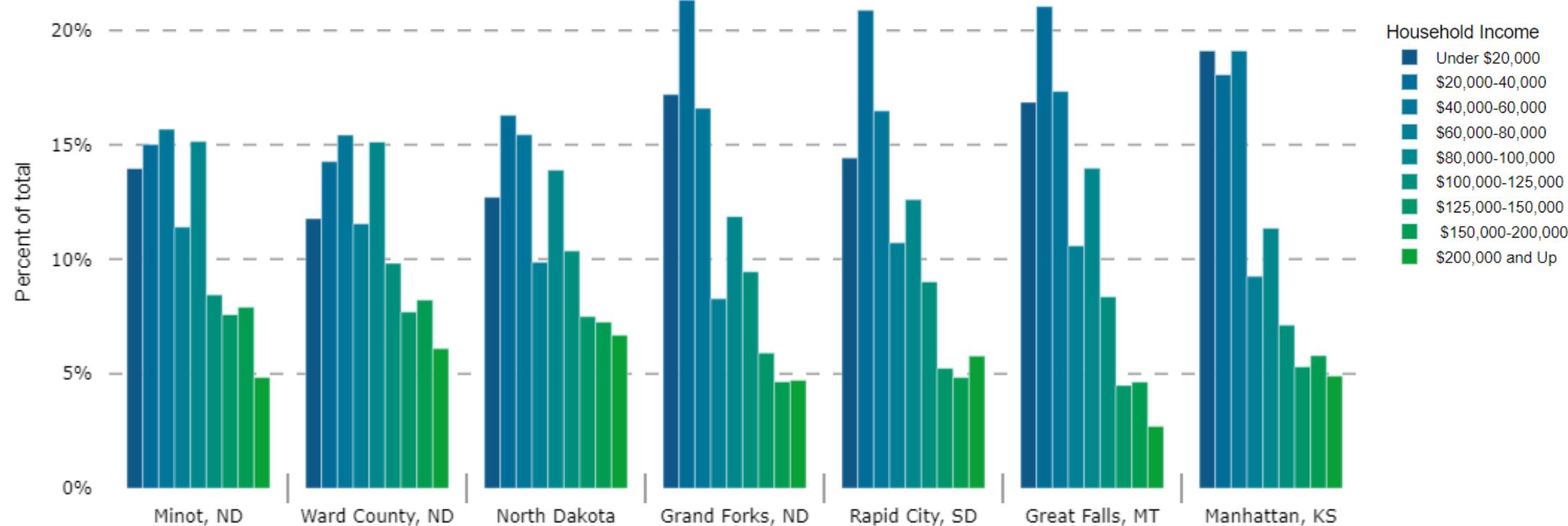
# Household income growth is robust and higher than comparison cities

Household incomes are on par with the North Dakota average, with wages heavily influenced by the oil and natural gas sectors. Median household incomes are higher on average than comparable cities.
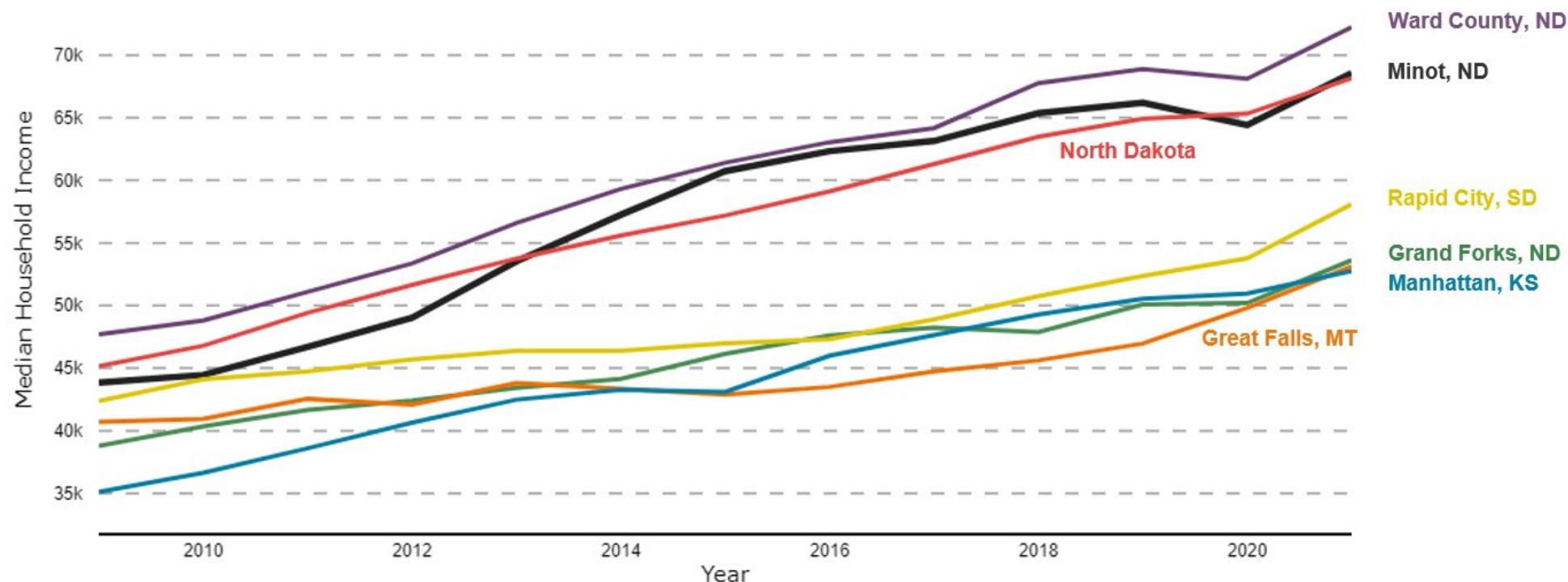
## Median Household Income

# Median Household Income

Household incomes are highest in single-family neighborhoods adjacent to downtown, and in newly build single-family subdivisions on the periphery. Higher concentrations of lower income households live downtown and extending along Highway 2 east of town.
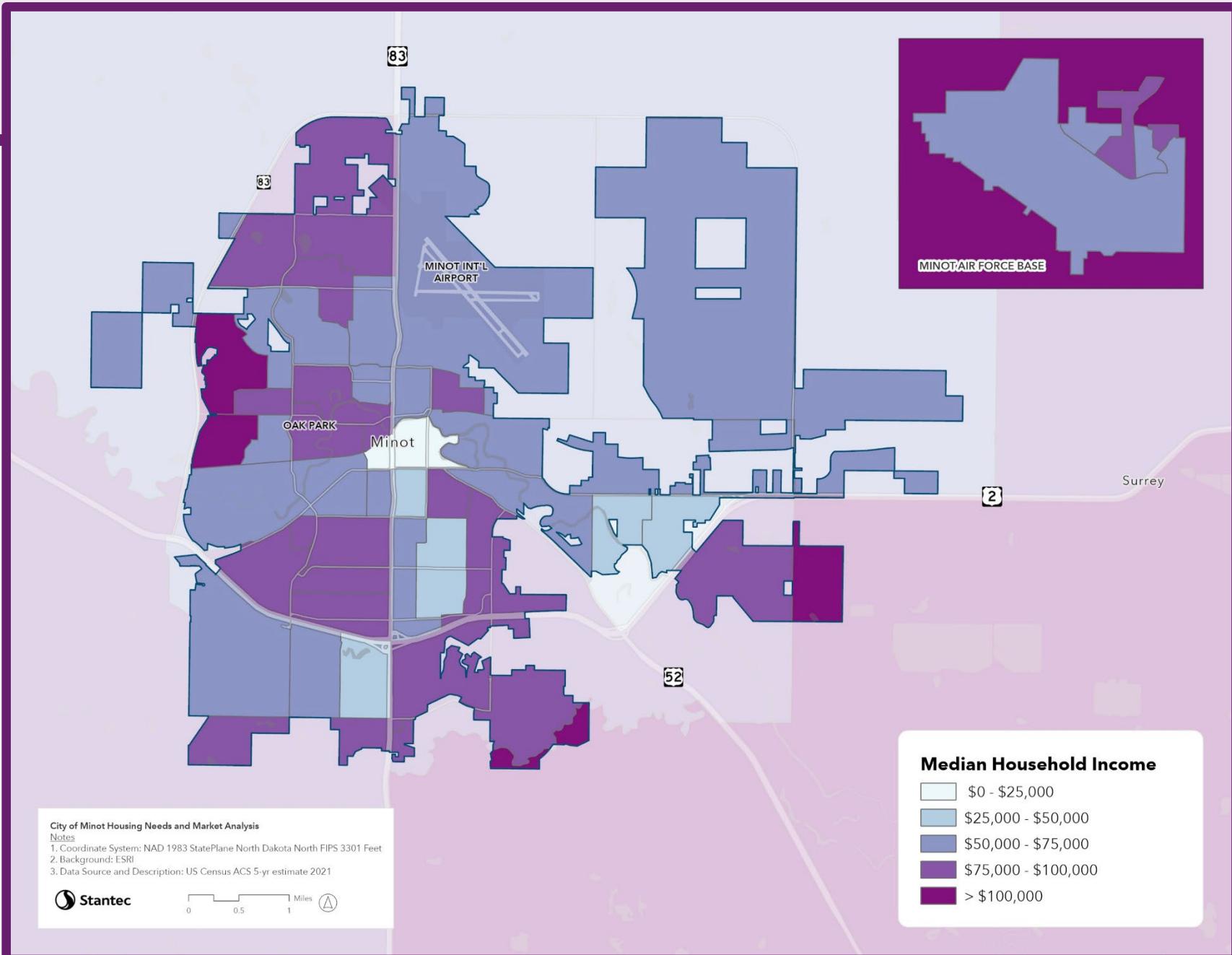
*Source(s): ACS, 5-year Survey, 2021*



**City of Minot Housing Needs and Market Analysis**
Notes
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2. Background: ESRI
3. Data Source and Description: US Census ACS 5-yr estimate 2021

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**Median Household Income**

| | |
|---|---|
| ☐ | $0 - $25,000 |
| ☐ | $25,000 - $50,000 |
| ☐ | $50,000 - $75,000 |
| ☐ | $75,000 - $100,000 |
| ☐ | > $100,000 |

# Homeownership Rates are higher for younger households, but less so for older

Homeownership rates tend to be higher for younger households but lower for older households compared to College towns, whereas the inverse is true compared to 'trading cities'. Homeownership rates have shifted due to the addition of new rental housing to accommodate a growing workforce.

## Homeownership by Age Bracket



*Source(s): ACS, 5-year estimates, 2021*
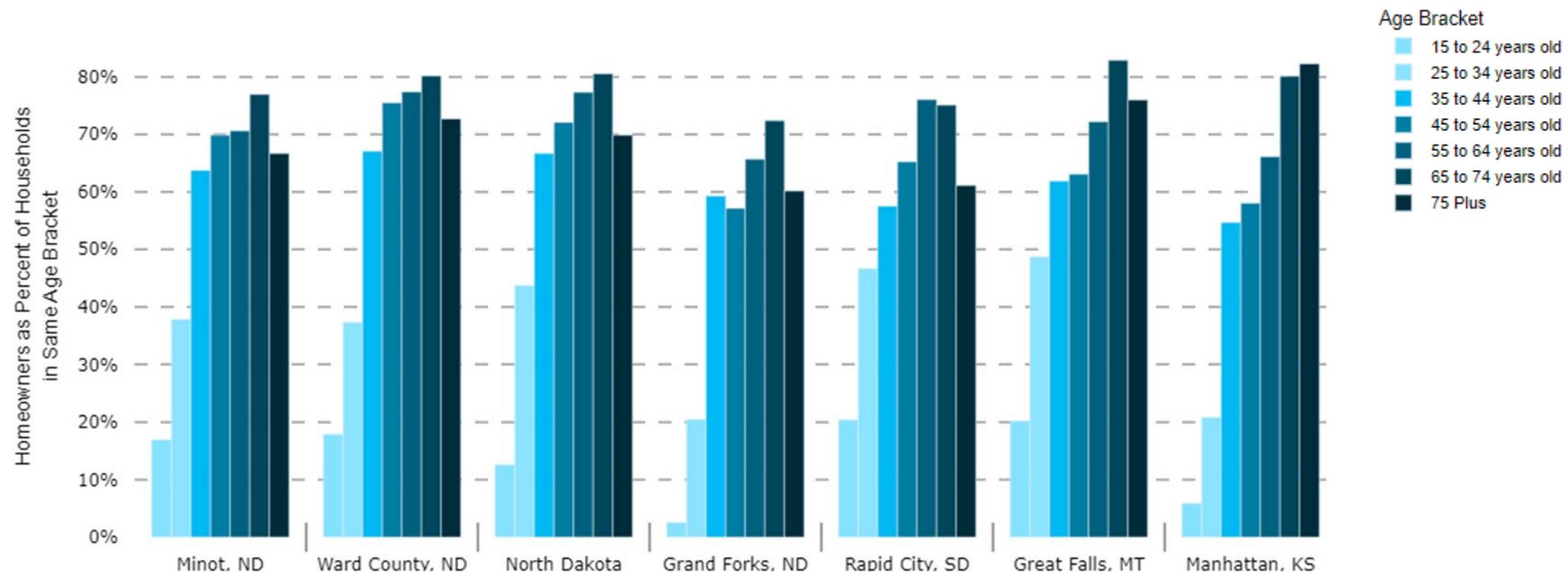
## More Households are Renting

Minot's home ownership rate dropped as a wave of multi-family rentals were built in the early to mid 2010s. The growth in the rental market accommodated flood-impacted households and new migrants to the region. Homeownership rates are higher than college town comparison cities.

## Home Ownership Rates
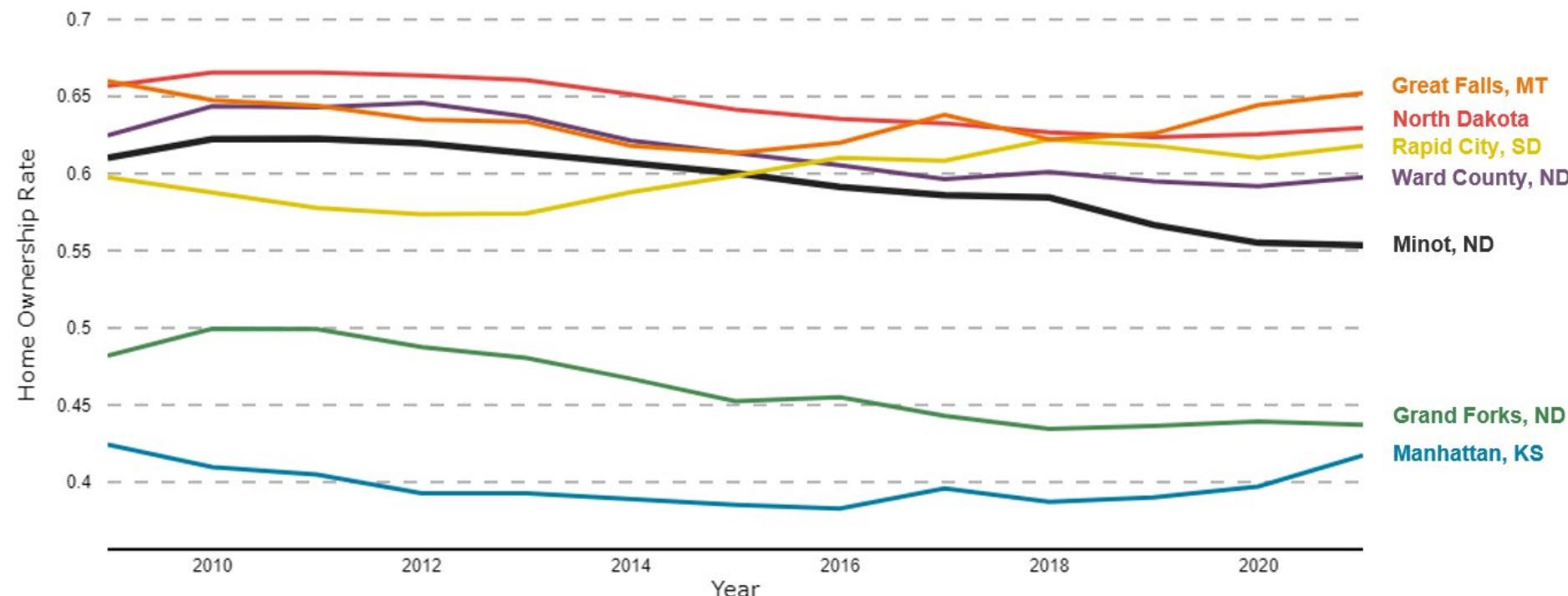
# Many are housing cost burdened, but Minot is not unique

Nearly 45% of renter households and 22% of homeowners are housing cost burdened—meaning they pay more than 30% of their income in rent or home ownership costs. That's a greater proportion than the state of North Dakota as a whole. All of the comparison cities have a higher rate of cost burdened households.

## Cost Burdened Households
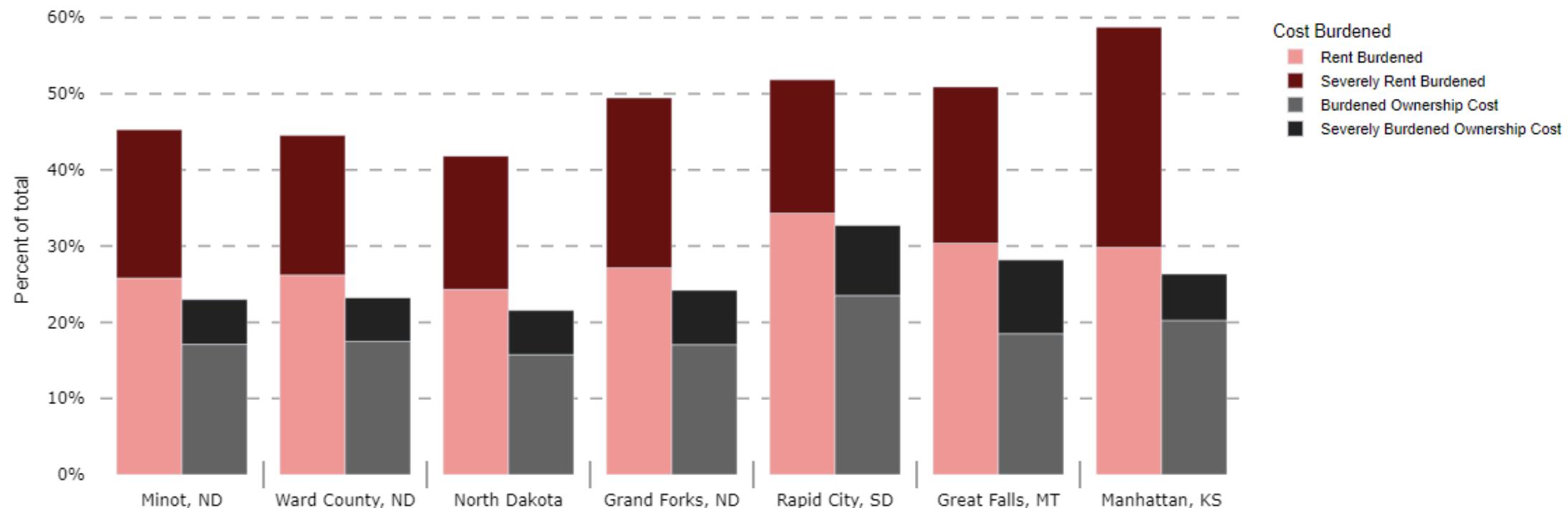
# Housing costs are increasing significantly faster than incomes

The growth in rent burdened households dropped peak-boom but has since increased. This corresponds to a plateauing of median income growth even as median rents continue to climb. Rents have more than doubled since 2009 while incomes have increased by about 60%.



**Rent Burdened Index**
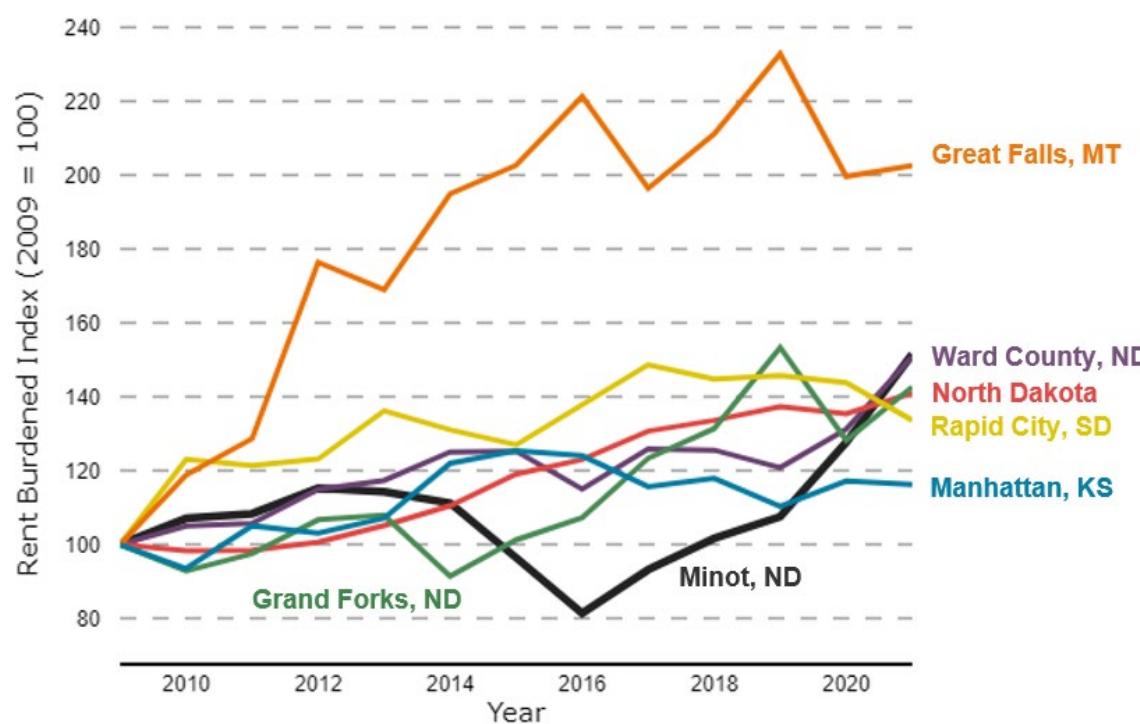
**Rent and Home Value Growth Relative to Incomes**

*Source(s): ACS, 5-year estimates, 2021*
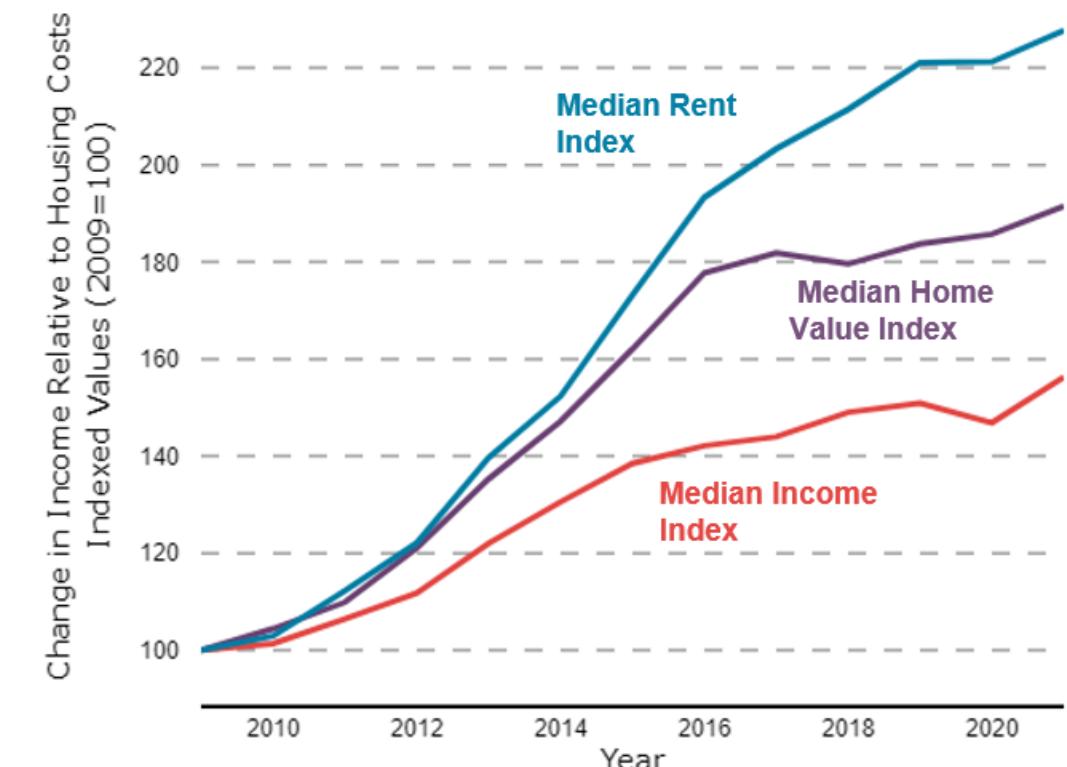
1. **Young adults are overrepresented in Minot.** The air force base is the most important reason for that.

2. **Educational attainment** is a bit lower than average for North Dakota, but **median incomes** are on par with the state as a whole.

3. **Home ownership rates** are a bit lower the state as a whole, in part due to apartment construction during the most recent oil boom.

4. **Housing cost burdens** are experienced by many Minot households—that is, they pay more than 30% of their income on housing related costs—and the proportion of cost burdened households has significantly increased since 2016 as incomes have not kept pace with housing costs.

04

**MARKET INDICATORS**

## Minot's residential construction boom was balanced between multi-family and detached single family homes

Minot's housing construction is far outpacing the broader region and comparative cities. Since 1980, development is concentrated in detached single-family homes and multi-family. Both jumped precipitously with the boom in the late 2010s, with multi-family since stabilizing.

**Units Built Index**
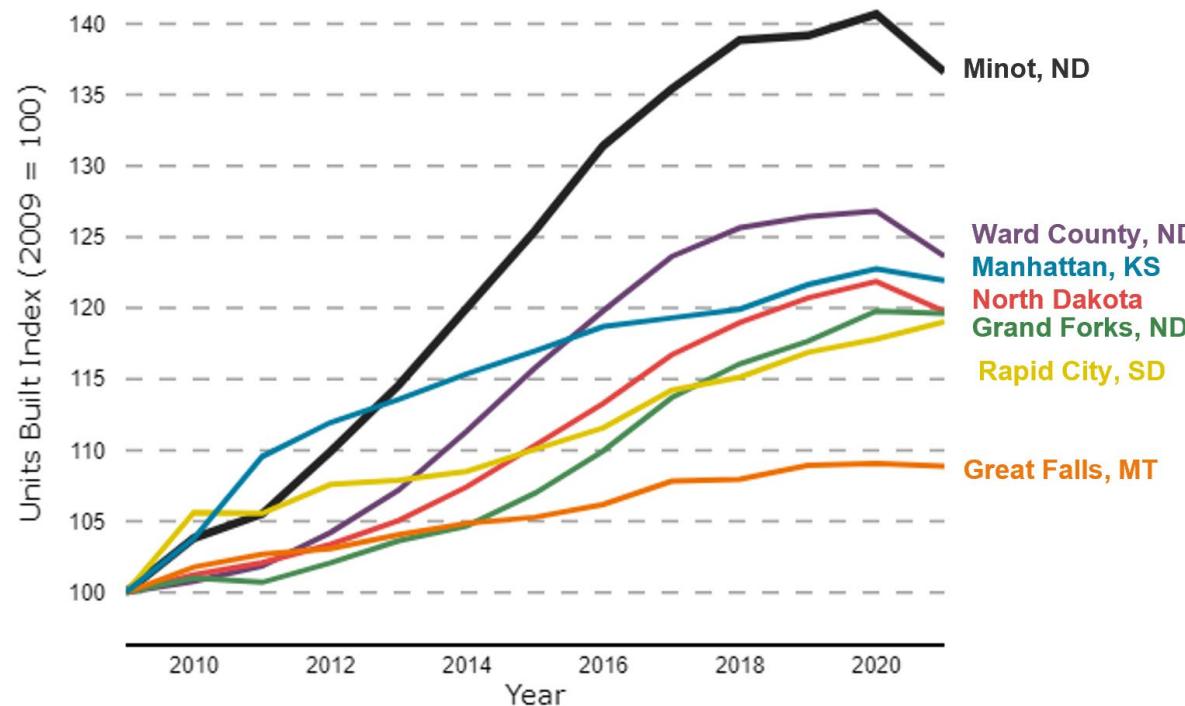
**Minot Housing Units Built by Type Since 1980**
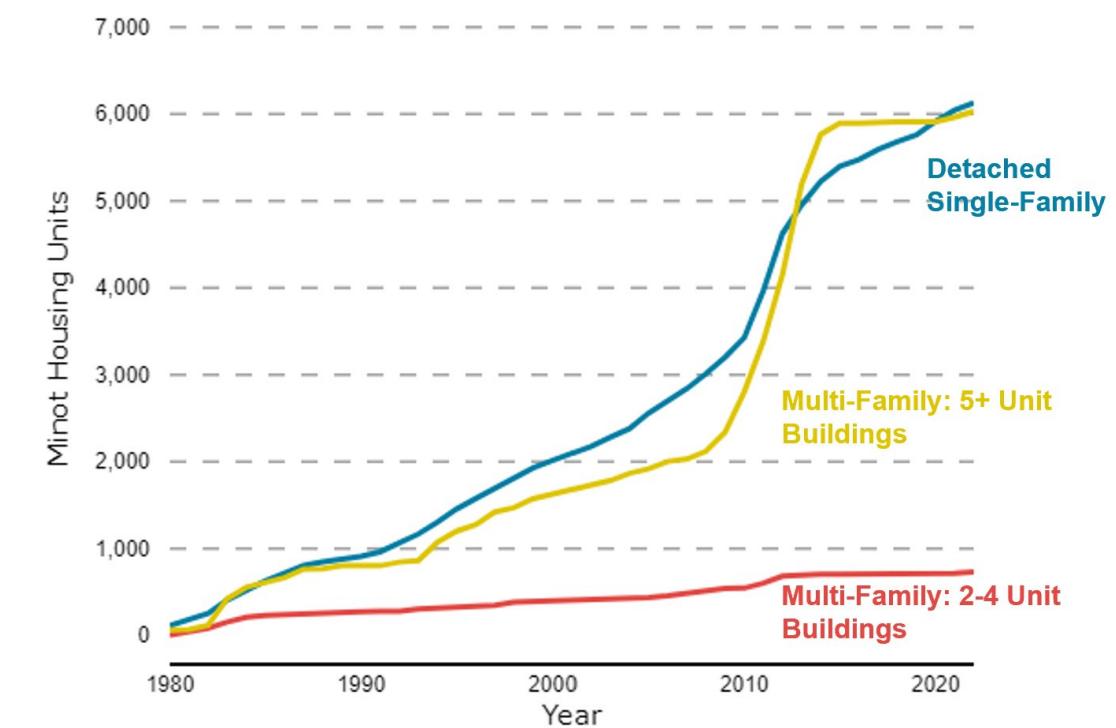
## Change in Housing Units

Minot's development landscape is complex. The 2011 flood damage included over 4,100 homes flooded, 3,100 of which were demolished. Of that inventory, 2,360 were rental units. The loss of rental units occurred right as the city needed units to absorb in-migration. Undersupply drove rental increases. The flood impacted the city's older, historic housing infrastructure.

Meanwhile, single-family and multi-family growth was robust in newer suburban areas in the northwestern and southeastern quadrants of the city.



Change in Housing Units, 2013-2019
Number of Units
- (-) > 550
- (-) 0 - 550
- (+) 0 - 500
- (+) 500 - 1,000
- (+) > 1,000

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source and Description: US Census ACS 5-yr estimate 2021

*Source(s): ACS, five-year survey, 2013 and 2019*
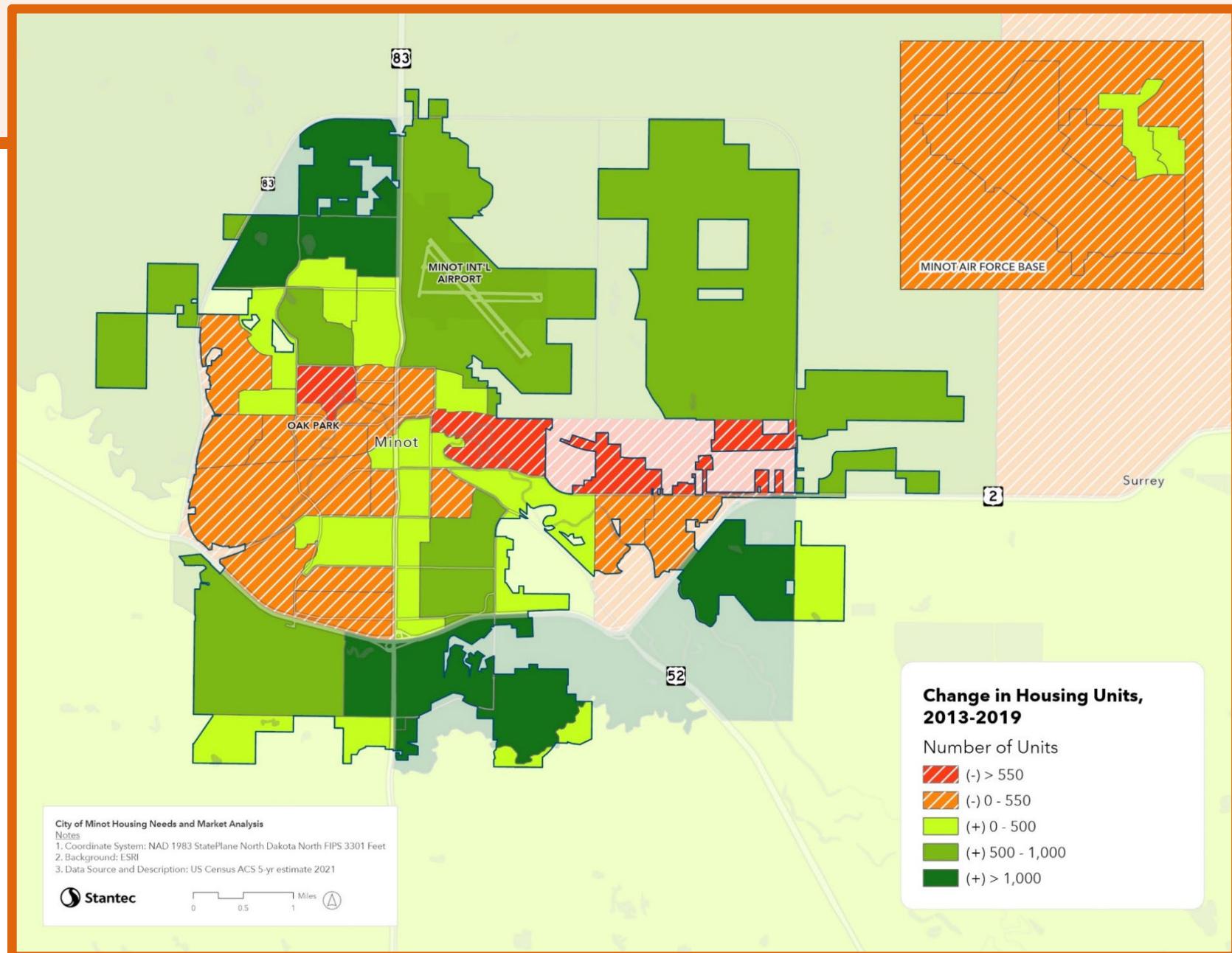
## Additional properties will be acquired and demolished to build Minot's flood control structures

Based on preliminary drawings of future flood control structures, an estimated 455 additional properties will need to be acquired in order to construct the flood control structures.

# Vacancy rates spiked after the floods, but remain high

Vacancy rates - as measured by the ACS – rose drastically following the flood. The ensuing map demonstrates the role of the flood in elevating rates. The growth in vacancy rates was driven by the 'Sold: not Occupied' category, which includes homes owned but no longer fit to be occupied. Vacancy rates remain elevated due to rise in the 'Other Vacant' category.

**Vacancy Rate**
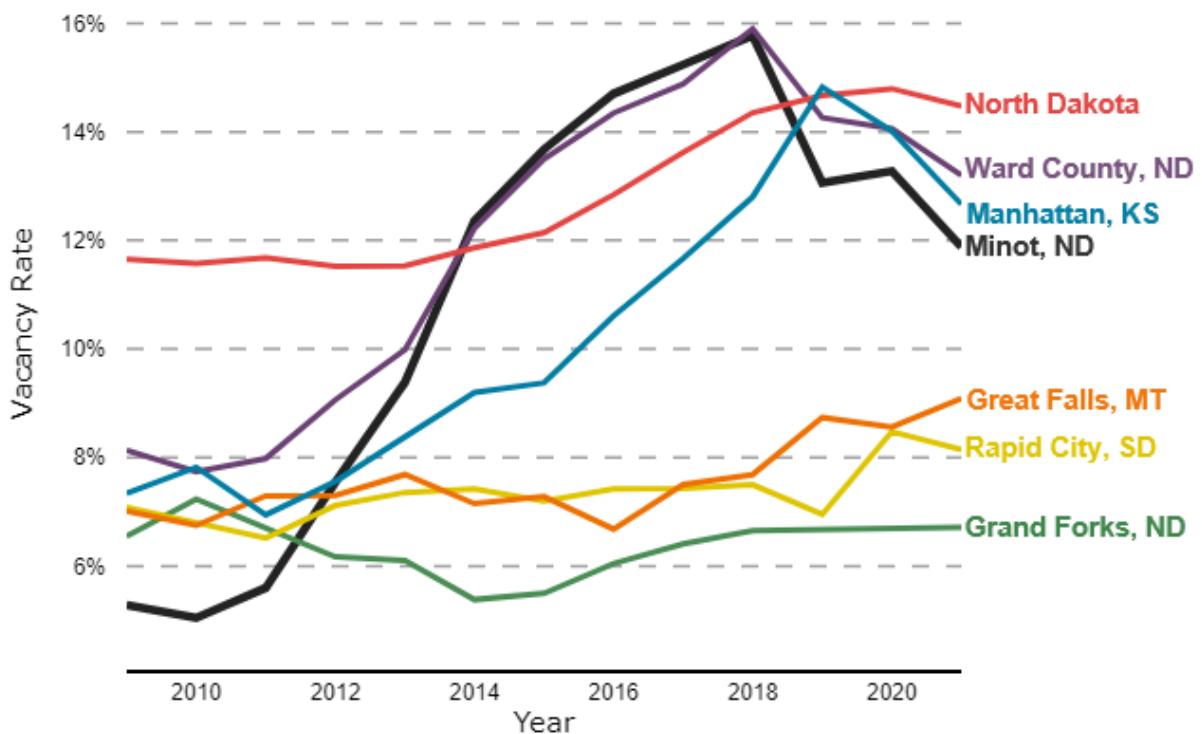


Vacancy rates are a composite of numerous types of vacancy. "Market Rate" vacancies are typically units for rent or for sale. A healthy "equilibrium" market vacancy rate is generally considered 5% for both ownership and rental markets.

Below 5% vacancy, and inventory is constrained, putting upward pressure on prices. Landlords are also less inclined to improve properties. Sustained rates below 5% send market signals to invest in new development.

Above 5%, and landlords may have difficulty filling units, leading to lower or declining prices, and an incentive to increase the quality of units, in order to compete for tenants. Sustained high vacancies can lead to under- or dis-investment.

## Vacancy

Minot's flood impacted ranges are still a primary driver of vacancy. Immediately after the flood, the increase in vacancy rates were driven by "Sold: Not Occupied" counts, or units that were inhabitable due to the flood. As oil prices dropped, however, market rate vacancies spiked as landlords had trouble filling units and more homes were put up for sale. As oil prices recovered, market vacancy rates dropped below 5%. However, vacancy rates as a whole remained propped up by the "Other: Vacant" category which includes uninhabitable homes. The higher rates of vacancy are clearly along the floodplain.

Higher rates of vacancy also exist in areas where newer apartments were built and in less desirable neighborhoods on the east side. On the other hand, the neighborhoods west of Oak Park remain some of the most desired (and least impacted by the flood), with very low vacancy rate. Unsurprisingly, rents and home values have been strongly appreciating in those neighorhoods.



**Housing Vacancy Rate**
- 0% - 2.5%
- 2.5% - 5%
- 5% - 15%
- 15% - 25%
- > 25%

City of Minot Housing Needs and Market Analysis
Notes
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3. Data Source and Description: US Census ACS 5-yr estimate 2021

*Source(s): ACS, five-year survey, 2013 and 2019*
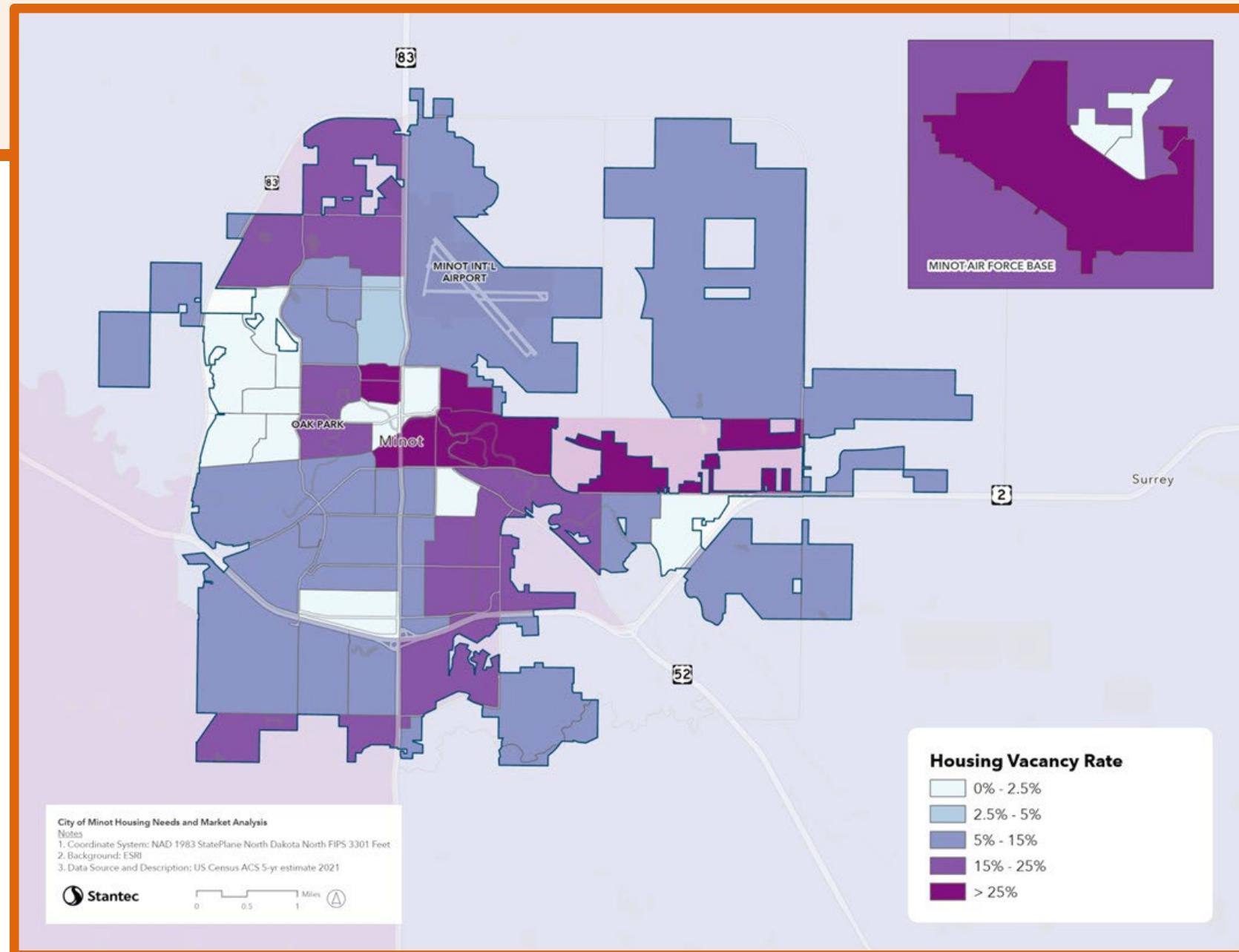
# Rents grew during the boom and then stabilized, albeit at higher marks

Rents were very affordable in 2009. Increased demand and undersupply from the flood drove rents up by nearly 78% from 2009 to 2018, with rents eventually stabilizing due to the oil crash and additional supply on the market. However, where home values plummeted more dramatically, rents have remained elevated, signifying some longer-term shifts towards renting.

**Median Gross Rent**
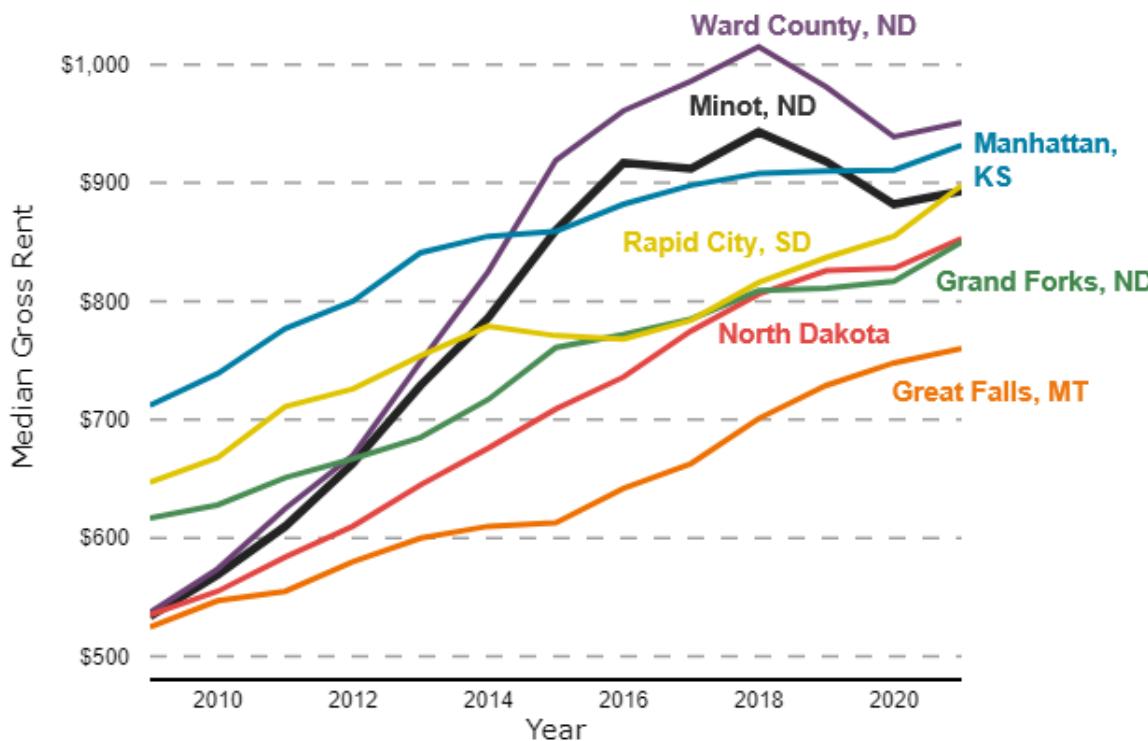


**Median Rent Index**
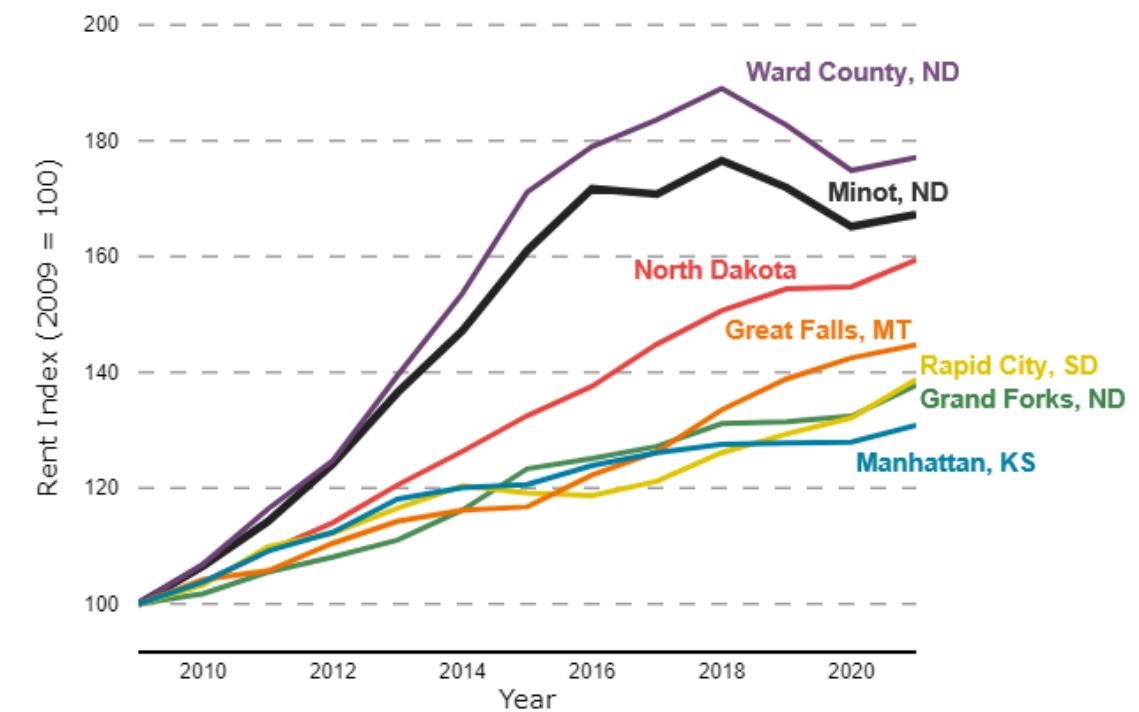
# As comparisons allow, the ZORI index shows rents are comparatively low despite recent growth

Zillow's Observed Rent Index offers another view of current rent trends—factoring all of Minot's rental listings. In this analysis, average rents in Minot have increased by around $135 per month since 2021 — an increase of around 16%. Median rents rapidly increased in Rapid City and Great Falls over the same time period.

**Zillow Observed Rent Index (ZORI)**
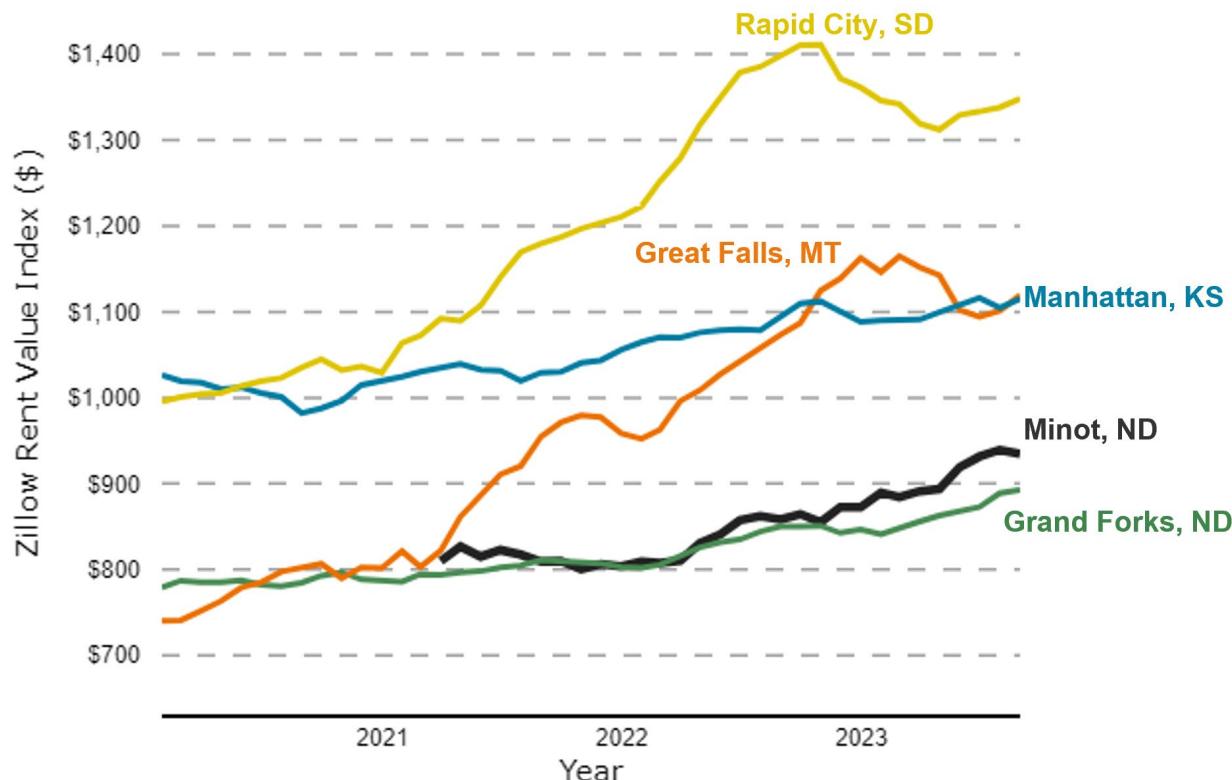


Zillow's rent index includes a more diverse range of housing types than CoStar. CoStar focuses on large multi-family rental complexes, whereas Zillow includes more single-family, duplex, and triplex rental properties in its 'repeat value index' model.

The difference, here, illustrates how market rents tend to be higher in multi-family buildings compared to more independent landlords who tend to own and manage single family homes, duplexes, triplexes, and smaller multi-family complexes. Zillow's data is more current than ACS data, and shows how rental increases have again trended upwards since 2021 (where the ACS survey ends).

*Source(s): Zillow, ZORI Smoothed Observed Rent Index for All Housing Types. Data available for Minot beginning in 2Q 2021.*

# A second burst in rent prices corresponds with a lack of inventory

Rents dropped precipitously when new well starts halted. However, as well starts recommenced and the industry again expanded output, new inventory has not kept pace, leading to 4-6% year-over-year rent growth. Average asking rents per unit have increased from $860 per unit to over $1,000 since 2018.

**Multi-Family Rent Growth**
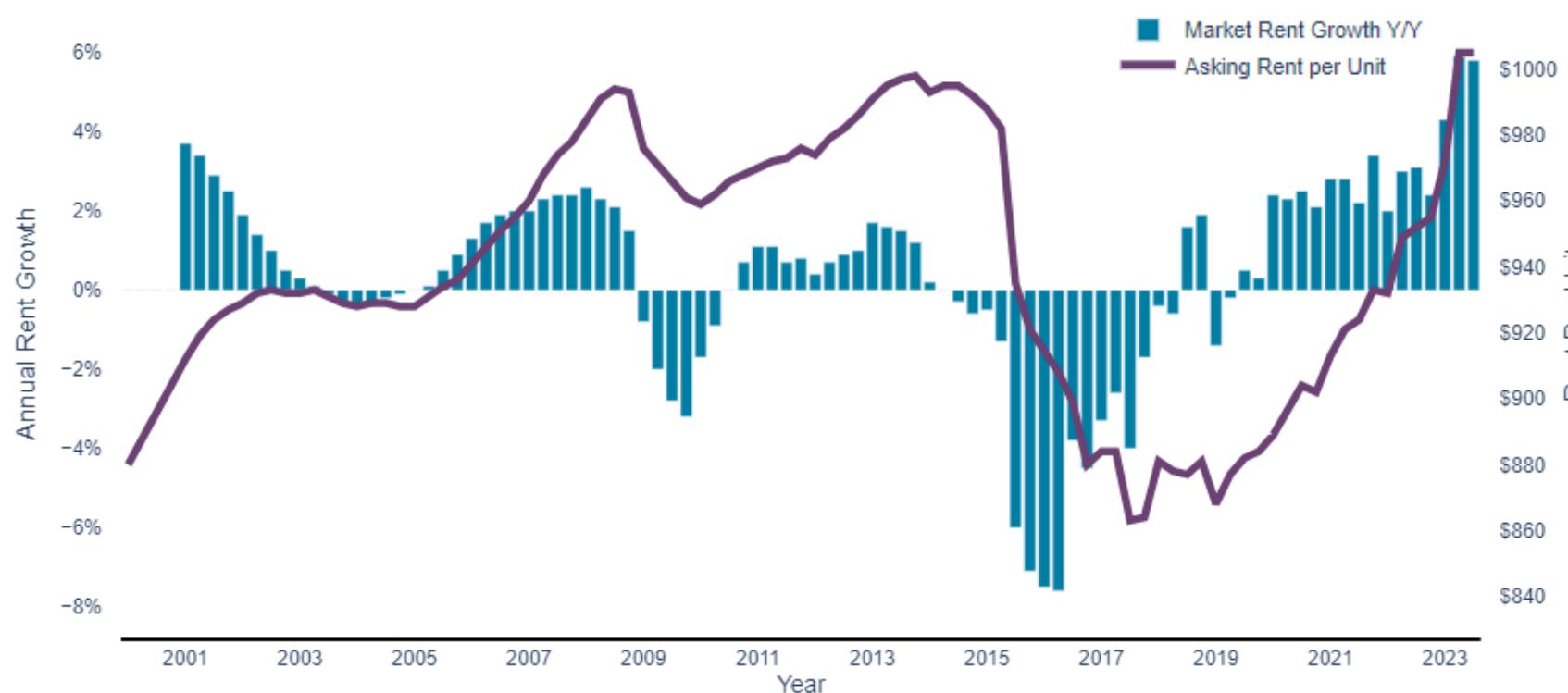


Costar is a comprehensive database of commercial properties. It tracks a range of housing market metrics and commercial descriptors. In the housing market, it is strongest at tracking larger multi-family, market rate rental buildings. It does not track single-family homes for rent, duplexes, triplexes, or smaller/older multi-family complexes. In Minot, it fails to capture some of the older apartment stock that was destroyed during the flood, while, on the other hand, it does capture the more recent apartment developments since the oil boom.

It is useful to triangulate data from Costar with other data sources to get a more comprehensive understanding of the market.

# Multi-Family rental units expanded greatly during the early 2010s

The multi-family rental stock nearly doubled since 2010, with strong market absorption. As oil field growth halted in 2016, so did new development. However, as mining rekindled growth in the late 2010s, the housing market has been slow to respond with new market rate inventory, putting upward pressure on rents.

**Multi-Family Delivered and Absorbed Units**
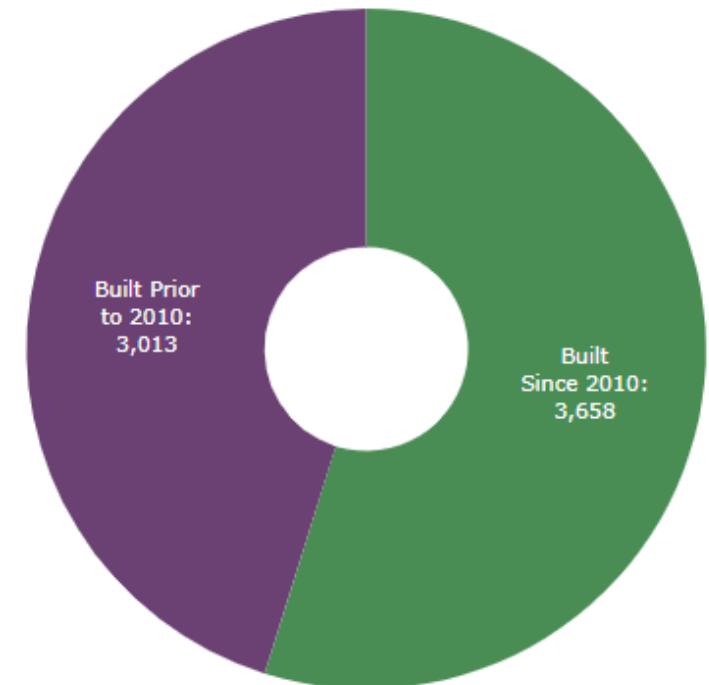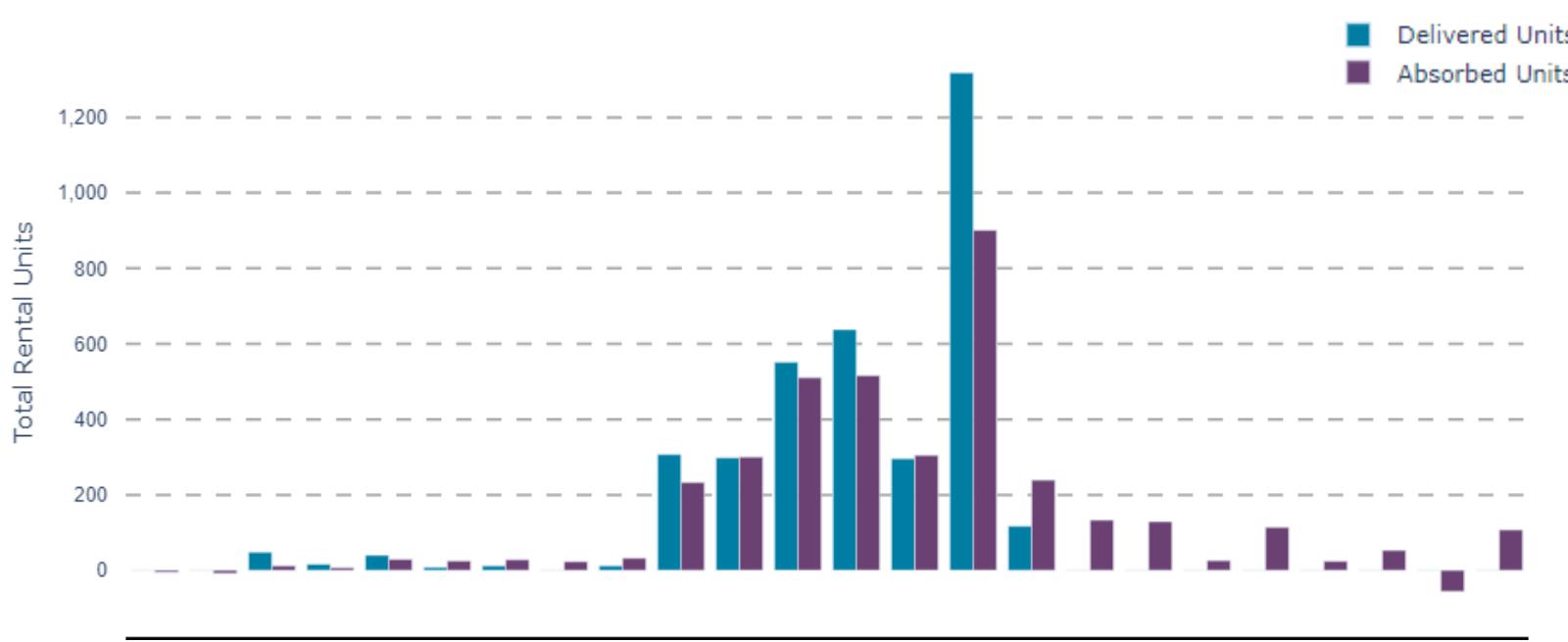
# Lack of recent development is driving up rents due to undersupply

Rapid creation of new inventory in the early 2010s helped absorb new demand, putting less pressure on the apartment market. The oil industry crash drove vacancy rates above 10%, driving down rents. Since 2019, the recovery of oil extraction and broader macroeconomic factors have caused rental vacancy to drop to below 5%, driving up rents.

**Multi-Family Rent Growth**



Costar rent tracking shows different trends from the ACS data. By asking people what rent they pay, the ACS captures a wider diversity of renters (affordable housing, section 8, single-family homes and plexes). During the flood, the destruction of rental units was acute. The units destroyed included older, more affordable housing types and more informal renting relationships between smaller landlords and tenants. The displacement of people from more affordable units into the more formal rental market would increase market exposure, rapidly driving up the median rent people pay, despite the 'average market rate apartment rent' – as depicted here – remaining between $850-1,000.

*Source(s): CoStar*

# Rents are highest for single-family homes and condos, with mobile homes also desirable

Multi-family apartment buildings have the lowest median rent, whereas single family homes and condos tend to rent at higher prices. Where many smaller plexes and condos may have current renters at lower rents due to friendly landlords, the value here is the market rent. Given turnover is high and landlords are profit-maximizing, most renters are exposed to market rate rents.

**Rent by Building Type**
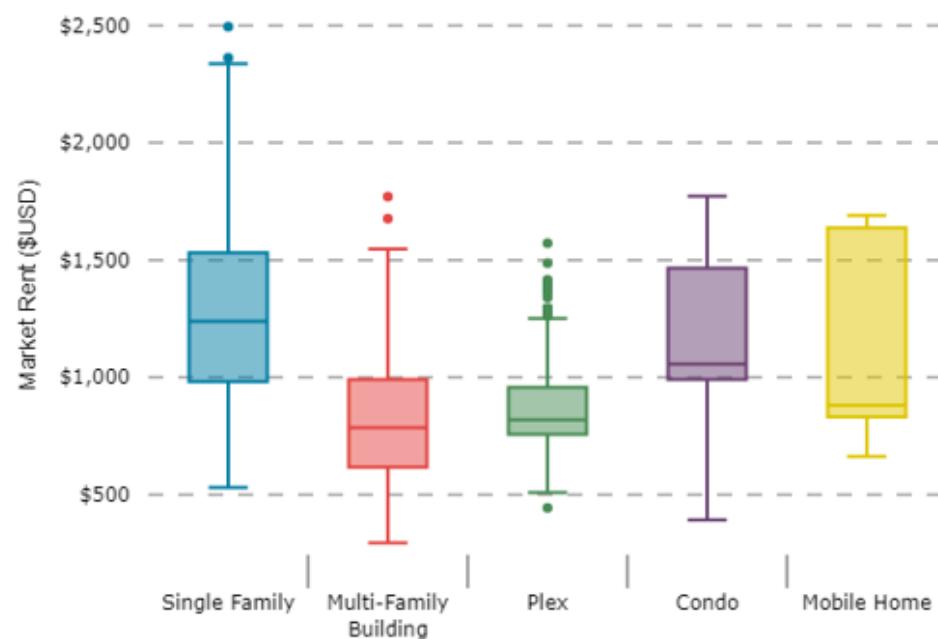


The market rate rental data on this slide and the next are derived from Stantec's rent prediction model. The rent prediction model is trained on existing market-rate rents. These rents are 'scraped' from a range of different online listing sites and joined to the assessor's parcel dataset that contains descriptions of each property, including its age, living area, land area, assessed values, number of bedrooms, etc. The model incorporates building attributes and neighborhood attributes (zip code, median household income, etc) to then predict rents. The result is an estimated or ground-truthed rent prediction for each property in Minot.

Here they are aggregated by different attributes into box plots. A box plot visualizes distribution, with the bottom bar indicating the bottom range, the first bar of the box indicating the 25th percentile, the middle line the median (or 50th percentile), the top of the box the 75th percentile, and the top line the maximum values (outliers are excluded and visualized with the dot, with outliers being 3 standard deviations or more from the median value).

*Source(s): Stantec Rent Model, with data sourced from Apartments.com, Padmapper, Bisman Online, Zillow, Costar, and Ward County Assessor Data*

# Rents in older buildings do not command a premium, while three to four-bedroom units do

A substantial premium exists for larger apartment units, perhaps a consequence of their limited supply and increased demand for space amidst the pandemic. Newer units have a relatively modest price premium compared to housing stock built in earlier decades.

**Rent by Bedroom Size**



**Rent by Year Built**



*Source(s):* Stantec Rent Model, with data sourced from Apartments.com, Padmapper, Bisman Online, Zillow, Costar, and Ward County Assessor Data
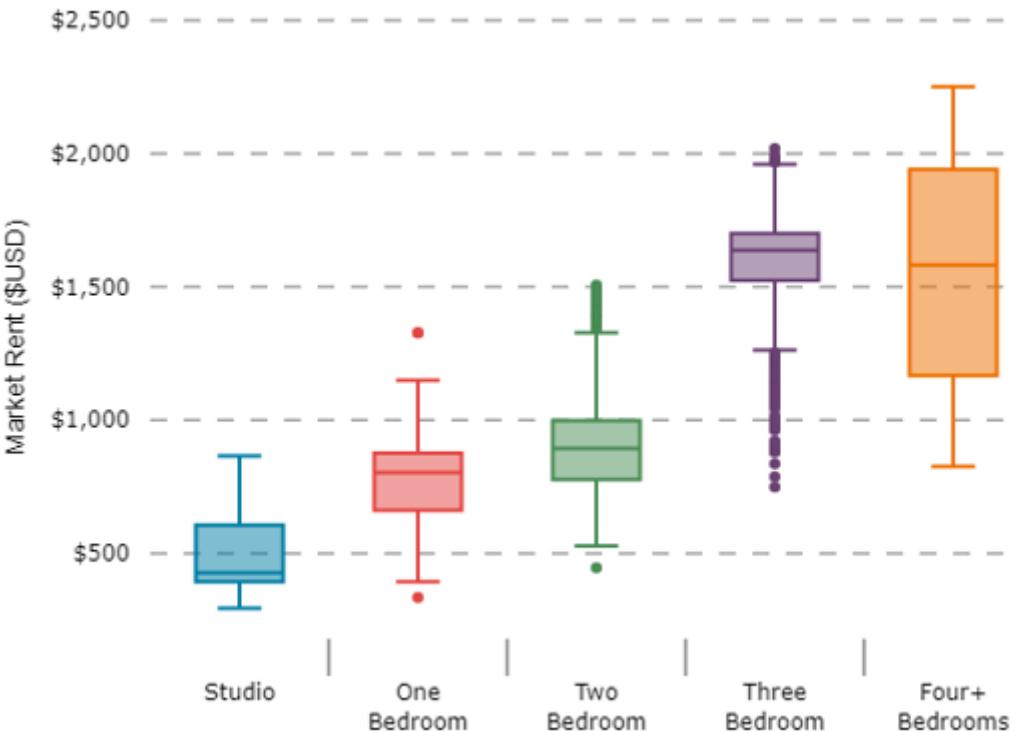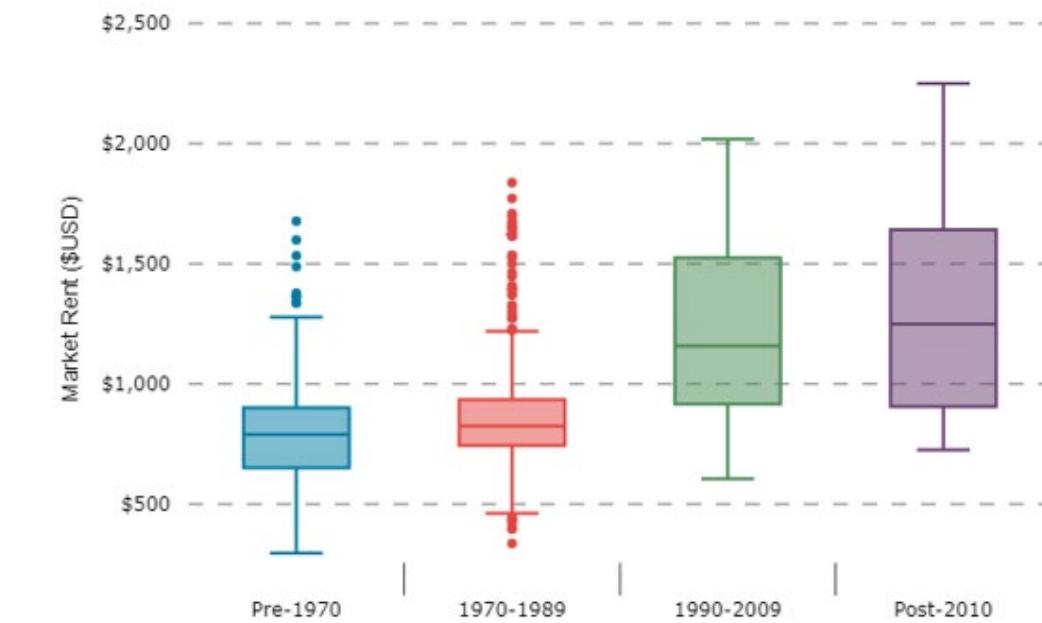
# Median Rents: 2021

Minot's development landscape is complex. The 2011 flood damage included over 4,100 homes flooded, 3,100 of which were demolished. Of that inventory, 2,360 were rental units. The loss of rental units occurred right as the city needed units to absorb in-migration. Undersupply drove rental increases. The flood impacted the city's older, historic housing infrastructure.

Meanwhile, single-family and multi-family growth was robust in newer suburban areas in the northwestern and southeastern quadrants of the city. New construction biased housing.



**Median Rent Value**

- ≤ $800
- $801 - $900
- $901 - $1,000
- $1,001 - $1,200
- $1,201 - $1,400
- > $1,400
- Insufficient Data

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot, ACS 2021 5-yr Estimates

Stantec

*Source(s): ACS, five-year survey, 2013 and 2019*

# Change in Rents

Change in rent in this analysis is calculated as the ratio of the estimated market rate rent of apartments in 2023 from the ACS median rents in 2013. That generates a difference that is likely to be greater than the actual change in rents – since the ACS estimate of rents tends to be below market rate.

Nonetheless, some patterns are evident. Many of Minot's historical neighborhoods and less desirable residential neighborhoods have seen only modest rent hikes, whereas much of the new construction – especially north by the airport and by retail on the southwestern side – have seen more substantial increases.



**Change in Median Rent**

Percent Change 2013-2023 by Block Group

- ≤ 0%
- 0 - 50%
- 50 - 100%
- 100 - 150%
- 150 - 200%
- > 200%
- Insufficient Data

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot, ACS 2021 5-yr Estimates

Stantec

*Source(s): ACS, five-year survey, 2013 and 2019*

# Home values peaked during the boom, dipped during the bust, and have now recovered

Due to the oil boom, Minot home values peaked as home prices stagnated in other locations. Outmigration led to a $60,000 drop in median home prices, which started rising again in 2020. The recovering demand has been strong across the three housing cost tiers.



**Zillow Home Value Index – Middle Market (35th-65th percentile)**
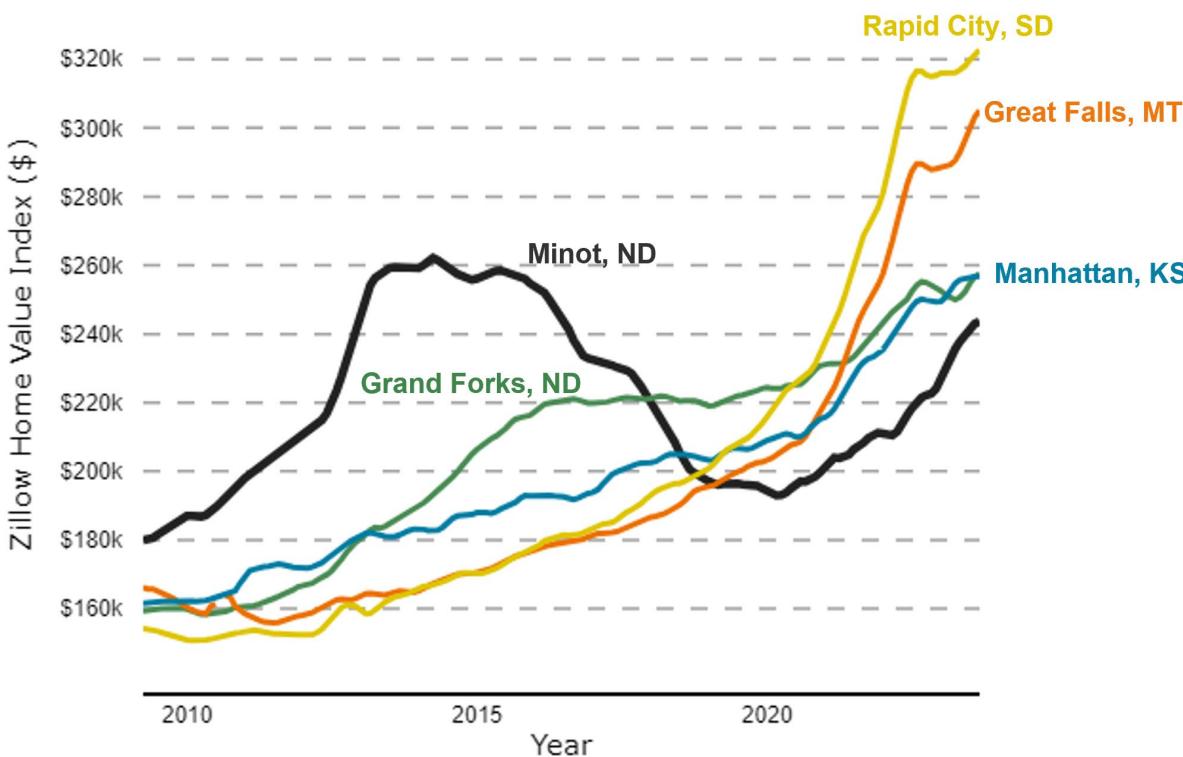
**Zillow Home Value Index in Minot – By Tier**
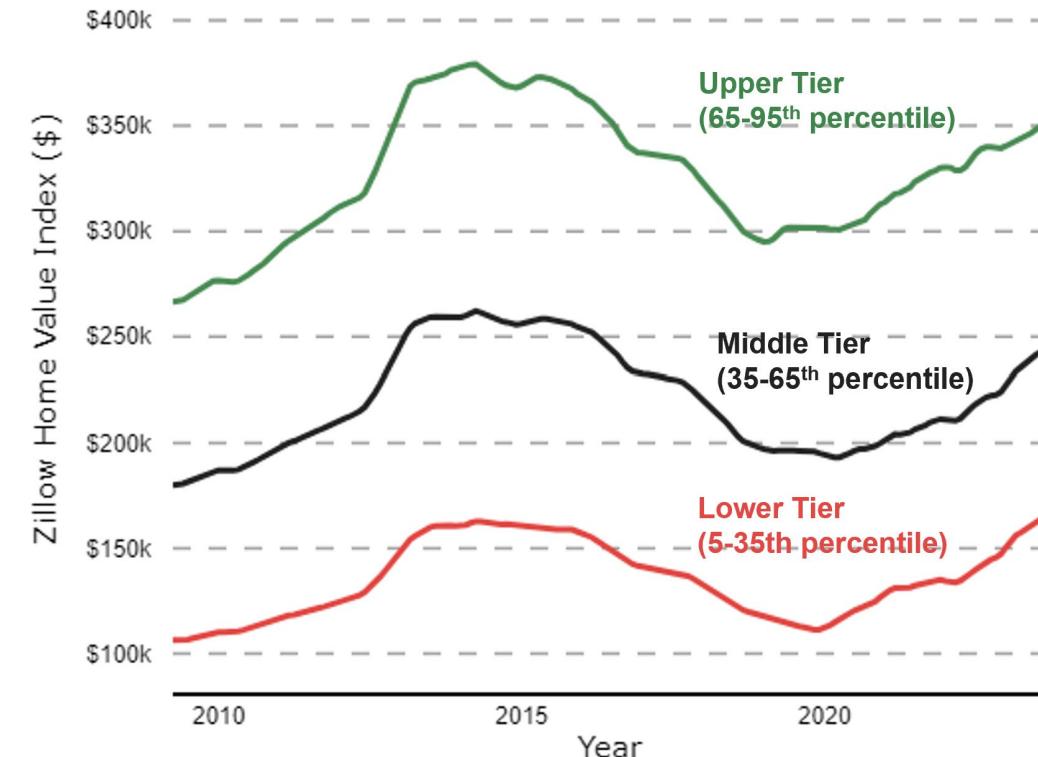
# Single-Family homes lead the market, mobile homes remain an attractive affordable home type

Single-family homes are the most expensive housing type, with condominiums also showing high desirability. Mobile homes, however, are a crucial affordable housing type option, with median market values near $90,000.

**Home Value by Housing Type**
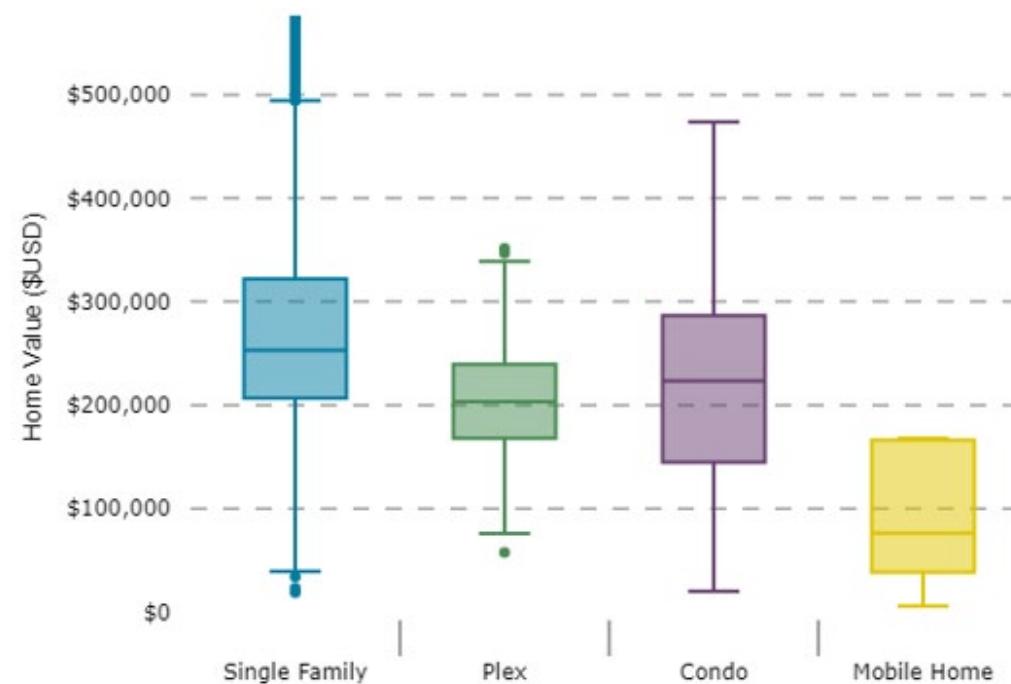


The market rate home value data on this slide and the next are derived from a similar price estimation model to that used to derive rents. The values are estimated based on parcel and neighborhood characteristics, and recent comparable sales.

Here they are aggregated by different attributes into box plots. A box plot visualizes distribution, with the bottom bar indicating the bottom range, the first bar of the box indicating the 25th percentile, the middle line the median (or 50th percentile), the top of the box the 75th percentile, and the top line the maximum values (outliers are excluded and visualized with the dot, with outliers being 3 standard deviations or more from the median value).

# Rents in older buildings do not fetch a premium, while three to four-bedroom units do

A substantial premium exists for larger homes, as does new construction. However, homes built in the past 30 years are valued competitively.

**Home Value by Number of Bedrooms**



**Home Value by Year Built**



*Source(s):* Stantec Rent Model, with data sourced from Apartments.com, Padmapper, Bisman Online, Zillow, Costar, and Ward County Assessor Data

Minot Housing Needs & Market Study | Stantec 58
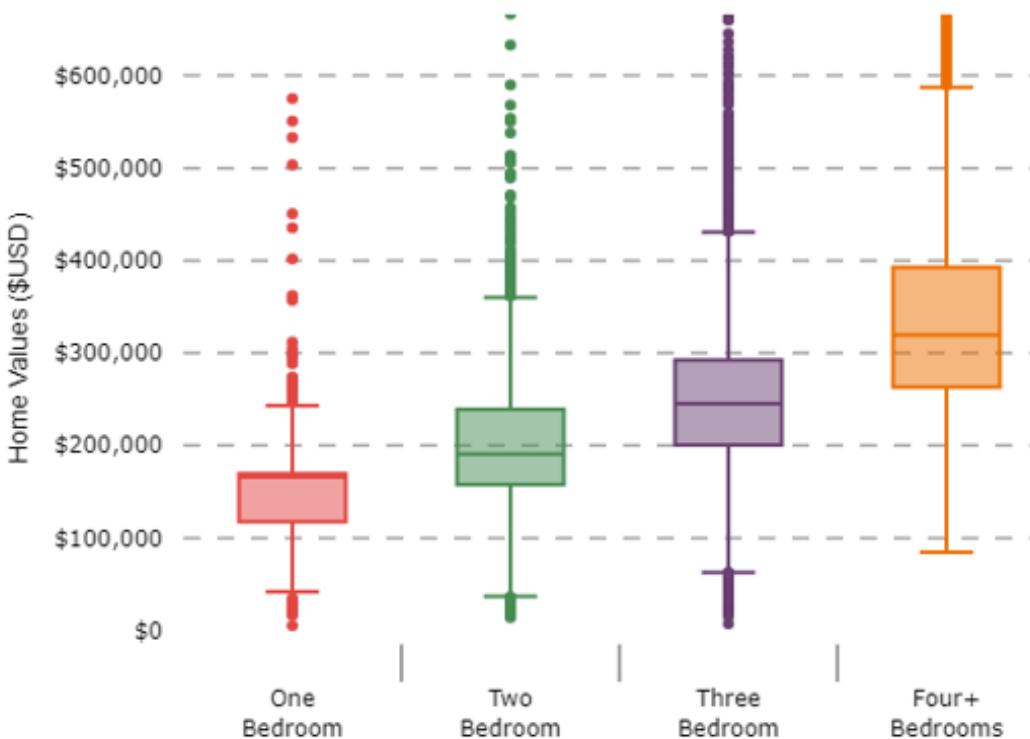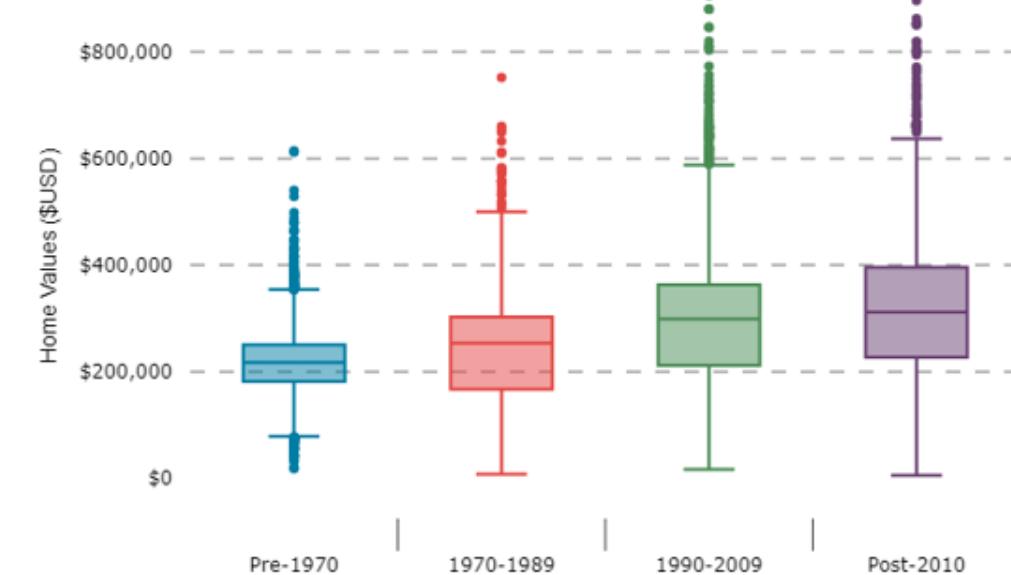
# Inventory and time on market have been steadily decreasing

Homes for sale increased as oil prices crashed, with the median time on market nearing 3 months (especially in the winter). However, as oil prices recovered and macroeconomic dynamics (see below) limited new supply, total inventory and median days on market have declined. Compared to many markets that have seen inventory spike, Minot's market remains hot.

**For-Sale Housing Inventory**
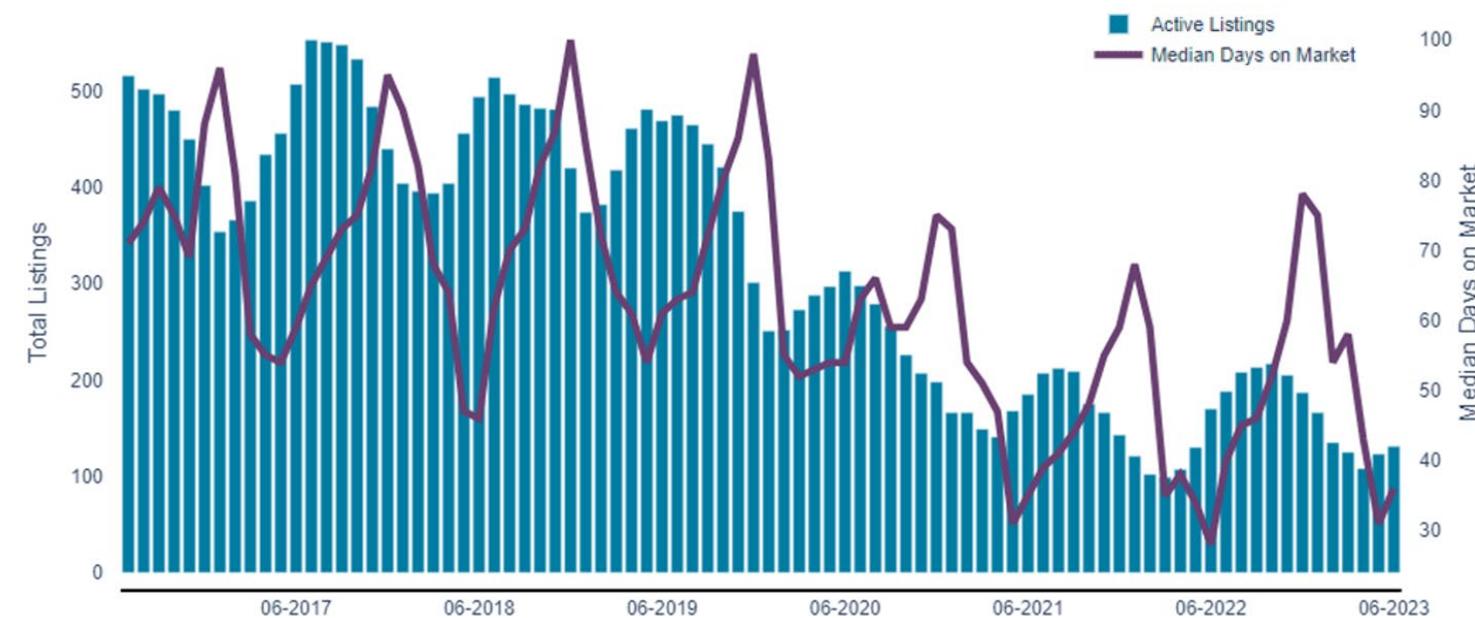


Housing inventory is subject to local and national drivers. Inventory may be high in times where job growth, and therefore household growth, is low or negative. Households leaving the community are forced to sell. In a low demand market, houses will be on the market longer, and are more likely to adjust the sale price downward to ensure a sale.

National drivers include things like macroeconomic performance and interest rates. As interest rates spiked to tame inflation in 2021-2023, new inventory nationwide plummeted as households were reluctant to forsake mortgages secured at lower interest rates and to absorb significantly higher finance costs at higher rates. This dampened the impulse of sellers to move.

In Minot, high demand for housing combined with limited inventory have driven home prices up.

*Source(s): CoStar*

# Median Home Value

West of Oak Park and southwest Minot remain the highest value urban neighborhoods. Homes in more historic Minot and extending east – areas that include some mobile home parks – have lower median values.
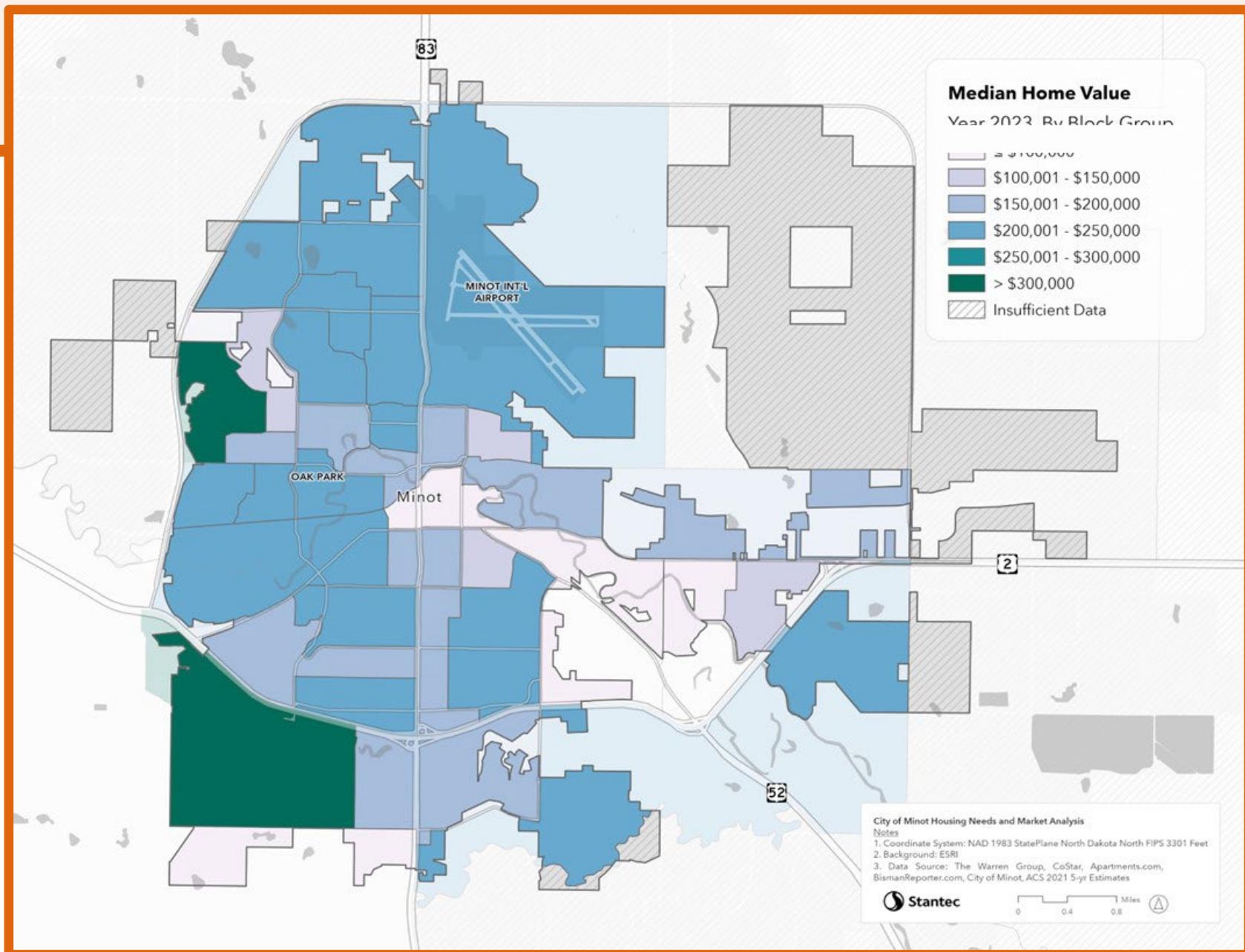
# Change in Median Values

Median home values have been appreciating fastest in the southwest quadrant of town. The fast-appreciating district on the eastern portion of town includes a pioneering development of single-family homes, which drove to large changes in median rents over the time-period.

Change from 2013-2023 doesn't quite capture the 'up and down' nature of the housing market, but does demonstrate how housing prices have increased across the board, with recent increases particularly acute.



*Source(s): ACS, five-year survey, 2013 and 2019*
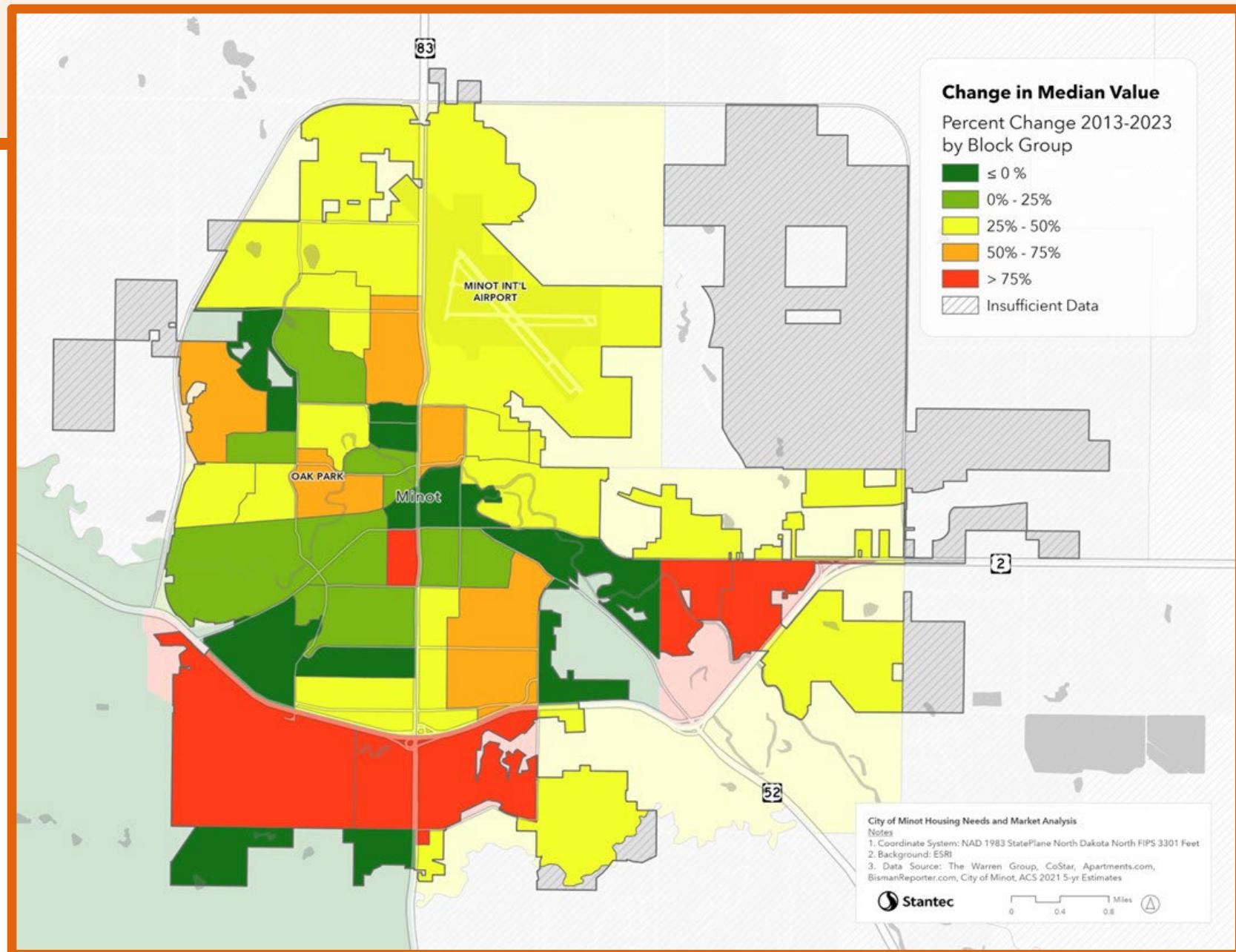
1.  **Ups and downs.**  The market indicators reflect the roller coaster of housing market impacts that Minot has experienced—a surge in demand and new construction with the oil boom and in-migration, and a drop in rent levels and home values when the labor force left.  Now, after a period of economic stability, apartment buildings have reached full occupancy and rents have started to rise once again.

2.  **Little new construction.**  These dynamics explain the absence of new multifamily housing and slow subdivision development while conditions stabilized, and the existing housing stock was fully absorbed.

3.  **Current market conditions.**  With lower vacancy rates and increased rents over the last few years, more supportive conditions may be returning for new housing development.  The multi-phase project being pursued by Epic Companies is a promising signal of market recovery.  It will also test the viability of an upscale apartment community, and the depth of a higher income professional rental demographic.

## Dwelling Types

Minot offers a broad variety of housing types. Newer multi-family construction is located on the northern and southern sections of town, with newer developments built at a larger scale than historic multi-family buildings. Abutting the newer multi-family apartments are a high proportion of Minot's multi-family and soft-density ownership housing (condominiums and townhomes).

Minot's single-family neighborhoods are abundant, with newer development largely occurring on the suburban periphery and extending into unincorporated Ward County

Duplexes, triplexes, and quadruplexes are located in the older historic neighborhoods where mixed-use and soft density were historically more common before single-use zoning.

"Vacant Residential" includes many platted subdivisions that remained unbuilt when the boom crashed. Recommencing construction remains challenging despite increasingly favorable conditions and demand.



City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot, ACS 2021 5-yr Estimates
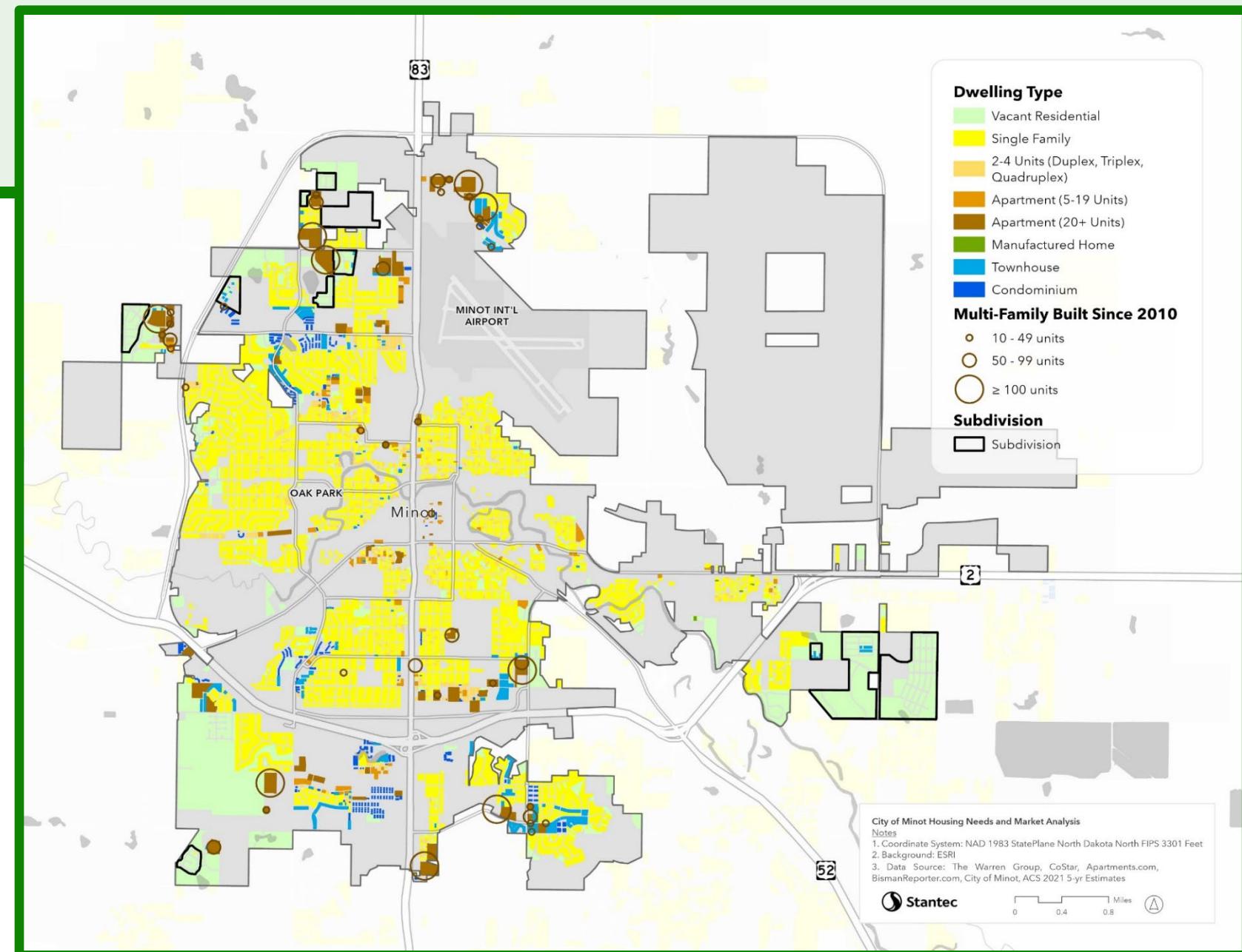
*Source(s): Stantec, Warren Group, Ward County Assessor, Costar, Apartments.com, City of Minot*

# Year Built

Minot's urban core was built prior to 1920. Mixed-use development was once more common, especially prior to the proliferation of single-family zoning that emerged after WWII. Duplexes remain common. Infill development is also common downtown in flood impacted areas.

Single family neighborhoods then expanded outwards during the post-War era, creating Minot's predominantly single-family housing neighborhoods.

New development in suburban areas, denoted by the yellow, often include a mix of housing density – with a much larger proportion of multi-family homes and lighter density (townhomes) than was typical in the previous era.



**Year Built**
- Pre-1920
- 1920-1939
- 1940-1959
- 1960-1979
- 1980-1999
- 2000-2023

City of Minot Housing Needs and Market Analysis
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Stantec

*Source(s): City parcel records*
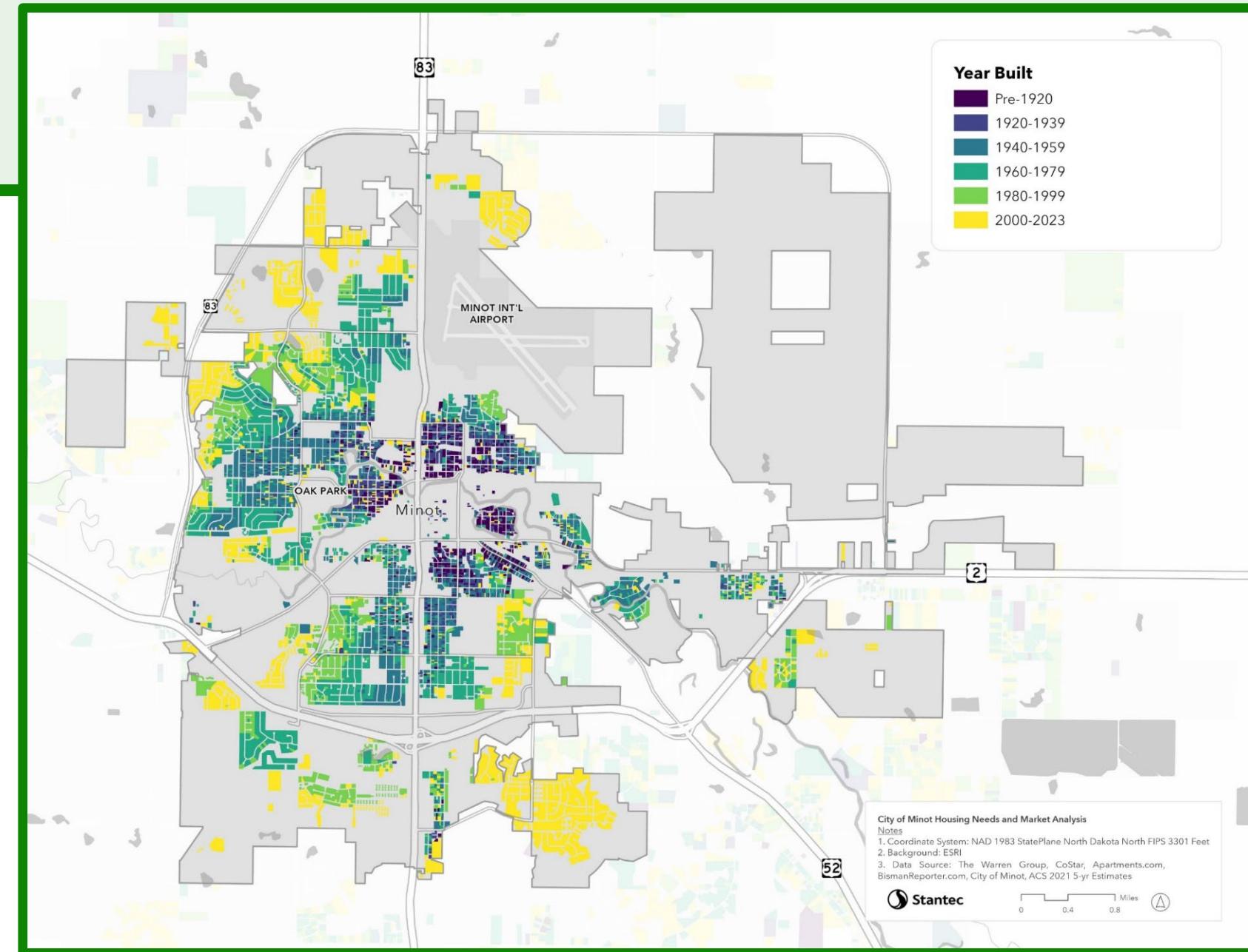
# Senior Housing

Market rate senior apartment developments are concentrated in the southwest quadrant of Minot.

A range of subsidized senior housing including Section-8 housing and LIHTC (Low Income Housing Tax Credit) financed communities are south of downtown, with Souris Heights by the airport the most recent development.

The region lacks recently built, market rate senior housing options despite demand. This includes some of the 'newer' retirement community types – such as active adult 55+ communities, both for rent and ownership. Active adult communities tend to have lower-maintenance lifestyle options including a range of housing types (single story ranch style homes or 'stacked' multifamily condos), and some community-oriented amenities (recreational and athletic facilities), but less integrated services than independent or assisted living. These communities – once mostly restricted to the Sunbelt – are proliferating as the peak Baby Boomer generation enters early retirement. Demand for this type of housing was noted in the housing survey among aging households.



**Senior Housing**

Type
- Licensed Care Facility
- Minot Housing Authority
- All Other

Souris Heights
Built 2021, 54 units

Trinity Homes
230 units

Minot Health and Rehab
114 units

Henry Towers
Built 1948 (1976 Costar), 83 units

The View Minot
Built 2005, 61 units

Edgewood Minot Senior Living
Built 1993, 114 units

Maple View Memory Care
43 units

Cooks Court Apartments
Built 2018, 40 units

Somerset Court
Built 1999, 137 units

Morgan Apartments
Built 1986, 64 units

Dakota Terrace Apartments
Built 1987, 138 units

Edgewood Minot Memory Care
Built 2002, 28 units

Elison Assisted Living Minot
Built 1999, 85 units

Minot Lodge Senior Living (The Wellington)
Built 2005, 67 units

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3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot, ACS 2021 5-yr Estimates

| Property Name | Owner | Address | Year Built | # Units/ Rooms | Building Format | Affordability | Type of Care | ND Licensed Facility |
|---|---|---|---|---|---|---|---|---|
| Souris Heights | Minot Housing Authority | 1400 35TH AVE NW | 2021 | 54 | Apartments | Rent Restricted | Independent living | |
| Cooks Court Apartments | Minot Housing Authority | 1810 2nd St SE | 2018 | 40 | Apartments | Rent Restricted | Independent living | |
| The View Minot | Maple View Memory Care/The View on Elk Drive | 2905 Elk Dr | 2005 | 61 | Condominiums for rent | | Independent living, assisted living | |
| Minot Lodge Senior Living (The Wellington) | Sinceri Senior Living | 601 24th Ave SW | 2005 | 67 | Apartments | | Independent living, assisted living, memory care | |
| Edgewood Minot Memory Care | Edgewood Healthcare | 520 28th Ave SE | 2002 | 28 | Rooms | | Assisted living, memory care, rehab services | |
| Elison Assisted Living Minot | Sagora Senior Living | 3515 10th St SW | 1999 | 85 | Apartments and Rooms | | Assisted Living | |
| Somerset Court | Somerset Court | 1900 28th St SW | 1999 | 137 | Apartments | Rent Restricted | Assisted Living, memory care | |
| Edgewood Minot Senior Living | Edgewood Healthcare | 800 16th Ave SE | 1993 | 114 | Apartments and Rooms | | Independent living, assisted living, memory care | Basic Care |
| Dakota Terrace Apartments | Investors Management & Marketing | 3205 10th St SW | 1987 | 138 | Apartments | | Independent living | |
| Morgan Apartments | Minot Housing Authority | 1921 6TH ST SE | 1986 | 64 | Apartments | Rent Restricted | Independent living | |
| Henry Towers | Minot Housing Authority | 1000 2nd St SE | 1948 (1976 Costar) | 83 | Apartments | Rent Subsidized | Independent living for 62+, disabled | |
| Trinity Homes | Trinity Health | 305 8th Ave NE | | 230 | Beds | | Certified long-term care facility, memory care, medical and rehab services | Skilled Nursing |
| Minot Health and Rehab | North Shore Healthcare | 600 S Main St | | 114 | | | Assisted living, memory care, skilled nursing care, rehabilitation services | Skilled Nursing |
| Maple View Memory Care of Minot | Maple View Memory Care/The View on Elk Drive | 2805 Elk Dr | | 43 | Rooms | | Memory care | Basic Care |

# Affordable Housing

Despite rising incomes in Minot, many households are still rent-burdened. Demand for affordable housing is, and will remain, substantial.

The primary funding vehicle for new affordable housing development is LIHTC (Low Income Housing Tax Credit). Housing that received LIHTC funding are required to set rents that are affordable to households earning incomes equal to or less than 60% of the Area Median Income (AMI).

Existing Section-8 apartments allow residents to pay 30% of their income on rent, and the federal government pays the rest.



**Affordable Housing**
Market Segment
- Affordable
- Affordable - Disabled
- Affordable - Senior
- Affordable - Senior & Disabled

Sunset Ridge Apartments
Built 2016, 35 units

Fieldcrest Apartments
Built 2015, 42 units

Souris Heights
Built 2021, 54 units

Polaris Apartments
Built 1994, 48 units

MINOT INT'L AIRPORT

Minot Artspace Lofts
Built 2014, 34 units

Oakwood Court
Built 2014, 7 units

Milton Young Towers
Built 1972, 221 units

OAK PARK

Minot Vocational Workshop
Built 1952, 48 units

Henry Towers
Built 1948, 83 units

Park South Essential Living and Townhomes
Built 2018, 62 units

Washington Townhomes
Built 2013, 32 units

Minot Place Rowhomes
Built 2013, 30 units

South Glen Village
Built 2002, 48 units

Blu on Broadway
Built 2021, 42 units

South Park Apartments
Built 1993, 36 units

Asi-Minot
Built 1996, 25 units

Morgan Apartments
Built 1986, 64 units

Guardian Manor
Built 1996, 48 units

Cooks Court Apartments
Built 2018, 40 units

Meadowlark Heights
Built 1973, 96 units

City of Minot Housing Needs and Market Analysis
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3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot, ACS 2021 5-yr Estimates

Stantec
Miles
0    0.4    0.8

| Property Name | Owner | Address | Year Built | Number of Housing Units | Market Segment | Affordability Type | Funding | Affordability |
|---|---|---|---|---|---|---|---|---|
| Blu on Broadway | Epic Companies | 1629 S Broadway | 2021 | 42 | All | Rent Restricted | National Disaster Resilience Funds/TIF | |
| Souris Heights | Minot Housing Authority | 1400 35th Ave NW | 2021 | 54 | Senior | Rent Restricted | LIHTC | 50% to 60% AMI |
| Park South Essential Living and Townhomes | Epic Companies | 234 14th Ave SE | 2018/2022 | 62 | All | Rent Restricted | National Disaster Resilience Funds | |
| Cooks Court Apartments | Minot Housing Authority | 1810 2nd St SE | 2018 | 40 | Senior | Rent Restricted | LIHTC | 50% to 60% AMI |
| Burlington Willows | Minot Housing Authority | 304-482 Riverwood Drive | 2016 | 38 | All | Rent Subsidized | Section 8 | 30% of Income |
| Sunset Ridge Apartments | Beyond Shelter Inc | 3524 NW Kodiak St | 2016 | 35 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| Fieldcrest Apartments | Minot Housing Authority | 500 36th Avenue NE | 2015 | 42 | All | Rent Subsidized | Section 8 | 30% of Income |
| Minot Artspace Lofts | | 3 Main St S | 2014 | 34 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| Minot Place Rowhomes | | 1717 11th St SW | 2013 | 30 | All | Rent Restricted | LIHTC | -- |
| Washington Townhomes | Beyond Shelter Inc | 813 SE 18th Ave | 2013 | 32 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| South Glen Village | Premier S Glen Vlg Minot Nd Ll | 1835 Hiawatha St | 2002 | 48 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| Asi-Minot | | 1425 31st Ave SW | 1996 | 25 | Disabled | Rent Subsidized | Section 811 | 30% of Income |
| Guardian Manor | | 3205 4th Street SW | 1996 | 48 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| Polaris Apartments | | 300 27th Ave NW | 1994 | 48 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| South Park Apartments | South Park Limited Partnership | 631 19th Ave SE | 1993 | 36 | All | Rent Restricted | LIHTC | 50% to 60% AMI |
| Morgan Apartments | Minot Housing Authority | 1921 6th St SE | 1986 | 64 | Senior | Rent Subsidized | Section 8 | 30% of Income |
| Meadowlark Heights | | 400 18th Ave SE | 1973 | 96 | All | Rent Subsidized | Project Based Section 8 | 30% of Income |
| Milton Young Towers | Minot Housing Authority | 108 Burdick Expy E | 1972 | 221 | All | Rent Subsidized | Public Housing | 30% of Income |
| Henry Towers | Minot Housing Authority | 1000 2nd St SE | 1948 (1976 Costar) | 83 | Senior & Disabled | Rent Subsidized | Project Based Section 8 | 30% of income |
| Minot Vocational Workshop | Kalix | 1005 11th Ave Costar | 1952 | 48 | Disabled | Rent Subsidized | HUD Section 202 | 30% of Income |

# New Multi-Family Apartments

The map shows multifamily development since 2010, which has led to an approximate doubling of total apartment units. New development has been concentrated in sites on Minot's periphery. Most construction of market-rate units occurred from 2011-2016. The development since then has mostly been rent-restricted affordable apartments. New multi-family construction tend to be significantly larger than older rental complexes –a consequence of the need for economies of scale that make larger projects financially viable. Most are strictly housing. Mixed use projects with both residential and commercial elements are rare. The housing survey noted a community desire for more retail and entertainment, especially near North Hill. Newer projects – especially those located near the new Trinity Hospital – are filling a market desire for more amenity rich, mixed-use facilities, such as Epic's The Tracks.

With land available on the periphery, infill redevelopment in more central locations have been less common. Examples include Beaver Ridge Apartments and Blue on Broadway.



**Multi-Family Built Since 2010**
Number Of Units
- 25 - 50 units
- 51 - 100 units
- > 100 units

Cobblestone Apartments
Built 2012, 76 units

Lindenwood Apartments
Built 2010, 48 units

Sunset Ridge Apartments
Built 2016, 35 units

Northern Plains
Built 2012, 144 units

Souris Heights
Built 2022, 54 units

Fieldcrest Apartments
Built 2015, 42 units

The Wyatt at Northern Lights
Built 2014, 276 units

Stonebridge Townhomes
Built 2014, 202 units

Landmark Circle
Built 2012, 35 units

Encore Apartments
Built 2012, 42 units

Sunset Pointe Apts
Built 2014, 27 units

North Highlands
Built 2014, 239 units

MINOT INT'L AIRPORT

Prairie Heights Apts
Built 2013, 147 units

Willowbrooke Lodge
Built 2012, 42 units

2100 33rd St NW
Built 2014, 50 units

Northdale Apartments 2717
Built 2011, 91 units

Parkview Place Apts
Built 2015, 36 units

Eagles Landing
Built 2010, 32 units

Beaver Ridge Apartments
Built 2011, 40 units

Country Meadows
Built 2014, 66 units

Beaver Suites
Built 2012, 32 units

Minot Artspace Lofts
Built 2014, 34 units

Park South Essential Living and Townhomes
Built 2022, 62 units

Blu on Broadway
Built 2021, 52 units

Country View Apartments
Built 2015, 52 units

Minot Place Rowhomes
Built 2013, 30 units

Minot Place
Built 2011, 144 units

Washington Townhomes
Built 2013, 32 units

Cooks Court Apartments
Built 2018, 40 units

Meadows at Woodside
Built 2010, 36 units

The Commons & Landing at Southgate
Built 2014, 341 units

Southwood
Built 2012, 156 units

Crossing at the Bluffs
Built 2011, 66 units

The Flats at Southwest Crossing
Built 2011, 60 units

Meadow Ridge Apartments
Built 2010, 168 units

Woodside Townhomes
Built 2011, 48 units

Paramount at the Bluffs
Built 2011, 50 units

City of Minot Housing Needs and Market Analysis
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Stantec    0   0.4   0.8 Miles

1. **Housing mix.** Minot benefits from having a broad mix of housing types that have been built over the years—including single family homes, twin homes, townhomes, mobile home parks, apartments, senior housing and affordable housing.

2. **Senior housing.** There are a good number of senior housing communities, but recently built developments are lacking, even as Minot's senior population has grown in numbers and in its share of the total population.

3. **Affordable housing.** A range of affordable housing options are present in Minot, with good geographic distribution—some of which have been recently built. The need for affordable and workforce housing options continues, however, due to lagging incomes compared to rising housing costs.

4. **New multifamily housing.** The most recent generation of housing was built during the oil boom and built for a working-class demographic. Maverick, the first phase of The Tracks, will be the first market rate apartments in Minot since 2015—and is targeting an upscale demographic.

06
GAP
ANALYSIS

# Real-time supply side analysis with machine learning.

A parcel-level inventory of all housing units within the region incorporates Census data, rental data from CoStar, real-time cost information from web-scraping algorithms, and other sources, to establish a predictive technique to assign monthly cost attributes to each unit using statistical regression and related methods. The model incorporates HUD data on public and subsidized unit totals, costs, and bedroom counts at the county level.

**1) Parcel Data from the Warren Group**

Parcel data contains information on the location, year built, homestead status, assessed value, number of bedrooms, bathrooms, and total rooms, condition and the property use type of each parcel. Many are missing attributes. Completed entries then train Machine Learning (ML) models to predict and fill missing data. Staff ground-truth this data with existing housing surveys such as the American Community Survey, ensuring the estimates for bedroom size, unit counts, and building types reflect existing data.

**2) Real-Time Data from Leading Sources**

CoStar: Aggregates data on multi-family rental buildings, including its class, intended market, condition, number of units by size, and rent for units at each size.

Apartments.com: We scrape rental data from Apartments.com listings, which can include both large multi-family buildings with real-time prices, and single-family homes, condos, or other units posted

Padmapper: Scraped rental data from Padmapper.com. Padmapper combines rental postings from a variety of sources, including smaller rental buildings like homes, condos, duplexes and triplexes in addition to large multi-family units.

BismanOnline: Rental data is scraped from North Dakota's own Craigslist, accessing data on real-time rents for properties such as duplexes, mobile homes, or single-family homes that often are not posted on more formal rental sites.

City of Minot: Data on tenancy was prioritized from Minot's internal housing assessment that determines whether a home, plex unit, condominium, or townhouse is rented or owner-occupied. This complements other data for approximating tenure such as homestead status. City data incorporated into the model also includes housing type, whether the property was converted from single-family into a multi-tenant property, and the number of units available.

Note on Affordable/Senior Units: Using an inventory of LIHTC and Public Housing data from the Minot Housing Authority and HUD's LIHTC database, buildings designated as affordable are included in the analysis, with rents set at the 60% MFI rate for the minimum household relative to unit size based on 2023 determinations (ie: a 2 bedroom unit is set at 60% AMI for a 2 person household).

**3) Real-Time rent with parcel information**

This combination creates a database of specific parcels and the rent and a 'training' dataset for statistical ML models. Stantec uses 20+ variables to help predict rent such as location, median rent for apartments by size in each block group in which the parcel is located, living area per unit, age, condition, bedrooms, bathrooms, assessed value per unit, etc.

Stantec checks predictions in a 'test' dataset – or 20% of the train dataset set aside – to assess the performance of the best ML model. The model then predicts market rents for all properties designated as 'rental' in the region. A similar model is developed and applied by the Warren group to determine the market value of condominiums and homes.

This dataset gives a detailed breakdown of all units in a region by building type, tenure, bedroom unit count, and type, as well as the rest of the building attributes. Using the estimated monthly housing cost to afford the unit, we get a specific breakdown of the cost to own or rent.

**4) Aggregate and Analyze**

This dataset enables us to aggregate data that helps contextualize supply and demand together. Stantec visualizes and analyzes data based on cost, location, year built, and development type.



Actual vs Predicted Rent: $y_i$ vs $\hat{y}_i$
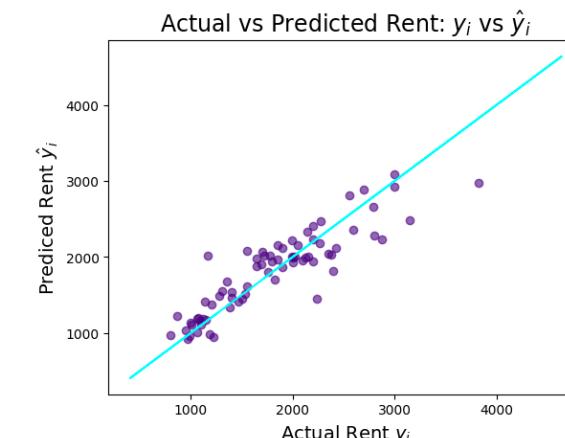
*Example regression analysis comparing Stantec's predicted to ground-truthed rent for parcels*

# Housing gap analysis is informed by supply, preferences, and production

**Current need**

Housing preferences are derived by analyzing the housing choices made by households who moved within the last 12 months per the most recent census (in this case, 2021 Census ACS). By isolating just these recent movers, the analysis can model housing market decisions typical households of various incomes and sizes are making in the present market based on their current needs and ability to pay. This is referred to as the market's "current preferences."

The current preferences model is a 'demand curve', incorporating the kinds of units that households of different sizes and income levels choose to acquire. The model creates a 'weight' that determines the odds of each household at a given number of persons and income choosing a house of a particular size. For example, in the case of a household with a high income but only 2 persons in the house, chances are higher than this household owns and occupies a unit larger than their strict need. However, there are many people that still choose to rent a one bedroom. The model would assign a low probability for the renting a one

bedroom and a higher probability for owning a three bedroom.

The cost of housing is determined based on the 'max affordability level,' or the amount that a household earning a certain income could pay and to still have that unit be considered affordable. Maximum housing cost is capped at 25% in this analysis because the data only includes monthly rent or mortgage and tax. Assuming an additional 5% should be added to cover costs such as utilities and insurance brings the effective cost ceiling approximately to the 30% standard.

**Identifying the gap**

Comparing the current distribution of preferences against the housing supply reveals how well aligned (or how misaligned) these two sides of the market are at each income level, tenure, and unit size. Shortages occur when there are more households preferring a given unit profile (cost, tenure, size) than there are such units available within the geography. Surpluses occur when there are more of a given unit profile than there are households who would prefer it.

The results of this analysis should be considered indicative of potential future shifts in settlement patterns and not necessarily predictive of where or when households might actively change units. There are numerous personal reasons a household might choose to move or remain in a given year. Also, even if they did choose to move, a unit matching their exact preference might not be available.

Affordability gaps are evident as shortages among the lowest cost units. Because the households included in this analysis are currently housed within the same geography, it can be assumed many at corresponding income levels are currently cost burdened for lack of affordable options.

# Minot Housing Demand

The table shows the housing demand for Minot's population as a function of their income, tenure (whether they rent or own), and desired unit size, based on the choices of the existing population

Using **25% of household income as the baseline** 'affordability' level, we project the number of units demanded at certain price points according to current household incomes and composition. We take the current composition of housing tenure (own versus rent) as the baseline. Willingness to pay may be different than ability to pay, especially with households above area median income.

**Housing preference**

The units size needed (number of bedrooms) reflects the household sizes in Minot's population as well as expressed housing preferences at each income level based on the regional model.

**Housing Demand by Price, Tenure, and Unit Size with Regional Preferences**

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | $313 | 736 | 435 | 134 | 40 | 40 | 231 | 302 | 108 |
| $15,000-24,999 | $521 | 389 | 306 | 110 | 47 | 19 | 163 | 225 | 69 |
| $25,000-34,999 | $729 | 336 | 419 | 126 | 21 | 24 | 101 | 206 | 85 |
| $35,000-49,999 | $1,042 | 673 | 689 | 301 | 85 | 37 | 286 | 512 | 261 |
| $50,000-74,999 | $1,563 | 399 | 766 | 278 | 71 | 38 | 393 | 851 | 414 |
| $75,000-99,999 | $2,083 | 290 | 436 | 239 | 75 | 32 | 275 | 865 | 512 |
| $100,000-149,999 | $3,125 | 189 | 352 | 223 | 79 | 19 | 307 | 1,091 | 1,032 |
| $150,000-199,999 | $4,167 | 28 | 114 | 78 | 67 | 3 | 69 | 314 | 557 |
| $200,000 or more | -- | 22 | 54 | 99 | 25 | 8 | 59 | 359 | 868 |

*Source(s): ACS, all regional PUMS preference*

# Minot Housing Supply

This table shows the housing supply in Minot, organized by tenure, unit sizes, and the monthly costs that are affordable to households at different income levels.

Housing supply is determined using parcel-level data. A detailed statistical analysis determines the total number of housing units currently occupied by renters and owners in the region.

## Rental

Real-time rent data, captured from live web postings, is incorporated into a statistical model to predict rents for all rented housing units in the region. Current home values are also estimated through a statistical modeling process.

## Ownership

Monthly housing costs for ownership housing reflects monthly payments on 30-year mortgages with a 13% down payment (national average) and 7.725% interest rate (regional average, July 2023). Estimated property taxes and insurance payments are added. This yields estimated monthly costs associated with the purchase of an ownership property, which is distinct from what the existing homeowner is currently paying.

**Housing Supply: Units categorized by tenure, size, and monthly cost**

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15,000 | $313 | 14 | 0 | 0 | 0 | 21 | 27 | 135 | 0 |
| $15,000-24,999 | $521 | 229 | 1 | 0 | 0 | 15 | 36 | 138 | 0 |
| $25,000-34,999 | $729 | 695 | 630 | 0 | 0 | 24 | 34 | 117 | 3 |
| $35,000-49,999 | $1,042 | 1,139 | 3,339 | 116 | 18 | 55 | 249 | 157 | 11 |
| $50,000-74,999 | $1,563 | 737 | 1,335 | 915 | 72 | 116 | 1,020 | 547 | 91 |
| $75,000-99,999 | $2,083 | 0 | 1 | 727 | 114 | 179 | 1,160 | 1,851 | 453 |
| $100,000-149,999 | $3,125 | 0 | 0 | 5 | 12 | 19 | 625 | 2,310 | 1,519 |
| $150,000-199,999 | $4,167 | 0 | 0 | 0 | 0 | 4 | 52 | 364 | 672 |
| $200,000 or more | -- | 0 | 0 | 0 | 0 | 4 | 14 | 81 | 262 |

*Source(s): Woods & Poole, Replica, ACS, CoStar, Apartments.com, Padmapper*

# The housing gaps snapshot results from comparing the supply of housing to housing demand

This table compares the housing supply to the housing demand to quantify the housing gaps at each income level, tenure and unit size. It demonstrates a surplus of workforce and middle-income housing, but deficits in affordable units and executive housing units.

**Gap Methodology**

The housing gap combines the units at different bedroom sizes and housing tenure demanded at affordable price points and the total units supplied for renters and owners at market prices. The product is either a housing surplus or deficit for units at price points and bedroom size that captures where housing demand is not meeting current housing supply, or where housing supply currently exceeds housing demand.

**Gap Snapshot Results**

- Minot needs to provide housing for the lowest income
- The housing supply is overly weighted towards 3-bedroom units in the $1,500 to $3,125 per month range, while the population characteristics indicate a stronger demand for 1- and 2-bedroom units in rental and more affordable family homes.

**Gap Analysis: Percent of units categorized by tenure, size, and monthly cost**

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | $313 | -722 | -435 | -134 | -40 | -19 | -204 | -167 | -108 |
| $15,000-24,999 | $521 | -160 | -305 | -110 | -47 | -4 | -127 | -87 | -69 |
| $25,000-34,999 | $729 | 359 | 211 | -126 | -21 | 0 | -67 | -89 | -82 |
| $35,000-49,999 | $1,042 | 466 | 2,650 | -185 | -67 | 18 | -37 | -355 | -250 |
| $50,000-74,999 | $1,563 | 338 | 569 | 637 | 1 | 78 | 627 | -304 | -323 |
| $75,000-99,999 | $2,083 | -290 | -435 | 488 | 39 | 147 | 885 | 986 | -59 |
| $100,000-149,999 | $3,125 | -189 | -352 | -218 | -67 | 0 | 318 | 1,219 | 487 |
| $150,000-199,999 | $4,167 | -28 | -114 | -78 | -67 | 1 | -17 | 50 | 115 |
| $200,000 or more | -- | -22 | -54 | -99 | -25 | -4 | -45 | -278 | -606 |

Housing Demand is Greater than Supply     Supply Meets Demand     Housing Supply is Greater than Demand

Housing Gap (All Units): Deficit exists at lowest incomes, and surplus shrinks towards upper incomes.

The difference in total unit supply and total households indicate total vacancy rate. The Stantec metric estimates vacancy at 13%, mirroring ACS estimates. Vacancy at specific price points is unavailable with the given data.

**Minot 2023 AMI: $93,500**
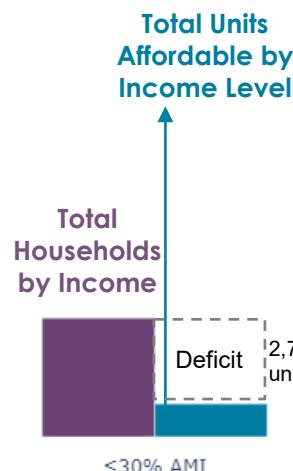
A surplus indicates that more units are available at this price point than matching households. It does not indicate vacancy, as many lower income households live in more expensive housing and vice versa.

The difference in total unit supply and total households indicate total vacancy rate. The Stantec metric estimates vacancy at 13%, mirroring ACS estimates. Vacancy at specific price points is unavailable with the given data.



**Total Units Affordable by Income Level**

**Total Households by Income**

Deficit

2,710 units

Deficit

1,126 units

294 Units — Surplus

Surplus

2,816 units — Surplus

3,698 units — Surplus

2,998 units — Surplus

≤30% AMI  ≤50% AMI  ≤60% AMI  ≤80% AMI  ≤100% AMI  ≤120% AMI  >120% AMI

*Source(s): Stantec*

# Workforce housing availability is difficult to find on a single income

For single-income households working some of the most common jobs in the region, the number of affordable units is limited. For example, common jobs such as grocery clerks, servers, or teachers may struggle to find affordable units on a single-income.

There are **80** Households earning 'Workforce Wages' (less than or equal to 120% AMI) for every **100** housing units available: A relatively strong indicator of market supply when examined from the perspective of households.

Housing becomes more scarce as the maximum income level is reduced.

For single-income or lower income households, the number of units affordable to typical 'workforce' jobs remains constrained, thereby encouraging household formation of more than one income earner. Single-income households may struggle to find affordable housing.



**Affordability Relative to Common Industry Median Wages**

Legend:
- Percent of Rental Units Affordable
- Percent of Ownership Units Affordable
- Median Annual Salary
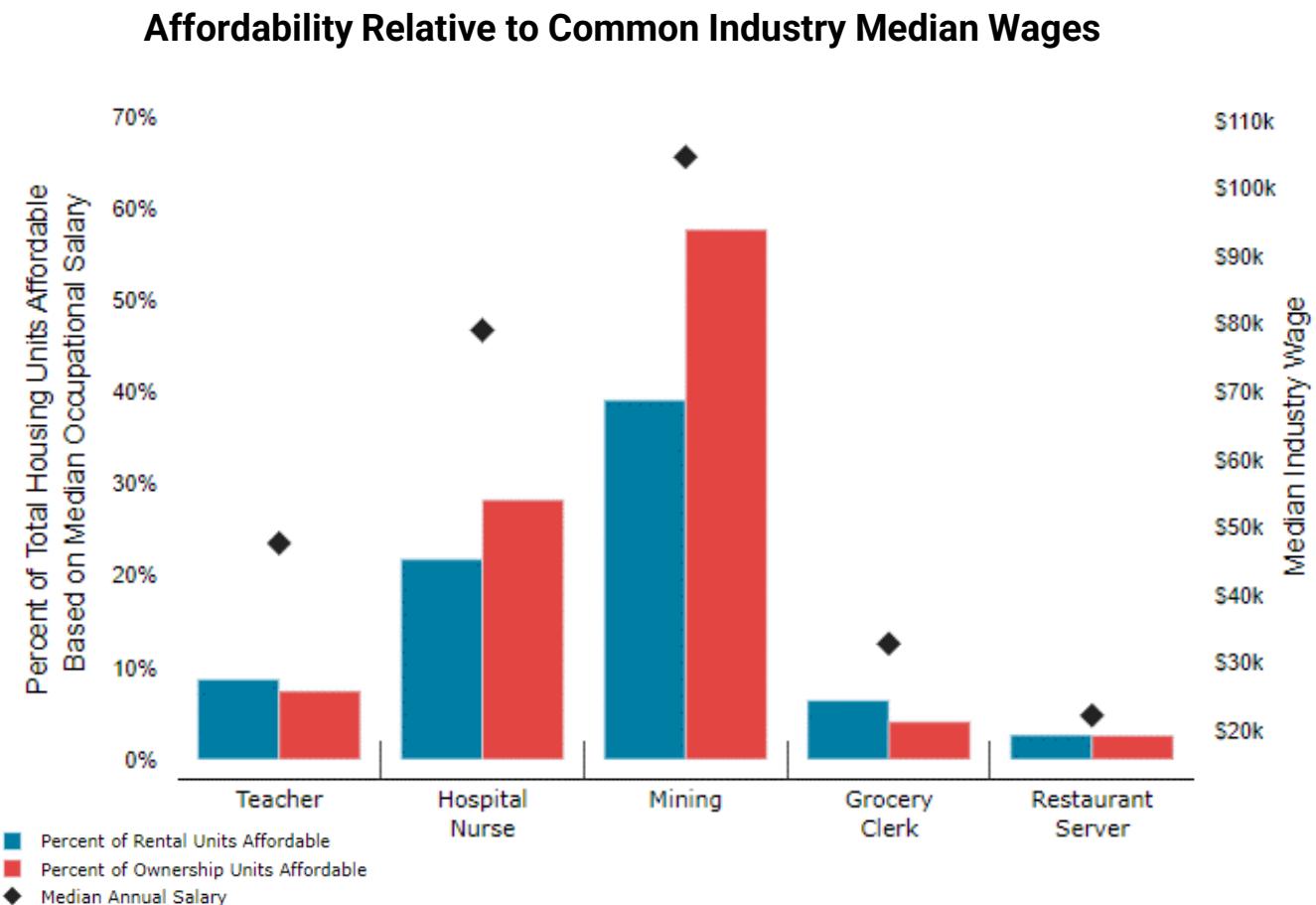
*Source(s):*
*Wages are derived from QCEW, Housing Availability from Stantec*

1.  **Middle income and workforce housing.**  The gap analysis suggests that, because of the increase in housing supply during the early 2010s followed by the contraction of the workforce, the supply of moderate to middle income housing is adequate to meet local needs.

2.  **Housing for lower income households.**  There is a deficit in numbers of affordable housing units for lower income households.  That is numerically evident in that there are fewer housing units available at a rent or ownership cost that is affordable to those households. And the actual deficit in supply will exceed that, since households at higher income tiers will occupy some of the housing units affordable to the lowest income tiers.

3.  **Executive rental and ownership opportunities.**  There is potential demand for higher cost housing options that haven't recently been built in volume. Epic Companies will be testing that demand in a rental apartment development through its Tracks development.  There may be corresponding demand on the ownership side for an executive home subdivision in a higher amenity environment.

07
HOUSING
NEEDS

# Population and household growth is projected to stabilize

Household growth and income brackets are projected to continue to grow at a moderate rate as the rate of new well drilling stabilizes, and under the assumption that oil and natural gas demand will continue to be strong.

Household growth projections are based on a projected population growth rate of 1.24% - a rate determined and utilized for Minot's 2040 Comprehensive Plan. The conversion from population to households is based on the 4-year average of number of persons per household from 2017-2021.

Income tiers are assumed to remain proportionally consistent.

**Projected Household Growth by Income**



*Source(s): Minot 2040 Comprehensive Plan, ACS 5-year estimates, Stantec assumptions*
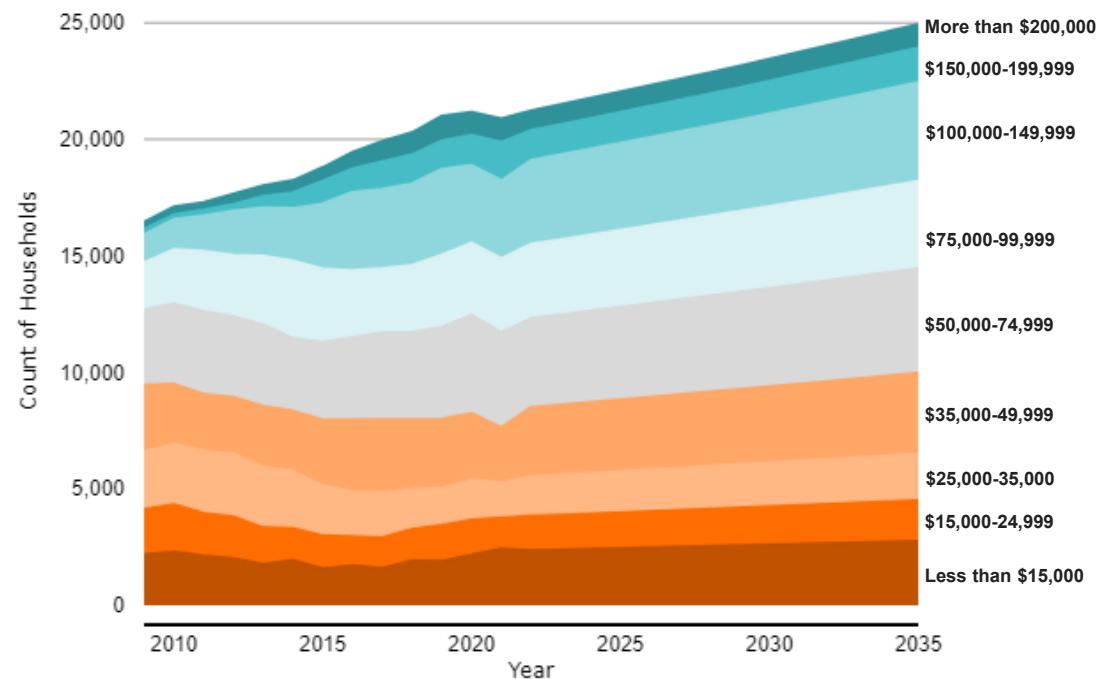
# Other considerations play into the calculation of overall housing need

Housing needs are further adjusted based on general undersupply, substandard housing, and replacement. The adjustments are then added to new units required for household growth to determine a production target.

**Vacancy Rate** adjustment is based on the number of additional units to maintain market equilibrium, generally considered at 5%. Vacancy rates in Minot have declined to at/around 5% in both rental and housing markets, down from about 12% in 2021.

**Substandard Housing** is defined as units with no plumbing and/or no kitchen. The national threshold is 1.2%, the Minot rate is 1.6%, therefore creating a .4% housing adjustment.

**Overcrowding** is defined as units where more than one occupant lives in the room. The threshold national average is 3.35%, where Minot's is 3.36%. No overcrowding adjustment is required.

**Replacement** is the replacement rate of demolitions. The annual replacement need is based on a four year average 2019-2022 of housing demolitions in Minot. The recent four year period was used because previous years were skewed by flood impacts.

| Vacancy (overall) | 5.0% | Threshold market health | -- | Minot rate | 149 | Vacancy adjustment |
|---|---|---|---|---|---|---|
| **Substandard** (no plumbing/kitchen) | 1.2% | Threshold nat'l avg | 1.6% | Minot rate | 70 | Substandard adjustment |
| **Overcrowding** (>1 occupant/room) | 3.35% | Threshold nat'l avg | 3.36% | Minot rate | -- | Overcrowding adjustment |
| **Replacement** (per year) | 0.09% | Annual need | 22 | Annual units | **220** | Replacement housing |
| **Household growth** | 21,484 | 2023 HHs | 24,313 | 2033 HHs | **2,829** | Household growth |

**10-year production: 3,268 units**

*Source(s): Minot 2040 Comprehensive Plan, ACS 5-year estimates, Stantec assumptions*

# Weighted Future Demand

Given the projections and considerations considered above, the weighted future demand is an analysis of the increased need for housing. It does not incorporate the existing housing gaps.

The weighted future analysis is determined by allocating households based on current demand preferences. To determine preferences, a 'weight' or 'probability' was determined based on the demand matrix. For example, for each household earning $100,000 or more, different odds were created on that household renting or owning units of different sizes. With the demand 'weight', the number of households are then allocated based on these odds to create a projected future demand table. This table *does not* incorporate existing gaps, and can be considered a projection simply based on new household need.

The weighted future demand table shows stronger demand for two main housing profiles. Proportionately more 1-2 bedrooms across income brackets, and larger single-family homes for ownership affordable to households earning around median incomes (generally home prices ranging from $192,000-385,000, which break down to monthly housing costs between $1,560-$3,125 per year.

Housing demand by price, tenure, and unit size with recent movers preference for new households: 2023-2033
*Source: ACS, regional PUMS preference for movers in the last 12 months*

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | 313 | 113 | 67 | 21 | 6 | 6 | 35 | 46 | 17 |
| $15,000-24,999 | 521 | 58 | 46 | 16 | 7 | 3 | 24 | 34 | 10 |
| $25,000-34,999 | 729 | 58 | 72 | 22 | 4 | 4 | 17 | 35 | 15 |
| $35,000-49,999 | $1,042 | 94 | 96 | 42 | 12 | 5 | 40 | 71 | 36 |
| $50,000-74,999 | $1,563 | 63 | 121 | 44 | 11 | 6 | 62 | 135 | 66 |
| $75,000-99,999 | $2,083 | 45 | 68 | 37 | 12 | 5 | 43 | 135 | 80 |
| $100,000-149,999 | $3,125 | 28 | 51 | 33 | 12 | 3 | 45 | 159 | 151 |
| $150,000-199,999 | $4,167 | 4 | 16 | 11 | 9 | 0 | 10 | 43 | 77 |
| $200,000 or more | -- | 2 | 4 | 8 | 2 | 1 | 5 | 27 | 66 |

# Projected Need: Unit Production Need x Existing Gaps x Weighted Future Demand

Projected need incorporates unit production need and allocated unit production targets by existing gaps and weighted future demand.

The projected need analysis uses weights from the future demand profile and the gap analysis to allocate future need. The purpose is to provide an 'ideal distribution' of new housing types, independent of the financial feasibility of producing those types.

The profile highlights three primary "needs", or areas of potential undersupply.

The first is deeply affordable housing, for both renter and owner households. The market systematically undersupplies both housing types.

The second is higher end, luxury apartments. This is the market niche targeted by Epic Companies in "The Tracks", a planned multi-family and mixed-use development that targets younger professionals.

The third is 'executive housing', or higher priced homes. This submarket is being targeted elsewhere in North Dakota, such as the golf course communities being built in Bismarck-Mandan. Minot has not seen a similar product, despite the presence of a higher income submarket.

Housing demand by price, tenure, and unit size with recent movers' preference
*Source: ACS, regional PUMS preference for movers in the last 12 months*

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | 313 | 232 | 138 | 43 | 13 | 10 | 70 | 77 | 34 |
| $15,000-24,999 | 521 | 89 | 96 | 34 | 15 | 4 | 46 | 51 | 22 |
| $25,000-34,999 | 729 | 15 | 53 | 43 | 7 | 5 | 29 | 53 | 28 |
| $35,000-49,999 | $1,042 | 42 | 0 | 74 | 23 | 3 | 51 | 132 | 77 |
| $50,000-74,999 | $1,563 | 25 | 59 | 0 | 13 | 0 | 0 | 198 | 121 |
| $75,000-99,999 | $2,083 | 93 | 139 | 0 | 8 | 0 | 0 | 15 | 100 |
| $100,000-149,999 | $3,125 | 58 | 109 | 68 | 23 | 3 | 7 | 11 | 104 |
| $150,000-199,999 | $4,167 | 8 | 34 | 23 | 20 | 0 | 13 | 43 | 72 |
| $200,000 or more | -- | 5 | 12 | 23 | 6 | 1 | 12 | 71 | 162 |

**1,643 Rental Units**          **1,625 Owner Units**

**3,268 Total Units**

*Source(s): Minot 2040 Comprehensive Plan, ACS 5-year estimates, Stantec assumptions*

# Recommendations: Bedroom Size

Projected need incorporates unit production need and allocated unit production targets by existing gaps and weighted future demand.

Minot's recent development trajectory favored 1 and 2 bedroom units, as new development sought to create quick workforce housing in multi-family rental complexes.

Our recommendation is a slight adjustment towards larger homes. Minot added many middle income, younger households due to the oil economy. As the industry stabilizes, many households will desire a shift from rental to ownership housing—especially as many younger workforce households start families.

**Housing by Number of Bedrooms: Current, Recent and Future**



*Current stock*

*New additions: Last 10 years*

*New additions: Next 10 years*

| | Current stock | New additions: Last 10 years | New additions: Next 10 years | |
|---|---|---|---|---|
| 4-Bed | 14% | 11% | 26% | **+15% CHANGE IN COURSE** |
| 3-Bed | 33% | 28% | 28% | **NO CHANGE IN COURSE** |
| 2-Bed | 37% | 41% | 27% | **-14% CHANGE IN COURSE** |
| 1-Bed | 16% | 19% | 18% | **-1% CHANGE IN COURSE** |
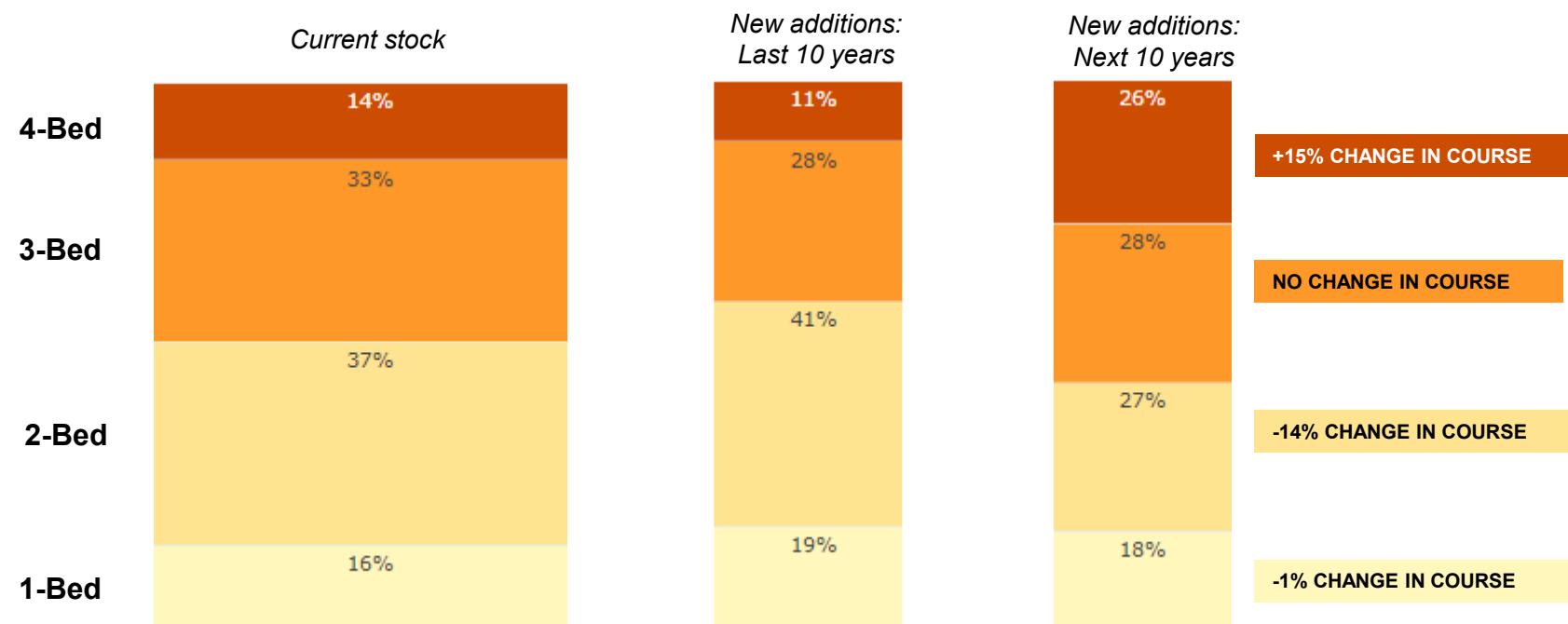
# Recommendations: Tenure

Projected need incorporates unit production need and allocated unit production targets by existing gaps and weighted future demand.

Minot's recent development focused on rental housing. During the oil-boom and flood period, adding rental stock was necessary given large transitions in people's lives that often requires flexibility. Also, given the role of the Air Force Base in the regional economy, a higher proportion of rental housing is sensible.

However, as the dust settles on the oil boom, the community and broader region added high paying jobs that enable home ownership options. Shifting towards historic norms of ownership will create new inventory that can act as a release valve on the existing housing stock.

**Housing by Tenure: Current, Recent and Future**



*Current stock*

*New additions: Last 10 years*

*New additions: Next 10 years*

**Renter-Occupied**

46%

69%

50%

**-19% CHANGE IN COURSE**

**Owner-Occupied**

54%

31%

49%

**+18% CHANGE IN COURSE**
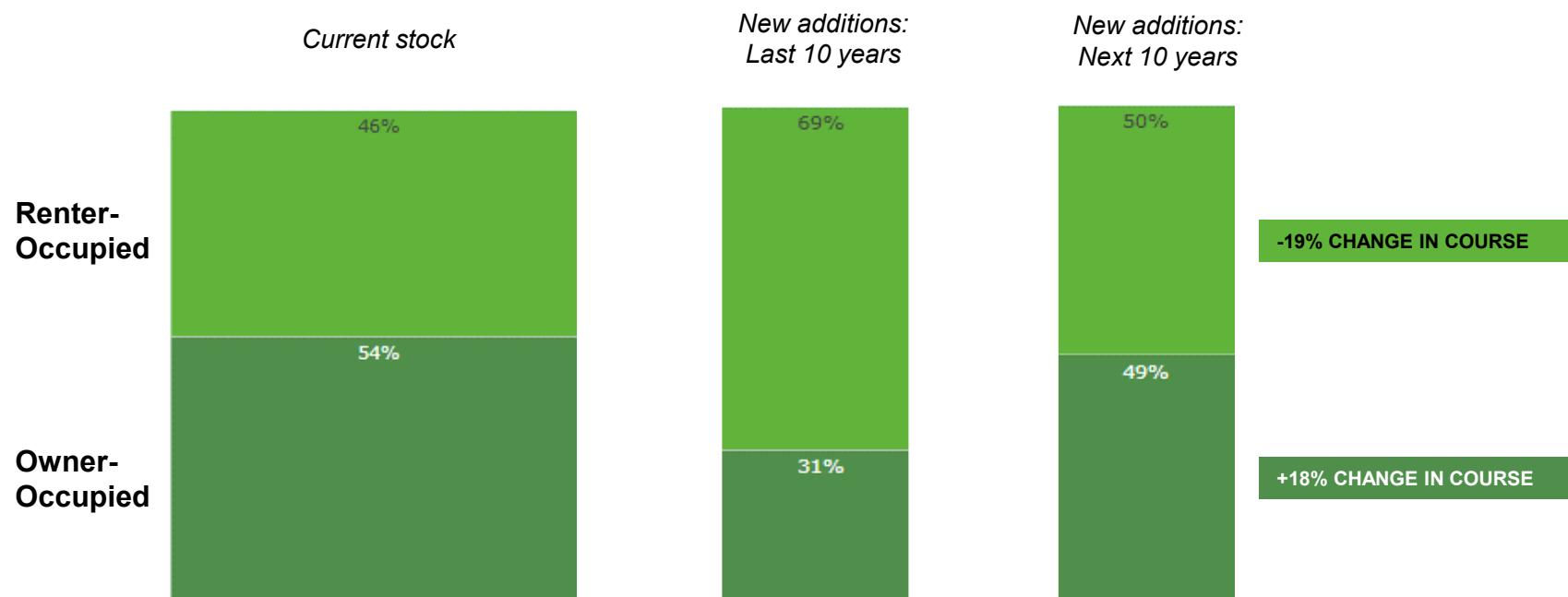
# Recommendations: Housing Type

Projected need incorporates unit production need and allocated unit production targets by existing gaps and weighted future demand.

Development heavily favored multi-family projects. Multi-family can quickly add housing supply, and is necessary in times of community growth.

Today, the oil boom apartments have been absorbed and the market is tight. That sets the stage for new apartment development. At the same time the Minot community will need to restore the production of single family homes to meet anticipated needs.

**Housing by Structure Type: Current, Recent and Future**



*Current stock*

*New additions: Last 10 years*

*New additions: Next 10 years*

| | Current stock | New additions: Last 10 years | New additions: Next 10 years | |
|---|---|---|---|---|
| **Multi-Family** | 35% | 52% | 42% | **-10% CHANGE IN COURSE** |
| **Light Density** | 13% | 14% | 13% | **-1% CHANGE IN COURSE** |
| **Single-Family** | 52% | 34% | 45% | **+11% CHANGE IN COURSE** |
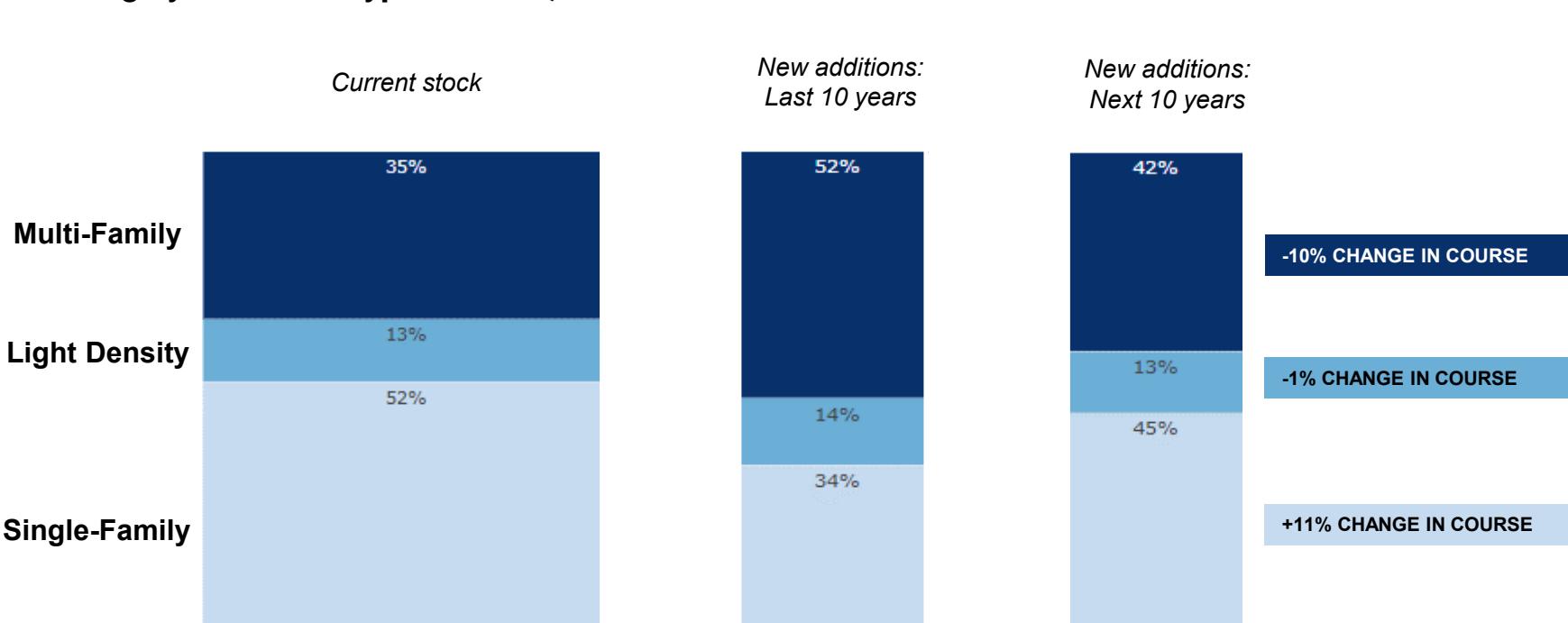
# Recommendations: Market vs Need

While Minot still has a gap for affordable workforce housing for households earning 80% or less of AMI, this need cannot be filled through new construction. A 1-to-1 match is not possible. So how does it work?

### Adding New Supply

Nationwide, housing prices have skyrocketed due to inadequate supply relative to demand. The rising cost of housing as a percentage of household income can be detrimental to households, local small businesses and employers. Communities often desire new housing to meet immediate affordable needs.

This is, however, a challenge. Raising construction, financing, insurance and material costs make building new housing expensive. Density – multi-family housing, town and twin homes, condominiums, and smaller lots – can help lower costs, but rarely to a price affordable to lower to middle incomes.

Counterintuitively, adding supply, even at the 'top end,' can alleviate rent and home value increases. When supply is tight and vacancy rates are low, landlords can charge more for rent knowing they can fill their units while also having less incentive to invest in rehabilitation and maintenance. Adding supply requires landlords to compete for tenants, either by lowering prices or improving units.

Adding new supply – even if it is relatively expensive given development costs – can 'open up' new housing options. Higher-income households with the ability and desire to pay more for higher quality housing have the option to do so. By shifting 'up' into newly built housing, this opens the market in the middle. With fewer households competing for middle-income housing, prices stabilize or decrease in older units. This again allows lower-income households to 'shift-up' in the market.

In the context of Minot, recent development (last 12 years) focused on workforce rental housing and entry-level ownership product to accommodate rapid employment growth and housing unit loss. A shift towards more historic norms of single-family housing construction and market-rate multi-family that is desirable for younger, non-married persons in the early stage of their career may not immediately produce affordable rents, but it will meet an unmet market niche that will help alleviate market pricing in the bulky 'middle-market', with older multi-family units with lower debt burdens likely to lower rents to attract new tenants if vacancies persist.

### Adding Affordable Units

Current housing markets inadequately provide housing for low-income households nationwide, and Minot is no exception. Consistent effort should be made to leverage local, state, and federal policies to bolster affordable housing construction that meets the needs of households earning 60% or less of AMI. Channeling this investment into mixed-income communities and developments builds greater economic and social resiliency and can help prevent the concentration of disinvestment and policy.

### Pro-Development Mindset

Increasing housing supply requires pro-development policies that encourage housing policy – policies that require communities to recognize that pro-housing policies broadly benefit the community.

# Three primary focus areas address Minot's housing needs

**Housing for low to moderate income households.** Lower-wage service sector jobs remain a major part of Minot's economy, leaving many households financially stretched and vulnerable to life setbacks. Housing for low to moderate income households should be intentionally fostered as part of the new housing mix. These will primarily be modest, market rate housing that could include manufactured home communities, tiny home developments, accessory dwelling units, townhomes, workforce apartments, and starter homes. To the extent possible, it should also include new rent restricted apartment developments.

While it is eminently possible to foster new housing development that supports lower income households, many or most such households will look to existing homes or apartments to meet their housing needs. New housing production of any kind has a ripple effect to make existing housing more available and affordable. New housing units that are occupied by current Minot residents are leaving their previous housing unit available for another household.

**Modest Multifamily Apartments**

*This product was overbuilt during the oil boom – Demand is beginning to return*

**Affordable Apartments**

*Beyond Shelter and Minot PHA are doing an excellent job in this arena*

**"Starter" Home Subdivisions**

*Subdivisions face challenges related to land and construction costs*

**ADUs, Tiny Homes, Cluster Development**

*Alternative housing types can have an impact at the margins*

**Manufactured Homes**

*Manufactured home parks are under stress*

# Three primary focus areas address Minot's housing needs

**Executive, single-family homes and upmarket apartments.** New apartments and residential subdivisions in Minot have largely focused on middle income households. That leaves an opportunity for differentiation of products toward housing types that support higher income tenants and homeowners.

Amenity-rich upscale apartments are appealing to a broad mix of ages and household types, which stereotypically includes young professional singles and couples, empty nesters and retirees, and divorced dads. The depth of demand for this housing type will be tested by "The Tracks" and the planned future stages of that project. Given that the submarket for these apartments is typically drawn to walkable, vibrant environments, downtown Minot is another location where upscale apartments may be successful.

"Executive" single-family homes have been built sporadically, but a higher income community hasn't been built in recent years. Building such housing may be helpful in attracting executive level personnel to Minot.

**Senior housing.** While Minot is getting younger as the community and region's economy diversifies, demand exists for senior housing as households age in place. Demand is high for single-floor (rather than split level or two story homes) homes that reduce falling risks and are easier on aging bodies. While some obstacles exist for higher-service senior living products (such as the cost of labor), opportunity exists for rental and ownership senior communities, both market-rate and affordable, that are age restricted and targeted to the needs of seniors. Providing senior housing has a dual benefit since it often makes an existing home available to others.

08
HOUSING
STRATEGIES

## Strategies Menu

The following pages offer a menu of strategies that are responsive to Minot's unique challenges, needs and opportunities.

The analysis in the preceding pages builds an understanding of Minot's housing needs. That picture was broadened through the qualitative input of stakeholders and community members, including:

- City Staff
- Elected officials
- Business leaders
- Developers
- Representatives of economic and civic organizations
- Community members

These sources of information and insight sharpened our understanding of the Minot's housing challenges, needs and opportunities, and set the stage for a collection of strategies that are responsive to those considerations.

### Production Strategies

| Accessory Dwelling Units (ADUs) | Tiny Homes | Manufactured Home Parks | Subdivision Production |

### Preservation Strategies

| Trinity Hospital Rehabilitation | Reposition Hotels for Workforce Housing |

### Location-Specific Strategies

| Infill Housing in Flood Protected Areas | Downtown Living for Downtown Activation |

### Capacity Building Strategies

| New Developer Training | Building Trades Workforce Development |

*These strategies are recommended for consideration because they may be suitable for Minot based on our research and stakeholder conversations.*

*They are offered for discussion, consideration and prioritization.*

# Accessory dwelling units (ADUs) add to housing diversity and can meet a range of needs.

They may meet a need for families who want to provide a space for a parent or adult child, which is close at hand but still offers independence. Other families would benefit from a source of rental income.

**Context.** Accessory dwelling units (ADUs) can meet community needs by increasing the supply and variety of housing. They create an important additional income stream for some, and for others they may meet family needs related to caring for family members.

They are smaller housing units that are on the same lot as an existing home and owned by that homeowner. They may be built as an attachment to the primary home or as a separate structure. They are an efficient use of public infrastructure because they introduce a new housing unit where there are existing utilities. The property manager, being the resident of the primary home, is close at hand, which usually ensures good management and responsive attention to issues that arise.

From a tenant perspective, ADUs can be attractive for renters who prefer to live in a neighborhood setting.

Minot has an existing ADU ordinance but has only permitted a few ADUs due to restrictions that:

- Only allow an ADU as an attachment to or within an existing primary residential home;

- Require that the unit be designed so that the home can be reverted back if ADU use terminates

- Require the applicant to apply for and obtain approval from the Planning and Zoning Commission for a Conditional Use Permit.

In general, cities that have more flexible regulations related to ADUs see a modest level of production over time, as opposed to rapid neighborhood transformation.

**Strategy.** Additional ADU development can be supported through revisions to Minot's existing ordinance to remove or modify restrictive requirements. No financial resources are required to pursue this strategy.

**Case studies.** Several North Dakota cities allow the development of ADUs. Those include Bismarck, Mandan, and Dickinson.

# Tiny homes are what they sound like – an affordable (and small) type of single family home

Tiny homes fill a need on the housing continuum because, like manufactured homes, they offer the independence of a single family home at a lower production cost.

**Context.** Increasing numbers of Minot households are paying more then they can afford on housing. Even small conventional homes cost in the range of $300,000 today, and the cost burden of home ownership can price people out of home ownership, or make it difficult to afford other life needs, such as eating well, getting good health care, and addressing emergencies that come up.

Tiny homes are modest in size and price even compared with typical starter homes, so they can be part of the menu of solutions. With increasing acceptance, tiny homes can represent a financial life-saver for some households.

Tiny homes differ from manufactured homes in two important ways. They are set on standard foundations or frost footings, and the land is typically owned along with the

home. They can be situated along a street, as in the illustration. Or they can be arranged in a cluster format, with multiple homes sharing a common parking area and community space.

**Strategy.** Zoning Code requirements for homes can be adjusted to allow smaller home dimensions and less space between homes, as part of an intentionally planned tiny home development.

Tiny homes could also be allowed as an accessory use. For example, Minnesota adopted a statute that allowed churches to situate tiny homes on church properties. Something like that could be authorized in Minot through its local zoning code.

**Case studies.** The images at right are from a Lennar development in San Antonio.

Church congregations in St. Paul and Roseville are among the first to situate tiny homes their properties. They partner closely with an organization that coordinates supportive services for residents as needed.

# Manufactured home communities are an important option for many lower income families

In recent years it has become common for land rents in manufactured home communities to be dramatically increased, resulting in this affordable form of homeownership becoming less affordable.

**Context.** Minot's manufactured home communities are important because they are the City's most affordable owner-occupied housing. Residents own their home, but pay rent for the land, utility availability and property maintenance. Nationally and locally, the owners of these communities have more and more often been boosting rents by dramatic amounts. Residents often have little alternative to paying more because of the difficulty of finding another manufactured home community to move to. Moreover, after being rooted in a place for some time, the home itself may be difficult to move.

These challenges have led to strategies for making the residents themselves the owners of their community through a cooperative ownership structure. A cooperatively owned manufactured home community will remain more affordable over the long term because

rent increases will only occur as required to meet property maintenance needs, as opposed to corresponding to what the market will bear.

Two strategies are explored relative to manufactured home communities. Both have the goal of stabilizing the affordability of the community over the long run.

**Strategy 1 – Cooperative conversion.** Cooperative conversion puts an existing manufactured home community on a more financially sustainable long-term basis. It entails paying market price for the property, investing resources in cost stabilization, and then transferring ownership to a cooperative entity that represents the homeowners themselves. A flagship organization nationally that supports this work is ROC (Resident Owned Cooperatives) USA. Local

partner organizations play a role as well.

Pursuing this strategy involves getting educated on how these processes work, by learning from ROC USA and others. Locally it requires building relationships with manufactured home community owners and residents in order to identify acquisition and conversion opportunities. Financial resources will need to be identified and raised to support cooperative conversion.
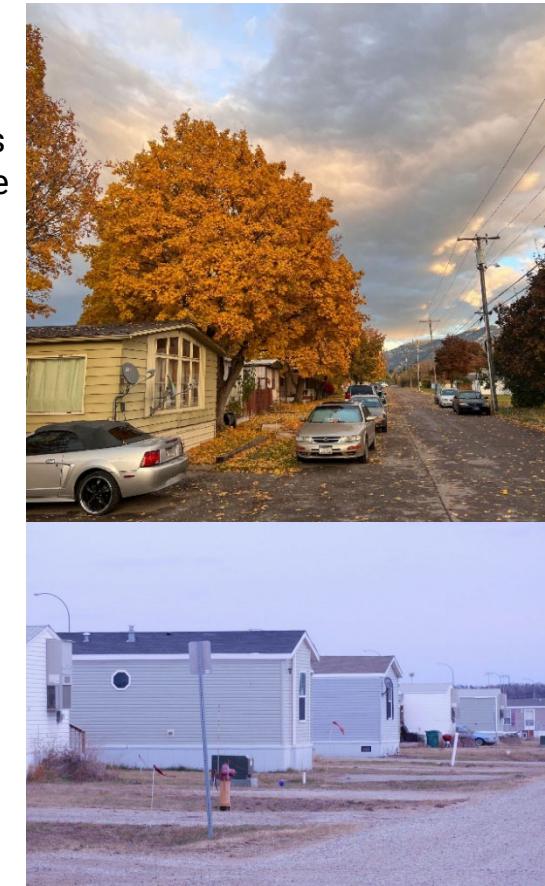
# Manufactured home communities are an important option for many lower income families

In recent years it has become common for land rents to be dramatically increased, resulting in this most affordable form of ownership housing becoming less affordable.

**Strategy 2 – Newly developed cooperatives.** If a cooperative ownership structure is established from the very beginning, it is less expensive to establish, and exploitative future rent increases will not occur. Given that future stages of Minot's flood protection will disrupt some existing manufactured home communities, it might be beneficial to facilitate the development of one or more new manufactured home cooperatives before that occurs.

Developing a cooperatively owned manufactured home community requires an intermediary because the homeowners the will reside in the future manufactured home community are unlikely to have the collective capital and preexisting organizational structure to accomplish this. The strategy for new development of a manufactured home cooperative begins with reaching out to organizations who can play a role in that process through their experience. The City of Minot can play an important role in facilitating its development through the use of public financing to support land acquisition and street and infrastructure development. Those resources can be wholly or partly recouped when the land is conveyed to the cooperative.

**Case studies.** Montana has seen a large number of successful cooperative conversions. The City of Missoula has been especially proactive in facilitating the conversion of manufactured home parks to cooperative ownership. Bonnie's Place is their most recent success story. It was converted to a cooperative in April 2023.

There are fewer examples of newly created manufactured home cooperatives than there are conversions of existing communities to cooperative. But two examples are being explored or planned in neighboring states.

Northcountry Cooperative Foundation is in the early stages of creating a new manufactured home cooperative in Northfield, MN. Headwaters Economics is exploring how to establish a cooperatively owned manufactured home community for owners of manufactured homes displaced by flood buyouts in Glendive, MT.

# New home subdivisions are the most common form of housing production in Minot

The overall supply of homes has a great impact on price, so increasing the rate of home building in an ongoing way will make Minot a more affordable community in the long run.

**Context.** Homebuilding is a major source of housing growth. But homebuilding in Minot is occurring at a slow rate. There are multiple factors that hinder more rapid subdivision development. A key factor is the high cost of development. Another is the land price expectations on the part of land owners. A third factor is development risks. Public sector actions can have an impact in each of these areas.

Cities and developers have a mutual interest in reducing development cost. Reductions in development costs increase the rate of production and reduces home prices. The graph at right shows how reducing costs shifts the supply curve to the right, which reduces home costs and increases their quantity.

**Strategy 1 – Adjust practices to reduce development costs and lower risks.** Most development costs are independent of public

sector influence. However, the elements that are impacted by public sector policies and practices make an important difference in the overall cost of development.

The most impactful opportunity is rethinking the provision and financing of public infrastructure. Cities have discretion over how and when the cost of infrastructure must be paid for. At one end of the spectrum, the City of Saskatoon acquires land, and finances the public infrastructure, for most new subdivisions, through its partner agency, Saskatoon Land. At the other end of the spectrum, the developer is responsible for funding all street and utility construction, and not seeing a return on that investment until new homes are sold. That adds costs because private financing is more expensive than public financing. And it adds development risk, which in turn increases costs through higher financing costs and other mechanisms.

Many cities have landed on a middle ground, where they fund public infrastructure, and recoup costs at the time of platting, or through special assessments. If this path is taken, good communication with homebuyers will allow the City to convey that, although special assessments can feel like an add-on, the development partnership will have reduced the price of the home overall.
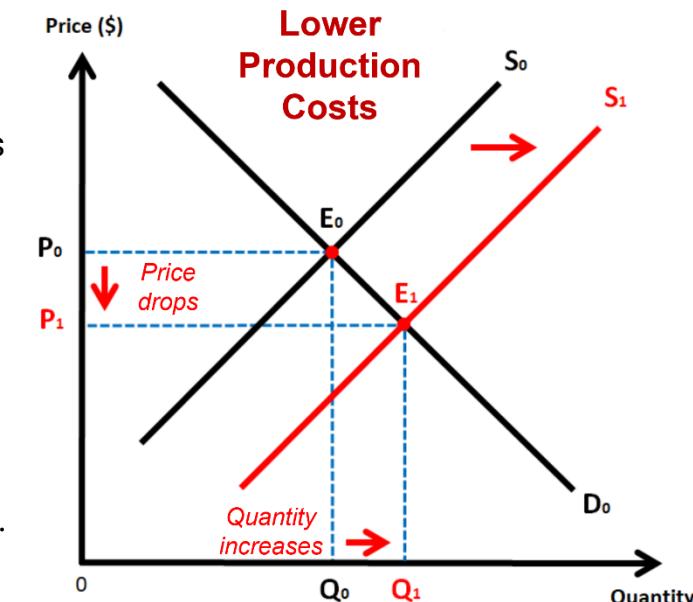
# New home subdivisions are the most common form of housing production in Minot

The overall supply of homes has a great impact on price, so increasing the rate of home building in an ongoing way will make Minot a more affordable community.

Some cities have gone one step further, and made homes more affordable to lower income or first-time homebuyers by forgiving a portion of the special assessment.

The regulatory processes are another arena in which the modification of city practices can contribute to reduced development costs. Any streamlining of processes reduces development risks and thus costs. Fees can also be reduced, and one way to rationalize that is to observe that reduced development fees are likely to be recouped in the first year or two of real estate taxes.

Note that for all of these strategies, if they result in increased production, the cost to the City will be offset by the newly created tax base.

**Strategy 2 – Land prices.** Minot can play a proactive role in resetting price expectations. The City can develop a communication strategy that addresses price expectations with information. Land sale price data can be collected from comparable markets and conveyed to landowners.

More assertively, the City can enter the land market directly or through an intermediary. The goal would be to determine a target land price, and look for opportunities to make land purchases at that price. Those sale prices become metrics that reset price expectations directly.

**Case studies.** Many North Dakota cities pay for subdivision infrastructure and recoup those costs through special assessments— including Fargo, West Fargo and Grand Forks.

Saskatoon Land is a public authority in Saskatoon, Saskatchewan, that has established a practice of buying land in the periphery of the City for subdivision development at a large scale, thereby supporting a flow of new development, fostering regional growth, and improving housing affordability in the entire region.

# Fostering reuse of the vacant Trinity Hospital building is a high priority in downtown Minot

In an initial analysis of the downtown Trinity Hospital building, this study found that the building may be conducive to rehabilitation for housing on its upper floors, and commercial or institutional use on its lower floors.

**Context.** Trinity Health, Minot's largest medical provider, recently constructed a new medical complex in southwest Minot, which left its downtown hospital building vacant. The property is in a prime location for being reoccupied to support the vitality of downtown Minot.

This market study included an initial feasibility study on the rehabilitation of the primary downtown hospital building. It found that, while significant improvements are needed, the building configuration is supportive of residential conversion on its upper stories. The lower stories, with their larger space configurations, are more suitable for commercial or institutional use.

**Strategy.** The investigation outlined a set of next steps to further explore the potential for rehabilitation, including:

- A Building Assessment, to learn more about the condition of the building core and shell, systems, hazardous materials, etc.

- As-built drawings

- Rehabilitation budget and preliminary proforma

- Soliciting developer interest

On the public side, there may be a demonstrated need for appropriately scaled public financial support. Public financial support, if provided, is likely to be recouped through new property tax generation.

Because challenges related to office vacancies are prevalent, it may be possible to advocate for state consideration of providing local public financing tools to support office-to-residential conversions.

# Hotel conversion could result in modestly sized residential apartment units

With an excess stock of low to mid-tier hotels and a need for housing that is affordable to lower and moderate income households, hotel-to-apartment conversions could be a win-win.

**Context.** Over half of the hotel rooms in Minot were developed during the oil boom between 2010 and 2013, leaving the city with excess capacity in low to mid-tier hotels. Minot's below average hotel occupancy can lead to property disinvestment and management concerns. Hotel-to-apartment conversions would result in small and affordable housing units, a product that would meet important needs in the local community.

An additional benefit of conversions would be the reinvestment that would come into these aging buildings.

The conversions of hotels to apartments currently faces zoning restrictions. Most hotels are located in the C1, C2 and GMU zoning districts, which don't currently allow apartment conversions without a commercial element remaining on the site.

**Strategy.** Inviting hotel-to-residential conversions entails increasing zoning flexibility to allow residential redevelopment in some or all commercial zoning districts. It may also require appropriately scaled public financial support.

**Case study.** In 2020, The City of Grand Forks approved a Planned Unit Development for a hotel to apartment conversion because their current ordinance prohibited residential uses on the ground floor uses in commercial districts. The conversion resulted in studio units and 1- or 2- bedroom units by connecting adjoining rooms.

## Areas that have been protect by levies are an opportunity for infill housing development

While complicated by the restrictions associated with home buyout funds, newly protected residential neighborhoods can start to be repopulated with infill housing.

**Context.** Numerous homes were purchased and demolished in the aftermath of the Mouse River flood, leaving vacant properties in desirable, centrally located Minot neighborhoods. As the flood protection infrastructure has been built, many of those properties are no longer at risk of flood damage. Redevelopment of the properties benefits the City through property tax generation and the strengthening of core neighborhoods.

New development on many of those lots is complicated by deed restrictions. Flood buyouts were funded using a variety of funding sources, some of which required that the property remain undeveloped indefinitely. In those instances, infill development must either occur on the properties that do allow development. Or relief from those restrictions could be sought.

**Strategy.** The recommended strategy starts with better information, mapping on a property specific basis the development constraints that are associated with vacant properties.

Where there are buildable lots mixed with non-buildable lots, a cluster development ordinance could be adopted that supports placing clusters of homes on the parcels that allow it, with open space on the ones that don't.

Potential removal of restrictions could be a subject of conversation with Minot's congressional delegation. They may be able to assess whether a case can be made at the federal level for releasing development constraints for properties that no longer face flood risks.

**Case study.** The City of Bismarck created a vacant property dashboard (below) using ArcGIS online to make it easy for developers and the public to find existing vacant lots for infill.
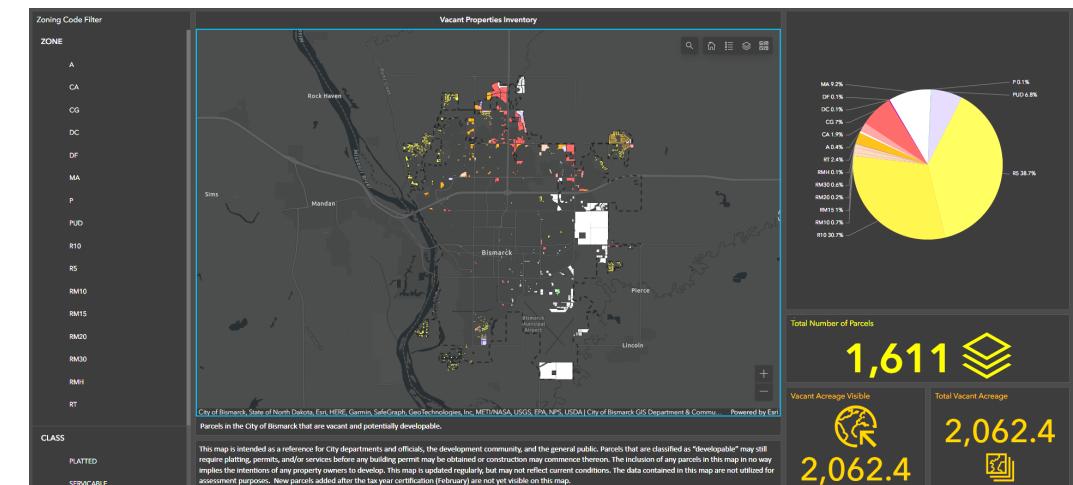
# Downtown is a priority location for housing because more housing supports downtown vibrancy

Downtown housing provides a customer base for downtown businesses. It puts eyes and foot traffic on the street, activating downtown and making it safer. It adds stakeholders who care about the success and vibrancy of downtown Minot.

**Context.** Minot has placed a major emphasis on strengthening its downtown, setting a goal of adding 500 housing units downtown by 2040. It understands the benefits of increasing the downtown population base as an integral part of fostering an activated downtown business district.

The downtown Renaissance Zone was established in 2001 to bring attention and resources to revitalizing the downtown area. It has funded retail, office and residential development, as well as streetscape improvements.

**Strategy.** With the downtown Renaissance Zone and existing policy commitments, Minot can continue to seek out opportunities to build the residential community in and near downtown Minot, whether in the form of redevelopment, the rehabilitation of underutilized commercial buildings, or re-occupancy of second and third story spaces in downtown storefront buildings.

Downtown can also be a priority location for development resources. The Renaissance Zone financial resources should continue to be employed to support development where the program criteria are met and the need is demonstrated. Other public financial support should also be considered when appropriate to surmount the extra challenges of redevelopment in the City's core.

# Increasing the pool of developers could yield more housing production

Development capacity in Minot was diminished after the end of the oil boom by multiple factors.  With renewed housing needs and demand, it's timely to invite and train a new generation of developers.

**Context.** Minot's community of local developers was crowded out during the oil boom because of the influx of national developers that came to Minot.  As the air went out of the oil boom there was a net migration out of the area, and little need for housing developers.  Now, at a time when housing demand is growing, the previous generation of local developers has been reduced.

There is a benefit to increasing the developer pool. Increased development capacity would yield more housing production, and that puts downward pressure on housing prices.

There are national organizations that provide developer training resources that can be used and modified as necessary to align with local regulations and processes. Those courses include:

- Certified Commercial Investment Institute - Real Estate Development: Land Development

- National Association of Home Builders - Land Development Program

- Urban Land Institute – Real Estate Development

Minot State University could play a partnering role in establishing and delivering the developer training curriculum.

**Strategy.** The City of Minot with local economic development partners can play the role of convener.  They can initiate conversations with national training providers and Minot State University to determine how a local developer training curriculum might be designed and delivered. A City financial contribution to the cost of program initiation could be considered.

# Boosting the building trades benefits housing development and the upcoming Sentinel Project.

A deeper building trades workforce would contribute to housing affordability in the near term, and it would position local people to capture more of the jobs associated with the upcoming Sentinel Project.

**Context.** A robust local workforce in the building trades contributes to lower housing production costs, and increases housing production. Minot faces challenges in attracting and retaining skilled workers in the construction industry—including the aging of the existing workforce, competition from other sectors and regions, lack of awareness and interest among young people, and barriers faced by women and minorities.

Workers in the building trades will also be a key hiring target for the upcoming Sentinel Project. Increasing Minot based participation in that project has multiple economic benefits including the likelihood that locally based workers will spend more of their income at local businesses.

Many local communities have implemented successful development and training programs in the construction industry, using programs offered by the North America's Building Trades Unions (NABTU), the Home Builders Institute (HBI), local home builder associations (HBAs) and others.

**Strategy.** The City of Minot and/or local economic development partners can play the role of convener—bringing together local partners and fostering collaborations with stakeholders such as Minot State University, Minot Association of Builders, Minot Public Schools, Minot Area Workforce Academy, and local labor organizations to design and implement workforce development and training programs that are tailored to the local context and needs.

A communications effort could also be made to promote the construction industry as a rewarding and viable career option for young people, women, minorities, and other underrepresented groups.

**09**
# COMMUNITY ENGAGEMENT
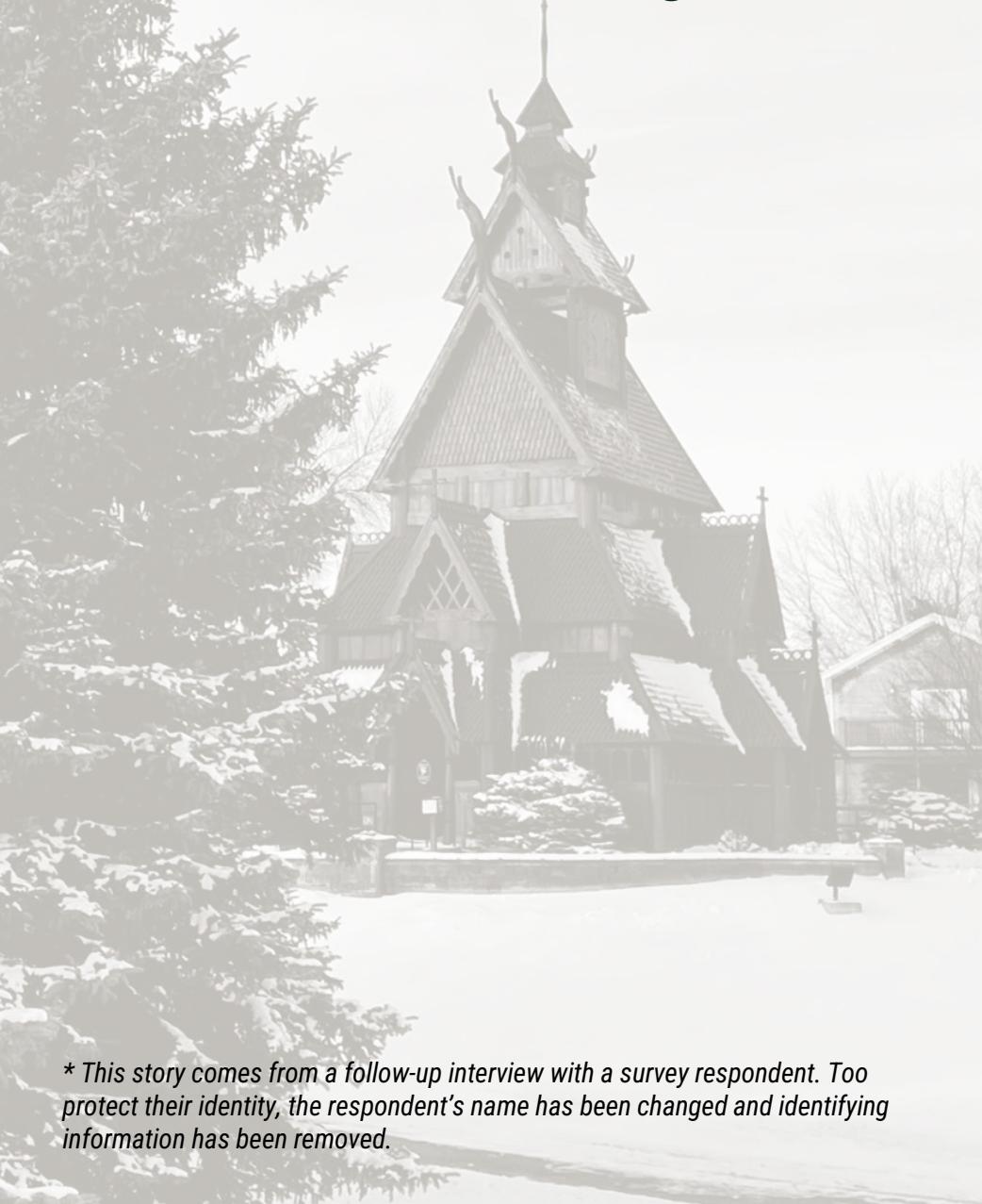
Minot Housing Needs & Market Study | Stantec

# Survey Respondent Follow-Up Interview
# Personal Story #1

Camila's job is to find housing for elderly and people with disabilities in Minot, and she noted that they really struggle to find affordable and accessible housing for people on fixed incomes. She said often there might be an accessible unit, but it's not in the price range that they're able to afford. Or if they can find an affordable unit, it presents accessibility problems for their clients. She said they also work with populations that have housing barriers such as poor credit or criminal backgrounds, and it's difficult to find landlords who are willing to overlook those barriers.

In her view the burden of finding senior housing in Minot is worsened by low availability so there are very few available units for people 55 and older. There is a voucher program that works for some people but they have seen clients go to shelters because they can't get them into a unit quickly enough while trying to overcome other barriers like a previous eviction.

She has also seen costs rise in Minot's manufactured home parks. That started during the oil boom but has really escalated in the last few years when they were sold to out-of-state investors. Rents were raised so much that "even though people had lived there for 20-30 years, they couldn't afford the lot rent anymore. So they had to make the decision to move to a different community."

**Camila**
*housing coordinator*

Minot Housing Needs & Market Study  |  🌀 Stantec

# Community engagement strategies were developed at beginning of the study

**Introduction**

It was important early on to identify and prioritize effective methods of gathering input from the community about housing related issues and needs in order to confirm or challenge data analysis findings.

A Public Engagement Plan (PEP) was created early in the process to identify effective engagement strategies for the Minot Housing Study. It established **Who** each strategy would be used to engage with, **How** engagement should be done and **Accountability** standards using measurable objectives to evaluate the strategies execution and success.

*A key part of the approach was a "no jargon" philosophy. The extensive use of graphics and other alternative formats helped translate complex ideas throughout every phase of the project to ensure study-related information was accessible for all.*

WHO

Public Engagement Plan

HOW

ACCOUNTABILITY

Objectives for THE PEP and each engagement strategy were evaluated to measure execution and success.

**Public Engagement Plan Objectives**

The following objectives were identified for this study.

1. Gather input from residents and businesses that have direct knowledge of the region, community or specialty.

2. Align strategies to aspirations of community members.

3. Put a human face on housing needs by highlighting individual experiences that are reflective of others in the community.

4. Broaden community support for housing strategies that meet City objectives.

5. Broaden understanding of community needs and buy-in for housing strategies to support implementation of the goals and objectives.

# The Minot City Council served as the primary advisory body and sounding board through the process.

Two presentations were made to the Minot City Council, following the Analytics and Strategies phases of the project. Stantec staff also solicited the views of City Council members in interview and focus group settings. They provided invaluable input and perspectives related to the needs of the community, and the opportunities they see to address those needs.



**City Council Meetings and Workshop Objectives**

The following objectives were met through City Council Meetings, individual interviews and focus groups:

1. All legal obligations for public hearings and notice of governing bodies were adhered to as well as open meetings requirements for any applicable or potentially applicable meetings or workshops in which a quorum of City Council members would be or were present.

2. Council member insights were solicited relative to housing needs, challenges, and opportunities.

3. Findings of research and analysis were conveyed to the City Council relative to Minot's housing market context and needs.

4. A range of potential strategies was advanced, which could be pursued over time to addressing challenges and meet local needs.

5. A foundation was set for housing related actions the City Council can take following the completion of the housing study.

6. All activities, comments received, notes from meetings, and other information generated through the process were documented and are available to the public.

# Smaller focus groups and research interviews captured a range of perspectives and thoughts

## Stakeholder & Research Interviews

- City of Minot Departments/Divisions:
  - Community Development
  - Planning
  - Engineering
  - Building Official
  - City Management
  - Human Resources
- Minot Chamber EDC
- Minot AFB
- City of Warren, NE
- City of Cheyenne, WY
- Realtors
- Trinity Hospital
- Affordable Housing Providers
- Service Providers
- Community Change Agents

**Local stakeholders and professional experts such as realtors and major employers provided important information and perspectives related to various aspects of housing.**

Participants for focus groups and research interview varied and were selected for their expertise and understanding of specific topics. Stantec worked collaboratively with City staff to identify stakeholders and interview subjects. The City of Minot was responsible for coordinating meeting dates, times, and location, however Stantec helped as needed. Meetings were held as either one-on-one formats or as small groups and where all conducted in-person except during a final site visit to accommodate a travel hindrance encountered by the Stantec Project Manager.

**The information gained in these interviews informed a more in-depth understanding of:**

- Current housing conditions and needs
- Housing related programs or activities that already exist
- Strategies that may potentially be employed to address housing challenges and meet local needs.

**Focus group and research interviews were also used to understand the housing needs and housing issues faced by hard-to-reach populations** such as though who may be housing insecure, homeless, BIPOC (Black, indigenous, and people of color) and those with disabilities that cannot participate using conventional engagement activities, prioritizing conversations with agencies that provide services for and work directly with these populations. This method ensured the Study project team was able to get a better understanding the housing issues these hard-to-reach populations face without needing to deploy labor intensive outreach strategies.

**Focus Groups and Research Interviews**

The following objectives were met for these engagement activities.

1. Participants engaged in structured conversations about relevant housing related issues.

2. Participants identified local needs, defined community priorities, reviewed housing strategies, and provided recommendations and guidance

3. All activities, comments received, notes from meetings, and other information generated through the process were documents, and are available upon request, within the bounds of protecting privacy for commenters and survey takers.

# Information about the Study was provided in an online, easy to use and interpret format

Utilization of a Story Map website ensured that study information and updates were made available to anyone who was interested, and was presented in an accessible format. By doing so, it fostering greater community engagement with housing related issues. It provided an initial overview of the study and provided a link to the housing survey. It was updated after the analytical phase of the project to provide detailed information about Minot's housing market. It was updated again after the strategies phase of the project to outline candidate strategies for meeting Minot's housing needs.

**Project Story Map Updates**

| Phase 1 *Kickoff* | Created June 2023 | • Study overveiw<br>• Study project schedule<br>• Housing mix map |
| --- | --- | --- |
| Phase 2 *Analysis* | Updated October 2023 | • Economic Foundation analysis<br>• Demographics<br>• Housing Inventory<br>• Market Context<br>• Needs |
| Phase 3 *Strategies* | Updated January 2024 | • Production Strategies<br>• Preservation Strategies<br>• Location-Specific Strategies<br>• Capacity Building Strategies |

**STUDY DELIVERABLE**

**Minot Housing Study StoryMap**

*visit*

**tinyurl.com/Minot-Housing**

SCAN ME

**Website/StoryMap Objectives**

The following engagement objectives were met for the online website

1. A Story Map providing study-related information was created, and its availability was communicated to the public through a variety of means.

2. The Story Map utilized easy-to-understand language and straightforward graphics to communicate content.

3. The Story Map built public understanding of Minot's housing needs in Minot, and put a human face on the stories of two households that have faced housing challenges.

4. The Story Map was updated on two occasions as the study advanced.

# An online housing survey provided an additional opportunity to gather input from the community

## 859

### Survey Responses
### October 13 – December 5, 2023

**Survey Purpose:**

The goal of the housing survey was to collect input on the housing experiences, needs and desires of community members – how well people feel their needs are met by their existing housing, and the challenges they face or have faced in finding housing that meets their needs.

**Survey Content**

The survey gathered the following information survey respondents:

- *Demographics*
- *Household Information: Housing Satisfaction*
- *Housing Barriers*
- *Housing Needs*

**Survey Administration**

The Survey was created and administered using Microsoft Forms and was embedded within the online Storymap. It was available to the public from October 13 to December 5. Promotion of the survey occurred at regular intervals by the City of Minot using scheduled social media posts (see bottom right example).

**Survey Results**

Key findings from the survey are on the following pages. A more complete survey report can be found in the appendix.

**Housing Survey Objective**

The following objective for the survey was met.

1. The housing survey collected input collected on the housing experiences of Minot community members, including how well they feel their needs are met by their existing housing, and the challenges they face or have faced in finding housing that meets their needs.

# Housing Survey Respondents Characteristics



**Origin of Respondents**

- Minot — 37.4%
- North Dakota, but not Minot — 25.3%
- Outside North Dakota — 37.2%
- No Response — 0.117%
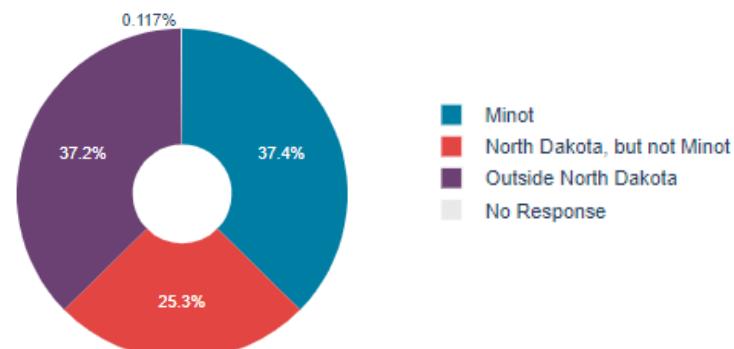
**Representation from Across Household Types**

- Married couple with children — 37.1%
- Married couple without children — 21.4%
- Single — 20.4%
- Unmarried couple or roommates — 10.2%
- Other — 9.48%
- No Response — 1.41%

**Income of Respondents**

- $28,000 or less — 9.6%
- $28,000 to 47,000 — 16.2%
- $47,000 to 56,000 — 8.89%
- $56,000 to 75,000 — 12.1%
- $75,000 to 93,000 — 14.1%
- $93,000 to 112,000 — 13.4%
- $112,000 or more — 25.7%

**Respondents tend younger**

- 18 and younger — 0.271%
- 19 to 34 — 34%
- 35 to 54 — 44%
- 55 to 74 — 20.3%
- 75 and older — 1.49%
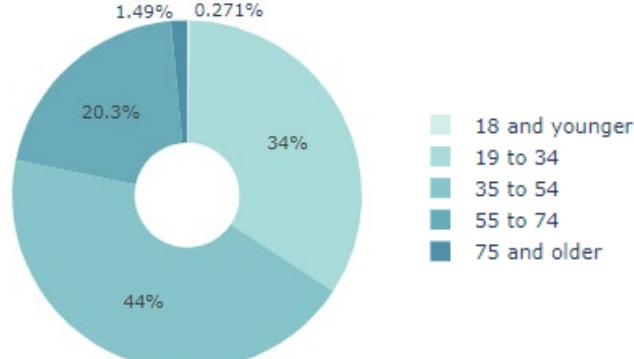
**Respondents Live Across Minot Locations**

- Downtown — 2.58%
- Neighborhoods near downtown — 36.4%
- Suburban — 52%
- Rural — 8.55%
- No Response — 0.468%

**Housing Tenure**

**64.5%** Own
**35.5%** Rent

**Race**

**86.3%** White
**13.7%** People of Color
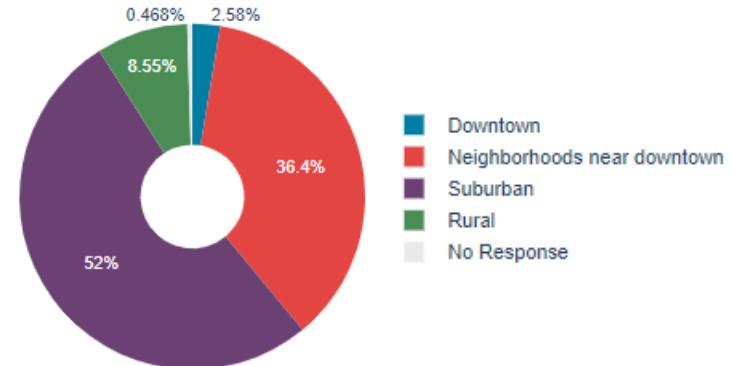
# Satisfaction with Current Housing

On a scale of 1-5 where 1 means strongly disagree and 5 means strongly agree, how well does your house meet your needs in terms of the following elements?

Highest Satisfaction

- Size of home

Lowest Satisfaction

- Cost of home

- Neighborhood amenities

Strongly Disagree

Disagree    Neutral    Agree    Strongly Agree

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Condition | 4.5% | 9.7% | 26.6% | 32.7% | 26.4% |
| Features | 5.4% | 11.9% | 26.6% | 29.0% | 27.1% |
| Size | 4.9% | 9.2% | 20.4% | 25.4% | 40.1% |
| Cost | 17.4% | 15.6% | 24.8% | 20.9% | 21.4% |
| Neighborhood Amenities | 14.2% | 16.2% | 24.9% | 22.7% | 22.1% |

**Typical Comments**



"I'm a senior and I need a single-story ranch home rather than a split-level home."

"I am 34, have two jobs, and should be a homeowner but the market in Minot is expensive!"

"Housing needs to cost less. Most families now have 2 or 3 jobs just to pay for their homes."

"I am a full-time college student and this year alone my rent increased $400."

"More amenities in the north side of town would be awesome for all northerners including myself."

Housing Survey Comments

# Survey Respondent Follow-Up Interview
# Personal Story #2
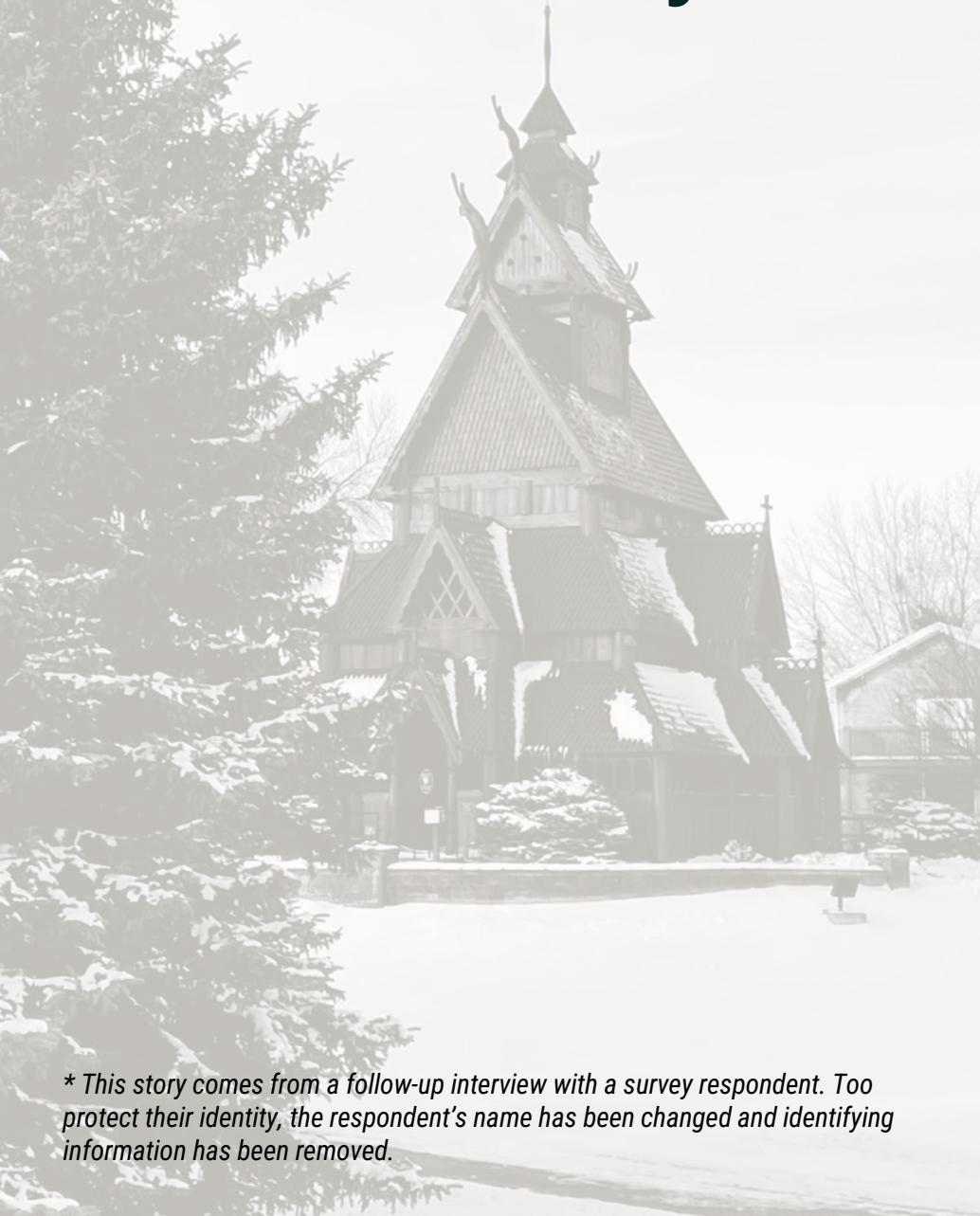
Lois is a single mother of two boys. She moved to Minot following a natural disaster, and says, "I have been trying to deal with housing from the moment I moved to Minot." She is in the rental market, and has lived in multiple apartments.

Even working at a professional job in the insurance industry, it is hard to make the finances work. She says, "You have to keep the rent to a reasonable level simply because of utility bills. Sometimes power gets very expensive when it's winter... I had to move from a place because a one month bill for electricity was almost $400. That's a lot when you are a single mom."

And her housing costs have escalated at times. "Where I am now, they haven't increased the rent. But every other place that I have rented from they have increased my rent $50 to $75 once or twice a year, and then they increase the fees for the common areas. And I have even seen them charge additional for snow removal. At my last place it just feels like the management company did everything they could to keep my deposit."

Lois's time in Minot has been beneficial to her older son, who graduated last year from Minot State University.

## Lois
### *A single mother of two boys*

10
APPENDIX

# Minot Housing Study

Housing Needs and Market Analysis

> The City of Minot is working on an in-depth study of the City's housing market – looking at the existing housing supply in Minot and how well that is meeting the needs of Minot residents.

The study will analyze Minot's past, current and projected housing conditions, including Minot's economic drivers, community demographics, housing market dynamics, and development trends.  It will identify proven strategies and innovative approaches to increasing the production of housing types that meet community needs.  It will also recommend strategies for dealing with future surges in housing demand.

The study will entail four phases from Summer 2023 to Spring 2024—Kickoff, Analysis, Strategies, and Deliverables. This website provides an overview of the study, and invites you to share your own experience about housing in Minot.



Please review the following info, complete a short survey by end of November, *and share this website with neighbors and friends!*

# Minot is growing, and like many growing communities housing is a pressing issue.

Housing challenges make it harder for Minot to meet local needs, support continued growth, and attract the workforce needed by local businesses. Minot also contends with external events that cause values and rents to surge, and that deepens challenges related to housing affordability—especially for renters, including:

- Flood-related losses and disruptions
- Changes in staffing levels at the air force base
- Booms and busts associated with the petroleum industry

Minot is expecting a temporary influx of workers in 2028-2029 related to upgrading the ballistic missile system at Minot Air Force Base, and that's expected to present additional challenges and opportunities. The City will need a resilient housing stock to meet its community needs now and into the future.

Click "*New Multifamily*" and "*Residential Areas*" on the map for more information.

## New Multifamily (since 2010)

### Number of Units

- ◯ 100+
- ◯ 50 - 100
- • 0 - 50

### Residential Areas

- Single Family
- Mobile Home
- Plexes
- Apartments (5-19 Units)
- Apartments (20+ Units)
- Townhouse
- Condominium
- Vacant Residential

### Subdivisions

5,000 ft
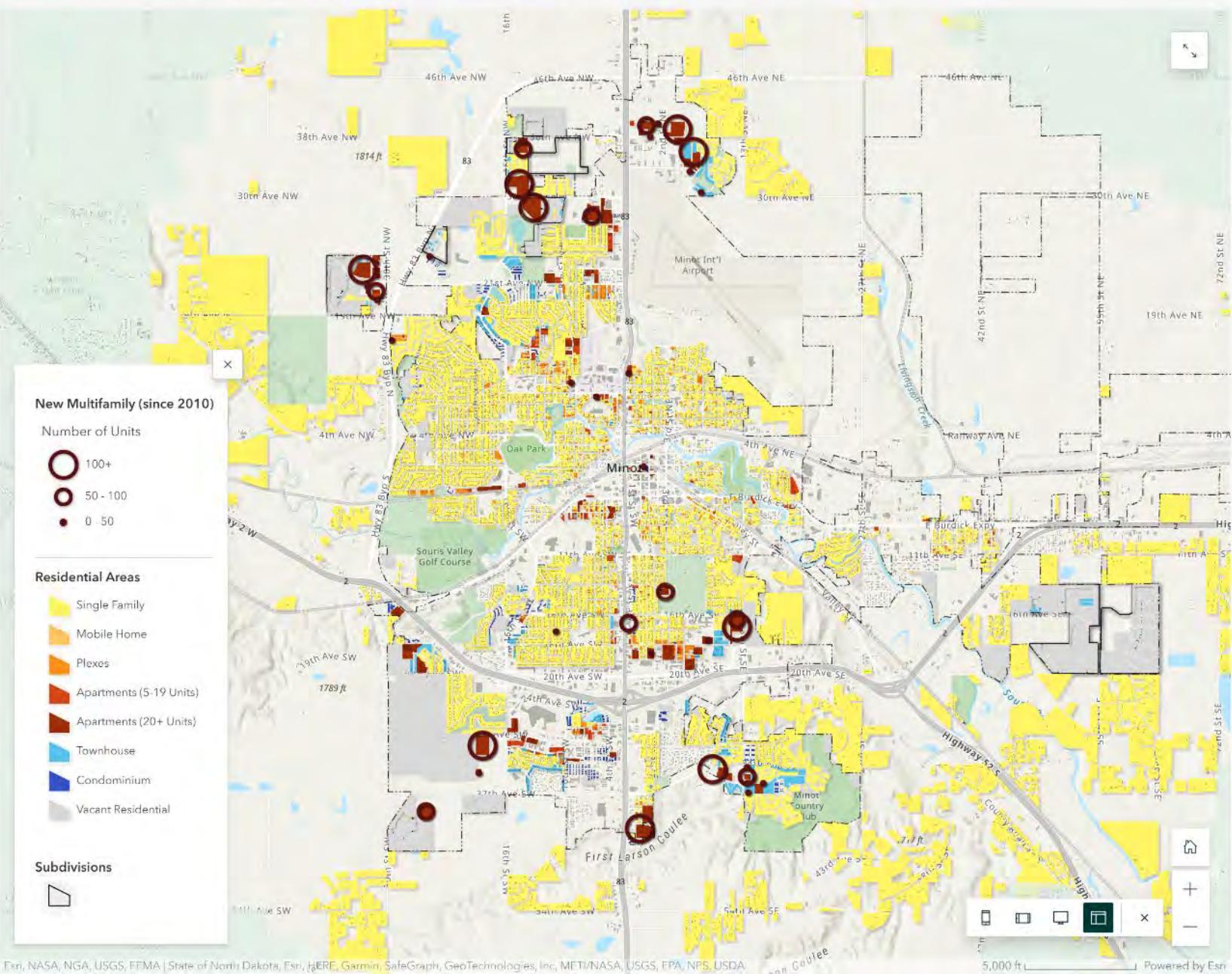
# Economic Foundations

Minot has a healthy and diversified economic foundation that encompasses three major planks.

*A Regional Commercial Center:*  Much of Minot's economic activity stems from its role as a regional commercial center, serving as a retail and healthcare destination, and wholesale distribution node for a broad multi-county region.

*Oil Turbulence:* The Bakken shale oil boom drove a short-term burst in employment that has slowed and stabilized. The oil boom has been the main contributor to economic growth, driving demand for housing and services.

*Air Force Base:* The Air Force base is a stable economic anchor to the regional economy. Base personnel are paid by the federal government, but spend much of their income at local businesses, supporting the local economy. Special projects such as the anticipated Sentinel project will result in short-term economic benefits.

Of these foundational elements, the oil industry has the most uncertain future. In the short to medium term we expect oil-based economic growth to be less aggressive than during its boom phase, as the industry enters a more mature development trajectory.

Click the arrow (to right) to read more about Economic Foundations

Ward County's employment is concentrated in sectors associated with being both a regional hub and a major Air Force base. (Air force personnel fall under the "Government" category in the table. Oil extraction remains a smaller portion of the total direct employment base despite its economic importance.

Continue to Demographics

**Industry (Ward County)**



Government and government enterprises

Health care and social assistance

Retail trade

Accommodation and food services

Construction

Real estate and rental and leasing

Transportation and warehousing

Other Services

0%    5%    10%    15%    20%    25%

Employment by Industry as Percent of Total (2021)

Employment Share in North Dakota as a Whole

Source: Bureau of Economic Analysis

# Demographics

*Young adults are overrepresented in Minot.* The air force base is the most important reason for that.

*Educational attainment* is a bit lower than average for North Dakota, but median incomes are on par with the state as a whole.

Home ownership rates are a bit lower the state as a whole, in part due to apartment construction during the most recent oil boom.

Housing cost burdens are experienced by many Minot households—that is, they pay more than 30% of their income on housing related costs—and the proportion of cost burdened households has significantly increased since 2016 as incomes have not kept pace with housing costs.

Click the arrow (to right) to read more about Demographics

# Minot's population growth jumped in the early 2010s at a faster rate than comparable cities and Ward County. As oil prices dropped, Minot's population growth stalled.

Ward County's population grew with high rates of net migration in during the oil boom. As the boom stabilized, net migration out of the county increased relative to natural change, driving decreases in the population.



Source: US Census
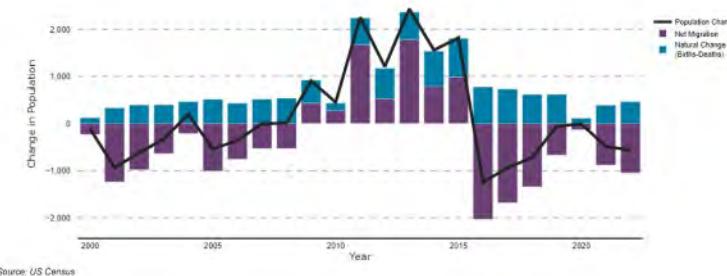
Minot's population contains higher proportions of working-age people in their 20-50s than North Dakota as a whole, and a lower proportion of other age groups.
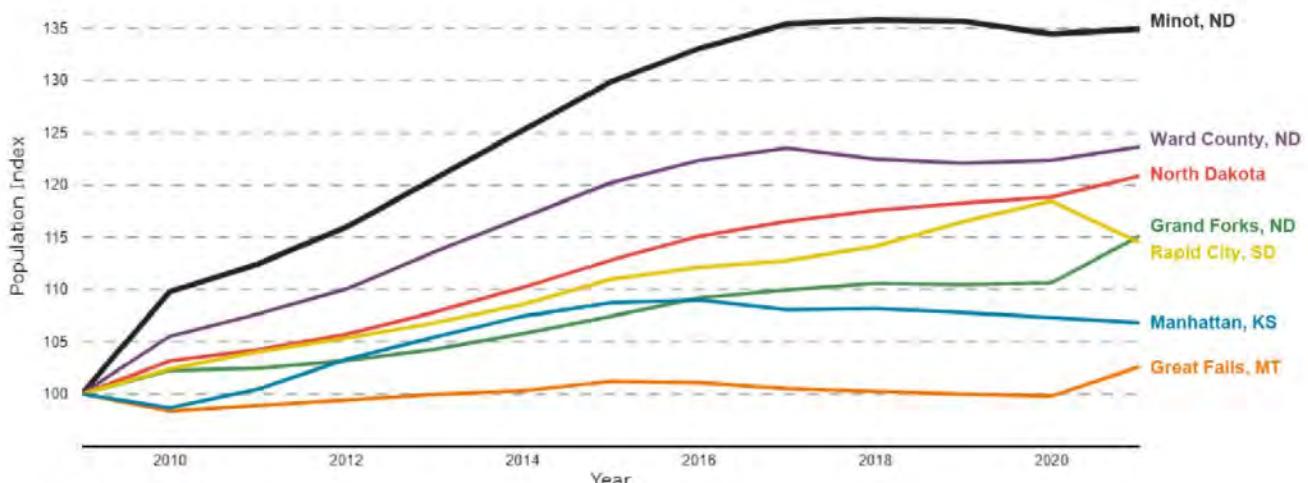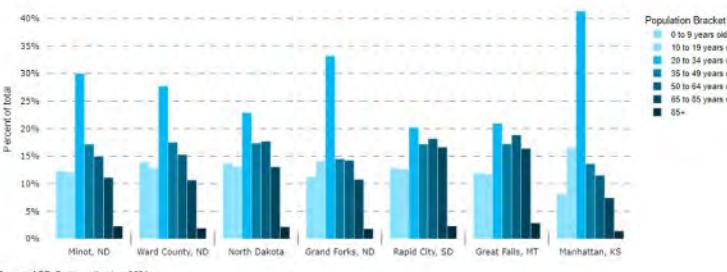


Source: ACS, 5-year estimates, 2021



* Indexed values are set to a base of 100, with 2009 established as the baseline year. A number of 130 indicates 30% growth over the initial point.

Source: ACS, 5-year estimates

Household incomes are higher in Minot than the comparison cities. The balanced distribution derives from the higher proportion of blue collar and healthcare occupations that pay middle to upper-middle incomes (with a lower proportion of college students than the comparison cities).



Source: ACS, 5-year estimates, 2021
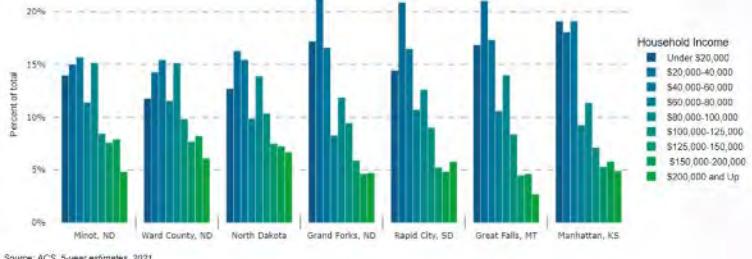
Median incomes tend to be higher in Minot's newer suburbs compared with the urban core.
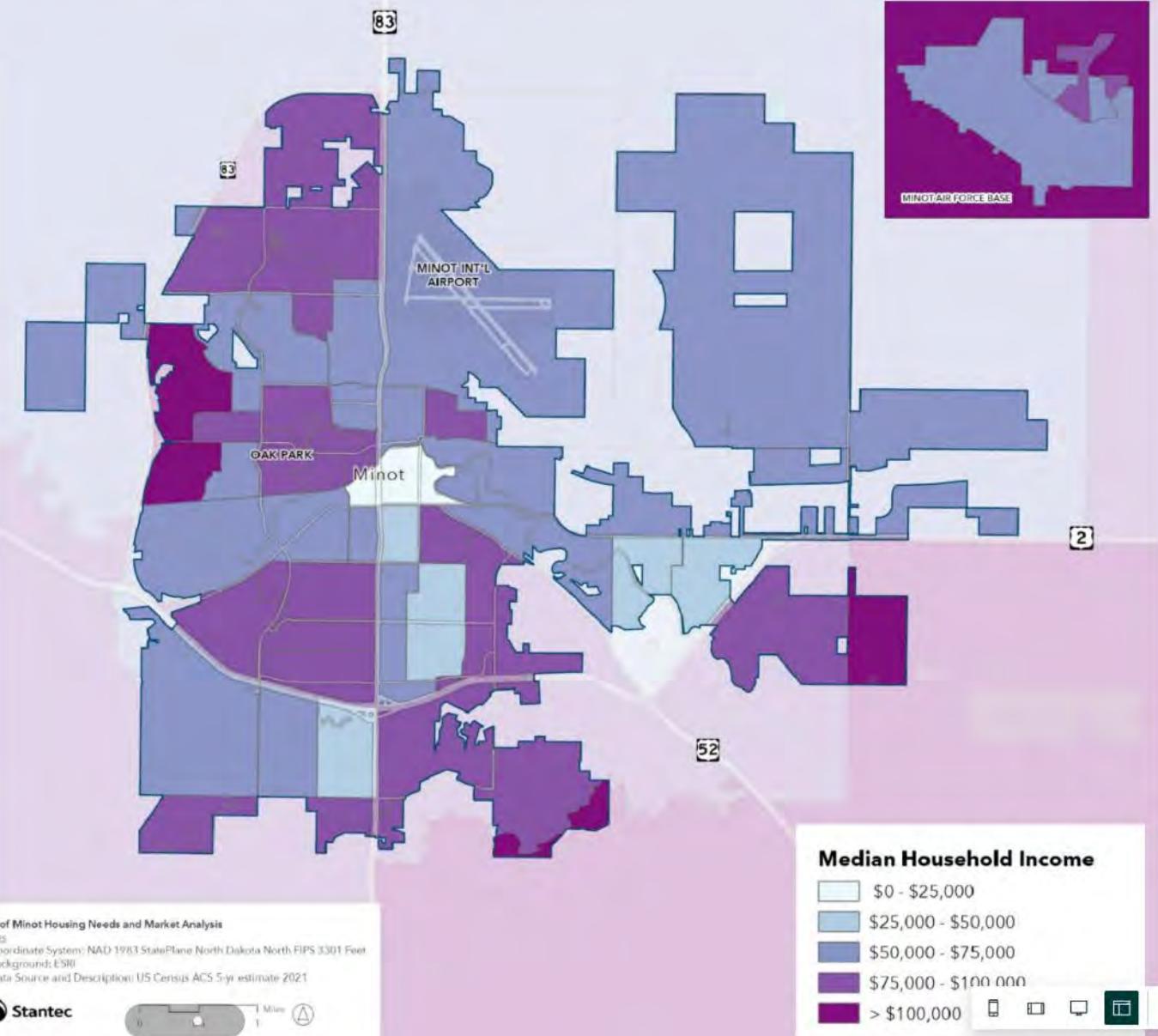


City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source and Description: US Census ACS 5-yr estimate 2021

Stantec

**Median Household Income**
$0 - $25,000
$25,000 - $50,000
$50,000 - $75,000
$75,000 - $100,000
> $100,000

Nearly 45% of renter households and 22% of homeowners are housing cost burdened—meaning they pay more than 30% of their income in rent or home ownership costs. That's a greater proportion than the state of North Dakota as a whole.  All of the comparison cities have a higher rate of cost burdened
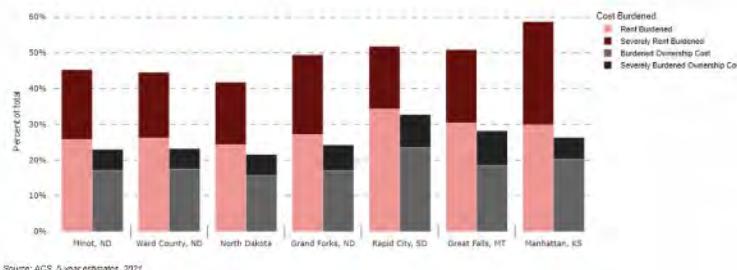


Source: ACS, 5-year estimates, 2021

The high number of rent burdened households is explained by a more rapid increase in rent levels in comparison to income growth.
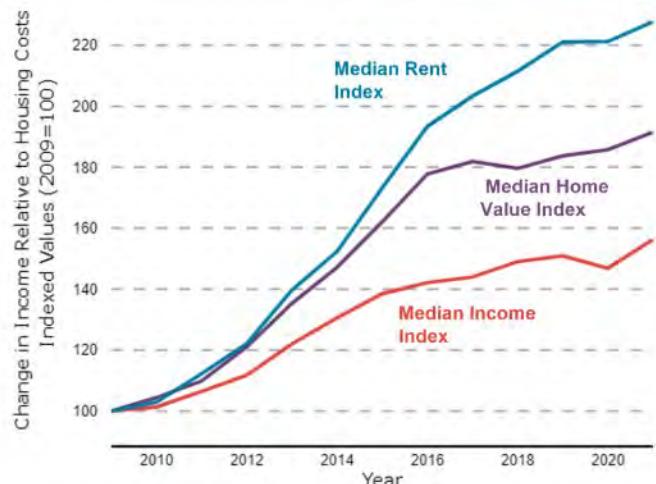


Source: ACS, 5-year estimates, 2009-2021

**Housing Cost Burdened, Renters only**

- 0% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- > 40%

MINOT AIR FORCE BASE

MINOT INT'L AIRPORT

OAK PARK

Minot

y of Minot Housing Needs and Market Analysis
CS
Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
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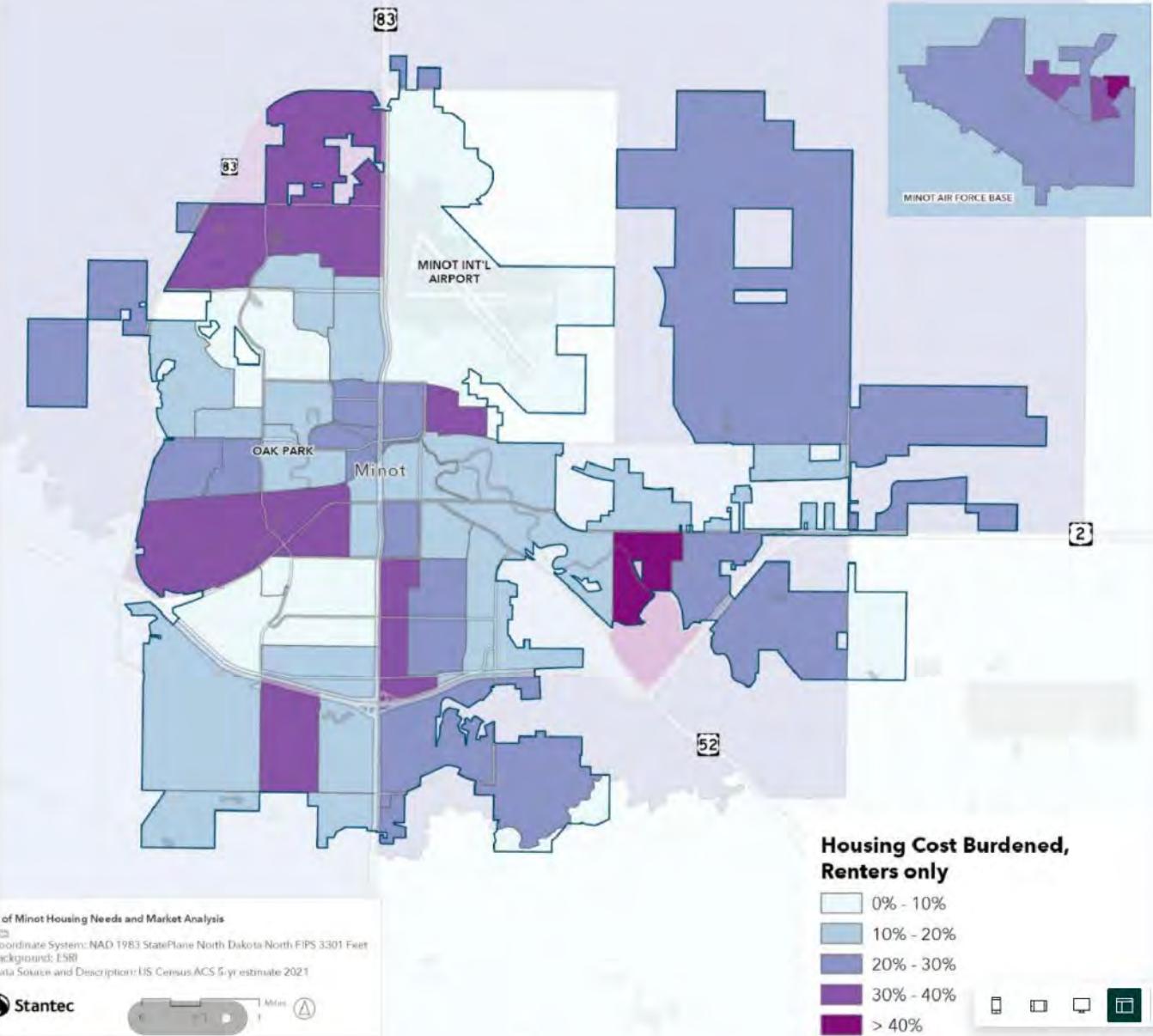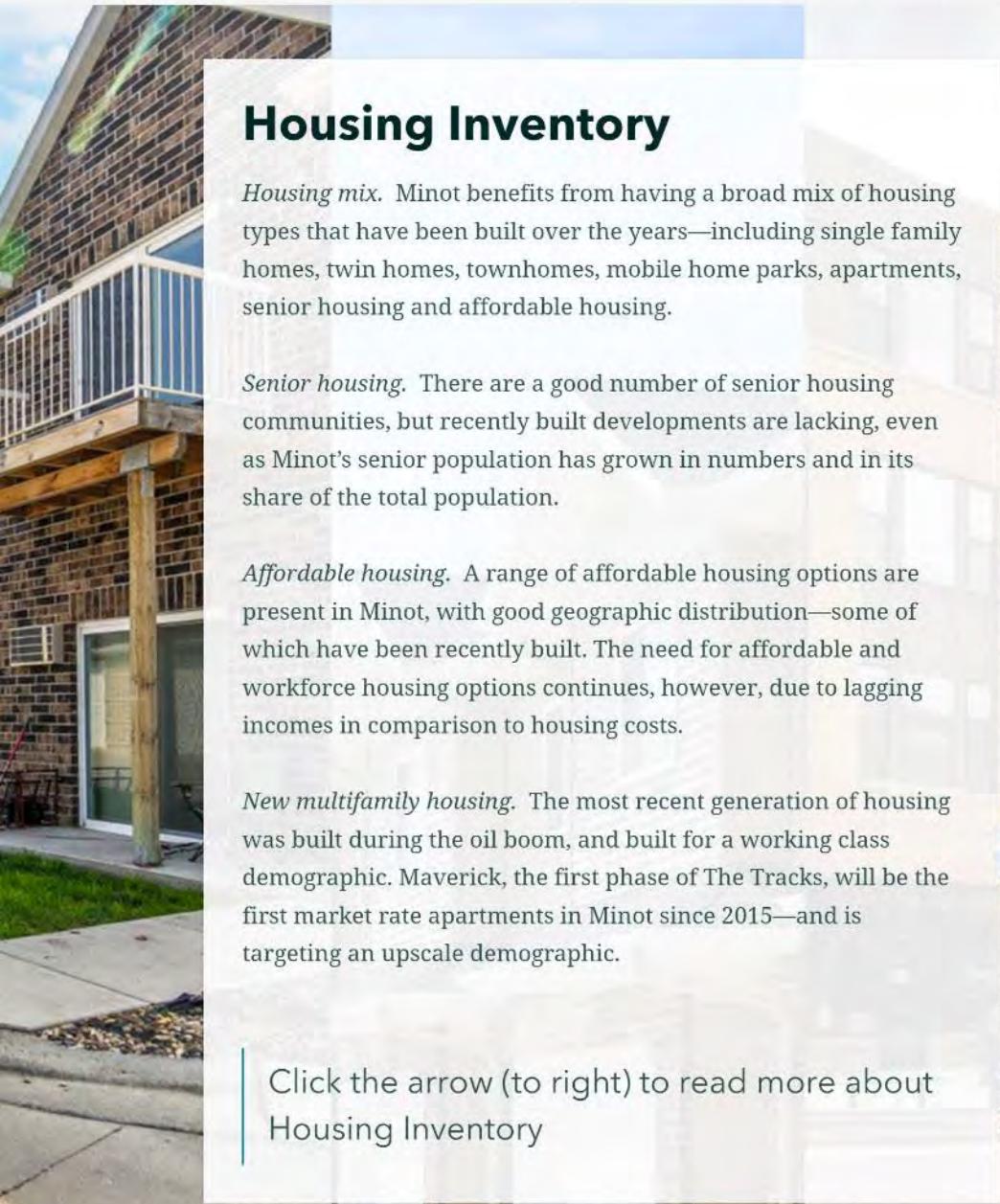
# Housing Inventory

*Housing mix.* Minot benefits from having a broad mix of housing types that have been built over the years—including single family homes, twin homes, townhomes, mobile home parks, apartments, senior housing and affordable housing.

*Senior housing.* There are a good number of senior housing communities, but recently built developments are lacking, even as Minot's senior population has grown in numbers and in its share of the total population.

*Affordable housing.* A range of affordable housing options are present in Minot, with good geographic distribution—some of which have been recently built. The need for affordable and workforce housing options continues, however, due to lagging incomes in comparison to housing costs.

*New multifamily housing.* The most recent generation of housing was built during the oil boom, and built for a working class demographic. Maverick, the first phase of The Tracks, will be the first market rate apartments in Minot since 2015—and is targeting an upscale demographic.

Click the arrow (to right) to read more about Housing Inventory

01 / 05

Market rate senior apartment developments are concentrated in southwest Minot

The region lacks recently built, market rate senior housing options



**Senior Housing**

Type

- Licensed Care Facility
- Minot Housing Authority
- All Other

Souris Heights
Built 2021, 54 units

Trinity Homes
230 units

Minot Health and Rehab
114 units

Henry Towers
Built 1948 (1976 Costar), 83 units

The View Minot
Built 2005, 61 units

Edgewood Minot Senior Living
Built 1993, 114 units

Maple View Memory Care
43 units

Cooks Court Apartments
Built 2018, 40 units

Somerset Court
Built 1999, 137 units

Morgan Apartments
Built 1986, 64 units

Dakota Terrace Apartments
Built 1987, 138 units

Edgewood Minot Memory Care
Built 2002, 28 units

Elison Assisted Living Minot
Built 1999, 85 units

Minot Lodge Senior Living (The Wellington)
Built 2005, 67 units

There's a good geographic dispersion of affordable housing, with a particular concentration in the communities south of downtown Minot

There has been a set of privately built affordable housing developments built in the past decade



**Affordable Housing**

Market Segment
- Affordable
- Affordable - Disabled
- Affordable - Senior
- Affordable - Senior & Disabled

Sunset Ridge Apartments
Built 2016, 35 units

Fieldcrest Apartments
Built 2015, 42 units

Souris Heights
Built 2021, 54 units

Polaris Apartments
Built 1994, 48 units

Minot Artspace Lofts
Built 2014, 34 units

Oakwood Court
Built 2014, 7 units

Milton Young Towers
Built 1972, 221 units

Minot Vocational Workshop
Built 1952, 48 units

Henry Towers
Built 1948, 83 units

Park South Essential Living and Townhomes
Built 2018, 62 units

Washington Townhomes
Built 2013, 32 units

Minot Place Rowhomes
Built 2013, 30 units

South Glen Village
Built 2002, 48 units

Blu on Broadway
Built 2021, 42 units

South Park Apartments
Built 1993, 36 units

Asi-Minot
Built 1996, 25 units

Morgan Apartments
Built 1986, 64 units

Guardian Manor
Built 1996, 48 units

Cooks Court Apartments
Built 2018, 40 units

Meadowlark Heights
Built 1973, 96 units

These multifamily development projects represent a strong housing growth pattern.

The great majority of these projects were built in the oil boom years. Little development has occurred since 2016.



Cobblestone Apartments
Built 2012, 76 units

Lindenwood Apartments
Built 2010, 48 units

Sunset Ridge Apartments
Built 2016, 35 units

Northern Plains
Built 2012, 144 units

Souris Heights
Built 2022, 54 units

Fieldcrest Apartments
Built 2015, 42 units

The Wyatt at Northern Lights
Built 2014, 276 units

Stonebridge Townhomes
Built 2014, 202 units

Landmark Circle
Built 2012, 35 units

Encore Apartments
Built 2012, 42 units

Sunset Pointe Apts
Built 2014, 27 units

North Highlands
Built 2014, 239 units

MINOT INT'L
AIRPORT

Willowbrooke Lodge
Built 2012, 42 units

Prarie Heights Apts
Built 2013, 147 units

2100 33rd St NW
Built 2014, 50 units

Northdale Apartments 2717
Built 2011, 91 units

Parkview Place Aph
Built 2015, 36 units

Beaver Ridge Apartments
Built 2011, 40 units

Eagles Landing
Built 2010, 32 units

Country Meadows
Built 2014, 66 units

Beaver Suites
Built 2012, 32 units

Minot Artspace Lofts
Built 2014, 34 units

Mino...

Park South Essential Living and Townhomes
Built 2022, 62 units

Blu on Broadway
Built 2021, 52 units

Country View Apartments
Built 2015, 52 units

Minot Place Rowhomes
Built 2013, 30 units

Minot Place
Built 2011, 144 units

Washington Townhomes
Built 2013, 32 units

Cooks Court Apartments
Built 2018, 40 units

Meadows at Woodside
Built 2010, 36 units

The Commons & Landing at Southgate
Built 2014, 341 units

Southwood
Built 2012, 156 units

Crossing at the Bluffs
Built 2011, 66 units

The Flats at Southwest Crossing
Built 2011, 60 units

Meadow Ridge Apartments
Built 2010, 168 units

Woodside Townhomes
Built 2011, 48 units

Paramount at the Bluffs
Built 2011, 50 units

**Multi-Family Built Since 2010**
Number Of Units
- 25 - 50 units
- 51 - 100 units
- > 100 units

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source: The Warren Group, CoStar, Apartments.com, BismanReporter.com, City of Minot ACS 2021 5-yr Estimates

⬡ Stantec

Minot's overall housing development pattern is unique. The 2011 flood damage included over 4,100 homes flooded with over 3,100 lost to demolition, 2,360 of which were rental units. The flood drove the net decrease of housing units in and around the more historic core. Meanwhile, single-family and multi-family growth was robust in newer suburban areas in the northwestern and southeastern quadrants.

Continue to Market Context

**Change in Housing Units, 2013-2019**

Number of Units

- (-) > 550
- (-) 0 - 550
- (+) 0 - 500
- (+) 500 - 1,000
- (+) > 1,000

City of Minot Housing Needs and Market Analysis
Notes
1. Coordinate System: NAD 1983 StatePlane North Dakota North FIPS 3301 Feet
2. Background: ESRI
3. Data Source and Description: US Census ACS 5-yr estimate 2021

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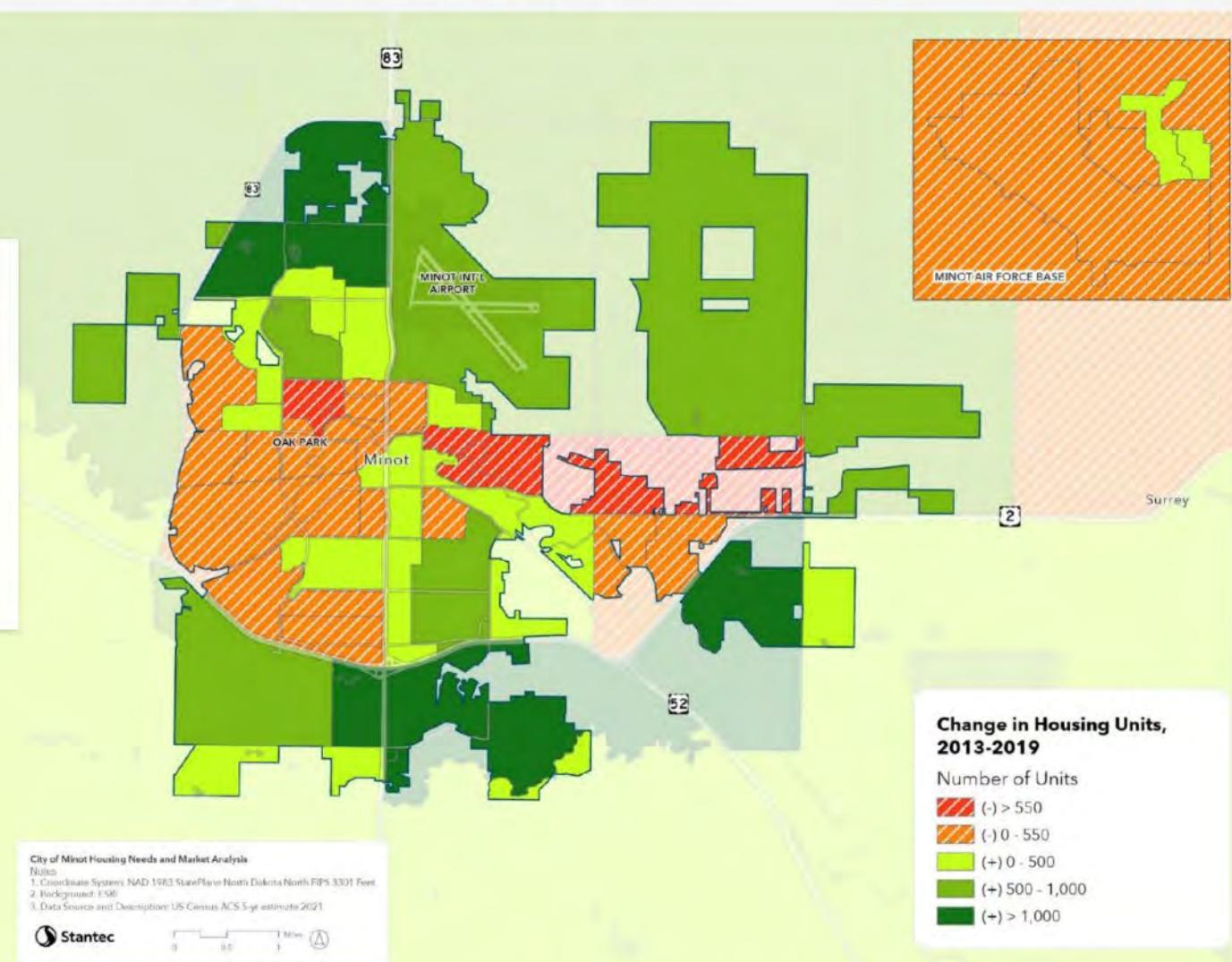
# Housing Market Context

*Ups and downs.* The market indicators reflect the roller coaster of housing market impacts that Minot has experienced—a surge in demand and new construction with the oil boom and in-migration, and a drop in rent levels and home values when the labor force left. Now, after a period of economic stability, apartment buildings have reached full occupancy and rents have started to rise once again.

*Little new construction.* These dynamics explain the absence of new multifamily housing and slow subdivision development while conditions stabilized and the existing housing stock was fully absorbed.

*Current market conditions.* With lower vacancy rates and increased rents over the last few years, more supportive conditions may be returning for new housing development. The multi-phase project being pursued by Epic Companies is a promising signal of market recovery. It will also test the viability of an upscale apartment community, and the depth of a higher income professional rental demographic.

Click the arrow (to right) to read more about Housing Market Context

Since 1980, development is concentrated in detached single-family homes and multi-family. Both jumped precipitously with the boom in the late 2000s, with multi-family since stabilizing.

## Minot Housing Units Built by Type Since 1980



Detached Single-Family

Multi-Family: 5+ Unit Buildings

Multi-Family: 2-4 Unit Buildings

Minot Housing Units (y-axis): 0, 1,000, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000

Year (x-axis): 1980, 1990, 2000, 2010, 2020

Source: SOCDS Building Permits Database, Ward County
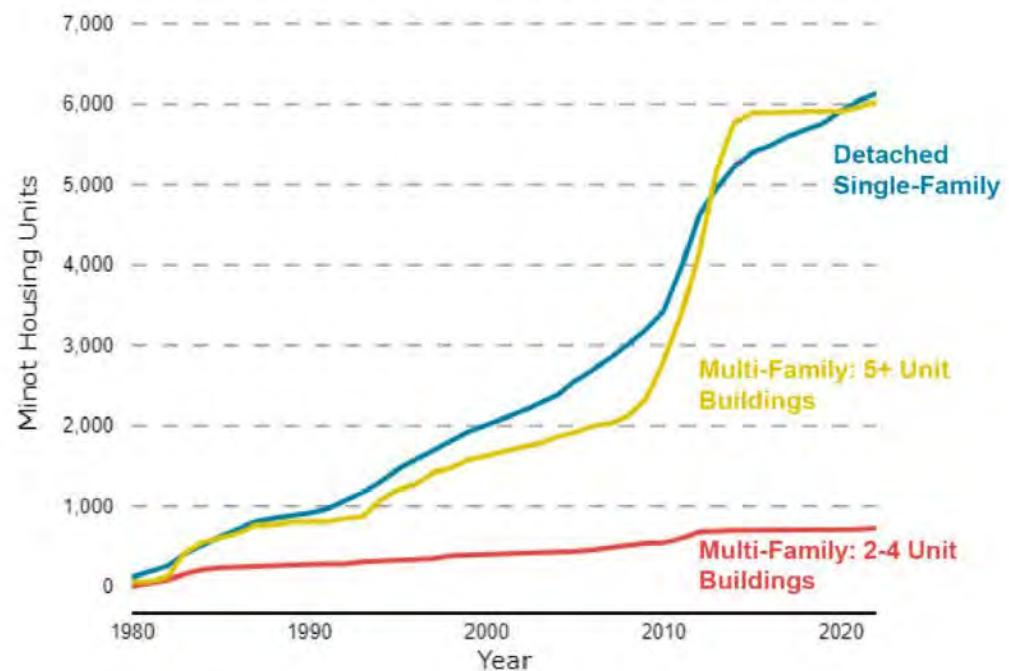
From 2000 to 2014, vacancy rates in Minot hovered near 10%. It took from 2015 to 2021 for the new apartment buildings built in the early 2010s to reach market equilibrium occupancy. Only then did rent levels start to rise again, and they have been rising quickly in the last several years.



Source: CoStar
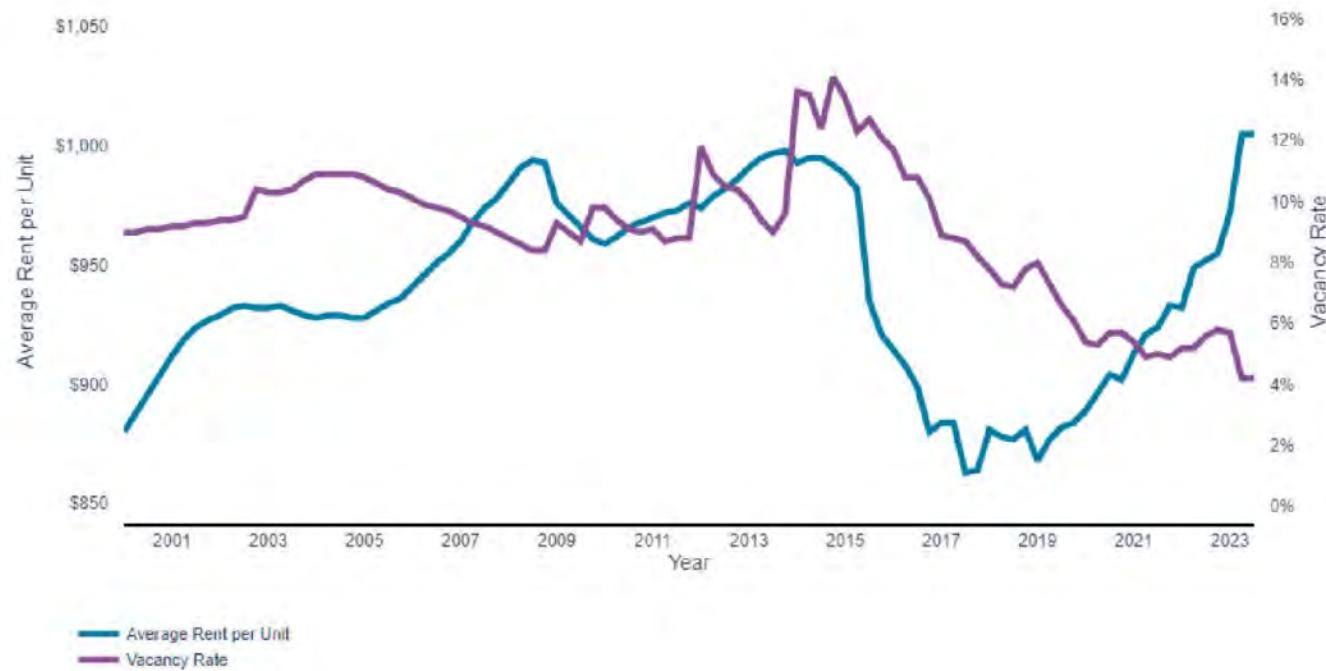
According to Zillow's Home Value Index, home prices in Minot have gone up and down. The housing crunch caused prices to dramatically climb, only to fall with the outmigration of the oil based workforce. The median price has rebounded, albeit at a slower rate than comparison cities.

Zillow Home Value Index in Minot – By Tier
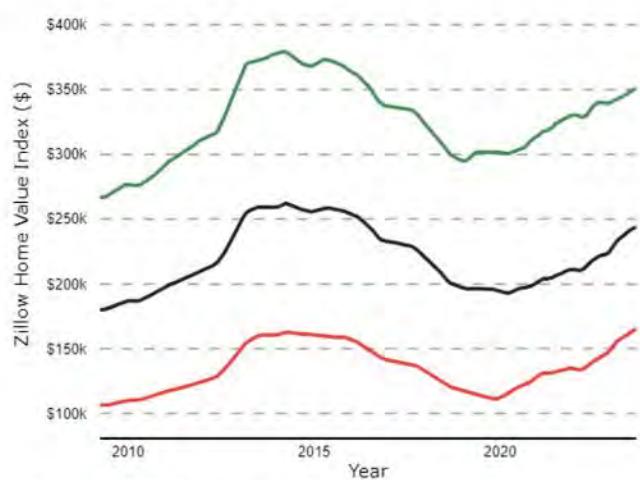


Source: Zillow, ZHVI Cuts by Metro, extracted 10/1/2023

Zillow Home Value Index – Middle Market (35th-65th percentile)
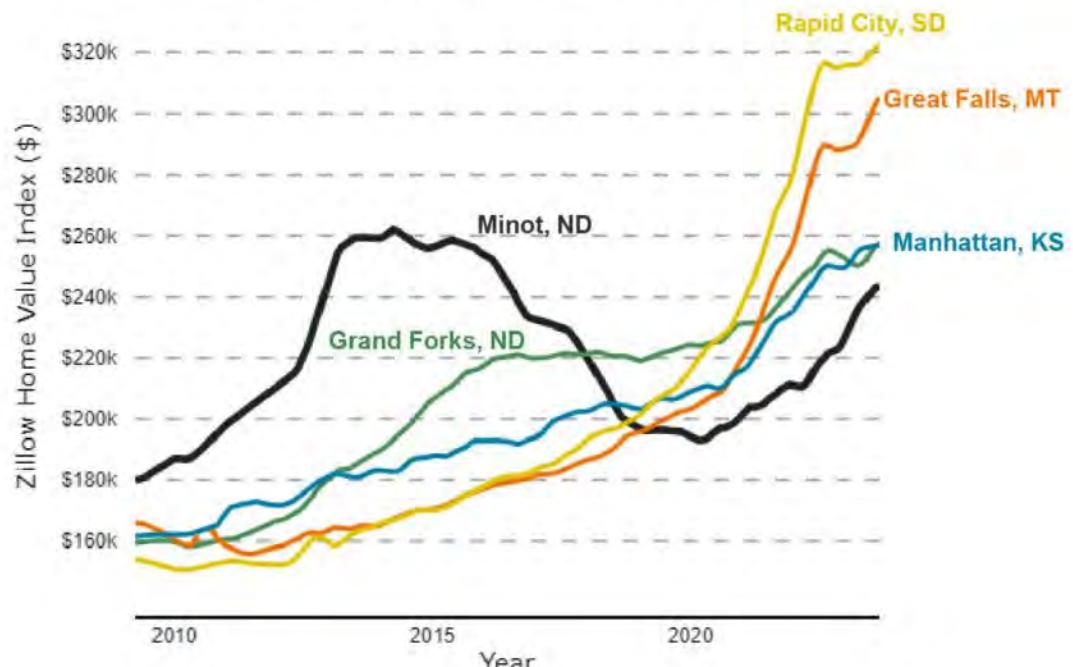


Source: Zillow, ZHVI Cuts by Metro, extracted 10/1/2023

Continue to Housing Needs

# Housing Needs

*Affordable rental housing.* There is a need for additional housing for low to moderate income households, as indicated by housing cost burden data, and the housing gap analysis. These needs can be met through both new construction products and the preservation of existing affordable apartments.

*Starter homes.* Entry level ownership housing is being built, but Minot would benefit from increased production, as well as broadening the housing types that are being produced, such as patio homes, twin homes, and townhomes.

*Executive homes.* Judging by the gap analysis, Minot might benefit from providing new executive home opportunities in both ownership and rental formats.

*Senior housing.* Minot lacks recently developed market rate senior housing options—including an independent living senior community or a full continuum senior housing development.

Click the arrow (to right) to read more about Housing Needs

This table compares the housing supply to the housing demand to quantify the housing gaps at each income level, tenure and unit size. It demonstrates a surplus of workforce and middle-income housing, but deficits in affordable units and executive housing units.

*Gap Methodology.* The housing gap combines the units at different bedroom sizes and housing tenure demanded at affordable price points and the total units supplied for renters and owners at market prices. The product is either a housing surplus or deficit for units at price points and bedroom size that captures where housing demand is not meeting current housing supply, or where housing supply currently exceeds housing demand.

**Results Snapshot**

- Minot needs to provide housing for the lowest income
- The housing supply is overly weighted towards 3-bedroom units in the $1,500 to $3,125 per month range, while the population characteristics indicate a stronger demand for 1- and 2-bedroom units in rental and more affordable family homes.

**Gap analysis:** % of units categorized by tenure, size, and monthly cost

*Source: Stantec*

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | $313 | -722 | -435 | -134 | -40 | -19 | -204 | -167 | -108 |
| $15,000-24,999 | $521 | -160 | -305 | -110 | -47 | -4 | -127 | -87 | -69 |
| $25,000-34,999 | $729 | 359 | 211 | -126 | -21 | 0 | -67 | -89 | -82 |
| $35,000-49,999 | $1,042 | 466 | 2,650 | -185 | -67 | 18 | -37 | -355 | -250 |
| $50,000-74,999 | $1,563 | 338 | 569 | 637 | 1 | 78 | 627 | -304 | -323 |
| $75,000-99,999 | $2,083 | -290 | -435 | 488 | 39 | 147 | 885 | 986 | -59 |
| $100,000-149,999 | $3,125 | -189 | -352 | -218 | -67 | 0 | 318 | 1,219 | 487 |
| $150,000-199,999 | $4,167 | -28 | -114 | -78 | -67 | 1 | -17 | 50 | 115 |
| $200,000 or more | -- | -22 | -54 | -99 | -25 | -4 | -45 | -278 | -606 |

Housing Demand is Greater than Supply        Supply Meets Demand        Housing Supply is Greater than Demand

The table shows the housing demand for Minot's population as a function of their income, tenure (whether they rent or own), and desired unit size, based on the choices of the existing population.

Using 25% of household income as the baseline 'affordability' level, we project the number of units demanded at certain price points according to current household incomes and composition. We take the current composition of housing tenure (own versus rent) as the baseline. Willingness to pay may be different than ability to pay, especially with households above area median income.

*Housing preference.* The units size needed (number of bedrooms) reflects the household sizes in Minot's population as well as expressed housing preferences at each income level based on the regional model.

Housing demand by price, tenure, and unit size with regional preferences
Source: ACS, all regional PUMS preference

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | $313 | 736 | 435 | 134 | 40 | 40 | 231 | 302 | 108 |
| $15,000-24,999 | $521 | 389 | 306 | 110 | 47 | 19 | 163 | 225 | 69 |
| $25,000-34,999 | $729 | 336 | 419 | 126 | 21 | 24 | 101 | 206 | 85 |
| $35,000-49,999 | $1,042 | 673 | 689 | 301 | 85 | 37 | 286 | 512 | 261 |
| $50,000-74,999 | $1,563 | 399 | 766 | 278 | 71 | 38 | 393 | 851 | 414 |
| $75,000-99,999 | $2,083 | 290 | 436 | 239 | 75 | 32 | 275 | 865 | 512 |
| $100,000-149,999 | $3,125 | 189 | 352 | 223 | 79 | 19 | 307 | 1,091 | 1,032 |
| $150,000-199,999 | $4,167 | 28 | 114 | 78 | 67 | 3 | 69 | 314 | 557 |
| $200,000 or more | -- | 22 | 54 | 99 | 25 | 8 | 59 | 359 | 868 |

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**Gap analysis:** % of units categorized by tenure, size, and monthly cost

*Source: Stantec*

| Household Income Required | Max Monthly Housing Cost | Rent | | | | Own | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1BR | 2BR | 3BR | 4BR+ | 1BR | 2BR | 3BR | 4BR+ |
| Less than $15000 | $313 | -722 | -435 | -134 | -40 | -19 | -204 | -167 | -108 |
| $15,000-24,999 | $521 | -160 | -305 | -110 | -47 | -4 | -127 | -87 | -69 |
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| $75,000-99,999 | $2,083 | -290 | -435 | 488 | 39 | 147 | 885 | 986 | -59 |
| $100,000-149,999 | $3,125 | -189 | -352 | -218 | -67 | 0 | 318 | 1,219 | 487 |
| $150,000-199,999 | $4,167 | -28 | -114 | -78 | -67 | 1 | -17 | 50 | 115 |
| $200,000 or more | -- | -22 | -54 | -99 | -25 | -4 | -45 | -278 | -606 |

Housing Demand is Greater than Supply — Supply Meets Demand — Housing Supply is Greater than Demand

# Strategies

The following strategies are recommended for consideration because they may be suitable for Minot based on research and stakeholder conversations. They are offered for discussion, consideration, and prioritization.

*Scroll down or follow links for information.*

## Production Strategies

- Accessory Dwelling Units (ADUs)
- Tiny Homes
- Manufactureed Home Parks
- Subdivision Production

## Preservation Strategies

- Trinity Hospital Rehabilitation
- Reposition Hotels for Workforce Housing

## Location-Specific Strategies

- Infill Housing in Flood Protected Areas
- Downtown Living for Downtown Activation

## Capacity Building Strategies

- New Developer Training
- Building Trades Workforce Development

# Accessory Dwelling Units (ADUs)

Accessory dwelling units (ADUs) are smaller housing units under owned by an adjacent homeowner. They are a way of introducing a rental housing option where there are existing utilities. The neighboring homeowner is the property manager, which usually means good management and responsive attention to issues that arise.

ADUs can be attractive for renters who would need a small home and prefer to live in a more residential setting. They can provide a helpful income stream for the homeowner.

Minot has an existing ADU ordinance but has only permitted a few ADUs due to heavy design restrictions.

*Objective: Increase housing supply and variety. Provide supportive environments for family members and others.*

## Strategy

- Update the existing ADU ordinance to remove barriers, including conditional use permit, parking and re-conversion requirements.
- **Resource requirements.** No financial resources are required.

## Case Studies

Bismarck, Mandan and Dickinson are ND cities that have ADU ordinances

# Production Strategies

## Tiny Homes

Even small conventional homes cost in the range of $300,000 or more. High housing costs can make it difficult to eat well, get good health care, and address emergencies that come up.

Increasing acceptance of tiny homes in certain locations can be a life-saving solution for some.

*Objective: Allow and facilitate the development of small homes to lower the cost of ownership or rental housing.*

### Strategy

- Update Zoning Code requirements to allow smaller home dimensions and less space between homes as part intentionally planned tiny home developments.
- Consider allowing churches to develop tiny homes as accessory uses on church properties.
- **Resource requirements.** No financial resources are required.

### Case Studies

The images are from a Lennar development in San Antonio. Churches throughout MN are now allowed to build tiny homes on their property. Congregations in St. Paul and Roseville have moved forward

## Production Strategies

### Manufactured Home Communities

Minot's manufactured home communities are important because they are the City's most affordable owner-occupied housing. Residents own their home, but pay rent for the land, utility availability and property maintenance. Investor purchases of parks can lead to huge rent increases, made possible because residents have trouble finding other options

Cooperative conversion involves paying market price for the property, investing in cost stabilization, and transferring ownership to the manufactured home owners themselves. From that time on, it will be long-term affordable.

If a cooperative ownership structure is established from the very beginning, it is less expensive to establish, and exploitative future rent increases by corporate owners will not occur. This requires an intermediary because the homeowners in a future cooperatively owned manufactured home community don't have the resources or preexisting organization to accomplish this

*Objective:* *Increase the long-term affordability and stability of mobile home community residents.*

### Strategy #1 - Cooperative Conversion

- Learn from the leaders who do this work. ROC (Resident Owned Cooperatives) USA is the nationalleader in this area. NeighborWorks Montana is their nearest partner organization, in Montana.
- Build relationships with manufactured home community owners and residents, identify/raise financial resources for cooperative conversion.
- **Resource requirements.** Public financial support would be needed.

### Case Studies

There have been many cooperative conversions in Montana. The City of Missoula has been especially proactive in facilitating cooperative conversions of their manufactured home parks. Bonnie's Place is their most recent success story. It was converted to a cooperative in April 2023.

## Strategy #2 - New Cooperatives

- Reach out and discuss partnership and collaboration with lead organizations in this arena.
- Provide leadership in financing the land acquisition and infrastructure provision. This is a timely action because it could provide an option for the manufactured home owners bought out in future flood buyouts.
- **Resource requirements.** Public capital investment is required, which can be fully or largely recouped.

## Case Studies

- Northcountry Cooperative Foundation is in the early stages of creating a new development manufactured home cooperative in Northfield, MN.
- Headwaters Economics is exploring how to establish a cooperatively owned manufactured home community for owners of manufactured homes displaced by flood buyouts in Glendive, MT.

# Production Strategies

## Subdivision Production

Homebuilding is a major source of housing growth, including for moderate income households, but it is occurring at a slow rate. Multiple factors hinder more rapid subdivision development, including high cost of development and inflated land price expectations.

Cities and developers have a mutual interest in reducing development cost. Any reduction in development costs increases the rate of production and reduces home prices. Reducing development risks also reduces development cost.

It can be rational for owners of land to overprice the land in hopes of future value increases. That's happening in Minot, resulting in land costs that is not reflective of what the land is worth under current market conditions.

*Objective: Increase the pace of new home subdivision development by reducing development costs and surmounting barriers.*
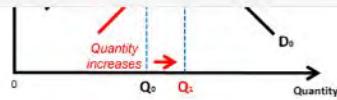
*Demand curve: as quantity increases, home prices decrease*

## Strategy #1 - Adjust Practices to Provide More Support to Development

- Public sector financing is less expensive than developer financing. Fund public infrastructure development, and recoup costs at the time of platting, or through special assessments. Clear communication with homebuyers is essential. Although they will have paid less for the home overall, special assessments can feel like an add-on.
- Make homes more affordable to buyers by forgiving some of the cost of infrastructure development.
- Streamline development review and reduce fees. This reduces risk and saves costs for developers. Fee reductions can be reimbursed through the initial year or two of property tax revenues.
- **Resource requirements.** Resources are required for some of these strategies, but if they result in an increase in home building they will be recouped through the growth in tax base.

## Case Studies

Many North Dakota cities pay for subdivision infrastructure and recoup those costs through special assessments—including Fargo, West Fargo and Grand Forks.

## Strategy #2 - Adjust Land Price Expectations

Minot can play a proactive role in resetting price expectations:

- Address expectations with information. Collect land sale price data from comparable locations. Communicate that land is abundant, and future value increases are not a given.
- Enter the market directly or through an intermediary to buy land at target prices, and resell for subdivision development.
- Resource requirements. Public capital investment is required, which will ideally be fully recouped. Entering a speculative activity like land acquisition entails risks associated with value changes.

## Case Studies

Saskatoon Land is a public authority in Saskatoon, Saskatchewan, that has established a practice of buying land in the periphery of the City for subdivision development at a large scale, thereby supporting a flow of new development, fostering regional growth, and improving housing affordability in the entire region.

# Trinity Hospital Rehabilitation

Trinity Health, Minot's largest medical provider, recently constructed a new medical complex in southwest Minot, which left its downtown hospital building vacant. The property is in a prime location for being reoccupied in order to support the vitality of downtown Minot.

This market study included a high-level, initial feasibility study on the rehabilitation of the primary downtown hospital building. It found that, while significant improvements are needed, the building dimensions and configuration are supportive of residential conversion.

*Objective: Reuse the downtown Trinity Hospital building for housing or other uses.*

## Strategy

- Encourage and support further investigation of the rehabilitation potential of the building.
- Be prepared to provide appropriately scaled public financial support, if the need is demonstrated.
- Because of its multiple benefits to the community, encourage state consideration of providing additional local public financing tools to support office-to-residential conversions.
- **Resource requirements.** Public financial support may be required, which would be recouped through greater future property tax revenues.

## Preservation Strategies

### Reposition Hotels for Workforce Housing

Over half of the hotel rooms in Minot were developed during the oil boom between 2010 and 2013, leaving the city with excess capacity in low to mid-tier hotels. Minot's below average hotel occupancy can lead to property disinvestment and management concerns. On the other hand, the hotel capacity may be beneficial for the upcoming influx of Sentinel Project workers.

Hotel-to-apartment conversions provides small and affordable housing units, which would meet important local needs. Most hotels are located in the C1, C2 and GMU zoning districts, which don't currently allow apartment conversions without a commercial element on the site

*Objective:* *Support the conversion of some existing hotels for short- and long-term rental housing.*

## Strategy

Support both hotel reinvestment and apartment conversions through:

- Increase zoning flexibility to allow residential redevelopment in some or all commercial zoning districts.
- Be prepared to consider appropriately scaled public financial support to support conversions, if the need is demonstrated.
- **Resource requirements.** Public financial support may be needed for some hotel to residential conversions.

## Case Studies

The proposed Fleck House project in Bismarck is at right. It involves an existing hotel rehab, and the development of a new apartment wing.

# Infill Housing in Flood Protected Areas

Numerous homes were purchased and demolished in the aftermath of the Mouse River flood, leaving vacant properties in desirable, centrally located Minot neighborhoods. As flood protection infrastructure is built, most of those properties are no longer at risk of flood damage.

Flood buyouts were completed using a variety of funding sources which in some cases limited future redevelopment. Redevelopment of infill sites benefits the City through property tax generation and support for local businesses.

*Objective: Foster new homes on vacant lots in newly protected, centrally located, Minot neighborhoods.*



*Example of infill housing*

## Zoning Code Filter

**ZONE**

- A
- CA
- CG
- DC
- DF
- MA
- P
- PUD
- R10
- R5
- RM10
- RM15
- RM20
- RM30
- RMH
- RT

**CLASS**

- PLATTED
- SERVICABLE
- UNPLATTED

### Vacant Properties Inventory



CG 17.2%    DC 0.2%
CA 3.3%     DF 0.4%
A 0.2%      MA 17.2%
RT 5.7%     P 0.2%
RMH 0.4%    PUD 6.2%
RM30 1.6%   R5 34.7%
RM20 0.2%
RM15 1.6%
RM10 0.5%
R10 10.4%

City of Bismarck, State of North Dakota, Esri, TomTom, Garmin, SafeGraph, GeoTec...    Powered by Esri

Parcels in the City of Bismarck that are vacant and potentially developable.

This map is intended as a reference for City departments and officials, the development community, and the general public. Parcels that are classified as "developable" may still require platting, permits, and/or services before any building permit may be obtained or construction may commence thereon. The inclusion of any parcels in this map in no way implies the intentions of any property owners to develop. This map is updated regularly, but

**Total Number of Parcels**

## 1,589

**Vacant Acreage Visible**

763.2

**Total Vacant Acreage**

2,041.8

*Example of infill housing*

## Strategy

- Undertake research to understand the development constraints on vacant flood buyout properties at a parcel specific level.
- Adopt a cluster development ordinance that supports placing clusters of homes on the parcels that allow it, with open space on the ones that don't.
- Explore whether a case can be made at the federal level for releasing development constraints for properties that no longer face risks of being flooded.
- **Resource requirements.** No financial resources are required for this strategy.

## Case Study

Bismarck created a vacant property dashboard using ArcGIS online to make it easy for developers and the public to find existing vacant lots for infill.



Vacant Properties Inventory

Zoning Code Filter
ZONE: A, CA, CG, DC, DF, MA, P, PUD, R10, R5, RM10, RM15, RM20, RM30, RMH, RT
CLASS: PLATTED, SERVICABLE, UNPLATTED

CG 17.2%  DC 0.2%
CA 3.3%  DF 0.4%
A 0.2%  MA 17.2%
RT 5.7%  P 0.2%
RMH 0.4%  PUD 6.2%
RM30 1.6%  R5 34.7%
RM20 0.2%
RM15 1.6%
RM10 0.5%
R10 10.4%

Bismarck

Total Number of Parcels
**1,589**

Vacant Acreage Visible    Total Vacant Acreage
2,041.8

Parcels in the City of Bismarck that are vacant and potentially developable.

This map is intended as a reference for City departments and officials, the development community, and the general public. Parcels that are classified as "developable" may still require platting, permits, and/or services before any building permit may be obtained or construction may commence thereon. The inclusion of any parcels in this map in no way implies the intentions of any property owners to develop. This map is updated regularly, but

# Location-Specific Strategies

## Downtown Living for Downtown Activation

Increasing downtown housing has a powerful positive effect on the vibrancy of downtown areas. It means

- More customer support for downtown businesses and restaurants.
- Increased pedestrian traffic and eyes on the street, which improves the safety of downtown.

Minot has placed a major emphasis on strengthening its downtown, setting a goal of adding 500 housing units downtown by 2040. The downtown Renaissance Zone was established in 2001 to bring attention and resources to revitalizing the downtown area. It has funded retail, office and residential development, as well as streetscape improvements.

*Objective: Support downtown vibrancy by increasing opportunities for people to live downtown.*

### Strategy

- Continue to seek out opportunities to build the residential community in and near downtown Minot, whether in the form of redevelopment, the rehabilitation of underutilized

Minot has placed a major emphasis on strengthening its downtown, setting a goal of adding 500 housing units downtown by 2040. The downtown Renaissance Zone was established in 2001 to bring attention and resources to revitalizing the downtown area. It has funded retail, office and residential development, as well as streetscape improvements.

**Objective:** *Support downtown vibrancy by increasing opportunities for people to live downtown.*

**Strategy**

- Continue to seek out opportunities to build the residential community in and near downtown Minot, whether in the form of redevelopment, the rehabilitation of underutilized commercial buildings, or re-occupancy of second and third story spaces in downtown storefront buildings.
- Utilize the Renaissance Zone financial resources to support developmentwhere the program criteria are met and the need is demonstrated.
- **Resource requirements.** If public financial support is provided, it wouldbe recouped through greater property tax revenues.

# New Developer Training

Minot's community of local developers was reduced by the influx of national developers during the oil boom, and then the reduced demand for housing after the oil boom. Increased developer capacity would yield more housing production, putting downward pressure on housing prices.

There are national organizations that provide developer training resources that can be used and modified as necessary to align with local regulations and processes. Courses are offered by the Certified Commercial Investment Institute, National Association of Home Builders, and Urban Land Institute. Minot State University could play a partnering role in establishing and delivering the developer training curriculum.

*Objective:* *Increase the pool of developers who can build Minot's future housing base.*

## Strategy

- Initiate conversations with national training providers and Minot State Universityto determine how a developer training curriculum might be designed and delivered.
- **Resource requirements.** A City contribution to the cost of program development and delivery could be considered.

Building Trades Unions (NABTU), the Home Builders Institute (HBI), local home builder associations (HBAs) and others.

*Objective: Foster workforce development in the building trades to gear up a homegrown workforce for the Sentinel project, and build a long-term workforce for housing development.*

## Strategy

- Establish collaborations with stakeholders such as Minot State University, Minot Association of Builders, Minot Public Schools, Minot Area Workforce Academy, and local labor organizations to design and implement workforce development and training programs that are tailored to the local context and needs.
- Promote the construction industry as a rewarding and viable career option for young people, women, minorities, and other underrepresented groups.
- **Resource requirements.** No financial resources are required for this strategy.

# Capacity Building Strategies

## Building Trades Workforce Development

A robust local workforce in the building trades contributes to lower housing production costs, which increases housing production.

Minot faces challenges in attracting and retaining skilled workers in the construction industry—including the aging of the existing workforce, competition from other sectors and regions, lack of awareness and interest among young people, and barriers faced by women and minorities.

Many local communities have implemented successful development and training programs in the construction industry, using programs offered by the North America's Building Trades Unions (NABTU), the Home Builders Institute (HBI), local home builder associations (HBAs) and others.

*Objective: Foster workforce development in the building trades to gear up a homegrown workforce for the Sentinel project, and build a long-term workforce for housing development.*

### Strategy

- Establish collaborations with stakeholders such as Minot State

# Fire Department Operational and Administrative Analysis

## Minot, North Dakota

### Draft



# CPSM®

# THE ASSOCIATION & THE COMPANY

## INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION (ICMA)

The International City/County Management Association (ICMA) is a 109-year-old, non-profit professional association of local government administrators and managers, with approximately 13,000 members located in 32 countries.

Since its inception in 1914, ICMA has been dedicated to assisting local governments and their managers in providing services to their citizens in an efficient and effective manner. ICMA advances the knowledge of local government best practices with its website, www.icma.org, publications, research, professional development, and membership.

## CENTER FOR PUBLIC SAFETY MANAGEMENT (CPSM)

The ICMA Center for Public Safety Management (ICMA/CPSM)was launched by ICMA to provide support to local governments in the areas of police, fire, and Emergency Medical Services.

The Center also represents local governments at the federal level and has been involved in numerous projects with the Department of Justice and the Department of Homeland Security. In 2014, as part of a restructuring at ICMA, the Center for Public Safety Management (CPSM) spun out as a separate company and is now the exclusive provider of public safety technical assistance for ICMA. CPSM provides training and research for the Association's members and represents ICMA in its dealings with the federal government and other public safety professional associations such as CALEA, PERF, IACP, IFCA, IPMA-HR, DOJ, BJA, COPS, NFPA, etc.

The Center for Public Safety Management, LLC, maintains the same team of individuals performing the same level of service that it had for ICMA. CPSM's local government technical assistance experience includes workload and deployment analysis using our unique methodology and subject matter experts to examine department organizational structure and culture, identify workload and staffing needs, and identify industry best practices.

We have conducted more than 400 such studies in 46 states and provinces and more than 275 communities ranging in population size 3,300 (Lewes, DE) to 800,000 (Indianapolis, IN).

**Thomas Wieczorek** is the Director of the Center for Public Safety Management.
**Leonard Matarese** serves as the Managing Partner for Research and Project Development.
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# SECTION 1. EXECUTIVE SUMMARY

The Center for Public Safety Management LLC (CPSM) was contracted by the City of Minot, North Dakota, to complete an independent analysis of the city's fire department, evaluate its current operational efficiency, and identify future fire service needs for strategic planning purposes. The principal focal points of the CPSM analysis as outlined in the city's Scope of Work include:

- Evaluate the Minot Fire Department (MFD) as related to its ability to provide service currently and meet the future needs of the City of Minot and its citizens per NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments*.

- Review the 2017 Public Protection Classification Report conducted by ISO; compare the report to current service levels of the MFD to determine if improvements can be developed to enhance the city's ISO rating.

- Evaluate operational and administrative staffing, fleet, facilities, service area characteristics, response to specialized incidents, fire prevention/community risk reduction components, training and education, emergency deployment capabilities, response time components, and community risk analysis.

- Utilize GIS mapping tools to analyze response performance of the department to primary response areas from its stations using existing street and roadway networks.

The MFD is responsible for providing services that include fire suppression, first response emergency medical services, technical rescue, community risk reduction, and response to disasters both natural and human-caused. These services are provided from five stations located in the city. Response is currently made through four engine companies, one ladder company, and one Battalion Chief.

The MFD is fortunate that it is signatory to a robust Technical Rescue and Hazardous Materials Response System. The Northwest Regional Response Team is an intergovernmental system of fire departments and agencies in North Dakota led by the North Dakota Department of Emergency Services, in which four geographic regions in the state provide technical rescue, hazardous materials, medical, ambus, search and rescue teams, and other specialty equipment and staffing assets in response to an emergency. As well, the system strives for standardization among participating departments of operational policies and procedures, training and education, facilities, dispatching services, and staffing. This system significantly benefits many departments such as the MFD, which do have technical rescue and hazardous materials assets but would require assistance on large-scale and complex incidents in accordance with the NFPA 1710 standard.

A significant component of this report is an All-Hazards Risk Assessment of the Community. The All-Hazards Risk Assessment contemplates many factors that cause, create, facilitate, extend, and enhance risk in and to a community. The service demands of the community are many for the MFD and include EMS first response, fire, and low acuity fire calls. The response district is made up primarily of single-family dwellings, which represent a low hazard; however, there are business, commercial, multifamily residences, and other target hazards that fall into higher classes.

The All-Hazards Risk Assessment of the Community also contemplates projected growth in the community (population and building), which will impact the MFD's ability in the future to respond to and mitigate emergencies in a growing commercial and residential community. In this report CPSM makes planning recommendations that include alternatives for new services based on the planned growth of large footprint and other industrial/commercial buildings in the city.

CPSM also evaluated the resiliency of the MFD, using the Center for Public Safety Excellence's Standard of Cover literature. Because of the current call volume, MFD's resiliency is not significantly stressed. However, response percentages are just below acceptance rates when both engine companies are committed to an incident and should be carefully evaluated.

The response time and staffing components discussion of this report are designed to examine the current level of service provided by the MFD compared to national best practices, specifically NFPA 1710. NFPA standards are national consensus standards and not mandates or the law. These standards are based on evolving technology and identified industry needs and provide strict guidance that has a focus on firefighter and community safety. Many cities and countries strive to achieve these standards to the extent possible without adversely impacting the financial health of the community. *It is important to note here that Minot is an island city, meaning the city is not contiguous with jurisdictions providing municipal services. Fire services automatic and mutual aid are not readily available, leaving the MFD to manage multiple calls and large incidents on their own. This should be considered when contemplating staffing and deployment of resources.*

A composite profile of MFD response times is featured in the following table. Data covers the period of October 1, 2022, to September 30, 2023. Key response time parameters established for dispatch time and the first arriving engine in NFPA 1710 at the 90th percentile are as follows:

- Event processed and units dispatched less than or equal to 64 seconds 90 percent of the time.

- Travel time shall be less than or equal to 240 seconds for the first arriving engine company to fire suppression and EMS incidents 90 percent of the time.

## TABLE 1-1: Average and 90th Percentile Response Time of First Arriving Unit

| Call Type | Average Response Time, Min. | | | | 90th Percentile Response Time, Min | | | |
|---|---|---|---|---|---|---|---|---|
| | Dispatch | Turnout | Travel | Total | Dispatch | Turnout | Travel | Total |
| Medical and other | 3.0 | 1.0 | 3.9 | 7.8 | 4.4 | 1.8 | 6.2 | 10.8 |
| MVA | 2.9 | 0.8 | 3.1 | 6.9 | 5.6 | 1.6 | 5.3 | 10.5 |
| **EMS Subtotal** | **3.0** | **0.9** | **3.9** | **7.8** | **4.4** | **1.8** | **6.2** | **10.8** |
| False alarm | 1.9 | 1.0 | 3.7 | 6.7 | 3.2 | 1.9 | 6.5 | 10.0 |
| Good intent | 1.6 | 0.8 | 4.1 | 6.5 | 3.0 | 1.6 | 7.1 | 9.6 |
| Hazard | 2.4 | 0.9 | 4.2 | 7.5 | 3.6 | 1.9 | 8.1 | 11.9 |
| Outside fire | 2.2 | 0.8 | 3.4 | 6.4 | 3.0 | 1.4 | 5.6 | 8.3 |
| Public service | 3.5 | 0.8 | 3.6 | 7.9 | 7.5 | 1.9 | 5.9 | 12.1 |
| Structure fire | 1.8 | 1.1 | 3.4 | 6.2 | 2.6 | 1.7 | 5.6 | 8.8 |
| Technical rescue | 4.4 | 0.6 | 3.6 | 8.6 | 12.2 | 1.4 | 6.1 | 16.3 |
| **Fire Subtotal** | **2.1** | **1.0** | **3.8** | **6.9** | **3.5** | **1.8** | **6.7** | **10.6** |
| **Total** | **2.8** | **0.9** | **3.8** | **7.6** | **4.3** | **1.8** | **6.2** | **10.8** |

Key takeaways from the information presented in this table and our analysis are:

- Dispatch times for EMS incidents do not meet the NFPA standard. *This aspect of response is out of the control of the MFD.*

- Dispatch times for fire incidents do not meet the NFPA standard. This is due partly to the time it takes to prepare the CAD system with multiple units from multiple stations, using automatic aid and closest station response prior to dispatching the call. *This aspect of response is out of the control of the MFD.*

- Turnout times for EMS incidents do not meet the NFPA standard. *This aspect of response is within the control of the MFD.*

- Turnout times for fire incidents do not meet the NFPA standard. *This aspect of response is within the control of the MFD.*

- Travel times to EMS incidents do not meet the NFPA standard. Travel times are dictated by the road network and accessibility to local streets, time of day when traffic congestion is heaviest, weather, and station location with respect to the incident. *Other than station location(s), this aspect of response is out of the control of the MFD.*

CPSM used GIS mapping to develop an analysis that benchmarks response from the MFD fire stations against NFPA response time standards. Included in this analysis is response coverage data of MFD <u>first-arriving</u> engines in Minot, measured against an arrival of 240 seconds; the arrival of the second fire suppression unit (engine or ladder) at 360 seconds; and the arrival of the initial alarm assignment (Effective Response Force) at 480 seconds. The results of this analysis are illustrated in the following figures.

- Response coverage at 240 seconds (first arriving engine) as benchmarked against the NFPA 1710 standard shows considerable coverage with the exceptions of areas in the southeast and southwest portions of the city. Mutual aid companies of Surrey and Burlington are too far away to impact this benchmark.

## FIGURE 1-1: Response Coverage at 240 Seconds
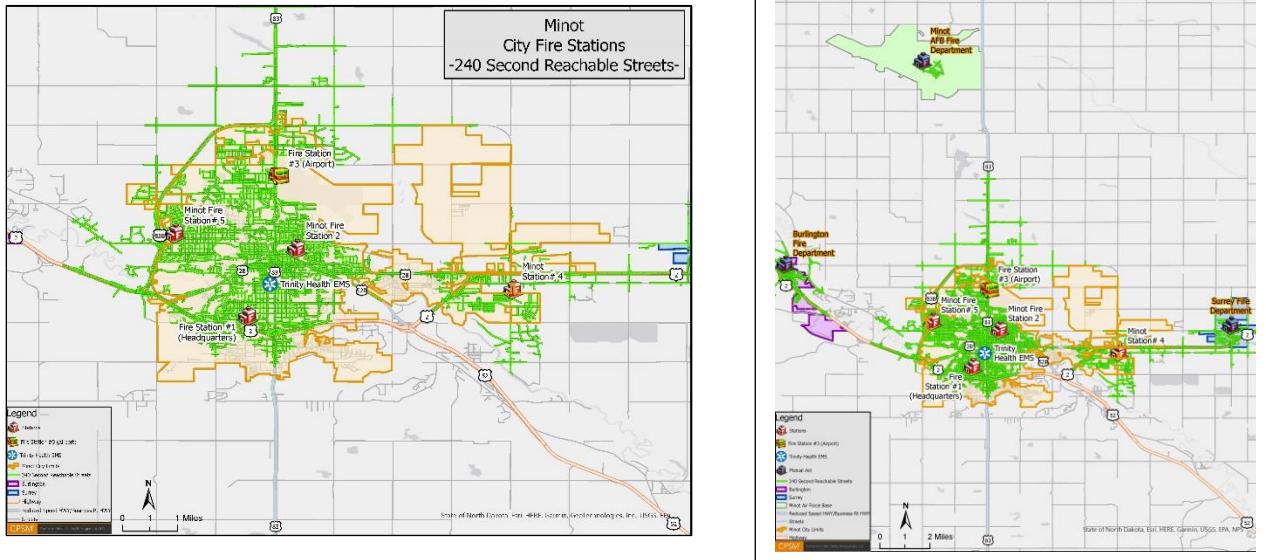
- The NFPA 1710 standard for the arrival of the second due fire unit (engine or ladder) to arrive on scene is 360 seconds. Analysis of this figure shows the majority of the built-upon area of the city is covered at the 360 second benchmark.

### FIGURE 1-2: Response Coverage at 360 Seconds
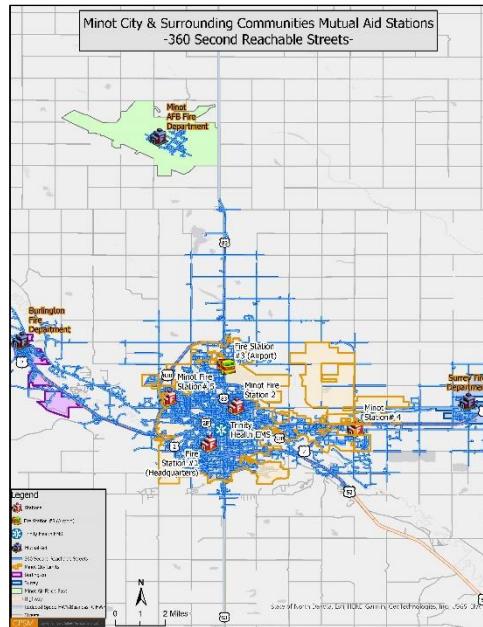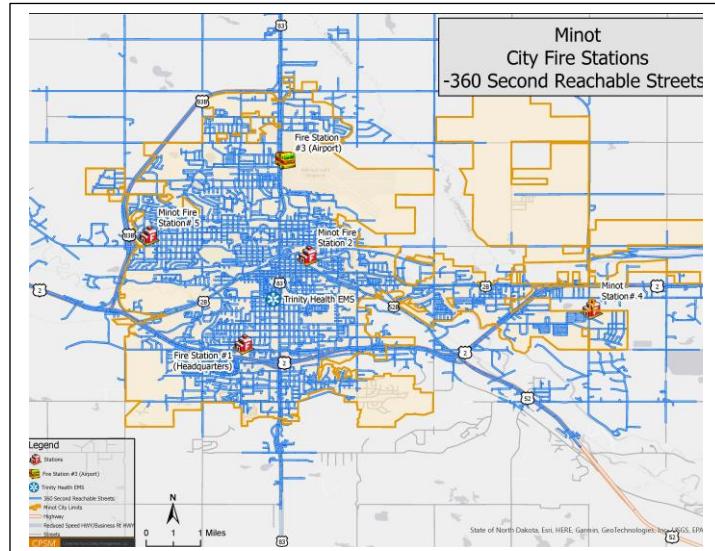


- The NFPA 1710 standard for assembling the initial first alarm assignment on scene for low/medium hazards is 480 seconds. This standard links to the incident critical tasking and the assembly of an Effective Response Force for the incident. The city is covered at the 480-seconds benchmark by the Minot fire stations. Mutual aid stations are too far away to meet the 480-second standard.

### FIGURE 1-3: Response Coverage at 480 Seconds
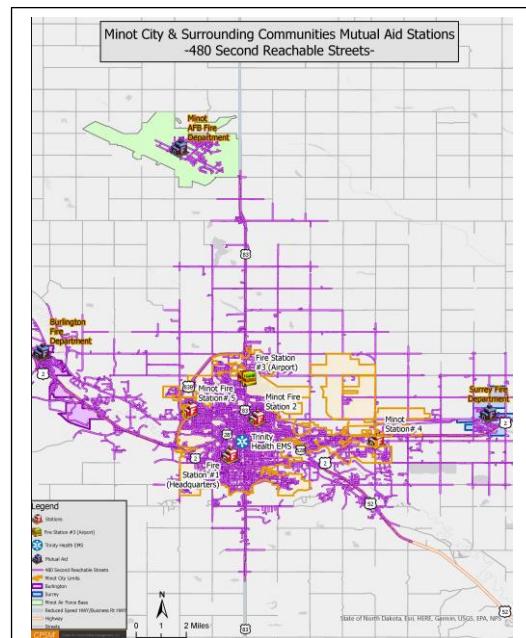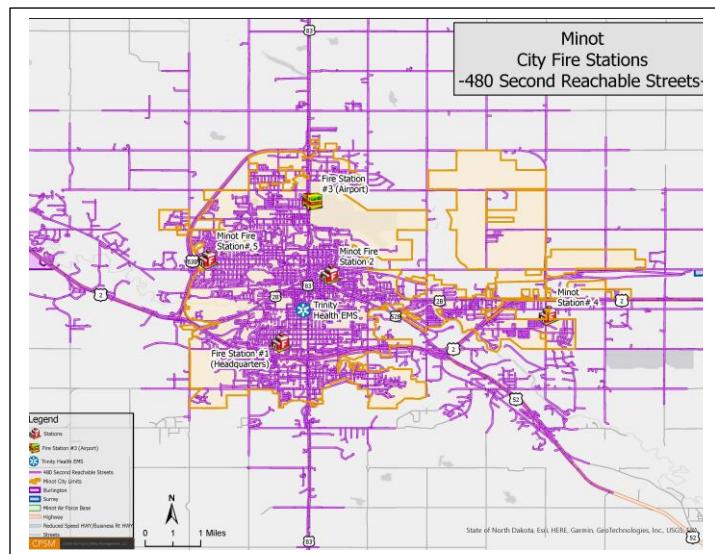
A comprehensive risk assessment, analysis of deployable assets, and response times are critical aspects of a fire department's operation. These analyses will assist the MFD in quantifying the risks that it faces, and the MFD will be better equipped to determine if the current response resources are sufficiently outfitted and positioned. The factors that drive the service needs are examined in this report and are linked to discussions regarding the assembling of an Effective Response Force and contemplating the response capabilities needed to address existing and future risks, which encompasses the component of critical tasks needed to be performed on the fireground.

CPSM took a detailed look at positions needed in Fire Administration as well as staffing and apparatus needed in Operations. An Assistant Chief, Fire Marshal, and Administrative Assistant are recommended for Administration; an Engine Company at Company 5, three firefighters, and three field incident technicians are recommended for Operations.

It is clear that a good number of senior officer positions will retire in the next four to five years. This presents an issue for the city because fire leadership positions and experience will be leaving the department. Succession planning will be needed to offset the loss of experience and leadership.

Minot is a Basic Life Support (BLS) department that works in conjunction with Trinity Health as its BLS/ALS transport provider for all EMS calls. A steering committee was established to facilitate good communications between the parties to provide the best outcome for patients and provide for continuous improvement of both agencies. *This is noted as a best practice by CPSM and should continue.*

An evaluation was also conducted of the department's ISO Report with recommendations on how to improve its PPC score. Minot Fire is one of only three departments in North Dakota with an ISO PPC of 2. The addition of operational apparatus and staffing could result in an increase in the PPC score.

Finally, interviews were conducted by CPSM staff of the City Manager, Fire Chief and staff, EDC Director, City Engineer, Police Chief, Finance Director, and Comptroller. CPSM appreciates their time and contributions to this report.

This report contains a series of observations and recommendations provided by CPSM that are intended to help the MFD continue to deliver services more efficiently and effectively. Most importantly is the discussion in the conclusion section of the report in which CPSM contemplates service delivery in terms of additional assets (ladder company, an additional engine company, as well as improvements in the community risk reduction function).

Recommendations and considerations for continuous improvement of services are presented next. CPSM recognizes there may be recommendations and considerations offered that first must be budgeted and processes developed prior to implementation.

# RECOMMENDATIONS

## *Administrative*
*(See pp. 15-24.)*
1. CPSM recommends that as the MFD continues with its strategic planning process that it be inclusive of the entire department and the community; that it reexamines current mission, vision, and values statements; that it incorporates measurable and obtainable goals and objectives; and that it provide for an annual review and report to the organization and community that outlines the plan's progress.

2. CPSM recommends the MFD continue to develop and then implement the comprehensive strategic plan that it is currently working on. The plan should incorporate recommendations contained within this report and include measurable and achievable administrative, operational, fiscal, and programmatic goals and objectives. CPSM further recommends this strategic planning document cover the near-, mid-, and long-term, and be updated as appropriate at the end of the mid-term period.

3. CPSM recommends as a planning objective that once the MFD accomplishes some of the strategic plan and staffing recommendations contained in this report, it should, with support from the City of Minot, consider undertaking the accreditation process.

## Organizational Guidelines and Policies

*(See pp. 24-29.)*

4. The MFD should continue its program of reviewing and updating the department's procedures and guidelines. In addition to the documents already completed and/or in development, attention should be given important procedures such as basic engine company and truck company operations, vehicle extrication operations, thermal imaging camera, and automatic external defibrillator use. The addition of other procedures covering additional operational, routine administrative, and training procedures should then follow.

5. The general set-up and organization of the SOG manual is an especially important consideration and the MFD must ensure that the manual/system is easy to utilize and that the necessary procedures are cross-referenced. If personnel are going to be required to learn and adhere to the department's procedures, then the format, organization, and filing of them must be user friendly, otherwise they will sit on a shelf, or on a computer drive, unused.

   □ The first operational procedure should identify and explain the components of the Written Communications System, including the use and organization of the SOG Manual and other components of the system, such as standardized forms.

6. The MFD is encouraged to establish a committee to review and assist with revisions to the SOP/SOG manual in the future. The committee should be comprised of members of each rank and include specific representation by a senior officer.

7. The MFD should institute a process for issuing <u>Training Bulletins</u>, <u>Safety Bulletins</u>, and <u>Informational Bulletins</u>.

## Community Risk Reduction

*(See pp. 29-35.)*

8. The MFD should fill the position of Fire Marshal, either internally or externally ASAP to provide direct, day-to-day oversight and supervision to the fire prevention staff. Recommend the Fire Marshal report directly to the Battalion Chief for Administration and Support.

9. Recommend that the MFD revise the Fire Prevention career path to make the following training and certification requirements:

   □ Fire Inspector I certification through the International Code Council prior to appointment. IAAI Fire Investigation Technician within one year.

   □ Fire Inspector II certification through the International Code Council within one year of appointment as a Fire Inspector I. Certification as an International Association of Arson Investigator (IAAI) Certified Fire Investigator (CFI) within two years of appointment as a Fire Inspector I.

   □ Fire Marshal, in addition to the above, requires certification as ICC Fire Marshal prior to appointment.

10. The MFD should implement an in-service company inspection program at residential, medical, manufacturing, and retail business establishments throughout the city.

   □ The MFD should provide appropriate training in conducting routine fire prevention inspections to all field personnel, particularly the Captains who will be responsible for supervising their companies.

11. MFD should continue to evaluate the new fee inspection program and its offset of current prevention costs. These fees may include inspections conducted by in-service fire companies.

12. Should the City of Minot implement the recommendations above, the MFD should complete a comprehensive review of the city's actual costs for providing fire prevention services. The review should include a full costing of providing all fire prevention services and reviewing the city's and national fire code(s)for updates.  The review should be designed to capture the full range of services provided and capture the scope of the new fees for operational permits and certain inspections.


## *Fire Education, Training, and Professional Development*
*(See pages 35-40.)*

13. The MFD should continue to develop and budget for officer training and development programs. To further enhance these programs the department should consider components that are competency-based on National Fire Protection Association (NFPA), International Association of Fire Chiefs (IAFC) and International Fire Service Training Association (IFSTA) standards, and that focus on contemporary fire service issues including community fire protection and emergency services delivery approaches, fire prevention practices, firefighter safety and risk management and labor/staff relations; reviewing, approving, or preparing technical documents and specifications, departmental policies, standard operating procedures and other formal internal communications; improving organizational performance through process improvement and best practices initiatives; and having a working knowledge of information management and technology systems.

14. The MFD should consider increasing the requirements for further professional advancement at various levels, such as the following:

   □ Senior Firefighter

      • Minimum of 30 college credits.

      • Advanced engine and truck company operations.

      • Tactics and Strategy.

      • Fire Instructor I.

      • Fire Officer I.

      • NFA Command and Control for Company Level Officers.

      • IMS Level 300.

   □ Captain

      • Possession of an associate degree.

      • Fire Instructor II.

      • Fire Officer II.

      • Fire Inspector I.

- NFA Command and Control of Incident Operations.
- Command and Control/ Blue Card Cert.
- Incident Safety officer.
- 1st. Leadership/Emergency Systems Management course.

□ Battalion Chief

- Bachelor's Degree.
- Fire Officer III.
- IMS Level 400.
- Health and Safety Officer.
- NFA Command and Control of Fire Department Operations at Target Hazards.
- 2nd Leadership / Emergency Services Management course.
- Fire Investigator.

15. The MFD should develop should institute written and practical skills testing and proficiency evaluations (non-punitive) as part of the department's comprehensive fire training program.

16. The City of Minot in consultation with the MFD should consider providing funding for the MFD to procure additional training props necessary to effectively and safely perform both basic and advanced/complex training evolutions for all personnel.

17. The MFD should make a concerted effort to send as many officers as possible to the National Fire Academy (NFA). This should include the Training personnel for various training-related classes, and the Fire Marshal and/or Fire Inspectors for fire prevention and community risk reduction classes. Any officers who meet the admissions criteria should be encouraged to enroll in the Academy's Executive Fire Officer Program.

18. The MFD should look for opportunities to provide periodic joint training between the department and various agencies that provide automatic/mutual aid to the city including in the evening and on weekends. Consideration should also be given to hosting large-scale exercises to test and evaluate regional interoperability.

## ISO Rating

*(See pp. 40-45.)*

19. CPSM recommends that the MFD address the deficiencies in the most recent ISO report as reviewed in this analysis. Special emphasis should be placed on section 561, Credit for Deployment Analysis (score 5.12/10) and section 571, Credit for Company Personnel (score 7.67/15). CPSM believes that the potential enhancements to staffing and deployment by the MFD, including the addition of Station 5, and the addition of a staffed, dedicated ladder truck, should make earning a coveted ISO Class 1 rating possible for Minot.

## Fleet

*(See pp. 45-49.)*

20. CPSM recommends that the City of Minot and MFD work collaboratively to have a complete and objective evaluation of the current condition of the MFD's apparatus fleet. If this evaluation indicates serious deficiencies in the fleet, then adjustments may need to be made to the apparatus replacement schedule.

21. CPSM recommends that the City of Minot and MFD explore options to obtain a quality pumper that can be utilized as a reliable spare. The only spare pumper the city has is in fair to poor condition. If it, or just one other unit, is out of service, the department has no spare

available. The MFD would be better served by having two spare pumpers available for when units are out of service and that can be used by off-duty personnel being recalled to work for major incidents.

## *Administrative and Operational Staffing*
*(See pp. 94-124.)*

22. CPSM recommends the position of Assistant Fire Chief be implemented to assist the Fire Chief with strategic planning and provide supervision to the three Operational and two Administrative Battalion Chiefs. Upon filling this position, the Fire Chef should evaluate the duties and responsibilities of the Administrative and Training Battalion Chiefs in order to reorganize the department as needed.

23. CPSM recommends the position of Fire Marshall be implemented and assigned to Fire Prevention/Community Risk Reduction. This position should be charged with the responsibility of managing and leading the fire inspection, plans review, fire investigation, and public education programs. This position should also take the lead on program design for Community Risk Reduction programs and performance measures focused on reducing the risk of fire and improving citizen and firefighter safety.

24. CPSM recommends the addition of three firefighters to be assigned to Ladder 5 to maintain a minimum of four firefighters on this apparatus. This is consistent with NFPA 1710 and as well will support tasks associated with ladder company operations. The department should also establish a strategic and budgetary plan to meet the staffing requirements of NFPA 1710 and an Effective Response Force for the four building types for the department.

25. CPSM recommends the establishment of an additional Engine Company to be assigned with the current Ladder Company 5 to form a two-apparatus company. This will allow personnel on Ladder 5 to conduct ladder company operations and not have to function as a primary engine. This will also provide an additional company that will increase resiliency and prevent all stations being vacant on every structure fire response.

26. CPSM recommends MFD consider future planning for Field Incident Technicians to enhance and support safety and command-and-control capabilities of the Operational Battalion Chiefs; this would also serve as a key component of a succession plan to prepare members to take on future leadership roles in the department.

27. CPSM recommends the addition of an Administrative Assistant position to support the new Assistant Chief and Fire Marshal's Office. This position will assist with the demands of paperwork on the inspectors, thereby giving them more time in the field.

## *Operational Planning Considerations*
*(See pp. 125-141.)*

28. CPSM recommends that the Fire Chief begin working with city leadership to begin a succession plan, given that several command level retirements will occur in the next four to five years.

29. Establish a process to improve turnout times for fire and EMS calls. The turnout time should align with current NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Departments*, 2020 Edition.

30. CPSM recommends the Fire Chief work on call processing times with the 911 Center.

31. Continue the Steering Committee with Trinity Health with fire department stakeholders; this is viewed by CPSM as a *Best Practice*.

32. CPSM recommends engaging Minot Rural Fire Department (MRFD) and Minot Air Force Base to strengthen some of their Automatic Aid and Mutual Aid Responses. MAFB and MRFD (a combination company) are the closest assistance for MFD in the event of a large incident.

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# SECTION 2. AGENCY REVIEW & SERVICE DELIVERY

## CITY OF MINOT OVERVIEW AND GOVERNANCE

The City of Minot is located in and the county seat of Ward County, North Dakota, which is in the in the state's north-central region. It is most widely known for the U.S. Air Force base approximately 13 miles north of the city. Founded in 1886 during the construction of James J. Hill's Great Northern Railway, Minot is also known as "Magic City," commemorating its remarkable growth in size over a short time.

### FIGURE 2-1: City of Minot
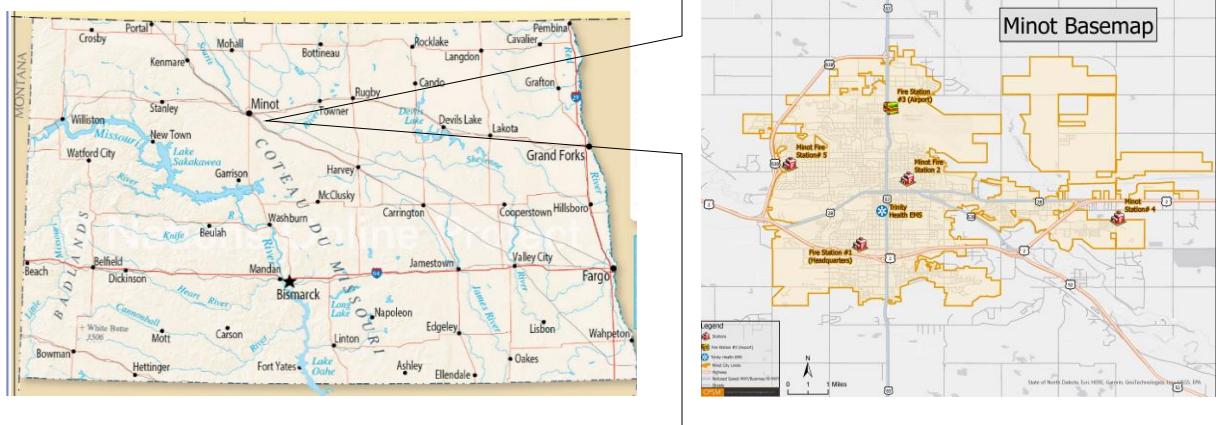


Minot is the state's fourth-most populous city and a trading center for a large part of northwestern North Dakota, eastern Montana, southwestern Manitoba, and southeastern Saskatchewan. The official 2020 census population was 48,377 which represents a 18.3 percent increase over the 2010 population of 40,888.[1] According to the U.S Census Bureau the estimated 2022 population was 47,759 which represents a decline of 1.3 percent.[2] The city's population has increased by 32.3 percent since 2000.

The city encompasses an area of 27.26 square miles[3] and has a mix of commercial, industrial, residential, recreation, and rural areas. The 2020 area of the city was 9.83 square miles (+56.4 percent) larger than the 17.43 square miles at the 2010 Census.[4] The city's population density in 2020 was 1,775 persons per square mile.[5] This represents a significant decease from the 2,346 persons per square mile in 2010.[6] This decrease in density is mainly attributable to the city's area increasing by 56.4 percent since the previous Census.

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1. https://www.census.gov/quickfacts/fact/table/minotcitynorthdakota/PST045223
2. ibid
3. ibid
4. ibid
5. ibid
6. ibid

Minot is the principal city of the Minot micropolitan area, a micropolitan area that covers McHenry, Renville, and Ward counties and which had a combined population of 77,546 at the 2020 census.

The following figure shows the city's population and percentage increase for each Census from 1970 through 2020 plus the estimate for 2022. Projections show that the city will continue to experience significant growth, both residential and commercial, over the next several years. New development is projected to be about 60 percent commercial and 40 percent residential.

**FIGURE 2-2: Minot Population Growth, 1970–2022**



**Minot Population**

| | 1970 | 1980 | 1990 | 2000 | 2010 | 2020 | 2022 |
|---|---|---|---|---|---|---|---|
| Minot Population | 32,390 | 32,843 | 34,544 | 36,567 | 40,888 | 48,377 | 47,759 |

Percentage increases shown: +1.7%, +5.2%, +5.9%, +11.8%, +18.3%, -1.3%
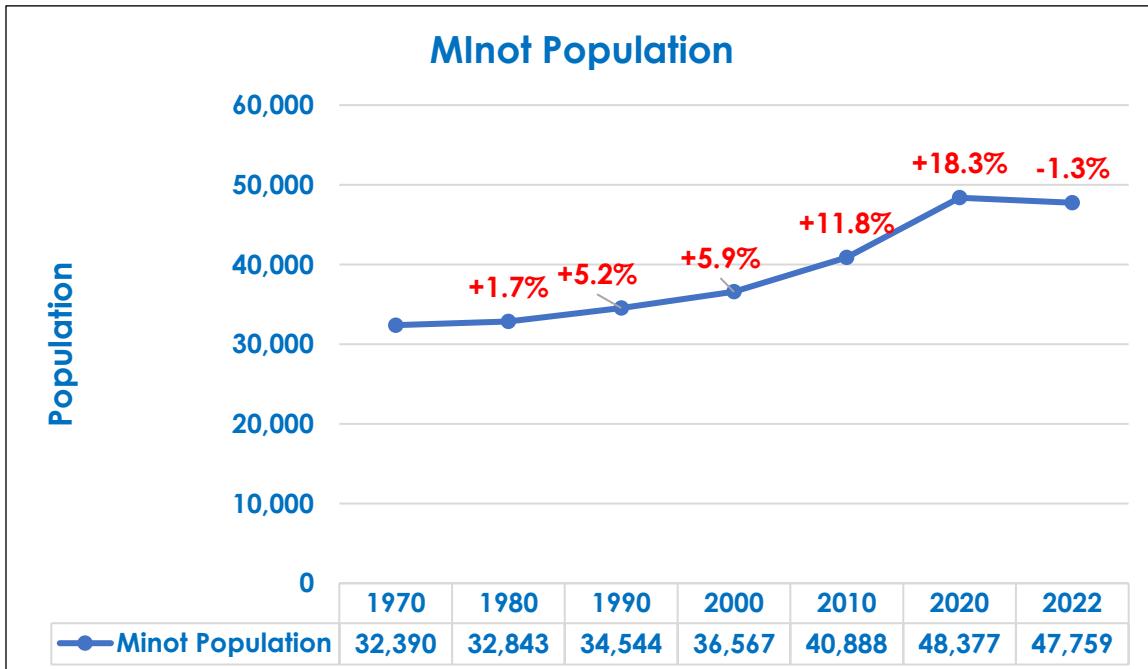


Minot's economy predominantly centers around the Minot Air Force Base approximately13 miles north of town, making the city's economy more robust than other cities of its size due to its large service area.

The city's largest employer group of more than 12,000 is employed by the Air Force at the base. Trinity Health Medical Center and its supporting operations, which together employ more than 2,800 people, is the largest in-city employer.

The Minot Public Schools employ more than 1,000 people while Minot State University employs more than 500 additional.

In the walkable downtown and surrounding areas, one can find multiple new restuarants and shops. Minot's arts community includes an art museum, a symphony orchestra, an opera company, a city band, several dance and theater troupes. More than 40 organizations claim membership in the Minot Area Council on the Arts. Minot has been the host to the Norsk Hostfest, North America's largest Scandinavian-American festival. Scandinavian Heritage Park, which features remembrances and replicas from each of the Scandinavian countries is located in Minot. The North Dakota State Fair is held annually in July in Minot.

Beginning in 2001, the City of Minot began designating parts of downtown Minot as a Renaissance Zone to support redevelopment of the once-bustling economic and social activity center of the city, which had generally been deteriorating since commercial relocation began several decades ago. Based on its population, the city has an official count of 40.5 blocks designated in the Renaissance Zone as of 2020. A total of 1.5 blocks are not designated. This number can increase as the population grows or whenever the city declares a block complete and removes it from the official map. A total of 17 blocks have been declared complete and have been removed from the official Renaissance Zone map.

## FIGURE 2-3: Minot Downtown/Renaissance Zone
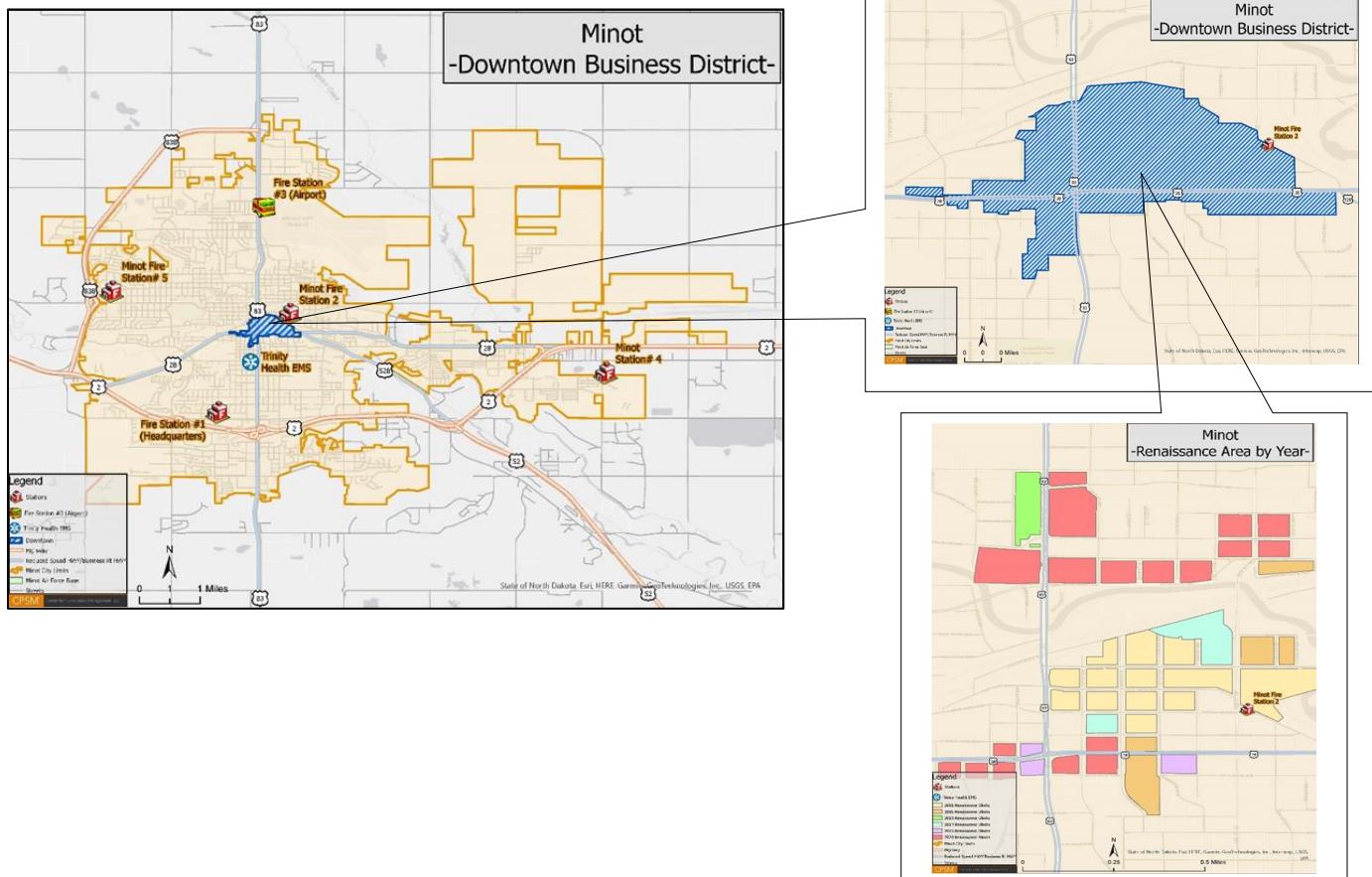
The Minot Park District operates 17 parks and natural open spaces, with various facilities that range from large urban and community parks to mini-parks including Roosevelt Park Zoo, which is one of the top zoos in the region.

Minot utilizes the council–manager system of government. The council is made up of seven members, six alderman and one mayor. As Mayor, he or she chairs the City Council, but only casts a vote to break a tie. The City Council appoints the City Manager to carry out the governing policies and ordinances established by the council, and to oversee the day-to-day operations of the city.

The City Manager reports directly to the City Council, with major functional offices and departments reporting to the City Manager. The major departments and offices reporting to the City Manager are illustrated in the organization chart for the city as shown in the following figure.

**FIGURE 2-4: City of Minot Organizational Chart**



## City of Minot Organizational Chart

*Library Director reports directly to Library Board

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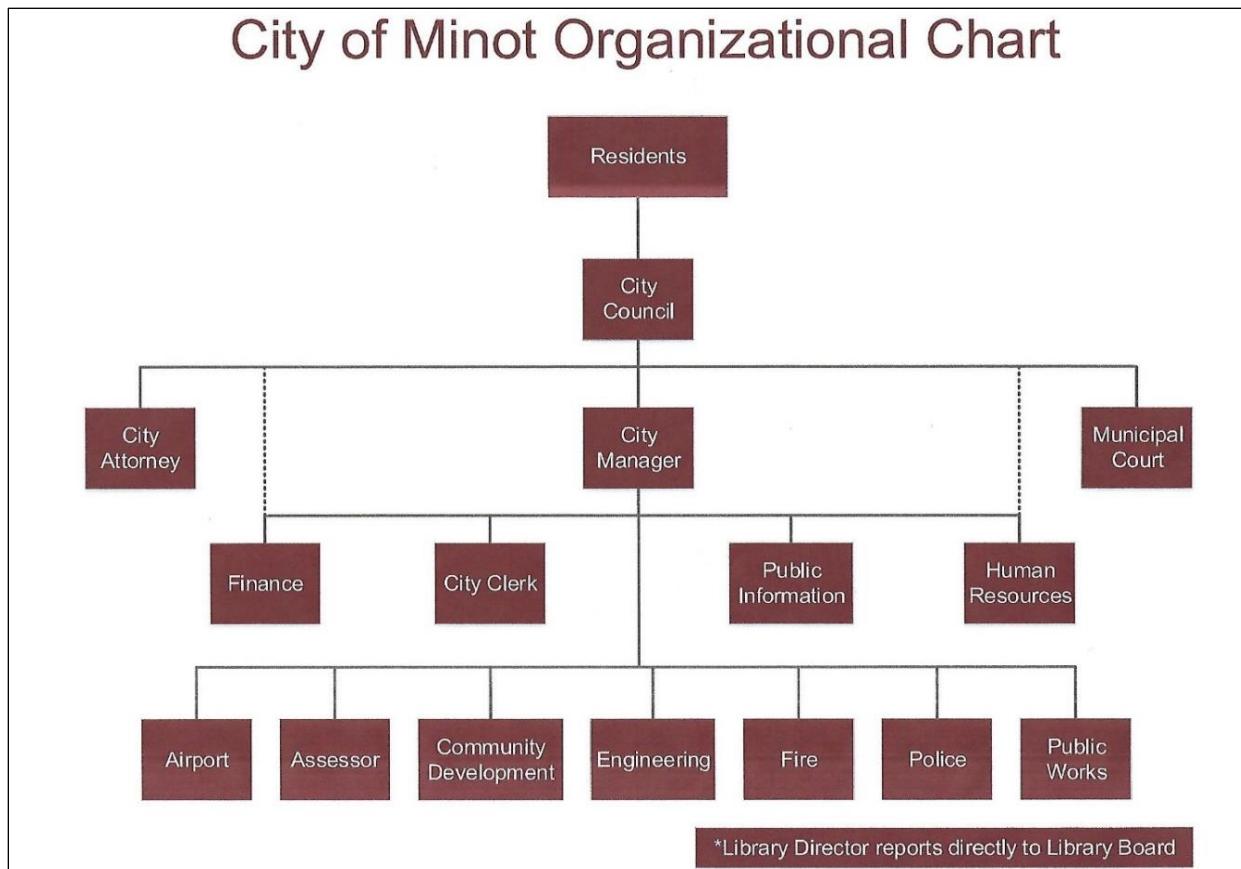
# MINOT FIRE DEPARTMENT BACKGROUND, GOVERNANCE, AND ADMINISTRATION

The City of Minot's first fire company was organized Sept. 13, 1895. It is unknown where the fire wagon was housed at the beginning. It was a volunteer company with firefighters paid by the call. The team of horses that pulled the wagon was also paid.[7] By 1908. the Fire Department had its own fire horses and two paid personnel, the Fire Chief and a driver.[8] In 1931, the Minot Fire Department became a fully paid department.[9]

In January 1965, the department opened its first substation, named Station 2. This station is located at 3rd St. and 2nd Ave. Southeast. In November 1980, the department opened its second substation, Station 3, at the Minot International Airport. In March 2016, the department opened its third substation, Station 4, at 1505 55th St. Southeast. Finally, in August 2023, the MFD opened its fourth substation, Station 5, at 2611 4th Ave. Northwest.

Today, the department operates 24/7 from five stations located strategically throughout the city. Minimum on-duty staffing is 17 personnel.

**FIGURE 2-5: Minot Municipal Boundaries and MFD Stations and Trinity EMS**



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7.https://www.minotnd.gov/174/History#:~:text=The%20City%20of%20Minot's%20first,firefighters%20paid%20by%20the%20call.
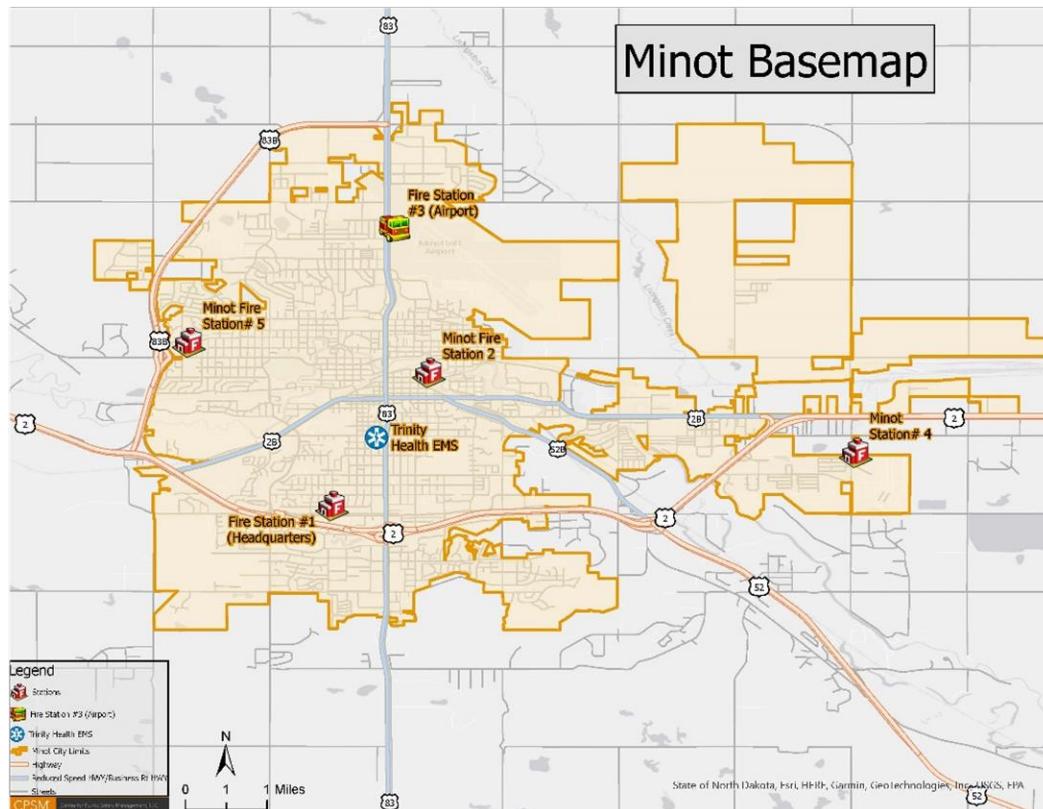
8. ibid

9. ibid

Chapter 13 Fire Prevention and Protection, Article I1, Division I of the Minot Municipal Code establishes the Fire Department of the city. Additional subsections of Chapter 13 provide for qualifications of firefighters, the powers and duties of the Fire Chief, as well as the adoption of the International Fire Code and amendments made to it.

The Minot Fire Department (MFD) is a full-service, career public safety organization. The department's total authorized strength is 71 personnel. Of these, 6 to the department's three operational shifts. The remainder of the personnel are assigned a daywork schedule in administration or support services. The following figure illustrates the organizational chart of the MFD.

### FIGURE 2-6: MFD Table of Organization
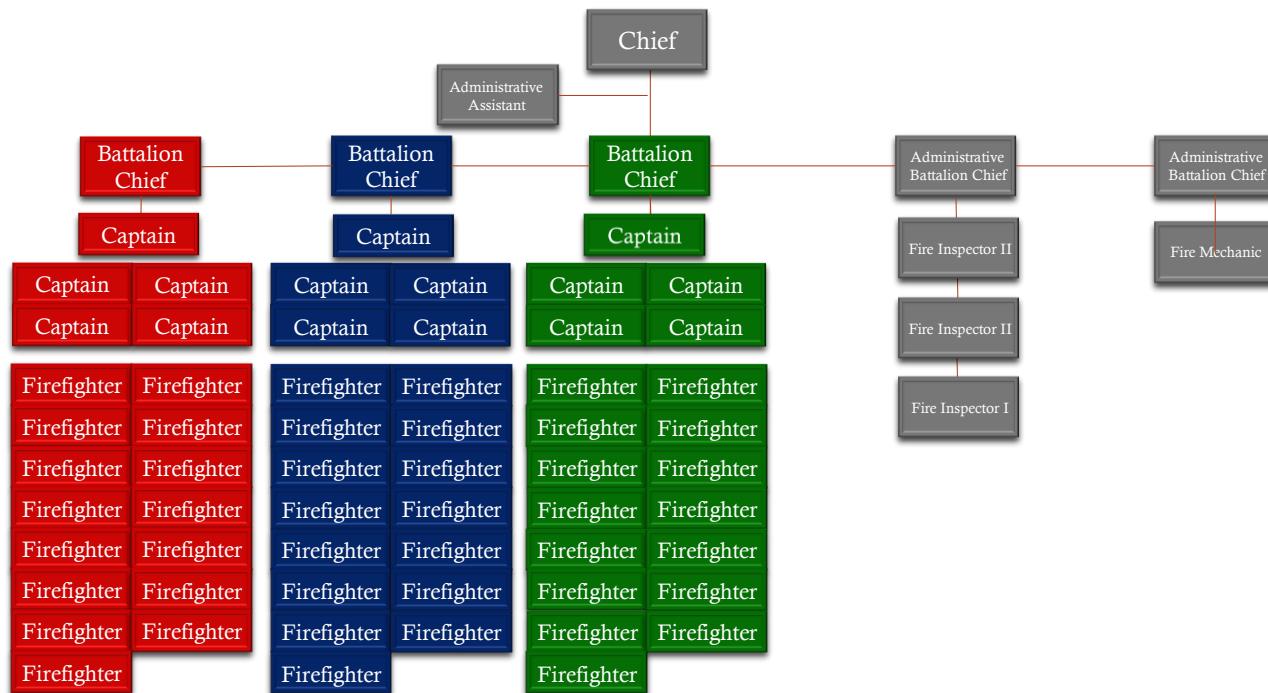


In 2002, the MFD began receiving funding for equipment in relation to regional response for northwest North Dakota for hazardous materials and domestic preparedness-type incidents incidents. This grew to include collapse rescue in 2004. The department continues to provide regional special operations response capabilities, including technical rescue, to northwest North Dakota today.

The MFD has established a mission statement on its web page and also displayed on its apparatus. The stations also have a vision statement and values listed. The MFD is to be commended for having these posted in the stations.

## *MFD Mission Statement Displayed in Stations and on Apparatus*



The mission statement should provide the very foundation for the organization, its operations, and why it exists. The mission statement provides broad direction that everything else that the organization does is going to be built upon.

Services of the MFD include:

- Fire protection and suppression.

- Emergency medical services (EMS), first responder at the Basic Life Support (BLS) level.

- Pre-fire/incident planning.

- All-hazards public education.

- Fire cause and origin investigation.

- Multidisciplinary technical rescue for northwest North Dakota.

- Ice rescue.

- Hazardous materials response and mitigation (leak and spill/operations response) as host of the Regional Hazardous Materials Response Team for northwest North Dakota.

- Tactical EMS support to the Minot Police Special Operations Response Team.

- Dive rescue

- Automatic/mutual aid to neighboring jurisdictions.

The organizational structure of any organization or entity, whether public or private, establishes and illustrates the important hierarchical relationships between various people, supervisors/subordinates, levels, divisions, and bureaus within the organization that allow it to function properly, operate effectively and efficiently in its daily operations or the pursuit of its mission. It also helps to clearly define the organizational chain of command from top to bottom, this is an

especially important consideration in a quasi-military public safety organization such as the fire department where all personnel receive and carry out orders. Effective communications in any organization, but especially public safety agencies, are essential and a cohesive chain of command allows everyone to know exactly who they report to, and/or who reports to them.

When discussing the organizational structure of fire departments, the normal perspective is to focus on the operational aspects of the department. However, in order for a fire department to be able to perform its key mission(s)—response to and mitigation of a wide range of emergency incidents—there needs to be a sufficient support system in place. The size and complexity of this support system should be dictated by the size and complexity of the community and its fire department.

**Fire Administration** is the administrative and management branch of the department where the day-to-day operations of the department are coordinated and managed. This includes finance, human resources, planning (short-term and strategic), records management, fire prevention, training, and intergovernmental liaison functions.

The organizational structure of the Minot Fire Department is somewhat limited, which is not unusual in smaller departments. As currently configured, the MFD is headed by a Fire Chief who is the department's highest-ranking officer and who serves as the administrative and operational head of the department. The Chief is appointed by the City Manager. The Chief, who has held the position for about eight years, is a professional officer and effective advocate for the organization while carrying out the mission of city leadership. The Fire Chief has been successful, with the help of department members in bringing a higher level of service and effectiveness through the creation of a high-performance organization. She follows a daytime work schedule; however, as the Fire Chief she is available 24/7 when needed.

The Chief is assisted by five Battalion Chiefs, three of whom serve as operational shift commanders, and two who are assigned to administration. The two administrative Battalion Chiefs also work a daytime schedule. The department previously had an Assistant Fire Chief who served as the second in command of the department. That position was reconfigured during a previous reorganization of the department. Overall, the chief officers form a capable, well-respected, and effective command and management team. The chiefs were passionate about their agency and the community. The department members, under the leadership of the command staff, work diligently to meet the needs of the community. The City of Minot is to be commended for supporting this strong management team, with its member firefighters, who together are guiding the department forward.

The modern fire chief is not only a leader, providing vision for the department's direction, they also oversee all administrative, management, and emergency incident operations and roles with the department. They are also expected to work effectively with other city leadership and department heads, members of the public, and others to create a safer community. The MFD's chief officers perform a wide variety of leadership, technical, administrative, management, and supervisory work in planning, organizing, directing, and implementing fire prevention, fire suppression, and emergency medical services operations to prevent or minimize the loss of life and property by fire and emergency medical conditions. Highly successful contemporary chief officers _manage things_ and _lead people_.

**FIGURE 2-7: Contemporary Chief Officer Roles**
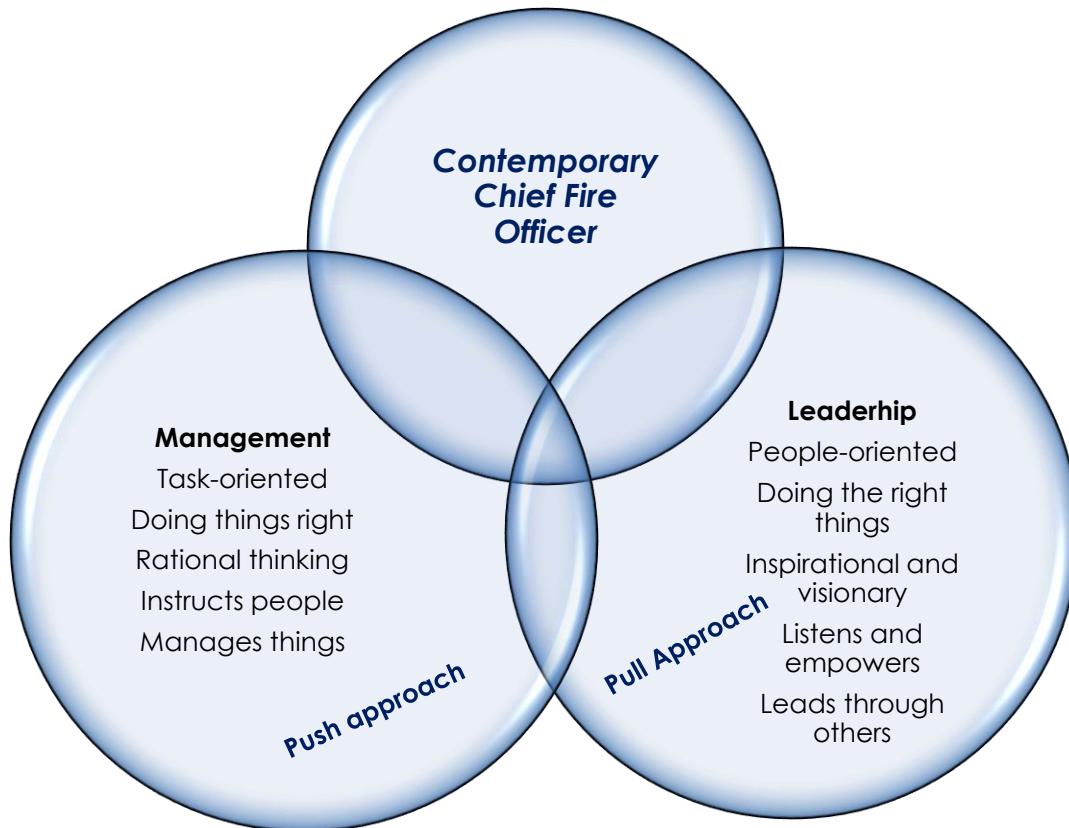


The chief officer's job is dynamic. The chiefs are responsible for carrying out the day-to-day tasks of running a firefighting organization. Their main responsibilities largely depend upon the size of the fire department. Such tasks include supervising other officers and firefighters at an emergency scene and recruiting, training, and equipping them for their respective duties. In smaller departments such as Minot, the chiefs are often more hands-on and must take on multiple tasks and responsibilities themselves or do without certain programs. Regardless of size of the department, the chief officer typically has two core duties:

■ Lead and manage day-to-day operations and ensure their department is fully operationally prepared for its core mission(s).

■ Ensure the most successful outcome possible to emergency incidents they are called upon to mitigate.

## FIGURE 2-8: Forces Impacting 21st Century Fire and Emergency Services



Forces impacting the 21st Century Fire and Emergency Services
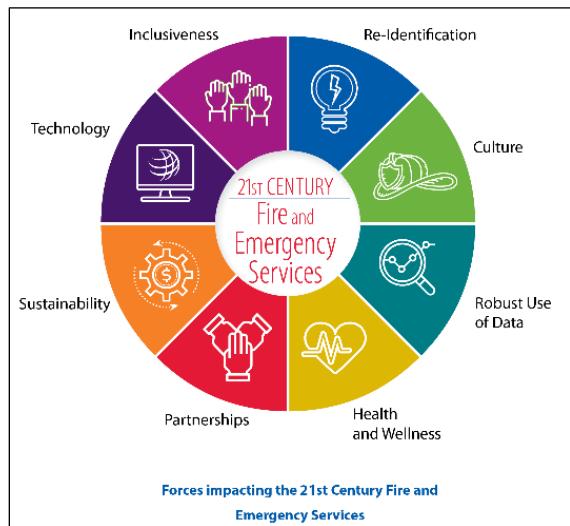
Depending upon local needs and the organization, the chief may also be involved in fire prevention, fire inspection, disaster preparedness, emergency medical services, and related disciplines, as well as administrative duties such as budgets and personnel issues, research into safety and regulations, and liaison with other agencies. While many of the fire chief's duties and responsibilities are similar to those of their predecessors, the issues today are much different, more complex, and ever-evolving. These new challenges often take the chiefs into unfamiliar territory as they try to navigate the changing dynamics of the world and their department.

MFD has 71 authorized positions in the department. The Fire Chief is the only non-fire association member. Some departments of similar size to MFD have either an Assistant or Deputy Chief who serves as a clearly defined second in command for the department. Based on the job description, Assistant Chiefs report to the Fire Chief and may be responsible for personnel matters, supervision, overseeing budgetary expenditures, assisting with the development of policies and procedures, and the myriad administrative and management tasks that are associated with running a significant sized, modern, full-service emergency services provider. In the absence of the Fire Chief, the Assistant Chief will assume the duties of Fire Chief.

The MFD has a single Administrative Assistant who provides a wide range of support to the Fire Chief, Battalion Chiefs, and the department as whole.

Officers and various members of the department have assumed responsibility for ancillary duties to assist with the management, oversight, and/or coordination of activities or program areas. These are in addition to their normal emergency response duties. Many of these duties, particularly those that involve training or program coordination, may at times require additional training and/or certifications.

During interviews with various stakeholders within the MFD there was a general sense that the department's current organizational structure is no longer robust enough to keep up with the challenges the department is facing with the current and forecasted levels of development that the city is experiencing. Most communities, even those where growth is flat, are experiencing increased requests for services. These requests are amplified in communities with continued significant growth. As the number of 911 calls increases, personnel who have been performing important administrative or support duties that are ancillary to their primary emergency response duties may find they have less time to accomplish these tasks and additional administrative staff members may be needed.

Throughout this report, CPSM will make several strategic recommendations regarding the department's organizational structure and staffing. It is important to stress that these recommendations primarily focus on the level of resources and staffing provided, which CPSM believes will be necessary for the department to continue to keep up the high service level expectations of a growing community. To that end, as the City of Minot continues to grow and develop, MFD will also need to grow and evolve to keep pace with the increased numbers and

diversity of the calls for service. This includes the long-term need to expand the department's administrative and operational support staffing and functions. Like many cities, an ongoing evaluation of staff is needed to keep pace with the growing demands of administrative and operational needs.

Areas where CPSM believes that the department will need to enhance its administrative staffing to meet the needs of the department with full-time positions dedicated to these programs are Assistant Fire Chief, Fire Marshal, and Administrative Assistant. The need for the Assistant Chief has already been discussed.

**A detailed recommendation for staff needs is detailed in Section 4 of this document.**

## STRATEGIC PLANNING

A fire and EMS department strategic plan encompasses both a baseline gap analysis of the organization and a "road map" to develop and achieve a planned response to specific factors which will or potentially will affect the organization's mission, or in the case of a public safety agency, service deliverables. A Fire and EMS Strategic or Master Plan identifies the purpose of an organization, what the organization will do, and how it will perform though goals and measurable objectives. It specifies baseline capabilities, real or potential constraints that may exist or be placed on the organization and delivers a set of goals and requirements to achieve identified objectives and desired outcomes. This process can be challenging because strategic planning requires an honest assessment of the department's current state of performance and a realistic understanding of ways to improve.

The development of vision and values must have input from the entire organization. Defining clear goals and objectives for any organization through a formal strategic planning document establishes a resource that any member of the organization, or those external to the organization, can view and determine in what direction the organization is heading, and as well how the organization is planning to get there.

The strategic planning process addresses the following:
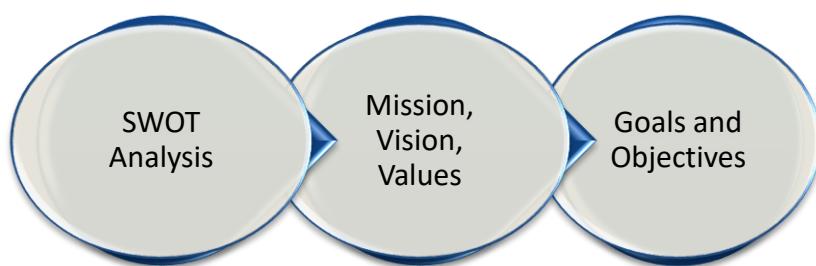


As part of the strategic planning process, a review of the department's current mission, vision, and values statements should be undertaken, followed by an update of those statements utilizing department-wide input to align more clearly with current and anticipated future perspectives. With department-wide input, the department can then develop goals and

objectives that align with the SWOT analysis, and the updated mission, vision, and values, guided by a gap analysis that should be conducted.

Suggested steps for a successful approach to the strategic planning process include:[10]

**Purpose-mission:** This is the statement that describes why an organization exists. This statement should describe what customer needs are intended to be met and with what services. The organization should agree on what the mission statement/purpose is, understanding that this will evolve over the years as the organization evolves.

**Stakeholder involvement:** Developing a strategic plan often involves engaging with various stakeholders, including community members, firefighters, and other relevant parties. This engagement fosters a sense of inclusivity and ensures that the plan reflects the diverse perspectives and needs of those it serves.

**Communication and transparency:** Developing a strategic plan provides an opportunity for transparent communication about the goals, priorities, and future direction of the fire department. This transparency helps build trust among team members and the community.

**Selection of goals and objectives the organization must meet to accomplish its mission:** Goals and objectives are general statements about what an organization needs to accomplish to meet its purpose, or mission, and address major issues it faces. This requires organizational input.



Defining clear goals and objectives for any organization through a formal strategic planning document establishes a resource that any member of the organization, or those external to the organization, can view and determine in what direction the organization is heading, and as well how the organization is planning to get there.

In a strategic plan, it is essential that clear and achievable goals and objectives for each program area and service deliverable are developed. Each program area must then (1) define its goals; (2) translate the goals into measurable indicators of goal achievement; (3) collect data on the indicators from those who have utilized the program; and (4) compare the data from program participants and controls in terms of goal criteria.[11] Objectives should be **SMART** (**S**pecific, **M**easurable, **A**mbitious/**A**ttainable, **R**ealistic, and **T**ime-bound). Additionally, these goals should link back to the city's fiscal planning goals and the council's strategic goals and initiatives.

**Identify specific approaches or strategies that must be implemented to reach each goal:** The strategies are often what change the most as the organization eventually conducts more robust strategic planning, particularly by more closely examining the external and internal organizational environments. This requires organizational input.

**Identify specific actions to implement each strategy:** Specific activities each division or major function must undertake to ensure it is effectively implementing each goal must be identified. Goals and objectives should be clearly worded to the extent that staff and the community can

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10. McNamara, C. (1996-2007), *Basic Overview of Various Strategic Planning Models*. Adapted from the *Field Guide to Nonprofit Strategic Planning and Facilitation*. (Minneapolis, MN: Authenticity Consulting LLC.)
11. Starling, *Managing the Public Sector*, 287.

assess if the goals have been met or not. Ideally, top management develops specific committees that each have a work plan or set of objectives. This requires organizational input.

**Resource Allocation:** A strategic plan helps in identifying and prioritizing resource needs. The fire chief can analyze existing resources, identify gaps, and allocate resources efficiently to meet the department's strategic goals.

**Monitor and update the plan:** Regularly reflect on the extent to which the goals and objectives are being met and whether action plans are being implemented. Perhaps the most important feedback is positive feedback from customers, both internal and external. This requires an annual review and report to the organization and community on each goal and objective and how the strategies to accomplish the goal are progressing.

**Leadership Development:** The strategic planning process can be an opportunity to identify and nurture leadership within the fire department. It allows for the identification of key personnel who can play crucial roles in implementing the strategic initiatives.

The Chief has been working on the development of a long-range strategic plan for the MFD covering the years 2024–2029. While it is still in draft form, CPSM was provided the opportunity to review the plan. We found it to be well done; it is being developed utilizing a collaborative community-based approach. **The Chief is to be commended for initiating and leading this process.** If the recommendations contained within this report are incorporated into the plan it will provide the city and MFD with an excellent road map for the department moving forward.

# ACCREDITATION



Accreditation is a comprehensive self-assessment and evaluation model that enables organizations to examine past, current, and future service levels and internal performance and compare them to industry best practices. This process leads to improved service delivery.[12]

The Center for Public Safety Excellence's (CPSE) accreditation program, administered by the Commission on Fire Accreditation International (CFAI) enables fire and emergency service agencies to compare their performance to industry best practices in order to:

- Determine community risk and safety needs and develop community-specific Standards of Cover.

- Evaluate the performance of the department.

- Establish a method for achieving continuous organizational improvement.[13]

Particularly for emergency services, local officials need criteria to assess professional performance and efficiency. The CFAI accreditation process provides a well-defined, internationally recognized benchmark system to measure the quality of fire and emergency services.[14]

As noted in several sections of this report, the MFD appears operationally and administratively to be a very good fire department. Based upon that premise, once the department accomplishes

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12. http://www.publicsafetyexcellence.org/agency-accreditation/about-accreditation-cfai.aspx
13. ibid
14. ibid

some of the strategic plan recommendations contained in this report, the MFD with support from the City of Minot should consider undertaking the accreditation process. While the accreditation process is time-consuming and labor intensive, accreditation would allow the MFD to be recognized for its excellence.

## Administrative Recommendations:

- CPSM recommends that as the MFD continues with its strategic planning process that it be inclusive of the entire department and the community; that it reexamines current mission, vision, and values statements; that it incorporate measurable and obtainable goals and objectives; and that it provide for an annual review and report to the organization and community that outlines the plan's progress. (Recommendation No. 1.)

- CPSM recommends the MFD continue to develop and then implement the comprehensive strategic plan that it is currently working on. The plan should incorporate recommendations contained within this report and include measurable and achievable administrative, operational, fiscal, and programmatic goals and objectives. CPSM further recommends this strategic planning document cover the near-, mid-, and long-term, and be updated as appropriate at the end of the mid-term period. (Recommendation No. 2.)

- CPSM recommends as a planning objective that once the MFD accomplishes some of the strategic plan and staffing recommendations contained in this report, it should, with support from the City of Minot, consider undertaking the accreditation process. (Recommendation No. 3.)

## MFD ORGANIZATIONAL GUIDELINES AND POLICIES

Effective communications systems are key to the successful operation of any emergency services organization. Standard operating guidelines (SOGs) and standard operating procedures (SOPs) are mission critical components of fire department daily operations and contribute to consistent, effective, and safe operations. Without them there is a tendency to "freelance" and personnel may not all be on the "same page" regarding a wide range of emergency and administrative operations.

A professionally written and up-to-date communications system including a manual of operations—the playbook if you will—can describe what to do and what not to do. Standard operating guidelines and procedures in their simplest form are very much a "how-to" guideline for firefighters to follow to achieve a desired goal. Standard operating guidelines and procedures are formal documents that specify a firefighter's course of action, thereby ensuring efficiency, predictability, consistency, and safety.

The fire service faces a dizzying array of challenges and must adapt to many things, including expanding missions, increasing legal and regulatory requirements, increasing complexity in emergency response techniques and equipment, and much more. The increasing acceptance of electric vehicles (EVs) is an example of the fire service needing to learn an all-new technology, retool, and develop comprehensive policies, procedures, and guidelines on an array of issues from new ways to provide patient extrication to extinguishing complex battery fires.

Policies are set and/or issued by the governmental authority having jurisdiction, in this case the City of Minot. Fire department rules, regulations, and policies should work in tandem with and be consistent with the overarching ordinances, rules, regulations, and policies that have been

adopted by the city. For example, policies concerning such topics as non-discrimination, sexual harassment, purchasing, freedom of information, internet, and computer usage (including social media), and smoking (on city premises or in municipal vehicles) are typically applied across-the-board to all departments and employees. While the city should provide training and familiarization concerning these policies on a regular basis (an annual review is usually adequate, with appropriate documentation), employees are obligated to be familiar with and comply with each policy. Individual departments have either Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs), which, among other things, can be used to implement policy at the department level and establish operational procedures that guide day-to-day activities.

The use of rules and regulations, operational procedures, and various other forms of written communications, are vital parts of a fire department's overall operations. Rules and regulations establish expected levels of conduct and general obligations of department members, identify prohibited activities, and provide for the good order and discipline necessary for the credible operation of a quasi-military emergency services organization.

Chapter 13, section 13-28, Paragraph "D" of the code of ordinances for the City of Minot states:

*"Prescribe rules and regulations. The Fire Chief shall prescribe such rules and regulations for the operation of the department as are in his judgment necessary to secure the best and most efficient service."*

The MFD has several rules and regulations documents that are incorporated into its written communications system as SOPs/SOGs. These include documents titled: *"General Rules," "Disciplinary Rules and Regulations,"* and *"Code of Conduct."* CPSM found these documents thorough and well written; they establish a base for both expected and prohibited behaviors by members of the MFD. There is also a document that describes the makeup and duties of the *Board of Review* which investigates complaints against, and infractions by, members of the MFD.

Operational procedures ensure the consistent, effective, efficient, and safe operation of various aspects of the department's operations, both emergency and routine. One of many common denominators among the best fire departments across the United States is that they have a comprehensive and up-to-date operational procedural manual, and their personnel are well versed and well-trained in those procedures. <u>The inclusion of written documents, such as training and safety bulletins, serves to make the system more effective.</u>

Standard Operating Procedures/Guidelines (SOPs/SOGs) document how operational tasks should be accomplished. They provide personal guidance relative to how to accomplish operational activities safely and consistently. To be effective, SOPs should be developed by each department through a participative process. Once developed, personnel need to be trained on the SOPs and periodically refreshed as to their content.

Standard Operating Procedures/Guidelines are developed for specific instances and based on the operations, training, resources, services delivered, and the administrative needs of a fire department. These written policies and internal regulations are typically based on recognized standards, regulations, and local government rules. These are the procedures that personnel rely on to perform their duties effectively and safely, and which the department utilizes to establish administrative processes and oversight.

Over the past 20 years or more, many agencies have shifted from Standard Operating Procedures (SOGs) to Standard Operating Guidelines (SOGs) or a combination of both. Some experts feel that the term "procedures" implies inflexible task steps or instructions, while "guidelines" implies more discretion in performing the job. Since emergency incidents are

unpredictable and flexibility is essential, these experts advise fire departments to develop SOGs, thereby reducing the need to identify exceptions, and even limiting liability due to actions by personnel. Other experts believe the opposite is true: the term "guidelines" implies too much flexibility and discretion, thus reducing control and increasing the likelihood of mistakes.[15] Whether agencies use SOGs, SOPs, or a blend of both, well-written SOGs/SOPs are essential in fire service operations. The differences between SOGs and SOPs include:

| Standard Operating Guidelines (SOGs) | Standard Operating Procedures (SOPs) |
| --- | --- |
| ■ SOGs tend to have more leeway or room for interpretations. | ■ SOPs tend to be more rigid, more of a rule, and not flexible. |
| ■ SOGs are often an action proceeded by the word "may" or "should," which can imply greater flexibility. | ■ SOPs are often an action preceded by the word "shall" or "will," which is more definitive. |

According to the National Fire Protection Association (NFPA), a standard operating procedure (SOP) is "**an organizational directive that establishes a standard course of action**." In other words, SOPs are written guidelines that explain what is expected and required of fire service personnel in performing their jobs. Standard operating procedures clearly spell out what is expected and required of personnel during emergency response and non-emergency activities. They provide a mechanism to communicate legal and administrative requirements, organizational policies, and strategic plans to the members. Both fire department SOPs/SOGs and policies are official documents that provide instruction, methods, procedures, and requirements for how to operationalize things such as bylaws, ordinances, plans, strategies, mutual aid agreements, and more. Both SOPs and SOGs provide a common set of standards by which every team member must follow. From the perspective of this discussion, the terms procedure and guideline can be used interchangeably, but should be applied consistently throughout the system.

Fire departments face an array of constant challenges and must adapt to many things including expanding missions, increasing legal and regulatory requirements, increasing complexity in emergency response techniques and equipment, and much more. For those reasons, procedures specific to fire department operations are more commonly found in a fire department SOP/SOG manual. The increasing acceptance of electric vehicles (EVs) is an example of the fire service needing to learn an all-new technology, retool, and develop comprehensive procedures and guidelines on an array of issues from new ways to provide patient extrication to extinguishing complex battery fires. The coronavirus pandemic (COVID-19) is another example where response procedures and use of personal protective clothing had to change. These examples are what CPSM finds important to cover in specific fire department SOPs/SOGs.

The CPSM team had an opportunity to review the MFD's current written communications system. It is our opinion that the current system is thorough, well written, and appears to follow current industry best practices for emergency operations. We believe that the communications meet the operational and administrative needs of the department. It appears that the entire SOP/SOG manual was reviewed and updated as necessary in October 2023. The department utilzes a standard format and template for SOP/SOG documents as shown in the following figure, which includes all pertinent information on the document. The MFD is now using a standardized template similar to the ones used by many other fire departments. The template includes the title of the procedure, the issue or revision date, the number, the category, the number of pages, and approval by a chief officer. It also includes a section for policy references. This is an

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15. Developing Effective Standard Operating Procedures for Fire and EMS (FEMA publication)

excellent practce in that by following this template, members gain a better understanding of the SOG and can research references for additional learning opportunities.

## FIGURE 2-9: MFD SOP/SOG Template

| | **22 – MAYDAY** | |
|---|---|---|
| | **Minot Fire Department** **Standard Operating Procedure/Guidelines** | |
| **Title:** MAYDAY | | **Section/Topic:** Mayday Operations |
| **Number:** 22 | | **Issue Date:** 01/20/2023 |
| | | **Revised Date:** 10/25/2023 |
| **Prepared By:** MFD BCs | | **Approved By:** Kelli Kronschnabel, Fire Chief |

| **1.0 POLICY REFERENCE** | |
|---|---|
| **CFR** | |
| **NFPA** | **1407, 1500** |
| **NIMS** | |

**2.0 PURPOSE**

**3.0 SCOPE**

**4.0 DEFINITIONS**

**5.0 GENERAL GUIDELINES**

CPSM did note that there are no operational procedures/guidelines in place to deal with operations such as Basic Engine Company and/or Truck Company Operations, Vehicle Extrication Operations, or Thermal Imaging Camera and Automatic External Defibrillator Use, to name just a few. These are the types of operational procedures/guidelines that are most important and provide standardization and consistency of operations. On the administrative side, CPSM was not provided with policies or procedures that might cover topics such as completion of incident reports.

We also noted that the department's materials refer to the documents as Procedures/Guidelines. We believe this could cause confusion. It is our belief that the MFD should choose one term or standardize the use of the term. We would recommend this be changed to either "Procedure" or "Guideline" for all documents and they be combined into a

single manual with appropriate sections. Finally, we noted that although the procedures/guidelines are placed into categories, that fact and the numbering system could be clarified to make it easier for users to understand. They refer to "Policy" in one set of documents and "SOGs" in another so as to not be confused with city policies,

The challenge for Minot as with many fire departments is to increase organizational buy-in relative to these procedures. Once a draft of a new or significantly revised procedure is completed, it should be distributed throughout the department for review. Personnel should be given a predetermined period of time to submit comments on the draft. Where appropriate, revisions can be made based upon the comments received. The SOP can then be finalized and issued.

Fire rescue personnel provide a valuable technical resource in the development of SOPs/SOGs. The development and drafting of these procedures should not be a top-down management driven process. The personnel who are going to be required to adhere to and follow the procedures should have input into their development. Input from personnel at all levels will continue to strengthen the quality and effectiveness of SOPs/SOGs.

Moving forward the Chief may want to consider the establishment of a committee comprised of a cross-section of department members of all ranks to regularly review the current SOPs/SOGs to ensure that they reflect the organization's current operations. In addition, one SOP/SOG and one policy should be reviewed by a randomly selected member at each shift change briefing and training session. Once personnel get used to this expectation, the knowledge and respect for SOPs/SOGs will grow within the organization and become an accepted part of the department's culture.

CPSM encourages fire departments to draw upon the policies, practices, and procedures of other organizations, both local and distant. The experiences and lessons learned from other fire and rescue agencies can be extremely helpful in the development of SOPs/SOGs. There are numerous excellent SOP/SOG manuals that can be found online and which can assist with the development of necessary procedures. No emergency services provider should be expected to write a policy document from scratch or without a template.

As part of its written communications system, the MFD should include Training Bulletins, which are issued to serve as reference regarding tested and approved methods of performing tasks, and Safety Bulletins, which are issued to serve as references with regard to general and specific safety and health issues.

## MFD Organizational Guidelines and Policies Recommendations:

- The MFD should continue its program of reviewing and updating the department's procedures and guidelines. In addition to the documents already completed and/or in development, attention should be given important procedures such as basic engine company and truck company operations, vehicle extrication operations, thermal imaging camera, and automatic external defibrillator use. The addition of other procedures covering additional operational, routine administrative, and training procedures should then follow. (Recommendation No. 4.)

- The general set-up and organization of the SOG manual is an especially important consideration and the MFD must ensure that the manual/system is easy to utilize and that the necessary procedures are cross-referenced. If personnel are going to be required to learn and adhere to the department's procedures, then the format, organization, and filing of them must be user friendly, otherwise they will sit on a shelf, or on a computer drive, unused. (Recommendation No. 5.)

- The first operational procedure should identify and explain the components of the Written Communications System, including the use and organization of the SOG Manual and other components of the system, such as standardized forms.

- The MFD is encouraged to establish a committee to review and assist with revisions to the SOP/SOG manual in the future. The committee should be comprised of members of each rank and include specific representation by a senior officer. (Recommendation No. 6.)

- The MFD should institute a process for issuing <u>Training Bulletins</u>, <u>Safety Bulletins</u>, and <u>Informational Bulletins</u>. (Recommendation No. 7.)

## COMMUNITY RISK REDUCTION

Community risk reduction activities are important undertakings of a modern-day fire department. A comprehensive fire protection system in every jurisdiction should include, at a minimum, the key functions of fire prevention, code enforcement, inspections, and public education. Preventing fires before they occur, and limiting the impact of those that do, should be priority objectives of every fire department. Fire investigation is a mission-important function of fire departments, as this function serves to determine how a fire started and why the fire behaved the way it did, providing information that plays a significant role in fire prevention efforts. Educating the public about fire safety and teaching them appropriate behaviors on how to react should they be confronted with a fire is also an important life-safety responsibility of the fire department.

Fire suppression and response, although necessary to protect property, have minor impact on preventing fires. Rather, it is public fire education, fire prevention, and built-in fire protection systems that are essential elements in protecting citizens from death and injury due to fire, smoke inhalation, and carbon monoxide poisoning. The fire prevention mission is of utmost importance, as it is the only area of service delivery that dedicates 100 percent of its effort to the reduction of the incidence of fire.

Fire prevention is a key responsibility of every member of the fire department, and fire prevention activities should include <u>all</u> personnel. On-duty personnel can be assigned with the responsibility for "in-service" inspections to identify and mitigate fire hazards in buildings, to familiarize firefighters with the layout of buildings, identify risks that may be encountered during firefighting operations, and to develop pre-fire plans, such as the MFD does currently. On-duty personnel in many departments are also assigned responsibility for permit inspections and public fire safety education activities.

Fire prevention should be approached in a truly systematic manner, and many community stakeholders have a personal stake and/or responsibility in these endeavors. A significant percentage of all the requirements found in building/construction and associated codes are related in some way to fire protection and safety. Various activities such as plan reviews, permits, and inspections are often spread among different departments in the municipal government and are often not coordinated as effectively as they should be. Every effort should be made to ensure these activities are managed effectively between departments.

The community risk reduction (CRR) function in the MFD is commanded by one of the Administrative Battalion Chiefs who nominally oversees that function. However, CPM was informed that there is limited interaction between the chief and the three civilian Fire Inspectors. Part of this is geographical in that the inspectors do not operate out of MFD headquarters. Instead, they are based with other city inspectors.

The MFD Fire Prevention Unit has a wide-ranging portfolio of duties and responsibilities. It's responsible for administering the various codes; performing inspections, development, and new construction plan reviews; witnessing fire prevention system tests; and ensuring code compliance through inspections regarding new buildings while under construction. Like many organizations, the Fire Prevention Unit is trying to get back on track after the COVID pandemic.

At the time of this assessment the City of Minot was utilizing the following codes:

- International Fire Code 2021.

- International Building Code 2021.

- 2021 International Residential Code.

- 2021 International Mechanical Code.

- 2021 International Fuel Gas Code.

- 2021 International Existing Building Code.

- 2021 International Energy Conservation Code.

- 2018 ND Plumbing Code (2018 Universal Plumbing code; as amended by ND).

- 2020 National Electric Code (NFPA 70) and ND Wiring Standards.

- A117.1- 2017 Accessibility Code.

Automatic fire sprinklers have proven to be very effective in reducing fire loss and minimizing fire deaths in residential structures. However, many states, North Dakota among them, have been reluctant to impose code provisions that require these installations in one- and two-family dwellings. The state's current fire code does not mandate the installation of these life safety systems, nor does it permit municipalities to adopt local ordinances that require them.

Fire Prevention is responsible for approving fire protection systems and performing these types of plan reviews. This includes sprinkler systems wet/dry, fire alarms, Ansul systems, clean agent suppression, and underground pressure tests for risers and fire pumps. They do not perform plans reviews for fire alarm systems. The following are the plans reviewed for 2020 through 2022:

- 2020: 5.

- 2021: 16.

- 2022: 9.

The Fire Prevention staff, along with UCC (new construction) personnel do participate in final system inspections along with acceptance testing for all new fire protection systems and for any remodels that require systems.

The inspectors informed CPSM that they perform annual inspections on healthcare facilities, daycares, schools, restaurants, and any occupancy that requires an annual liquor license renewal. Churches are inspected every three years, and common areas in apartment complexes every five years. Fire inspections performed for 2020 through 2022 include:

- 2020: 318.

- 2021: 740.

- 2022: 967.

One of the concerns expressed to CPSM by senior fire MFD staff was that they currently do not feel that enough inspections are getting done and the fire prevention fuction needs more guidance and direct interactiion with their supervisor to assist. Based upon the number of inspections performed and the fact that there is somewhere between 2,700 and 3,200 businesses and commercial occupancies in the city this would appear to be needed.

It is our impression that for the most part the fire prevention personnel establish their own work day priorities. The lack of direct supervision of the fire prevention staff creates gaps in community risk reduction work, such as fire prevention code enforcement (noted gap between inspectable properties and actual inspections completed in 2020, 2021, and 2022). The Chief has established a career path for the fire prevention personnel; however, the current personel have been slow to embrace this opportunity especially with regard to earning Fire Marshal certification. The minimum requirements for each step are as follows:

- **Fire Inspector I** - Fire Inspector I Certification through the International Code Council within one year of hiring date and to retain such certification while in this position. IAAI Fire Investigation Technician within three years.

- **Fire Inspector II** - Fire Inspector II Certification through the International Code Council within one year of hiring date and to retain such certification while in this position.

- **Fire Marshal** - Requires certification as International Fire Code Inspector II within 1 year of appointment and ICC Fire Marshal certification within three years of appointment. Certification as an International Association of Arson Investigator (IAAI) Certified Fire Investigator (CFI) within three years of appointment.

If none of the current inspectors are interested in pursuing the Fire Marshal position, the MFD should consider bringing in someone from the outside to fill this important role and provide direct supervision and oversight to the unit.

Another reason may be that the current fire code lacks proverbial "bite" that would require the abatement of violations. The sole exception to this is establishments that require a liquor license. The initial inspection of premises and the first reinspection are done at no charge. The second reinspection and any subsequent ones result in a fee being assessed. However, the ability to enforce compliance is limited.

There are many reasons why existing buildings should be inspected for fire code compliance. The obvious purpose is to ensure that occupants of the building are living, working, or occupying a building that is safe for them to do so. Some buildings are required to have specific inspections conducted based on the type of occupancy and the use of the buildings such as but not limited to healthcare facilities (hospitals, nursing homes, etc.), schools, restaurants, and places of assembly. These inspections are mandated by various statutes, ordinances, and codes. The inspections themselves are often limited to specific areas within the building and to specific periods. The fire inspectors will also witness tests of required fire protection systems and equipment. Conversely, many businesses are not required to have any type of periodic fire safety inspections.

Fire inspections can also identify violations and lead to follow-up inspections to ensure that violations are addressed and that the fire code is enforced. In fire prevention, the term "enforcement" is most often associated with inspectors performing walk-throughs of entire facilities, looking for any hazards or violations of applicable codes. Educating the owner as to the requirements, as well as the spirit and intent, of the code can also attain positive benefits for fire and life safety.

With about 3,000 business located in Minot, several of them large, along with numerous schools, multifamily residential complexes, and other hazards, there is no consistent or comprehensive program that ensures that all businesses and commercial occupancies receive a routine "maintenance" fire prevention inspection on a regular, periodic basis.

In many departments, on-duty firefighters can be assigned with the responsibility for "in-service" inspections to identify and mitigate fire hazards in buildings, to identify risks that may be encountered during firefighting operations, and to develop pre-fire plans. On-duty personnel in many departments are also assigned responsibility for permit inspections and public fire safety education activities. Fire department personnel are often able to recognize hazards or violations, whereas inspectors are often able to identify features of a specific property that could prove important during an emergency. Effective information sharing enhances the ability of the fire department to protect the community.

Performing complex, technical inspections can be a very time-consuming, but necessary, endeavor. Nationwide, communities that have proactive fire inspection and code enforcement programs in place often have a lower incidence of fire loss because many potential fire- and life-safety hazards are identified and corrected before they cause or contribute to a fire.

Of course, having sufficient personnel to perform fire prevention inspections can be a costly proposition. To help offset these costs, the MFD will begin charging inspection fees for certain services. Fees for various permits range from $25.00 to $120.00. The new fee schedule adopted by MFD in February 2024 is as follows:

- Operating Permits: $60.00 per year
- Commercial Daycare $60.00 per year
- Home Daycare: $25.00 per year
- Pyrotechnic, Special Effects: $120.00 plus $85.00 an hour
- Tent Permit: $50.00
- Construction Permit: $85.00
- Failure to Correct Violations: $60.00, No Fee for First Visit in a Re-inspection.

The new fee inspection program is estimated to offset the current costs of Fire Prevention services by $56,000 annually.[16]

One of the newest trends in fire prevention inspections is the use of Remote Video Inspection (RVI) programs. According to the NFPA, "RVI provides an effective alternative means for building inspection, enabling one or more parties to remotely perform an inspection of a building or building component." The NFPA has released a new infographic that emphasizes the five key considerations for an RVI inspection program: procedures, communication, technology, verification, and completion.

According to the NFPA:

*"RVI provides an effective alternative means for building inspection, enabling one or more parties to remotely perform an inspection of a building, or building component. Just like traditional on-site or in person inspections, an RVI typically occurs as part of a jurisdiction's permitting or inspection process. Virtual inspections are not intended to be less complete than*

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16. https://www.minotdailynews.com/news/local-news/2024/02/mfd-to-implement-new-inspection-fees/

*an on-site inspection; they are meant to achieve the same (or enhanced) results as an on-site inspection."*[17]



Until recently, use of RVI was limited and sporadic. The COVID-19 pandemic and remote work conditions combined with a normal extensive workload have made more jurisdictions consider alternatives to traditional inspection procedures and processes. Long term, the use of a program such as this can help any fire prevention entity better manage often unrealistic inspection workloads. The MFD does have a procedure that permits the use of this technology for re-inspections but not initial inspections. This is a reasonable compromise on the use of a new system. Moving forward, the department should periodically review this procedure to determine if it can be expanded to better meet the needs of the department.

Image credit: National Fire Protection Association

The investigation of the cause and origin of fires is also an important part of a comprehensive CRR system. Determining the cause of fires can help with future prevention efforts. At the time of this evaluation, the Fire Inspectors were charged with initiating the fire origin and cause determination process. Each was assigned as the primary investigator for one of the Department's battalions (shift). The weakness in the system as currently structured is that these personnel are only required to be Fire Investigation Technicians rather than Certified Fire Investigators. When needed, particularly when the fire involves a significant loss, injury, or fatality, the MFD can request assistance from the North Dakota State Fire Marshal to perform an in-depth investigation. The state has a local field office at MFD Station 4. The number of fire investigations completed by the FMO in 2020, 2021, and 2022 were:

- 2020: 12.

- 2021: 28.

- 2022: 20.

The MFD has an active public fire education program, which is an important component of an overall fire prevention program. **This effort is very commendable and results in time and resources well spent.** Seventy-five percent of all fires, fire deaths, and injuries occur in the home, an area where code enforcement and inspection programs have little to no jurisdiction. Public education is the area where the fire service will make the greatest impact on preventing fires and subsequently reducing the accompanying loss of life, injuries, and property damage through adjusting people's attitudes and behaviors regarding fires and fire safety. Fire prevention presentations include fire safety, extinguisher training, CPR, cooking safety, car seat checks, demonstrations, tours, ride-a-longs, community events, citizen leadership, school visits,

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17. https://www.nfpa.org/News-and-Research/Publications-and-media/Press-Room/News-releases/2020/New-infographic-from-NFPA-highlights-remote-inspection

etc. Public education is presented by both the Fire Prevention office and the suppression crews. The number of public education presentations completed in 2020, 2021, and 2022 were:

- 2020:47.

- 2021:60.

- 2022: 67.

There are numerous ways the MFD can spread its fire safety (and all-hazards) messages. These include, but are certainly not limited to:

- Maximize MFD public appearances at community events.

- Add signs or marquees to fire stations with regular fire and life safety messages.

- Keep school and other presentations on track.

- Include fire safety messages in the city's community videos.

- Increase social media presence for the community to learn about their fire department and its services, along with frequent social media postings (Facebook, Instagram, etc.) on department events, disaster preparedness, all-hazards injury prevention, etc.

- Social media addresses advertised on apparatus, department letterhead, etc.

- Development of an MFD YouTube page.

- Increased social media activity during holidays (when there is an uptick in cooking fires), prior to and during major weather events, during public education events (Facebook Live, for example), and live dispatch or live updates from PIO on incidents.

## Community Risk Reduction Recommendations:

- The MFD should fill the position of Fire Marshal, either internally or externally. as soon as possible in order to provide direct, day-to-day oversight and supervision to the fire prevention staff. The Fire Marshal should report directly to the Battalion Chief for Administration and Support. (Recommendation No. 8.)

- The MFD should revise the Fire Prevention career path to make the following training and certification requirements mandatory prior to appointment to a position and for the duration of their employment. (Recommendation No. 9.)

  □ Fire Inspector I certification through the International Code Council prior to appointment. IAAI Fire Investigation Technician within one year.

  □ Fire Inspector II certification through the International Code Council within one year of appointment as a Fire Inspector I. Certification as an International Association of Arson Investigator (IAAI) Certified Fire Investigator (CFI) within two years of appointment as a Fire Inspector I.

  □ Fire Marshal, in addition to the above, requires certification as ICC Fire Marshal prior to appointment.

- The MFD should implement an in-service company inspection program at residential, medical, manufacturing, and retail business establishments throughout the city. (Recommendation No. 10.)

- The MFD should provide appropriate training in conducting routine fire prevention inspections to all field personnel, particularly the Captains who will be responsible for supervising their companies.

- MFD  should continue to evaluate the new fee inspection program and its offset of current prevention costs. These fees may include inspections conducted by in-service fire companies. (Recommendation No. 11.)

- Should the City of Minot implement the recommendations above, the MFD should complete a comprehensive review of the city's actual costs for providing fire prevention services. The review should include a full costing of providing all fire prevention services and reviewing the city's and national fire code(s)for updates.  The review should be designed to capture the full range of services provided and capture the scope of the new fees for operational permits and certain inspections. (Recommendation No. 12.)

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## FIRE EDUCATION, TRAINING, AND PROFESSIONAL DEVELOPMENT

Training is, without question, one of the most essential functions that a fire department can perform on a regular basis. One could even make a credible argument that training is, in some ways, more important than emergency responses because a department that is not well-trained, prepared, and operationally ready will be unable to fulfill its emergency response obligations and mission. Education and training are vital at all levels of fire service operations to ensure that necessary functions at an incident are completed correctly, safely, and effectively. A comprehensive, diverse, and ongoing training program is critical to the fire department's level of success.

An effective fire department training program must cover all the essential elements of that department's core missions and responsibilities. The level of training or education required for a set of tasks varies with the jobs to be performed. The program must include an appropriate combination of technical/didactic training, manipulative or hands-on/practical evolutions, and training assessment to gauge the effectiveness of these efforts. Most of the training, but particularly the practical, standardized, hands-on training evolutions should be developed based upon the department's own operating procedures and operations while remaining cognizant of widely accepted practices and standards that could be used as a benchmark to judge the department's operations for any number of reasons.

Certain Occupational Safety and Health Administration (OSHA) regulations dictate that minimum training must be completed on an annual basis, covering assorted topics that include:

- A review of the respiratory protection standard, self-contained breathing apparatus (SCBA) refresher and user competency training, SCBA fit testing (29 CFR 1910.134).

- Blood Borne Pathogens Training (29 CFR 1910.1030).

- Hazardous Materials Training (29 CFR 1910.120).

- Confined Space Training (29 CFR 1910.146).

- Structural Firefighting Training (29 CFR 1910.156).

In addition, National Fire Protection Association (NFPA) standards contain recommendations for training on diverse topics such as a requirement for a minimum of 24 hours of structural firefighting training annually for each fire department member. Also, the ISO-Fire Suppression

Rating Scale (ISO-FSRS) has certain training requirements for which fire departments receive credit during the ISO-FSRS review.

Because so much depends upon the ability of the emergency responder to effectively deal with an emergency, education and training must have a prominent position within an emergency responder's schedule of activities when on duty. Education and training programs also help to create the character of a fire service organization. Agencies that place a real emphasis on their training tend to be more proficient in performing day-to-day duties. The prioritization of training also fosters an image of professionalism and instills pride in the organization. Overall, the MFD has an excellent, robust, and comprehensive training program and there exists a dedicated effort focused on a wide array of training activities.

The training function in the MFD is currently headed by a Battalion Chief who manages this function as part of a broader portfolio of duties. At the time of this assessment the Battalion Chief was the only person formally assigned to training. It was reported that at one time the MFD had a dedicated training officer before those duties were combined with other duties and responsibilities. The Battalion Chief puts out an annual training calendar and assigns personnel to various classes throughout the year.

It does appear that the training program is headed in the right direction. There seems to be a dedicated effort—and desire by the members of the department—to focus training on a wide array of training activities. The department also earned the maximum points allowable for training in its last ISO evaluation. However, as the department increases in size and its missions grow more complex, attempting to manage the wide-ranging training function along with other duties will eventually overwhelm the Battalion Chief.

As a result, CPSM believes that within the next several years the department's training and safety functions should be refined and expanded. It is recommended that an Administrative Battalion Chief lead the training and Operational Battalion Chiefs lead the safety function. Battalion FITs, if implemented, could serve as the Safety Officers and work in coordination with Operational Battalion Chiefs.

The MFD utilizes a wide range of personnel from both inside and outside of the department (and even the city) to provide training based upon the subject and the expertise needed to teach that particular subject or skill. Many MFD personnel are state-certified as Fire Instructor 1. Shift Battalion Chiefs assign personnel different under their command to present classes for battalion or company level training, in addition, the department has various city employees—such as Finance, Human Resources, Water Dept., Police Dept., etc. —provide training on multiple aspects of the city's operations. Finally, the department will bring in outside instructors from the state, private businesses, and national organizations to provide specialized training.

The MFD does not require newly hired personnel to be certified firefighters prior to hire. New firefighters are hired and put through a six-to-eight-week, in-house training academy. They then go on shift and work towards their Pro-Board Fire Fighter I certification over their first year of employment. They must also obtain their Nationally Registered Emergency Medical Technician certification within 18 months of employment.

The MFD has multiple locations and opportunities for training. All five MFD stations have large open bay areas for training on topics to include search and rescue, hose deployment, ropes, EMS, ladder deployment, hoisting and operating fire tools, and salvage/overhaul. All stations are also equipped with exercise facilities to support firefighters' cardiovascular and muscular endurance.

The department has its own training facility that includes classrooms, a burn building, a high-rise building, ventilation prop, trench rescue prop, forcible entry prop, two fire hydrants, and vehicles for auto extrication. Personnel also have access to city-owned properties that can be used for training. This includes flood damaged homes for fireground evolutions, Roosevelt Park swimming pool for diving and other water operations, Minot city water treatment facility for confined space training, and the airport for ARFF operations. The Minot State University swimming pool is also available for diving and water operations training. North Dakota State fairgrounds are used annually for the state fire school.

The MFD utilizes Trinity Health Riverside facility for EMT courses, continued education, and EMT certification. The Trinity Health First Response building is used for medical training and patient care mutual aid training.

Additional daily opportunities for training can be found during related activities such as daily/weekly apparatus and equipment inspections and fire pre-planning activities. Annual inspection and testing requirements such as for hose, pumps, hydrant flow testing, etc. can also provide additional training credits for personnel who participate. Training can and should also be conducted during evening hours and on weekends.

On the EMS side of operations, training programs and requirements are primarily driven by the mandatory nature of continuing education and recertification requirements for various levels of practitioners. All levels of EMS training require continuing education credits on a multiyear cycle for recertification. If individual personnel, or the agency, were to not keep up with required training and/or certification requirements they could lose their ability to practice or provide the prescribed levels of service.

An MFD Captain assists with coordinating and providing this training. Whenever possible, fire training should be tied into EMS continuing education credits, providing dual discipline benefit for personnel. Since EMS incidents make up a significant percentage of the department's responses, ensuring that these certifications continue to be maintained should remain a meaningful component of the department's training focus.

Professional development for fire department personnel, especially officers, is also an important part of overall training. There are numerous excellent opportunities for firefighters and officers to attend training on a wide range of topics outside of Minot including those offered at various state firefighting academies, at the National Fire Academy (NFA) in Emmitsburg, Maryland, and at national conferences such as the Fire Department Instructor's Conference (FDIC), Fire Rescue International, and the annual Firehouse Expo. The department also sends its personnel to various training opportunities across the country such as the Anniston, Ala., Regional Training Center, Pueblo Colorado training facility, TEEX annual fire training school, IAFF training, and the ND State Fire School.

CPSM was informed that although a few officers have attended the NFA, most have so far declined to take advantage of this excellent opportunity. Beyond the practical benefits to be gained from personnel participating in outside training, encouraging personnel to earn and/or maintain various specialized certifications such as Fire Instructor or Fire Officer increases the positive professional perception of the organization and can help to demonstrate a commitment to continued excellence.

As of the time of this assessment the MFD's personnel development program was a work in progress. The department is to be commended for this effort and given the support to continue to develop this program.

MFD officers typically provide feedback to personnel regarding their performance but there is no formal testing or skills assessments for fire training in the department. Training is a required activity in the fire service and thus it is essential to incorporate a formal testing process as part of the learning effort. EMS skills assessments, both practical and written, are regularly incorporated into EMS training. Traditionally, fire departments are reluctant to incorporate skills testing into their fire training components. However, an increasingly common way to evaluate the department's training program is through annual skills proficiency evaluations where all members of the department are required to successfully perform certain skills or complete standardized evolutions, either individually or as part of a team.

The ability to monitor and record training test scores is beneficial from an overall proficiency standpoint. In addition, training scores should be incorporated into the annual performance appraisal process for both the employee, his/her supervisor, and the training staff. In addition, the concept of adding a testing process to each training evolution adds to the importance and seriousness in which these activities are carried out.

The MFD utilizes a formal task book process to provide training guidance and new rank orientation. A growing number of fire departments are employing task books for personnel who aspire to (or in some cases have already been promoted to) higher rank and is considered a *CPSM Best Practice*. The successful completion of a task book may be considered as a prerequisite for promotion to higher rank or step-up assignment. These efforts can help provide newly promoted personnel with the tools needed to operate both administratively and in field settings. The completion of the task book also qualifies individuals to assume acting Senior Firefighter and Captain assignments in which they receive practical experience and on-the-job training.

Beyond the establishment of requirements to achieve certain levels of certification for promotion, the department should consider the implementation of a formal professional development program for all department personnel. The program should attempt to strike an appropriate balance between technical/practical task books, simulator training, formal certifications, mentor relationship, and outside influences. Where practical, best practices identified by the NFA, NFPA, ISO, IFSTA, IFSAC, North Dakota State Fire School, and the Center for Public Safety Excellence (CPSE) should be incorporated.

## Fire Education, Training, and Professional Development Recommendations:

- The MFD should continue to develop and budget for officer training and development programs. To further enhance these programs the department should consider components that are competency-based on National Fire Protection Association (NFPA), International Association of Fire Chiefs (IAFC) and International Fire Service Training Association (IFSTA) standards, and that focus on contemporary fire service issues including community fire protection and emergency services delivery approaches, fire prevention practices, firefighter safety and risk management and labor/staff relations; reviewing, approving, or preparing technical documents and specifications, departmental policies, standard operating procedures and other formal internal communications; improving organizational performance through process improvement and best practices initiatives; and having a working knowledge of information management and technology systems. (Recommendation No. 13.)

- The MFD should consider increasing the requirements for further professional advancement at various levels, such as the following: (Recommendation No. 14.)

  □ Senior Firefighter

- Minimum of 30 college credits.
- Advanced engine and truck company operations.
- Tactics and Strategy.
- Fire Instructor I.
- Fire Officer I.
- NFA Command and Control for Company Level Officers.
- IMS Level 300.

☐ Captain

- Possession of an associate degree.
- Fire Instructor II.
- Fire Officer II.
- Fire Inspector I.
- NFA Command and Control of Incident Operations.
- Command and Control/ Blue Card Cert.
- Incident Safety officer.
- 1st. Leadership/Emergency Systems Management course.

☐ Battalion Chief

- Bachelor's Degree.
- Fire Officer III.
- IMS Level 400.
- Health and Safety Officer.
- NFA Command and Control of Fire Department Operations at Target Hazards.
- 2nd Leadership / Emergency Services Management course.
- Fire Investigator.

■ The MFD should develop should institute written and practical skills testing and proficiency evaluations (non-punitive) as part of the department's comprehensive fire training program. (Recommendation No. 16.)

■ The City of Minot in consultation with the MFD should consider providing funding for the MFD to procure additional training props necessary to effectively and safely perform both basic and advanced/complex training evolutions for all personnel. (Recommendation No. 17.)

■ The MFD should make a concerted effort to send as many officers as possible to the National Fire Academy (NFA). This should include the Training personnel for various training-related classes, and the Fire Marshal and/or Fire Inspectors for fire prevention and community risk reduction classes. Any officers who meet the admissions criteria should be encouraged to enroll in the Academy's Executive Fire Officer Program. (Recommendation No. 18.)

■ The MFD should look for opportunities to provide periodic joint training between the department and various agencies that provide automatic/mutual aid to the city including in the evening and on weekends. Consideration should also be given to hosting large-scale exercises to test and evaluate regional interoperability. (Recommendation No. 19.)

# ISO-PPC ANALYSIS

The ISO is a national, not-for-profit organization that collects and evaluates information from communities across the United States regarding their capabilities to combat building fires. ISO conducts field evaluations to rate communities and their relative ability to provide fire protection and mitigate fire risk. This evaluation allows ISO to determine and publish a Public Protection Classification (PPC) rating of Class 1/1X to Class 9 (Class 10 are areas with no fire protection) for the community.

Class 1 (highest classification) represents an exemplary community fire suppression program as outlined below. In contrast, a Class 9 score indicates that the community's fire suppression program does not meet ISO's minimum criteria. It is important to understand the PPC is not just a fire department classification, but a compilation of community services that include the fire department, the emergency communications center, and the community's water supply system operator. A lower numerical rating makes the community more attractive from an insurance risk perspective, so insurance costs are reduced for businesses and homeowners. A community's PPC grade depends on:

**Emergency Communications**: A maximum of 10 points of a community's overall score is based on how well the fire department receives and dispatches fire alarms. ISO field representatives evaluate:

- The emergency reporting system.

- The communications center, including the number of telecommunicators.

- Computer-aided dispatch (CAD) facilities.

- The dispatch circuits and how the center notifies firefighters about the location of the emergency.

**Fire Department**: A maximum of 50 points of the overall score is based on the fire department. ISO representatives review the fire companies and check that the fire department tests its pumps regularly and inventories each engine and ladder company's equipment according to NFPA 1901. ISO also reviews the fire company records to determine factors such as:

- Type and extent of training provided to fire company personnel.

- Number of people who participate in training.

- Firefighter response to emergencies

- Maintenance and testing of the fire department's equipment.

**Water Supply:** A maximum of 40 points of the overall score is based on the community's water supply. This part of the assessment focuses on whether the community has sufficient water supply for fire suppression beyond daily maximum consumption. ISO surveys all components of the water supply system and reviews fire hydrant inspections and frequency of flow testing.

**Community Risk Reduction**: The Community Risk Reduction section of the FSRS offers a maximum of 5.5 points, resulting in 105.5 total points available in the FSRS. The inclusion of this section for "extra points" allows recognition for those communities that employ effective fire prevention practices, without unduly affecting those who have not yet adopted such measures. The addition of Community Risk Reduction gives incentives to those communities that strive proactively to reduce fire severity through a structured program of fire prevention activities. The areas of community risk reduction evaluated in this section include:

- Fire prevention.

- Fire safety education.

- Fire investigation.

Many communities view achieving a Class 1 as an accolade. Therefore, when it is possible, maintaining a favorable rating or lowering an ISO score is often included in a community's strategic plan.

Overall, the community PPC rating for Minot (2017) yielded 82.75 out of 105.5 earned credits, leading to a Class 2 rating.[18] **This is an excellent score (and class), for which the City of Minot and MFD are to be commended.**

### FIGURE 2-10: ISO PPC Ratings in the U.S.
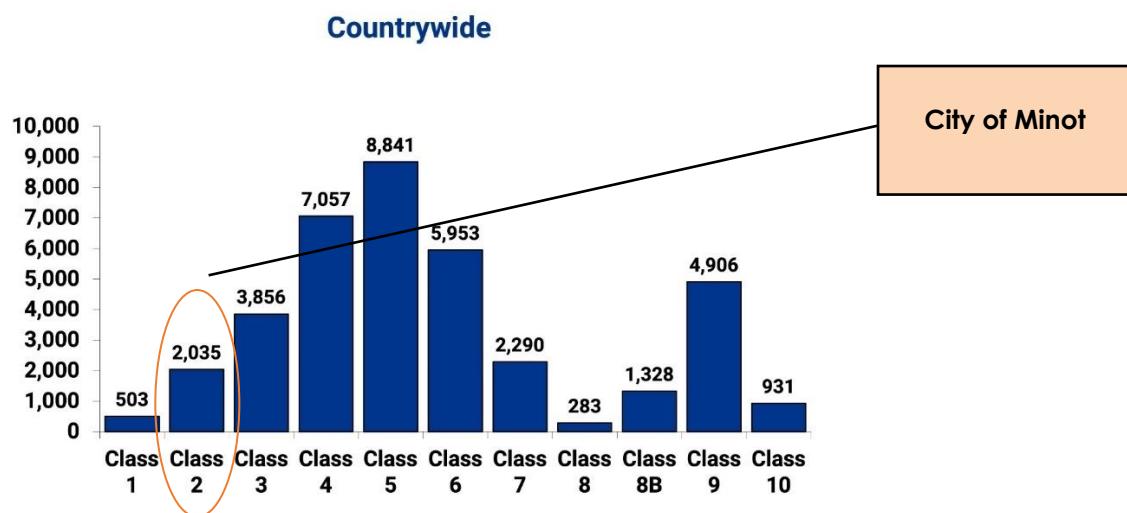


### FIGURE 2-11: ISO PPC Ratings in North Dakota



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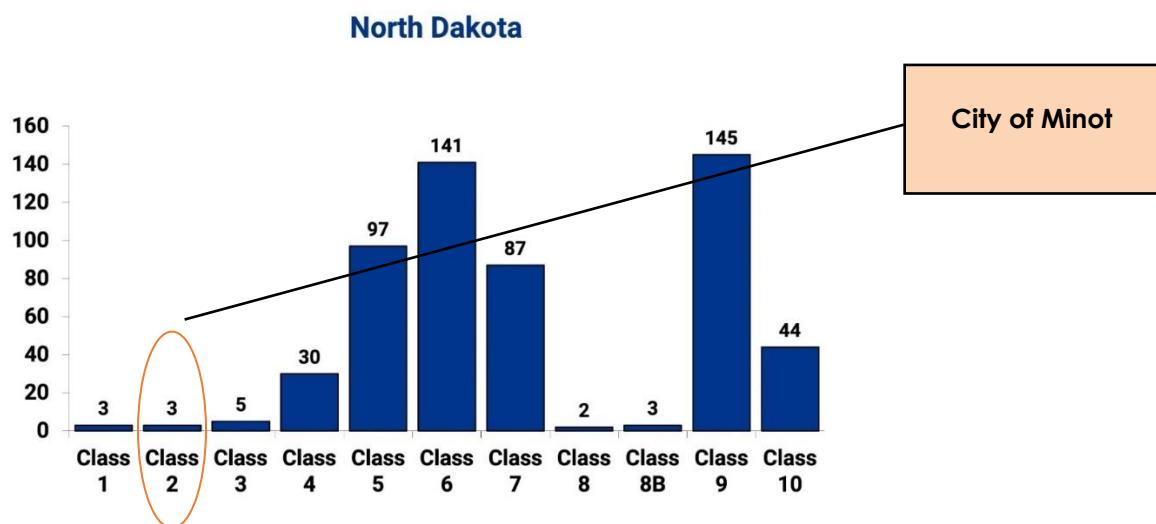
18. ISO 2017 Minot Report (2017)

The following table is a summary of Minot's 2017 ISO rating.

**TABLE 2-1: City of Minot ISO Earned Credit Overview**

| FSRS Component | Credit Available | Earned Credit 2017 |
|---|---|---|
| 414. Credit for Emergency Reporting | 3 | 2.85 |
| 422. Credit for Telecommunicators | 4 | 4.00 |
| 4.32. Credit for Dispatch Circuits | 3 | 1.57 |
| **440. Credit for Emergency Communications** | **10** | **8.42** |
| 513. Credit for Engine Companies | 6 | 5.75 |
| 523. Credit for Reserve Pumpers | .5 | 0.50 |
| 532. Credit for Pump Capacity | 3 | 3.00 |
| 549. Credit for Ladder Service | 4 | 2.03 |
| 553. Credit for Reserve Ladder and Service Trucks | .5 | 0.00 |
| 561. Credit for Deployment Analysis | 10 | 5.12 |
| 571. Credit for Company Personnel | 15 | 7.67 |
| 581. Credit for Training | 9 | 9.00 |
| 730. Credit for Operational Considerations | 2 | 2.00 |
| **590. Credit for Fire Department** | **50** | **35.07** |
| 616. Credit for Supply System | 30 | 29.14 |
| 621. Credit for Fire Hydrants | 3 | 3.00 |
| 631. Credit for Inspection and Flow Testing | 7 | 8.00 |
| **640. Credit for Water Supply** | **40** | **40.00** |
| **Divergence** | **---** | **-5.97** |
| **1050. Community Risk Reduction** | **5.50** | **5.23** |
| **Total** | **105.50** | **82.75** |

This table shows that the Emergency Communications, Water Supply, and Community Risk Reduction credits are very good. In the Emergency Communications component the only significant point deduction was for the number of dispatch circuits. With dispatch's move into the new City Hall this issue may be resolved. **The city received maximum credit for Water Supply, which is very rare and commendable.**

Under the Fire Department category, **the department received full credit for Training, which again is rare and commendable.**

The Fire Department credits have room for improvement, specifically improving credits in Ladder Service, Deployment Analysis, Company Personnel, and Training sections.

- Credit for Reserve Pumpers – ISO provides credits for the number and adequacy of pumpers (engines) and their equipment within. The number of needed reserve engines and ladder trucks is one for each eight needed in a community, or fraction thereof. There is one reserve pumper in the city, which would be adequate for the City of Minot. However, the credit for engine companies is calculated by ISO based on an agency's capability to provide 3500

GPM from three engine companies. To achieve the 3,500 GPM standard, the reserve pumper was utilized, thus negating the reserve credit.

- ISO provides credit for the number of response areas within the city with five buildings that are three or more stories (or 35 feet or more in height), or with five or more buildings that have a fire flow requirement greater than 3,500 GPM. The height of all buildings in the city, including those protected by automatic sprinklers, is considered when determining the number of needed ladder companies.

  - The MFD lost 1.97 points for Credit for Ladder Service due to several factors, but in its simplest form, the fact that the city utilizes its primary ladder, which is a quint, as both an engine and a ladder (and is primarily an engine/pumper) costs points as ISO will not give full credit for both. In addition, the fact that it is stationed at Station 5, rather than at the downtown location of Station 1 or 2 (not within 2.5 road miles of all buildings three stories or greater or that require 3,500 GPM or more fire flow) also results in a point loss. To receive full credit for the ladder, the MFD would need to:

  - Staff an additional pumper at a station along with the Ladder.

  - Have a ladder truck stationed downtown also, or within 2 ½ road miles of all buildings of three stories or more in height or that require 3,500 GPM or more for fire flow.

- The Credit for Deployment Analysis section measures the number of fire units staffed at ISO or NFPA standards that are available to respond to incidents within the city. ISO provides credits for the percentage of the community within specified response distances, which is 1.5 miles for pumpers and 2.5 miles for a ladder truck. As an alternative, a fire protection area may use the results of a systemic performance evaluation; an evaluation analyzing CAD history to demonstrate that, with its current deployment of companies, the department meets the time constraints for initial arriving engine and initial full-alarm assignment as specified by NFPA 1710.

  - The MFD would need to add staffed and equipped apparatus that can respond immediately to increase its points in this section. These units would also need to meet the response area and time frames specified.

## FIGURE 2-12: ISO 1.5-Mile Engine Company and 2.5-Mile Ladder Service Polygons
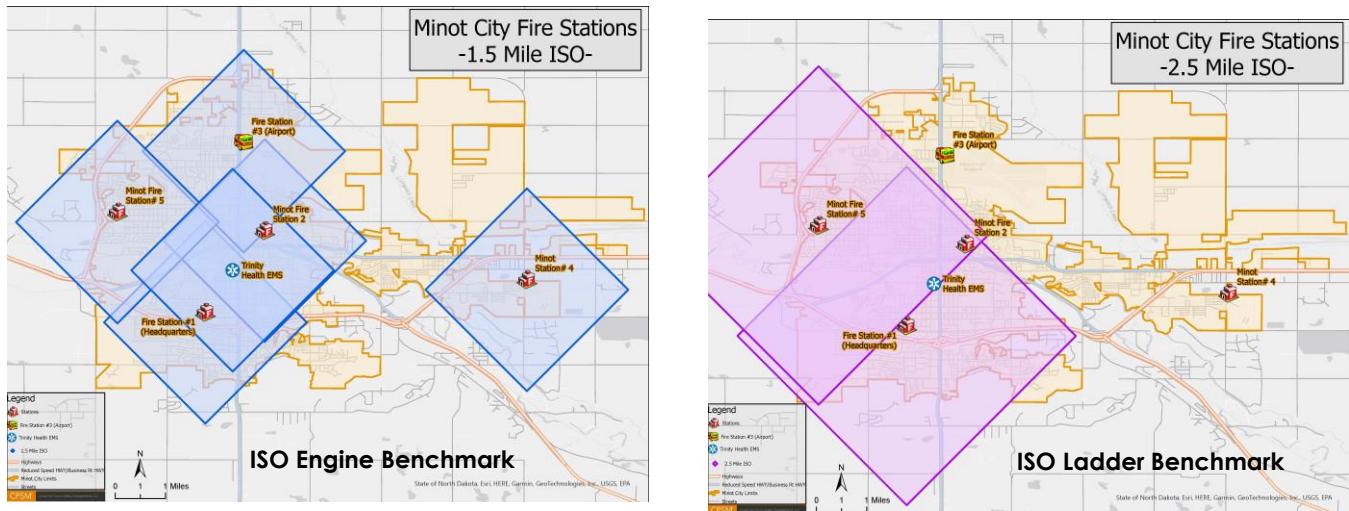
- The section on <u>Credit for Company Personnel</u> simply looks at the department's staffing practices based upon averages. It also includes automatic aid companies and on-call personnel that fall within a five-road mile status or response times as recommended by NFPA standards.

    □ To receive additional points in this area MFD would need to increase staffing. The addition of the engine at Station 5 and 4 minimum personnel on Ladder 5 could most likely help.

    □ Fire department staff would also need more time available to conduct pre-fire planning inspections. This is addressed later in Section 4 on Fire Operations.

- MFD's credit for <u>Divergence</u> is -5.97. For the divergence analysis, when a fire department's apparatus and personnel capabilities do meet the capabilities of the water system, the department loses what are called divergence points.

    □ To receive those points, the MFD would need to place additional fire suppression apparatus and personnel into service.

There are multiple recommendations made throughout this report that if implemented should improve the MFD's ISO rating.

## ISO Rating Recommendation:

- CPSM recommends that the MFD address the deficiencies in the most recent ISO report as reviewed in this analysis. Special emphasis should be placed on section 561, Credit for Deployment Analysis (score 5.12/10) and section 571, Credit for Company Personnel (score 7.67/15). CPSM believes that the potential enhancements to staffing and deployment by the MFD, including the addition of Station 5, and the addition of a staffed, dedicated ladder truck, should make earning a coveted ISO Class 1 rating possible for Minot. (Recommendation No. 20.)

## FLEET ANALYSIS

The resources that the fire department uses to perform its core mission and mitigate a wide range of emergency incidents are divided into two major categories: apparatus and tools/equipment.

Apparatus includes the department's motorized vehicle fleet and includes the major emergency response apparatus such as engines (pumpers), aerial apparatus including towers and ladders, rescue vehicles, and ambulances. Specialized apparatus includes emergency units such as lighting vehicles, brush trucks, and other off-road vehicles. It also often includes trailers for specialized applications such as technical rescue, hazardous materials response/equipment, hazardous material decontamination, structural collapse rescue equipment, breathing air/light support units, foam units/supplies, and mass casualty incident supplies. Support vehicles that are critical to fire department operations, both routine and emergency, include command post and emergency communications units, command/staff vehicles, and maintenance trucks.

The geography, infrastructure, hazards, and construction features within the community all play a key role in determining the composition of each department's unique and individualized apparatus fleet and equipment inventory. Minot's characteristics present the fire service with a wide variety of strategic and tactical challenges related to emergency response preparedness and mitigation. This includes fire suppression operations, emergency medical responses, and

complex incidents requiring special operations capabilities such as technical rescue and hazardous materials emergencies.

Large commercial buildings, mid/high-rise structures, and a diverse mixture of target hazards present much different operational hazards and challenges than those required for operations in single-family dwellings. These factors, as well as projected future needs, must be taken into consideration when specifying and purchasing apparatus and equipment. Every effort should be made to make new apparatus as versatile and multifunctional/capable as is possible and practical.

Fire department apparatus is designed and intended to transport firefighters and fire and life safety equipment to the scene of an emergency. The provision of an operationally ready and strategically located fleet of mission-essential fire and rescue vehicles is fundamental to the ability of a fire-rescue department to deliver reliable and efficient public safety within a community. Modern, reliable vehicles are needed to deliver responders and the equipment/materials they deploy to the scene of dispatched emergencies within the city.

The procurement, maintenance, and eventual replacement of response vehicles is one of the largest expenses incurred in sustaining a community's fire-rescue department. Reliable vehicles are needed to deliver responders and the equipment/materials they employ to the scene of dispatched emergencies within the city. A well-planned and documented emergency vehicle replacement plan (capital improvement plan) ensures ongoing preservation of a safe, dependable, and operationally capable response fleet. A plan must also include a schedule for future capital outlay in a manner that is affordable to the community.

NFPA 1901, *Standard for Automotive Fire Apparatus*, serves as a guide to the manufacturers that build fire apparatus and for the fire departments that purchase them. NFPA 1901 is updated every five years using input from the public/stakeholders through a formal review process. The committee membership is made up of representatives from the fire service, manufacturers, consultants, and special interest groups. The committee monitors various issues and problems that occur with fire apparatus and attempts to develop standards that address those issues. A primary interest of the committee over the years has been improving firefighter safety and reducing fire apparatus crashes. A key component of NFPA 1901 states:

> "It is recommended that apparatus greater than 15 years old that have been properly maintained and that are still in serviceable condition be placed in reserve status and upgraded in accordance with NFPA 1912, *Standard for Fire Apparatus Refurbishing* (2016), to incorporate as many features as possible of the current fire apparatus standard. This will ensure that, while the apparatus might not totally comply with the current edition of the automotive fire apparatus standards, many improvements and upgrades required by the recent versions of the standards are available to the firefighters who use the apparatus."

Under the NFPA1912 standard there are two types of refurbishments a fire department can choose. These are Level 1 and Level 2 refurbishments. According to NFPA 1912, a Level 1 refurbishment includes *the assembly of a new fire apparatus by the use of a new chassis frame, driving and crew compartment, front axle, steering and suspension components, and the use of either new components or components from existing apparatus for the remainder of the apparatus.* A Level 2 refurbishment includes *the upgrade of major components or systems of a fire apparatus with components or systems of a fire apparatus that comply with the applicable standards in effect at the time the original apparatus was manufactured.*

A few important points to note regarding the NFPA 1912 standard regarding the refurbishment of heavy fire apparatus. These are:[19]

- **Apparatus that was not manufactured to applicable NFPA fire apparatus standards or that is 25 years old <u>should be replaced</u>.** Some departments will utilize vehicles such as this (frontline but not regularly utilized) for longer than 25 years. CPSM does not recommend this practice; however, we understand the financial burden of replacing heavy fire apparatus. It is up to the department and municipality regarding the management of older fire apparatus and the risks these may pose to firefighters and the public who share the road with them.

- A vehicle that undergoes a Level 1 refurbishing receives a new make and model designation and a new Certificate of Origin for the year of refurbishment. Apparatus receiving a Level 1 refurbishing are intended to meet the current edition of the NFPA automotive fire apparatus standard. *This is the optimal level of refurbishing.*

- A vehicle that undergoes a Level 2 refurbishing retains its original make and model identification as well as its original title and year of manufacture designation. Apparatus receiving Level 2 refurbishing are intended to meet the NFPA automotive fire apparatus standard in effect when the apparatus was manufactured.

It is an accepted fact that fire department apparatus and vehicles, like all types of mechanical devices, have a finite life. A primary impetus for these recommended service life thresholds is continual advances in occupant safety. Despite good stewardship and maintenance of emergency vehicles in sound operating condition, there are many advances in occupant safety, such as fully enclosed cabs, enhanced rollover protection and air bags, three-point restraints, antilock brakes, higher visibility, cab noise abatement/hearing protection, and a host of other improvements as reflected in each revision of NFPA 1901. These improvements provide safer response vehicles for those providing emergency services within the community, as well those "sharing the road" with these responders.

Today's fire departments are obligated to establish and document formal programs and procedures to ensure that equipment is replaced regularly, maintained properly, and deployed in accordance with accepted standards and department procedures. Proper training on the use and maintenance of equipment is essential to effective and safe firefighter performance and minimizes the fire department and city's risk exposure.

The current MFD fire apparatus fleet consists of five pumpers, one Quint, one reserve aerial ladder, one rescue, one ARFF unit, one brush unit, one tech rescue truck, one dive truck, one hazardous material response unit and trailer, and various staff and command vehicles. The age of the major firefighting apparatus currently in service ranges from 24 years old for the brush truck to two years old for Engines 2 and 4.

When considering apparatus usage, hours on the motor and pump hours must be taken into consideration. Fire apparatus typically spend more time idling while at emergency scenes or throttled up when operating the fire pump. A rule of thumb that can be used is that each hour on the motor is the equivalent of 30 to 35 miles of actual road usage.

The MFD emergency vehicle inventory is outlined in the following table.

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19. NFPA 1912, *Standard for Fire Apparatus Refurbishing*, 2016 Edition.

## TABLE 2-2: MFD Full Fleet Listing and Age

| Unit # | Description | Year | Type | Serial Number | Suggested Replacement Date | Estimated Replacement Cost | Replacement Interval |
|---|---|---|---|---|---|---|---|
| | **Engines** | | | | | | |
| 204 | E-One Typhoon (E4) | 2022 | Engine | 4EN6AHA8XN2004806 | 2037 | | 15 |
| 206 | E-One Typhoon (E2) | 2022 | Engine | 4EN6AHA83P2005380 | 2037 | | 15 |
| 225 | F-550 Ford- Brush Truck | 2000 | Brush/Grass | 1FDAF57F9YEE09294 | 2015 | 150,000 | 15 |
| 229 | Intn'l 4400 SBA 4x2- (Dive Rescue) | 2005 | Dive Rescue | 1HTMKAAL15H157364 | 2035 | 100,000 | 30 |
| 234 | Freightliner Pumper Toyne (Reserve Engine) | 2010 | Engine | 1FVACYBSXBDAY7614 | 2025 | | 15 |
| 233 | CBRNE Truck (HazMat) | 2010 | HazMat | 4S7CU2D98AC072469 | 2030 | 500,000 | 20 |
| 238 | Spartan Force Fire Pumper Truck (E3) | 2012 | Engine | 4S7YT2B96DC076326 | 2029 | | 15 |
| 241 | Ford F550 Rescue Truck (R2) | 2013 | Non-Transport Rescue | 1FDUF5HT4DEB53061 | 2028 | | 15 |
| 243 | Ford F550 Tech Rescue/Tow Vehicle | 2015 | Tech Rescue | 1FDEF5HT9FEA99811 | 2030 | | 15 |
| 244 | Fire Department Aerial Truck (P1) | 2015 | Aerial Truck | 4ENLABA8XF1008989 | 2035 | | 20 |
| 245 | E-One 78' Typhoon Quint (L5) | 2016 | Engine | 4EN6AAA84G1000413 | 2031 | | 15 |
| 246 | E-One Typhoon Pumper (E1) | 2016 | Engine | 4EN6AHA82G2000414 | 2031 | | 15 |
| 301 | E-One Titan (ARFF) OUT OF SERVICE | 1992 | ARFF | 4ENDAAA85N1009982 | 2012 | 672,000 | 20 |
| 302 | Oshkosh Striker (ARFF) | 2012 | ARFF | 10TALDLGF8CS749212 | 2032 | 672,000 | 20 |
| | **Support Vehicles** | | | | | | |
| 202 | Ford F150 pickup | 2009 | Inspections | 1FTPX14V59FA17327 | | | |
| 203 | Ford Explorer AWD | 2016 | Inspections | 1FM5K8AR6HGB15745 | | | |
| 205 | Ford F150 pickup | 1997 | Utility | 1FTDF18W0VKD29484 | 2007 | 30,000 | 20 |
| 226 | Ford Excursion XLT | 2002 | Command | 1FMNU41L32EC33530 | 2017 | 50,000 | 15 |
| 228 | Chevy 2500 4WD | 2000 | Utility | 1GCGK24U3YE178968 | 2020 | 37,000 | 20 |
| 232 | Chevy Impala | 2006 | Utility | 2G1WS551969322338 | 2014 | 22,000 | 10 |
| 235 | Chevy Suburban (BC2) | 2011 | Command | 1GNWK5EG7BR111383 | 2026 | 60,000 | 15 |
| 239 | Ford Explorer AWD | 2014 | Inspections | 1FM5K8AR3EGA09281 | 2034 | 20,000 | 20 |
| 242 | Chevy Silverado K2500 | 2009 | Utility | 1GCHK59K79E122952 | 2019 | 30,000 | 10 |
| 247 | Chevy 3500 Pickup (Mechanic's Truck) | 2009 | Utility | 1GCHK59K89K09E126536 | | | |
| 248 | Toyota Corolla | 2016 | Utility | 2T1BURHEXHC926702 | | | |
| 249 | Cheverolet Tahoe (BC1) | 2019 | Command | 1GNSKDEC6KR378181 | | | |
| | **Trailers** | | | | | | |
| 251 | United Trailer (Investigations) | 2002 | Trailer | 48B500C1821058726 | 2032 | | 30 |
| 252 | Old Car Trailer | 2002 | Trailer | 1P9CSI82721199490 | 2032 | | 30 |
| 254 | 28" Tech Rescue Trailer | 2004 | Trailer | 1WC200N3551110245 | 2034 | | 30 |
| | Falcon XC Round Top Cargo Trailer | 2012 | Trailer | AFX8516TA3 | 2042 | 10,000 | 30 |
| 256 | 2012 American Hauler (Wood Trailer) | 2012 | Trailer | 5N6200G27D1039559 | 2042 | | 30 |
| 257 | 2014 Diamond Car Hauler | 2014 | Trailer | 46UFU2021E1158853 | 2034 | | 30 |
| 259 | 2022 Haulmark | 2022 | Trailer | 7K5N000167 | 2052 | | 30 |
| | **Miscellaneous** | | | | | | |
| 237 | Zodiac boat MS007 Engine OR483683 | 2012 | Water Rescue | XDCC146FB212 | 2022 | 25,000 | 10 |
| 240 | 2015 Wacker Neuson WL30 Wheel Loader | 2015 | Utility | 3023767 | 2035 | | 20 |
| 258 | Bobcat 790 | | Specialized | 5128191177 | | | |

One of the biggest factors that can impact the serviceable life of an apparatus is the level of preventive maintenance that it receives. NFPA 1911 provides guidance on this important aspect of fire department support operations. Apparatus manufacturers also identify suggested programs and procedures to be performed at various intervals. As apparatus ages it is reasonable to expect that parts will wear out and need to be replaced. It follows then that maintenance costs and overall operating expenses will increase. As a result, cost history and projected costs for the future must be considered as a factor in determining when to replace, or refurbish, a fire apparatus. In addition, reliability of the apparatus must be considered. Experiencing low downtime and high parts availability are critical factors for emergency equipment maintenance and serviceability. A proactive preventive maintenance program can assist with holding costs to an acceptable level. The Annex Material in NFPA 1911 contains recommendations and worksheets to assist in decision making in vehicle replacement.

The MFD provides routine vehicle repairs and maintenance to the MFD fleet using its own fire mechanic who does an excellent job of maintaining the fleet. In addition, limited preventive

maintenance is completed by some personnel within each of their stations. More complex and/or warranty work on the vehicles is performed by either the MFD mechanic, dealer of the apparatus, or a regional vendor who is contracted to do the work. Regarding maintenance and repair to apparatus, a few key points to remember are:

- Ensuring that preventive maintenance programs are developed and implemented for fire apparatus according to manufacturer's guidelines and national consensus standards.

- Ensuring that preventive maintenance on fire apparatus is performed and/or overseen by qualified personnel who meet the certification requirements outlined in NFPA 1071, *Standard for Emergency Vehicle Technician Professional Qualifications*.

- Develop and utilize policies and procedures that monitor preventive maintenance and other automotive services performed by vendors.

From CPSM's perspective, the apparatus fleet as a whole, even the older units, all appear to be in at least fair condition. The equipment is stowed in an orderly fashion.

CPSM understands that the harsh winter weather conditions in North Dakota can have an impact on apparatus and in all probability shorten its life span. CPSM recommends that MFD evaluate the lifespan of its apparatus in terms of this criteria when considering repairs and replacement and evaluate their service life against the NFPA 1912 standard.

MFD utilizes an outside vendor for their ladder testing with pump testing conducted internally. Test results provide an indicator of apparatus condition and are a valuable tool in budget planning. Often, because of this testing, minor maintenance issues can be resolved which will delay or eliminate the need for major repairs in the future. It is also important to remember that from a safety and performance perspective, this annual testing needs to be completed to ensure the overall rating, capacity, and functionality of the pumps and ladders are reliable during emergency incidents.

The MFD does maintain an Apparatus Replacement Plan that is projected out to the year 2055. In 2022, the city received two new pumpers which were assigned to Engines 2 and 4. Another new pumper is slated to be ordered in 2025, followed by two more in 2031. Two challenges for municipalities and fire departments that are looking to replace apparatus today are cost and lead time. A standard pumper can cost between $800,000 and $1,000,000 while a new ladder can be upwards of $2,000,000. Lead time from order to delivery can be two to three years for a pumper and three years or more for a ladder.

## Fleet Recommendations:

- CPSM recommends that the City of Minot and MFD work collaboratively to have a complete and objective evaluation of the current condition of the MFD's apparatus fleet. If this evaluation indicates serious deficiencies in the fleet, then adjustments may need to be made to the apparatus replacement schedule. (Recommendation No. 21.)

- CPSM recommends that the City of Minot and MFD explore options to obtain a quality pumper that can be utilized as a reliable spare. The only spare pumper the city has is in fair to poor condition. If it, or just one other unit, is out of service, the department has no spare available. The MFD would be better served by having two spare pumpers available for when units are out of service and that can be used by off-duty personnel being recalled to work for major incidents. (Recommendation No. 22.)

# CITY OF MINOT EMS GROUND TRANSPORT SERVICE DELIVERY



First Response Ground is the EMS ground transport division of the Trinity Health Network. It provides direct support to the Minot Fire and Police Departments, as well as the Ward County Sheriff's Office and additional first responder groups. It responds to approximately 10,000 calls annually, both emergency and non-emergency, inter-facility transfers, and provides ALS intercept services to many of the ambulance services in northwestern North Dakota.

FRG operates from a station in Minot located at 305 11th Ave SW. By state law, EMS is supposed to work to achieve a nine-minute response time in the city, and 12 minutes in the surrounding county area. While EMS was not evaluated as part of this assessment, CPSM was informed anecdotally by multiple stakeholders that MFD units are facing increasing on-scene wait times for ambulances. This is a common challenge that we hear today in communities where the EMS ground transport is handled by a private third-party entity.

# BUDGET OVERVIEW

**The proposed 2024 City of Minot budget** continues the City Council's long-standing effort at providing municipal services as cost effectively as possible. The city levy approved by the City Council in 2023 was 120.08 mills. The final adjusted rate by the County was 119.15. The proposed mill rate for 2024 is 120.71, a slight increase of 0.63 mills.

The 2024 proposed budget is $199,635,478 compared to $182,627,269 in 2023, which is an increase of $17,008,209 or 9.31%.

**The MFD operating budget** for the current and the FY 2023 fiscal year is outlined in the following table: the figures shown are general fund budget allocations, as the MFD is a General Fund (GF) department. Funding the city's General Fund comes from property taxes, licenses, and permits, intergovernmental, charges for services, fines and forfeitures, and transfers. Personnel services (payroll expenditures to include salary, benefits, and pension costs) made up 88.4 percent of the general fund budget for the MFD. This is not uncommon nationally, since general fund departments and activities are typically service-oriented departments and costs are heavily weighted by staffing and personnel costs (salary, benefits, pension costs).[20] The FY 2024 annual proposed budget for the city's General Fund is $60,609,677 million, with public safety (police and fire operations) making up a significant portion of General Fund expenditures.[21]

### TABLE 2-3: MFD Budget 2024

| FY 2024 Budget | FY 2023 Budgeted | Dollar Change | Percent Change |
|:---:|:---:|:---:|:---:|
| $9,657,417 | $8,882,834 | $774,583 | 8.72% |

Traditionally, and like every other career fire department in the nation, the MFD's budget is primarily consumed in personnel costs. This includes salary, benefits, retirement, overtime, and worker's compensation. The MFD personnel services budget area consistently represents

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20. City of Minot Budget Document 2024.
21. Ibid.

approximately 80-plus percent of the total budget. The next largest budget areas are supplies and services, which support the operation and maintenance of facilities and equipment, automotive operational/repair costs and replacement, maintenance and operations of equipment, professional development, and information technology. The next figure illustrates a breakdown of the MFD budget.

**FIGURE 2-13: MFD Expense Breakdown**[22]



■ PERSONNEL  ■ OPERATIONS & MAINTENANCE  ■ OTHER
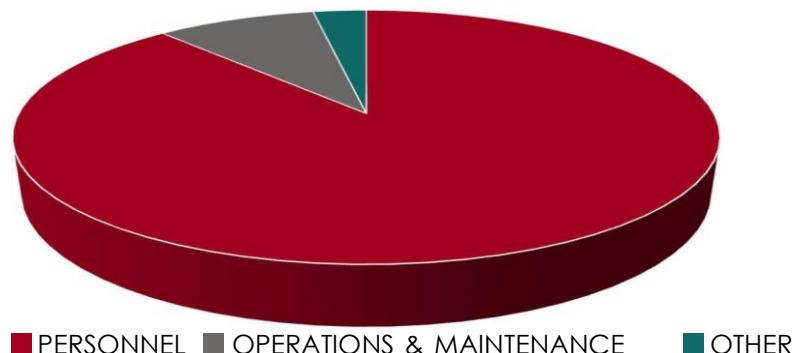
In February 2024, CPSM met with the Fire Chief and staff; the Fire Chief discussed the current overtime the department is experiencing. The FY 23 budgeted overtime for firefighters, engineers, and Captains collectively is $207,859. The 2024 budgeted overtime is $370,303, a 56 percent increase. Overtime is used to maintain minimum staffing of three on each engine and ladder and one on the ARFF apparatus (17 per shift) to meet departmental staffing. Shift staffing is a dynamic process, and vacancies occur daily due to scheduled and unscheduled leave.

Proving guidance of minimum staffing for scheduled and unscheduled leave are governed through Standard Operating Procedure/Guideline #3, Minimum Staffing. The MFD operates a staffing model of four assigned per apparatus with three being the minimum to operationally staff the apparatus. This means there are added personnel assigned to a shift to fill vacancies created by scheduled or unscheduled leave; however, the challenge remains. Vacancies in staffing can be affected by long-term injuries, illnesses, military leave, vacant positions, and Family Medical Leave or FMLA. This model then, consistently requires overtime to maintain minimum staffing levels and thus must be budgeted on an annual basis.

The Fire Chief is developing strategies to assist in covering scheduled and unscheduled leave and reducing overtime through the hiring and filling of vacancies as soon as possible.

It is not unusual for fire departments to staff shifts with additional personnel to cover scheduled and unscheduled leave. In some departments this is done on a large scale, such as one additional firefighter per engine per shift. These personnel are utilized to cover both short- and longer-term vacancies, thus reducing overtime expenses. Again, filling vacancies as soon as possible helps reduce overtime needs as does hiring additional firefighters to outweigh the use of overtime monies.

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22. City of Minot Budget Document 2024.

# SECTION 3. COMMUNITY RISK PROFILE

A significant part of determining the acceptable levels of service including deployment and staffing levels related to the delivery of fire and emergency services are directly tied to the level of risk found within a community. The level of risk includes a combination of factors including, but not limited to, the number and types of target hazards, life hazard, building construction and the presence of fire sprinklers and fire alarm systems, types and numbers of calls, and social-economic factors within a community. The purpose of this section is to provide an overview of the risk factors found in the City of Minot. Further discussion and related recommendations later in this report are based in significant part on the findings of this risk assessment. Since this section is focused primarily on the assessment itself, there are limited recommendations contained herein.

An all-hazards fire and EMS risk assessment is a compressive, participatory process for assessing hazards, vulnerabilities, and overall risks in a community. The primary purpose of a community risk assessment is to provide data to better inform local decisions on the planning and implementation of risk reduction measures.

A community risk reduction program (CRR) is a process used to identify and prioritize local risks, followed by the integrated and strategic investment of resources to reduce their occurrence and impact. [23] A CRR is a process to help communities find out what their risks are and develop a plan to reduce the risks viewed as high priority. The steps involved in the CRR are conducting a Community Risk Assessment (CRA), developing a CRR plan, implementing the plan, and evaluating the plan.

The CRA is a comprehensive evaluation that identifies, prioritizes, and defines the risks that pertain to the overall community. It is a critical first step in the CRR process and results in a full understanding of the community's unique risks, capabilities, and characteristics. An all-hazards approach is an integrated approach to emergency preparedness planning that focuses on capacities and capabilities that are critical to preparedness for a full spectrum of emergencies or disasters.

## POPULATION AND COMMUNITY GROWTH

The City of Minot resides within Ward County in northwest North Dakota. Minot encompasses an area of 27.26 square miles and has a population of 48,377.[24] The population density in the City of Minot is 1,775 per square mile.[25] There has been an 18.3 percent increase in population since the 2010 census and a 32.3 percent increase since 2000. Through annexation, the city's area also increased 56.4 percent since the 2010 census. Minot is expected to continue to experience moderate growth in the near future.

The City of Minot has a mix of industrial, residential, commercial, mixed uses, and parks. The city is the home to several large agricultural product elevators, a college district, a hospital campus, an enclosed mall, several large name-brand big-box retail stores, and mercantile businesses. Minot is a central hub for healthcare, shopping, advanced education, and other activities for a

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23. NFPA 1300, *Standards on Community Risk Assessment and Community Risk Reduction Plan Development.*
24. https://www.census.gov/quickfacts/fact/table/minotcitynorthdakota/PST045223
25. ibid

large part of northwestern North Dakota, eastern Montana, southwestern Manitoba, and southeastern Saskatchewan. The city has a historical downtown that has been designated a renaissance district with newer / refreshed mixed-use occupancies.

The following map illustrates Minot's land use districts within the city.

**FIGURE 3-1: Minot Land Use Map**
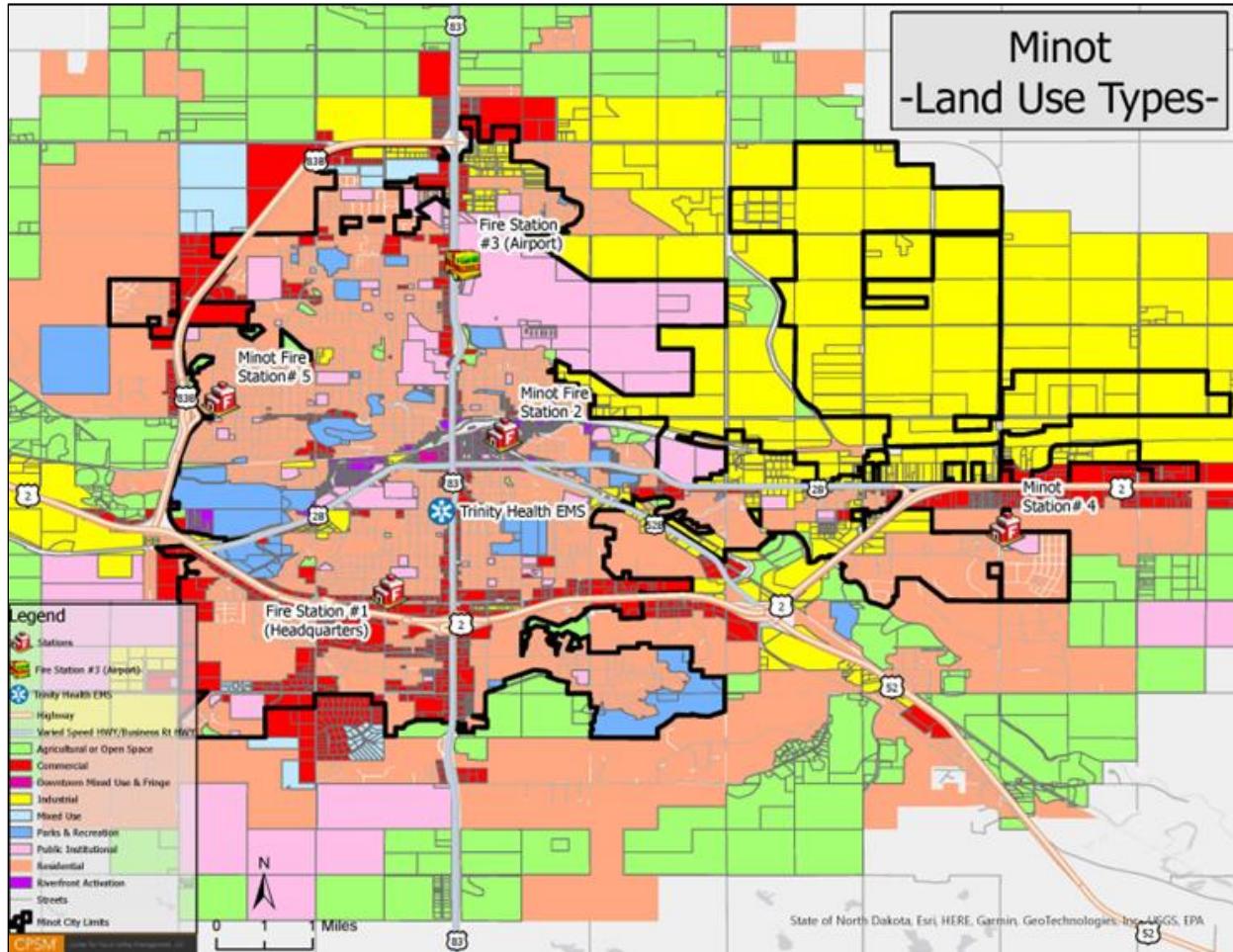


In terms of fire and EMS risk, the age and socio-economic profiles of a population can have an impact on the number of requests for fire and EMS services. Evaluation of the number of seniors and children by fire management zones can provide insight into trends in service delivery and quantitate the probability of future service requests. In a 2021 National Fire Protection Association (NFPA) report on residential fires, the following key findings were identified for the period 2015–2019:[26]

- Males were more likely to be killed or injured in home fires than females and accounted for larger percentages of victims (57 percent of deaths and 55 percent of injuries).

- The largest number of deaths (19 percent) in a single age group was among people ages 55 to 65.

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26. M. Ahrens, R. Maheshwari, "Home Fire Victims by Age and Gender" (Quincy, MA: NFPA 2021).

- 59 percent of the victims in fatal fires were between the ages of 39 and 74, and three of five (62 percent) of the non-fatal injured were between the ages of 25 and 64.

- Slightly over one-third (36 percent) of the fatalities were aged 65 and older; only 17 percent of the non-fatality injured were in that age group.

- Children under the age of 15 accounted for 11 percent of the home fire fatalities and 10 percent of the injuries.

- Children under the age of 5 accounted for 5 percent of the deaths and 4 percent of the injuries.

- Adults of all ages had a higher rate of non-fatal fire injuries than children.

- Smoking materials were the leading cause of home fire deaths overall (23 percent) with cooking ranking a close second (20 percent).

- The highest percent of fire fatalities occurred while the person was asleep or physically disabled and not in the area of the fire origin, key factors to vulnerable populations.

The following tables outline census and living data for the City of Minot.

## TABLE 3-1: Census Data, City of Minot, ND[27]
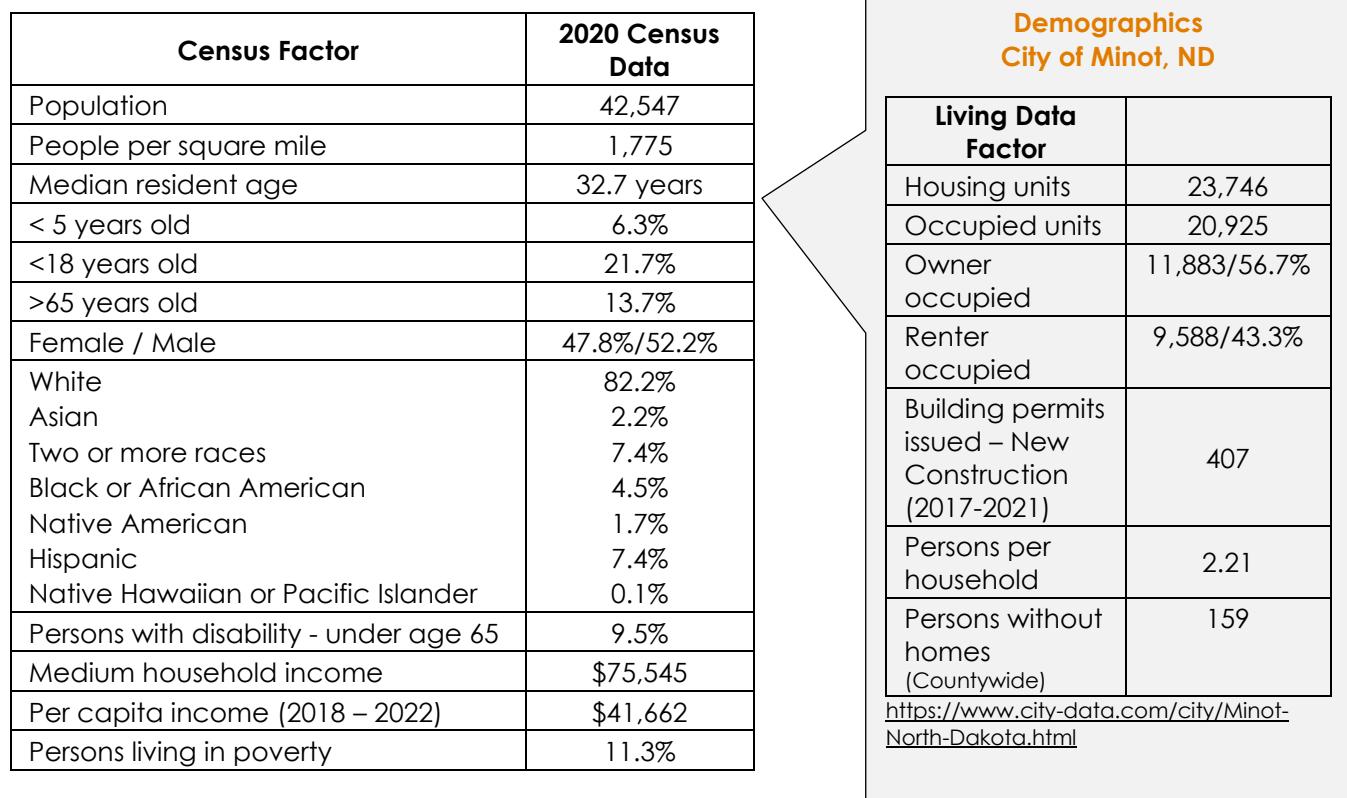
| Census Factor | 2020 Census Data |
|---|---|
| Population | 42,547 |
| People per square mile | 1,775 |
| Median resident age | 32.7 years |
| < 5 years old | 6.3% |
| <18 years old | 21.7% |
| >65 years old | 13.7% |
| Female / Male | 47.8%/52.2% |
| White | 82.2% |
| Asian | 2.2% |
| Two or more races | 7.4% |
| Black or African American | 4.5% |
| Native American | 1.7% |
| Hispanic | 7.4% |
| Native Hawaiian or Pacific Islander | 0.1% |
| Persons with disability - under age 65 | 9.5% |
| Medium household income | $75,545 |
| Per capita income (2018 – 2022) | $41,662 |
| Persons living in poverty | 11.3% |

**Demographics City of Minot, ND**

| Living Data Factor | |
|---|---|
| Housing units | 23,746 |
| Occupied units | 20,925 |
| Owner occupied | 11,883/56.7% |
| Renter occupied | 9,588/43.3% |
| Building permits issued – New Construction (2017-2021) | 407 |
| Persons per household | 2.21 |
| Persons without homes (Countywide) | 159 |

https://www.city-data.com/city/Minot-North-Dakota.html

Living in Minot offers residents a dense suburban/urban feel. The public schools in Minot are highly rated and there are lots of things to do from Roosevelt Zoo to the Dakota Aire Museum to the annual North Dakota State Fair and Scandinavian Festival.

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27. ibid

Demographically, Minot's older population—13.7 percent of the total population is over 65 years of age—is lower than the national average of around 17 percent. However, Minot's percentage of residents in this age group is expected to increase in accordance with nationally projected trends. Older individuals are at a higher likelihood of having pre-existing medical conditions or limited mobility, which can also diminish their capacity to effectively respond to natural disasters.

There is often a connection between socio-economic status/poverty and elevated fire risk (and use of the EMS systems). Factors associated with poverty and elevated fire risk include family stability, crowdedness, the percentage of owner-occupied homes, older housing, the proportion of vacant houses, and the ability to speak English.[28] Successful programs to reduce fire incident rates have been introduced in high-poverty areas in several areas of the country.

The greatest fire safety concern in Minot is the potential life loss in fires that occur in non-sprinklered, single, and multifamily residential dwellings during sleeping hours, which is consistent with national trends. These fires are fueled by new "lightweight" construction and more flammable home contents. The time to escape a house fire has dwindled from about 17 minutes, 20 years ago, to three to five minutes today (provided there is a working smoke detector). Fires can double in size and intensity every 30 seconds. This poses a severe risk not only to occupants but also to firefighters as they now have less time to do their job and save residents' lives and property.

Looking ahead, following a historic flood in 2011, an oil boom, and a pandemic, new opportunities have emerged in Minot. Development catalysts include the new Trinity Medical Campus in the city's south end, a surge of investment in community flood protection, a new high school, the Minot Air Force Base Sentinel project, and ongoing revitalization within the downtown area. Since 2013, for every house demolished because of flood damage, two new ones have been built.

The City of Minot has a comprehensive Plan that envisions what the city will look like between now and 2040. The plan projects a 2040 population of approximately 66,532, which would be an increase of 18,155 (+37.5%).[29] It also projects this will result in an additional 6,600 households calling the city home.[30]
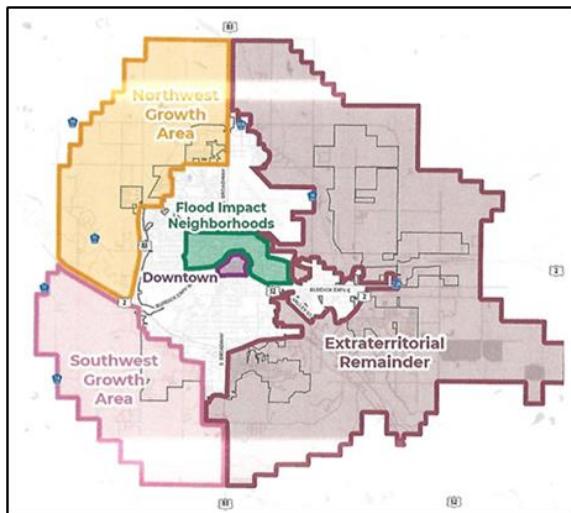


The Comprehensive Plan envisions five general focus areas for the city. These are identified in the adjacent figure. The downtown and flood impact neighborhoods are already experiencing redevelopment and infill development. The northwest and southeast are where the largest amount of growth and development are projected to occur. The extraterritorial area is projected to support a variety of industrial, commercial, and residential projects.

The next figures show the areas that are projected for residential and commercial development.

28. https://www.nfpa.org/~/media/Files/News and Research/Fire statistics and reports/US Fire Problem/poverty.pdf
29. https://www.minotnd.gov/233/Comprehensive-Plan
30. ibid

**FIGURE 3-2: Minot Comprehensive Plan 2040 Residential and Commercial Development Areas**
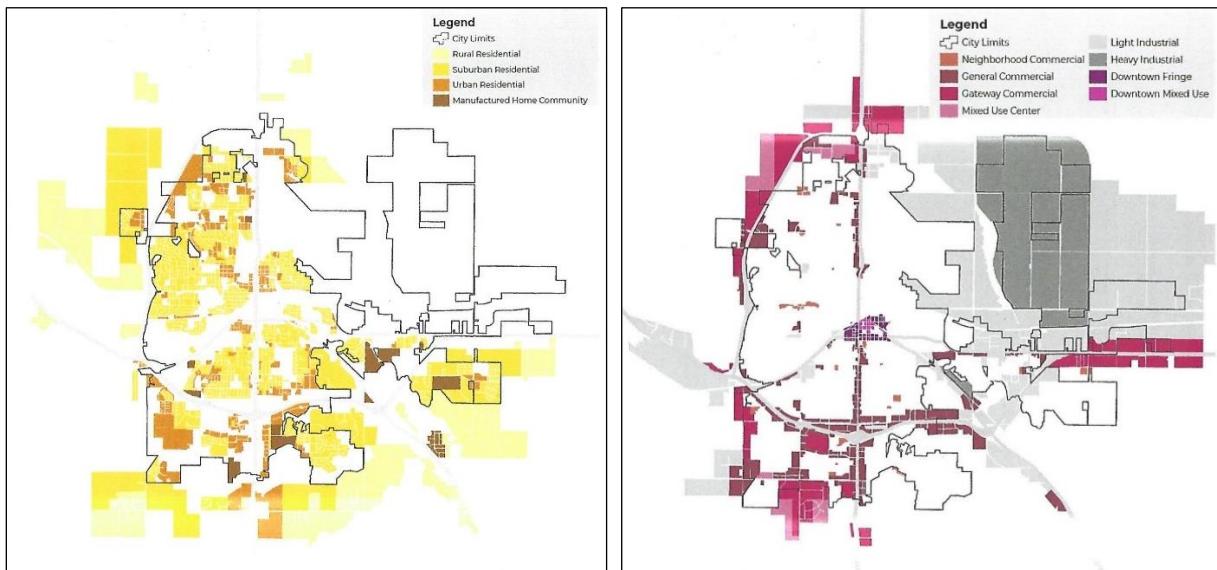


More immediately the city has hired a retail recruiter to market the city to potential retailers interested in possibly setting up in the city. The city has also seen multiple new apartment projects with additional projects proposed. One of the catalysts for this development is money from FEMA after the 2010 floods.

Much of the recent interest is centered on southeast Minot near Trinity. One major project in that area would involve more than 1,200 residential lots. The project has been dormant for several years but there are recent indications that the developer may try again. There are also hundreds of large lots for sale in the city's north end. The Highway 83 bypass also presents the potential for a lot of commercial growth.



One of the major projects currently under deveopment is the Tracks project in southeast Minot across from the new Trinity Hospital. This project will eventually include 400 units of mixed residential and commercial in five, seven-story buildings.

The Big M building behind City Hall is undergoing a complete renovation that when complete will feature four floors of retail and four floors of residential. There is also a five-story, 175-unit, mixed-use residential/commercial project propsed over the central parking ramp.

## ENVIRONMENTAL FACTORS

The City of Minot is prone to and will continue to be exposed to certain environmental hazards that may impact the community. Identifying and assessing impacts of local hazards in a community is important; agencies can participate in county-wide and state-wide mitigation efforts and prepare local communities for disasters (all-risk).

The natural, human-caused, and technological hazards are currently being evaluated in the 2017 Ward County Hazard Mitigation Plan (WCHMP).[31] In the northwestern region of the state (Ward County/Minot area), wildland fires, severe weather, flooding/ dam failures, earthquakes, drought, haz-mat incidents, disease, landslides, terrorism, violence, civil unrest, and cyberattacks are identified as potential hazards.

The following table places these environmental factors in order of probability.

### TABLE 3-2: Potential Environmental Factors for Minot

| Environmental Factor | Geographical Area | Potential / Severity | Probability |
|---|---|---|---|
| Wildland Fire | Extensive | Critical | Highly Likely |
| Severe Weather | Extensive | Limited | Highly Likely |
| Drought | Extensive | Critical | Likely |
| Haz-Mat | Limited | Limited | Likely |
| Flooding/Dam Failures | Significant | Critical | Occasional |
| Earthquake/Landslides | Significant | Limited | Occasional |
| Disease | Extensive | Critical | Occasional |
| Terrorism, Violence, Civil Unrest, Cyber Security | Significant | Critical | Occasional |

According to the National Centers for Environmental Information (NCEI) database, at least 323 weather-related hazard events have occurred in Ward County since 1950, including the following number and types of hazard events:

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31. Montana Hazard Mitigation Plan (2023).

## TABLE 3-3: Occurrences of Weather-Related Hazards Since 1950[32]

| Type Event | Number | Type Event | Number |
|---|---|---|---|
| Blizzard | 33 | Higfh Wind | 33 |
| Cold/Extreme Cold | 33 | Ice Storm | 1 |
| Excessive Heat | 1 | Thunderstorm | 72 |
| Flood | 8 | Tornado | 33 |
| Funnel Cloud | 2 | Wildfire | 1 |
| Hail | 55 | Winter Storm | 31 |
| Heavy Snow | 16 | Winter Weather | 4* |

*Four winter storms that resulted in a FEMA disater declaration or significant dollar loss.

The potential environmental risks include:

- North Dakota winters are known for being extremely cold with multiple days with overcast skies. Severe winter storms that produce high winds, heavy snow, drifting snow and blizzard-like conditions, ice, extreme low temperatures, as well as power outages and carbon monoxide emergencies are to be expected. The season can last approximately four to six months, usually beginning around November and lasting through April, with the coldest months being December, January, and February.

- Because Minot, like all other upper Midwestern cities, is exposed to eastern-moving fronts, it is prone to strong thunderstorms that produce heavy winds, rain, and lightning. Accompanying these storms is the potential for tornadic activity. The normal North Dakota tornado season spans June and July, although a tornado can occur at any time if the conditions exist to produce these weather events.

- Drought and extreme high temperatures causing dry brush, grass, and other vegetation which leads to outside brush fires. Since the start of 2024, abnormally dry conditions have increased in North Dakota by 57 percent and drought has increased by nine percent.[33] While less of an overall environmental threat, there are hundreds of wildfires reported each year in in North Dakota. While not all these fires are major in size, they pose threat to life, property, and the economy. Wildland fires are often difficult to put out and require a great deal of resources. The peak time of wildfire season in North Dakota is the spring season because it's windier and drier than other times of the year. Anytime between the snowpack being gone and the green up of grasses, fires can occur, particularly on warm, windy, dry days. A dry winter can extend this time, leading to more potential wildfires. Wildland fires are overwhelmingly caused by humans followed by dry-lightning strikes.

The most immediate dangers from wildfires are the destruction of homes and timber, wildlife, and injury or loss of life to persons who live in the affected area or who are using recreational facilities in the area. Long-term effects can be numerous and include scorched and barren land, soil erosion, landslides/mudflows, water sedimentation, and loss of recreational opportunities.

For western and central North Dakota, 2012 had the most red flag warning days of the past 15 years. In more recent memory, 2021, with little snowpack all winter and expansive drought, also had lots of wildfires. While not directly impacting Minot, the National Interagency Fire Center has

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32. https://www.co.ward.nd.us/DocumentCenter/View/6728/16---Ward-County-
33. https://www.kfyrtv.com/2024/03/07/potential-more-wildfires-than-normal-this-spring-nd-large-fires-burn-other-parts-us/

also placed the eastern half of North Dakota in the above normal risk category for wildfires in March and April.[34]

### FIGURE 3-3: High Wildfire Danger Days



Flooding can occur from heavy rain (urban flooding due to poor drainage), the melting of snow, presence of rivers and creeks, and the failure of dams or levees. Flooding can also cut off access to utilities, emergency services, transportation, and may impact the overall economic well-being of an area.

In Minot, the flooding concern is the Souris (or Mouse) River which originates in the Yellow Grasslands Marshes north of Weyburn, Saskatchewan, Canada, and flows southeast, crossing into North Dakota, passing southeast through Ward County and the City of Minot before then looping back north into Canada to eventually flow into the Assiniboine River near Brandon, Manitoba. The Des Lacs River flows south through Ward County to converge with the Souris River at a point six miles northwest of the City of Minot.[35]

Ward County has a series of naturally occurring coulees that channel water towards the Souris and Des Lacs Rivers. Flows of water through these coulees have measured three feet or more during localized heavy rain (6 to 9 inches in three hours). This type of flooding has washed out roads, breached culverts, and damaged bridges. Adding to these phenomena, as the water flows down through the coulees it picks up a great deal of debris and deposits it into the river, compounding the flood hazard.[36]

In June 2011, after Canada received more than 7" of rain in a short period of time, the City of Minot experienced severe flooding along the Souris (Mouse) River. This resulted in hundreds of millions of dollars in damage throughout the valley including in Minot. While the City of Minot did have some time to prepare for the anticipated floods, there was still extensive damage in the city.

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34. https://www.kfyrtv.com/2024/03/07/potential-more-wildfires-than-normal-this-spring-nd-large-fires-burn-other-parts-us/
35. https://www.co.ward.nd.us/DocumentCenter/View/6728/16---Ward-County-
36. ibid

## FIGURE 3-4: 2011 Downtown Minot Flood



## FIGURE 3-5: 2011 Minot Flood Map
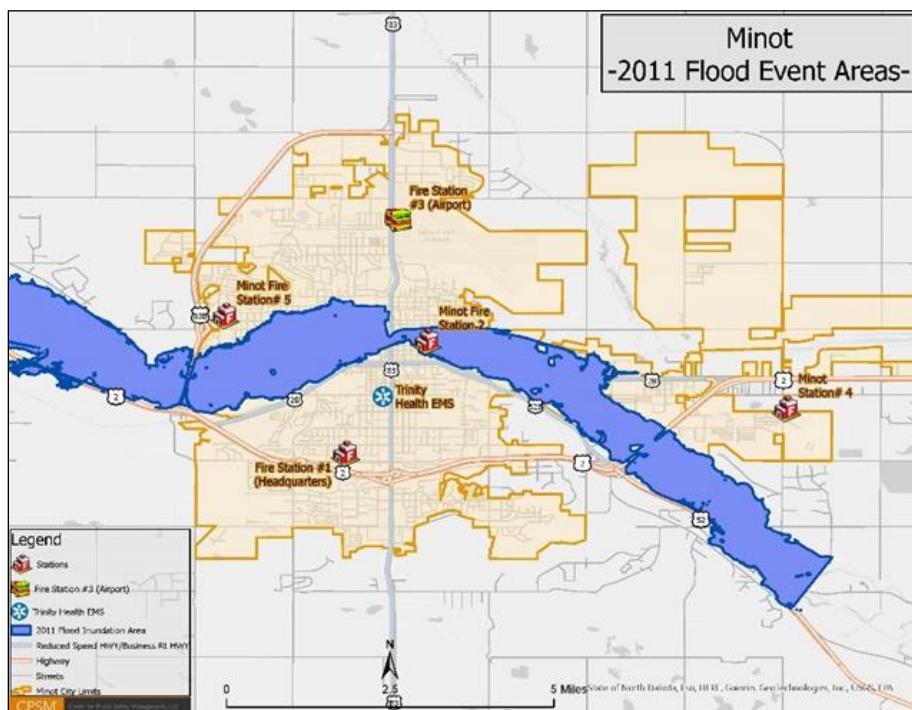


Damage to the city's housing stock included 4,100 homes flooded with 3,100 lost or extensively damaged displacing over 11,000 residents. Estimated damage to residential structures alone was more than $480 million, with losses to commercial, public, and farm structures estimated at more than $210 million. The majority of flooded housing units were not in the FEMA designated 100-year floodplain, therefore many homeowners elected not to carry FEMA flood insurance.[37]

The following figure Illustrates normal flood risk to the City of Minot.

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37. https://www.minotnd.gov/DocumentCenter/View/1848/Minot-NB-DT-Chapter-3-Flood-Chronology#:~:text=Damage%20to%20the%20city's%20housing,estimated%20at%20over%20%24210%20million.

## FIGURE 3-6: Minot Flood Zone Map
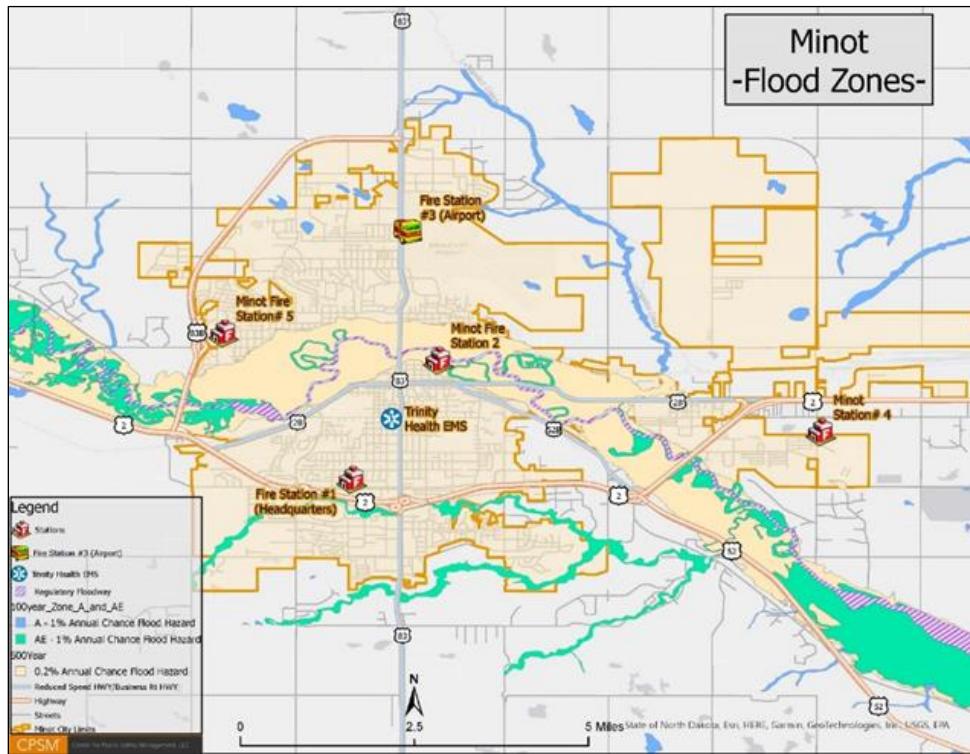


NCEI contains records of another eight flash-flood/flood events that have impacted Ward County since 1950. Of these eight records, seven were flood events and one was a flash flood event.

Although an exceptionally low risk, North Dakota does occasionally experience earthquakes. According to the United States Geological Service there have been five earthquakes in North Dakota since 1909. However, the most recent, which occurred on September 28, 2012, and registered 3.3 on the Richter Scale was centered about 13.7 miles east-southeast of Williston. The largest risk is interruption to natural gas lines and the electric grid from earthquakes distant to the city.

## BUILDING AND TARGET HAZARD FACTORS

Building and target hazards are defined as significant hazards that can strain the fire department response capability—*a plausible scenario* in which a fire department could quickly become overwhelmed and for which additional resources would be needed to mitigate the incident. The definition of target hazards varies among jurisdictions but typically covers hospitals, nursing facilities, schools, churches, storage facilities, military sites, high-rise, multifamily dwellings, assemblies, and industrial parks / manufacturing plants.

Target hazards are often segregated by high, medium, or low hazard depending on factors such as the life and building content hazard, and the potential fire flow and staffing required to mitigate an emergency in the specific property. According to the NFPA *Fire Protection Handbook*, these hazards are defined as:

**High-hazard occupancies:** Schools, hospitals, nursing homes, assisted living, explosives plants, refineries, high-rise buildings, and other high life-hazard (vulnerable population) or large fire-potential occupancies.

**Medium-hazard occupancies:** Apartments, offices, and mercantile and industrial occupancies not normally requiring extensive rescue by firefighting forces.

**Low-hazard occupancies:** One-, two-, or three-family dwellings and scattered small business and industrial occupancies.

Identifying high-hazard occupancies or target hazards that would require a higher concentration of fire department resources is an essential part of fire risk assessment. The process of identifying target hazards and pre-incident planning are basic preparedness efforts that have been key functions in the fire service for many years. In this process, critical structures are identified based on the risk they pose. Then, tactical considerations are established for fires or other emergencies in these structures. Consideration is given to the activities that take place (manufacturing, processing, etc.), the number and types of occupants (elderly, youth, handicapped, imprisoned, etc.), and other specific aspects relating to the construction of the facility, or any hazardous materials that are regularly found in the building.

Target hazards are those occupancies or structures that are unusually dangerous when considering the potential for loss of life or the potential for property damage. Typically, these occupancies include hospitals, nursing homes, and high-rise and other large structures.

The construction type for most residential structures in Minot is a mix of wood frame with wood or composite siding, and wood frame with brick veneer built on slab and crawl space with some having basements.

Townhomes, condos, and apartments are also common in Minot. Typical construction includes wood frame with wood or composite siding, wood frame with brick veneer, and ordinary (block/brick) construction. Some are mid/high-rise structures that create vertical density. Some apartment complexes include multistory structures and/or those in a campus footprint.

Other construction types for residential structures are present in Minot as well and may include masonry non-combustible and fire resistive. The city does have an assortment of manufactured homes as well, which are typically made of light metal/wood construction with various exterior coverings. The commercial/industrial structure building inventory is ordinary (block/brick) construction, wood frame with composite siding, and masonry non-combustible.

Minot has the following building types:

- Single-family homes (**10,600**).
- Condos, lofts, townhomes (**2,691**).
- Duplex/Triplex/Quad (**186/64/226**).
- Apartment buildings – 5 or more units (**443 buildings/6,500 +/- units**).
- Commercial/industrial structures (**2,000 +/-/68**).
- Covered/Enclosed malls (**1 w/77 stores**).
- Strip malls (**32: 2 w/25+ stores**).
- Day care centers (**23**).

- Hospitals/medical centers (**2; 1 occupied**).

- Assisted living/long-term care structures (**8**).

- Housing/commercial/professional business structures over 75 feet in height (high rise) (**6: 1 – hotel; 3 - apartment buildings; 2 - hospitals (1 vacated**).

- Public education structures (**21**).

- Public government buildings (**10**).

- Correctional institutions (Ward County Detention Center)(**1**).

In terms of identifying target hazards, consideration must be given to the activities that take place (public assembly, life safety vulnerability, manufacturing, processing, etc.), the number and types of occupants (elderly, youth, handicapped, imprisoned, etc.), and other specific aspects related to the construction of the structure.

Minot has a variety of target hazards that include:

- Multifamily/apartment complexes/buiuldings with a total 6,500 +/- units (life safety/fire spread).

- Hospital/medical center target hazards (Trinity Health complex: 6 stories w/ 148 beds).

- Hotel target hazards (life safety). There are 30 hotels/motels, with 2,946 rooms.

- Correctional instituion target hazard (life safety/access).

- Educational/school/public assembly/day care centers target hazard (life safety).

- Mercantile/Business/Industrial (life safety, hazardous storage and or processes).

- Long-term care target hazard (life safety, vulnerable population).

- Government infrastructure target hazard (hazardous storage/processes and continuity of operations).

- Government business target hazards (life safety, continuity of operations).

- Private business target hazards (life safety).

- High-rise target hazards (life safety) of which there are six of mixed occupancy types and include housing units.

- Grain elevators (life safety/dust explosion hazard).

- College dormitories (life safety)

- Covered shopping mall (life safety).

- Movie theaters (life safety).

- Big box stores (life safety, hazardous storage).

- Warehouses/storage facilities (hazardous storage).



The city has a mix of low- and medium-risk structures that make up the majority of the target hazard risk. High-hazard building risks are noted in this section as well. These include schools, assisted living/long-term care facilities, residential structures housing a vulnerable population, hospital/medical centers, residential high-rise structures, public assembly structures when

occupied, and those that have hazardous materials used in processes or that are stored in large quantities.

**An identified high hazard for Minot is the number of high- to mid-occupancy buildings that do not have sprinklers.**

The following figure illustrates the location of target hazards in the city.

### FIGURE 3-7: Minot Target Hazards (All)
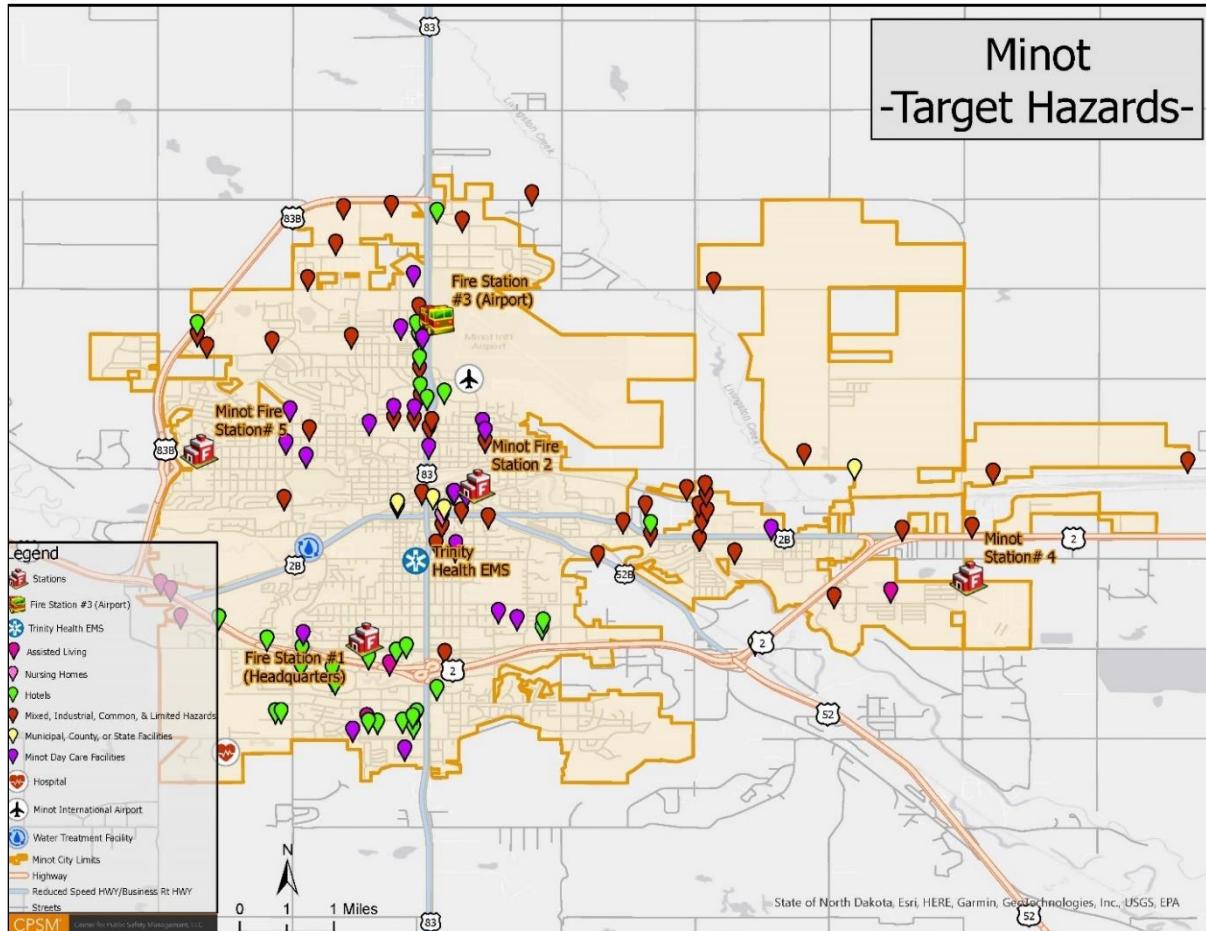


Larger footprint buildings that are projected to be constructed in the city will pose additional building risks to the MFD in terms of a large footprint, mass storage of commodities, and waterflow requirements based on the size and commodities stored and mercantile processes being conducted in the buildings. These buildings are typically built of fire resistive structural members and are sprinklered, but contain internally combustible accessories, storage, processes, and internal structures. While the life-safety hazard normally will not require extensive rescue by firefighting forces (in terms of the number of people on premises at one time to be rescued), the scope and complications of the larger footprint to be covered by initial attack lines and in a search and rescue undertaking may raise these types of structures to a higher hazard.

The City of Minot provides a mix of challenges and hazards that must be protected by its fire department. Like many old cities, Minot has an older center core and downtown area with numerous closely spaced, abutting, and even some interconnected buildings (next figure).

## FIGURE 3-8: Downtown Minot



These buildings are mostly two to four stories, older unprotected construction, with zero lot lines, and limited area separations. They date to the latter part of the 19th and early years of the 20th centuries. These types of structures and areas can contribute to rapid fire spread from one building to another, requiring an aggressive attack to contain and control. Although some of these buildings have been renovated over the years and equipped with automatic fire suppression systems, a considerable number have not, which increases the potential life hazard and fire spread concerns. As the city continues its downtown renaissance project for revitalizing downtown Minot it should ensure that all buildings that are renovated/rehabilitated are equipped throughout with automatic fire suppression systems.

Minot is also home to Minot State University (MSU), part of the North Dakota state university system. MSU had a total 2023 enrollment of 2,741 students. Of these, 379 reside in on-campus residence halls, while another 74 live in three off-campus apartment complexes. College living facilities present elevated life safety concerns for residents and visitors.

## FIGURE 3-9: MSU Campus



To summarize the building and target hazard factors for Minot:

■ The greatest building fire risks in the City of Minot are of a low-to-moderate hazard (single-family dwellings, lightweight, wood-frame construction, and mixed use/ historical buildings in the downtown). Of particular concern is Wheatland Village, which is a FEMA temporary housing community that was erected after the 2011 floods. At its peak, this community included over 1,000 temporary residences; today, 13 years later, there are still several hundred that are occupied.

- The city has high-risk/vulnerable population risks (nursing/assisted living facilities, schools, and multifamily residential structures apartments/condominiums).

- The city also has multiple residential projects under construction or approved and planned for near- to mid-term construction.

- The industrial and mercantile building risk, while a lower life-safety risk, is a moderate to higher hazard risk based on processes, storage, and overall occupancy type. All the high-hazard risk locations pose either a difficulty for MFD to conduct evacuations and/or fire attack. The MFD, as with most fire departments, utilizes a quick and aggressive fire attack to contain an incipient fire to the room of origin. However, a significant commercial or a large complex fire and/or a multiple occupancy evacuation will quickly exhaust the resources of both the MFD and its limited mutual aid partners.

- Robust public education and fire inspections / pre-fire planning, specifically in the downtown district and for high- and moderate-risk occupancies, should remain an important endeavor for the MFD.

## HUMAN-CAUSED RISK

Human-caused or generated risks include civil unrest, large mass gatherings, cyberattacks, school violence, and threats of violence with the potential of weapons of mass destruction use. As it is somewhat remote and the county seat, there are several federal, state, and local government buildings that could be targeted. Minot is also about 13 miles from the strategically significant Minot Air Force Base and the city is surrounded by multiple ballistic missile silos.

## TRANSPORTATION FACTORS

The road network in Minot is typical of cities across the country and includes arterial streets, which carry high volumes of traffic; collector streets, which provide connection to arterial roads and local street networks as well as residential and commercial land uses; and local streets, which provide a direct road network to property and move traffic through neighborhoods and business communities. Minot also has limited access highways that penetrate the city boundaries. U.S. Routes 2 and 52 travel in an east-west direction in the southern part of the city. U.S. Highway 83 bisects the city in a north-south direction. The U. S. Highway 83 Bypass allows drivers to bypass the northwestern portion of the city by connecting Highway 2/52 on the west side of the city with Highway 83 on the extreme north end of the city limits. All these roads include a series of on- and off-ramps. In addition, there are state and county roads that carry high volumes of traffic in and out of the city.

The road network described herein poses risks for a vehicular accident, some at medium to high speeds, as well as vehicular-versus-pedestrian risks. There are additional transportation risks since a heavy volume of tractor-trailer and other commercial vehicles traverse the roadways of Minot to deliver mixed commodities to businesses and residential locations. Loads of industrial chemicals and hazardous materials traverse the city daily. Hazardous military cargo also transits the county because the 91st Missile Wing at Minot Air Force Base services the missile sites situated throughout the county. Fires involving these products can produce smoke and other products of combustion risks that may be hazardous to health.

In Minot, response routes are impacted by a limited number of highway, railroad, and river crossings (bridges) available to emergency responders.

## FIGURE 3-10: Minot Streets and Highways
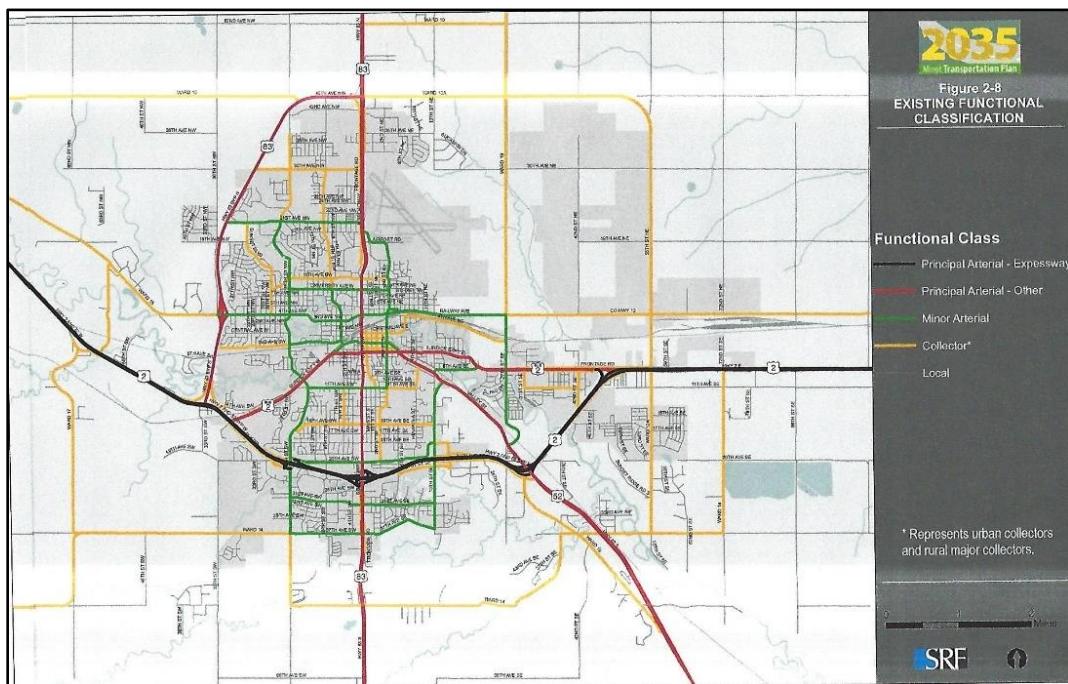


The Minot City Transit service operates fixed bus routes that provide service in the city Monday through Friday from 7:00 a.m. to 7:00 p.m. There is no Saturday or Sunday service. The fixed-route buses provide service to medical facilities, major employment centers, tourist attractions, major retail shopping centers, schools, MSU, professional buildings, the central business district, and all major points of interest. A bus accident when a bus is occupied poses a mass casualty response risk if multiple riders are injured.

## FIGURE 3-11: Minot City Transit System Routes
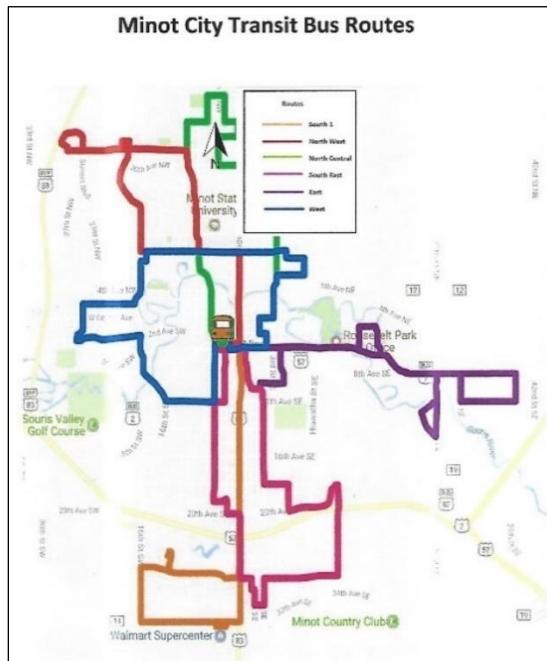
There are several active railroad lines that pass through the city, as well as the presence of active rail freight yards. Rail traffic includes passenger and freight. Active rail lines include Burlington Northern Santa Fe (**33 trains per day**), Canadian Pacific (**15 trains per day**), and Amtrak (**2 trains per day**). Numerous freight trains traverse Minot daily. Hauled freight includes all manner of raw and finished goods as well as tank cars of industrial and agricultural chemicals. While not all of these commodities may be considered hazardous materials, fires involving these commodities can produce smoke and other products of combustion risks that may be hazardous to health. Hazardous materials themselves present risks to health. There are also multiple at-grade crossings on connector and local roads, and these create transportation risks. The Canadian Pacific line in particular traverses multiple grade crossings and bisects downtown Minot. Most arterial streets and highways do not intersect directly with rail traffic, which helps neutralize rail/vehicular traffic accidents.

## FIGURE 3-12: Minot Rail Lines
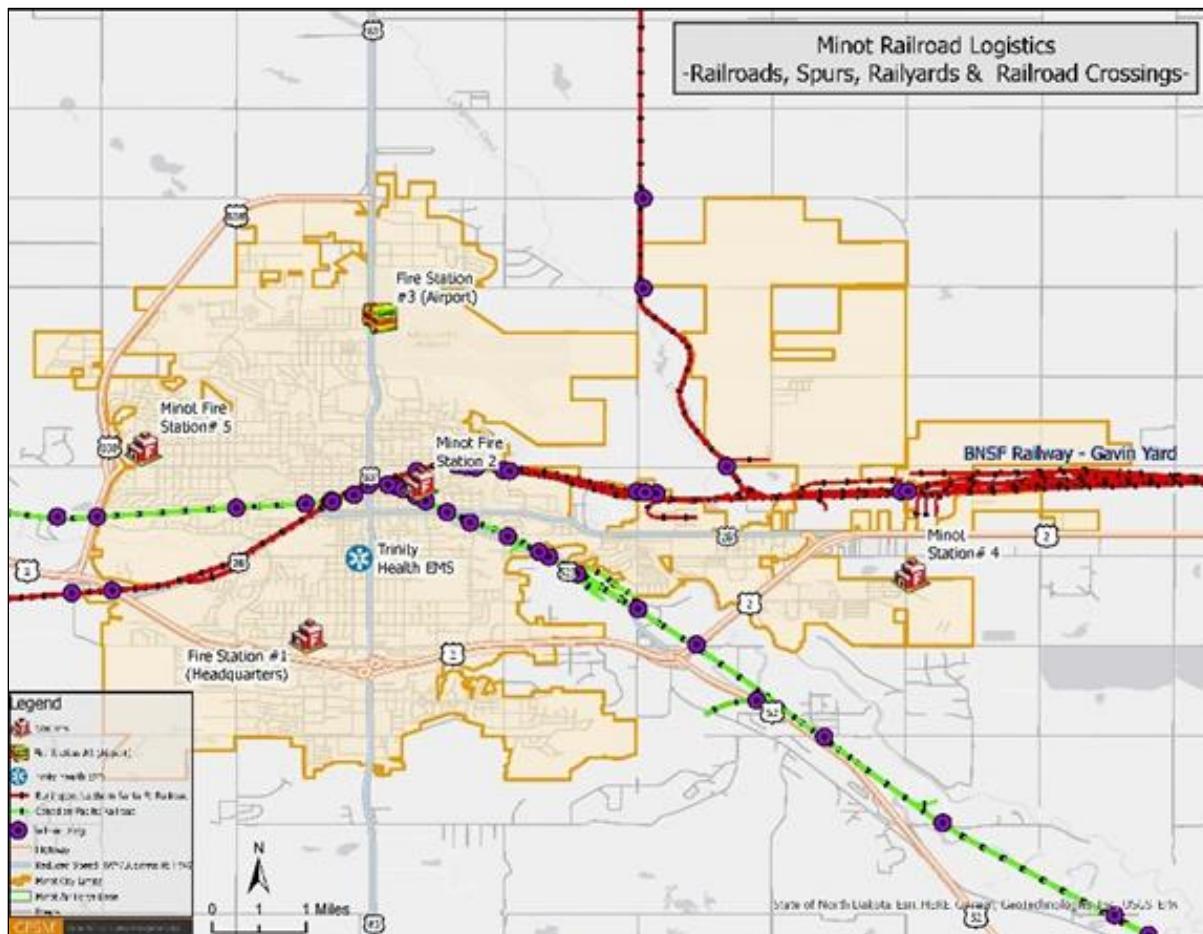


Passenger train service by Amtrak consists of two daily runs: one train goes west in the morning, and another goes east in the evening.

The two rail lines cross just west of Minot's downtown area. Several railroad choke points also exist in Minot: the 6th Street SW overpass in Minot, which serves both freight and passenger rail traffic, and Trestle Valley, which is a particularly heavily used freight train artery on the extreme southwestern side of Minot.

## FIGURE 3-13: Minot Rail Line Crossing



There are also three rail yards in Minot:

- Canadian Pacific Railway is located at 1345 Valley St.

- BNSF Railway is located at 6400 4th Ave. NE.

- Northwest Transloading Facility, also known as the North Dakota Expansion Plant, is located at 4900 Railway Ave. The port is a 3,200-acre industrial development in northeast Minot with more than 45 miles of rail spur track, an intermodal facility, and a new 55th Street overpass over the BNSF mainline.

## FIGURE 3-14 Minot Rail Yard

**FIGURE 3-15: Port of North Dakota Expansion Plan[38]**
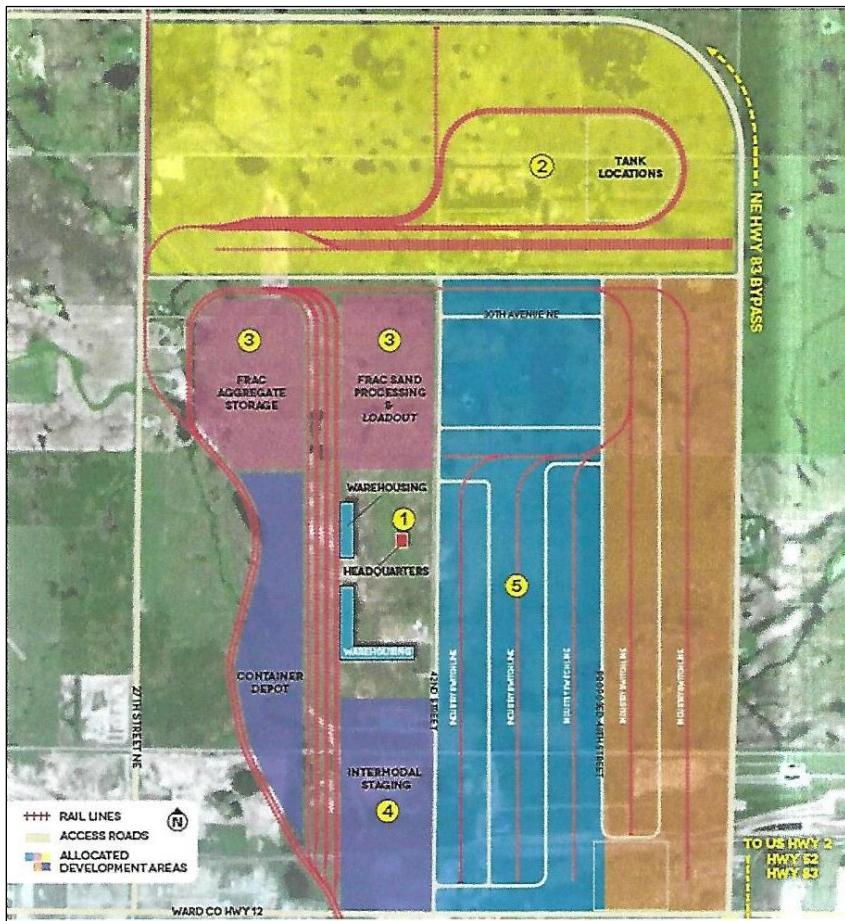


Minot International Airport is locted witin the city limits, approximately 2 miles north of downtown.

Scheduled passenger service to the airport is currently provided by Delta Air Lines, United Airlines, and Allegiant Air.

There are six daily flights to and from Minneapolis-St. Paul International Airport (MSP) on Delta, and two daily flights to and from Denver International Airport (DEN) on United. Allegiant Air provides multiple flights throughout the week to Las Vegas (LAS), Orlando(MCO) and Phoenix-Mesa (IWA).

The airport covers 1,563 acres. It has two runways: 13/31 is the primary runway with Instrument Landing Syste (ILS) approach capabilities. It is 7,700 feet by 150 feet and constructed of concrete. Runway 8/26 is a crosswind runway that is 6,348 feet by 100 feet and made of asphalt.[39]

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In the year ending March 30, 2023, the airport had 33,020 aircraft operations, averaging 90 per day. Of these 73 percent general aviation, 6 percent were commercial airline, 6 percent were military, and 15 percent were air taxi.[40] 128 aircraft are based at this airport: 119 single-engine, 6 multi-engine, 1 jet, and 2 helicopters.[41] According to the FAA, total passengers travelling through the airport in 2023 totalled 301,441.[42]

## FIGURE 3-16: Minot International Airport Runway Size and Configuration
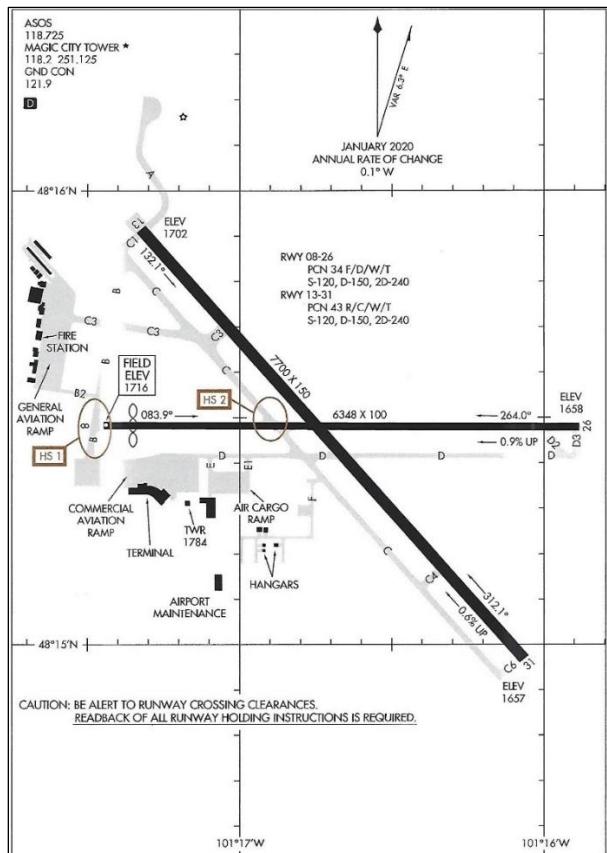


The potential for a mass casualty incident exists for any passenger aircraft arriving at or departing from the airport. There is also the possibility of an aircraft with an inflight emergency—including military aircraft—being diverted to Minot.

The FAA calculates the aircraft rescue and firefighting (ARFF) requirements—minimum emergency response capabilities specifically to aircraft incidents—based on five indexes. These indexes are calculated based on the length of aircraft and the average daily departures. The five indexes are labeled A through E, beginning with aircraft less than 90 feet long and ending at those more than 200 feet long.[43] Each index classifies ARFF minimum requirements in terms of type, water, and agent delivery.[44] MOT is currently an Index B airport.[45] The following table outlines ARFF requirements specific to the City of Minot.

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40. https://www.gcr1.com/5010ReportRouter/MOT.pdf
41. ibid
42. https://motairport.com/DocumentCenter/View/728/December-2023
43. CFR § 139.315 Aircraft rescue and firefighting
44. CFR § 139.317 Aircraft Rescue and Firefighting Equipment and Agents
45. https://adip.faa.gov/agis/public/#/airportData/BTL

## TABLE 3-4: Airport Rescue and Firefighting Requirements (MOT)[46]

| Index | Aircraft Max. | No. of ARFF Vehicles Required | ARFF Min. Standards | Response Time |
|-------|---------------|-------------------------------|---------------------|---------------|
| B | >90 feet <126 feet | 1 on site<br><br>Or<br><br>2 vehicles | 500 pounds of sodium-based dry chemical, halon 1211, or clean agent and 1,500 gallons of water and the commensurate quantity of AFFF for foam production.[47]<br><br>One vehicle carrying the following extinguishing agents:[48]<br>✓ 500 pounds of sodium-based dry chemical, halon 1211, or clean agent; or<br><br>✓ 450 pounds of potassium-based dry chemical and water with a commensurate quantity of AFFF to total 100 gallons for simultaneous dry chemical and AFFF application.<br><br>One vehicle carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by both vehicles is at least 1,500 gallons.[49] | Within 3 minutes from time of alarm to mid-point of the furthest air carrier runway. |



The MFD staffs the airport 24/7 with a crew of four out of Fire Station 3, which is located on airport property. However, only one person is dedicated strictly to the ARFF function. The other personnel cross staff Engine 3 and respond to incidents off property. The one dedicated position on each shift (3 total) are funded by the airport through a pass off fee to the airlines.

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46. CFR § 139.319 Aircraft rescue and firefighting: Operational requirements
47. https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-139/subpart-D/section-139.317
48. ibid
49. ibid

Minot is traversed by multiple pipelines, several of which supply fixed storage facilities located just outside of the city limits. A significant pipeline leak can have significant fire, health, and environmental implications. Any incident in the area would likely result in extensive MFD involvement.

**FIGURE 3-17: Minot Pipe Lines**
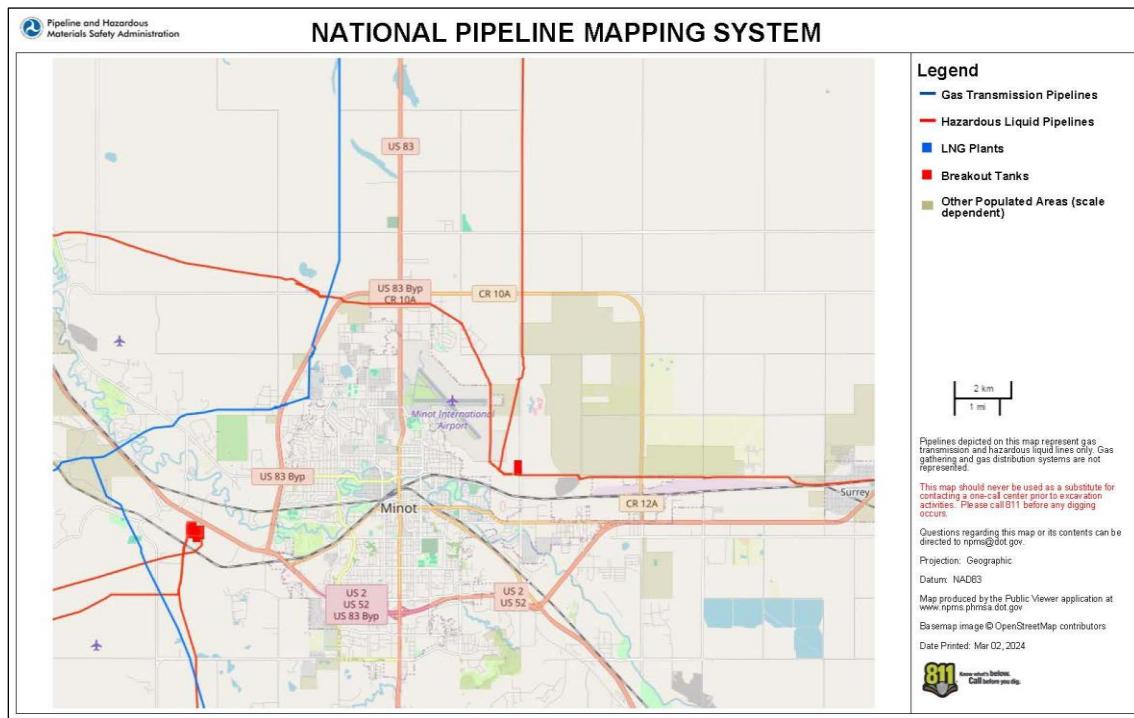


## TOURISM AND TRANSIENT POPULATION

Minot hosts a significant and growing tourism sector. The city is a gateway to not only the energy drilling sites in the area but also for the multitude of outdoor recreational activities found in northwestern North Dakota. The nearby U.S. Air Force Base also contributes to visitors to the area, as well as the city's status as a regional commerce center. As previously noted, there are 30 hotels/motels with a total of 2,946 rooms located in Minot. While good data was not available, it is estimated the hotels averaged a 60 percent occupancy rate, which equates to 645,174 room stays per year. The demographics of the visitor population are of relevance to emergency services, particularly when it comes to older (over age 65) visitors who are more likely to require EMS services.

Minot is home to the North Dakota State Fair, which is held each year in early July. In 2023, over its nine-day run, the fair set an all-time attendance record with 356,534 visitors. The fairgrounds also host numerous other events throughout the year. Although the fairgrounds themselves are not in an MFD first response area, the department does assist during the fair, and any significant event that occurs will require extensive assistance from the MFD.

## FIGURE 3-18: North Dakota State Fairgrounds



## FIRE AND FIRE-RELATED RISK

An indication of the community's fire risk is the type and number of fire-related incidents to which the fire department responds. CPSM conducted a data analysis for this project that analyzed MFD incident responses and workload. During the period studied, from October 1, 2022, to September 30, 2023, the MFD responded to 905 fire-related calls for service. The following table details the call types and call type totals for these types of fire-related risks.

## TABLE 3-5: Fire Call Types

| Call Type | Total Calls | Calls per Day | Call Percentage |
|---|---|---|---|
| False alarm | 400 | 1.1 | 8.2 |
| Good intent | 76 | 0.2 | 1.6 |
| Hazard | 186 | 0.5 | 3.8 |
| Outside fire | 47 | 0.1 | 1.0 |
| Public service | 95 | 0.3 | 2.0 |
| Structure fire | 83 | 0.2 | 1.7 |
| Technical rescue | 18 | 0.0 | 0.4 |
| **Fire Subtotal** | **905** | **2.5** | **18.6** |

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## FIGURE 3-19: Fire Calls by Type
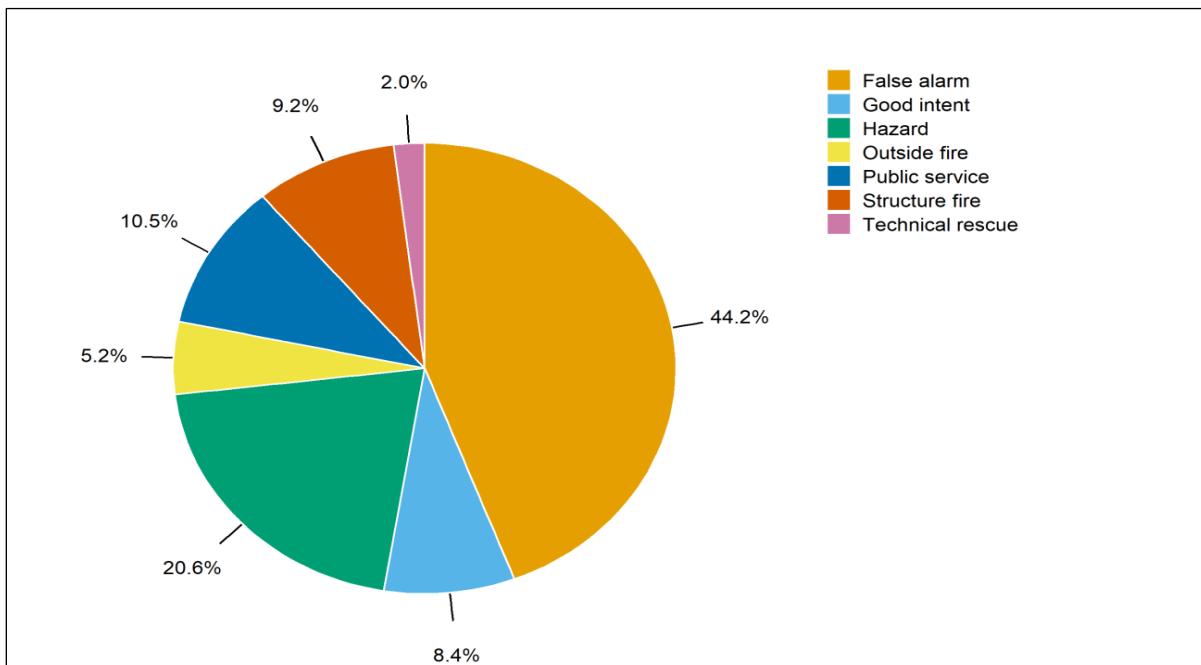


Key takeaways from the data in this table and figure are:

- Fire calls for the year totaled 905 (18.6 percent of all calls), an average of 2.5 calls per day. This percentage is slightly lower than CPSM typically sees with fire calls normally accounting for 20 percent to 30 percent of all calls.

- False alarm calls were the largest category of fire calls at 44 percent of fire calls, an average of 1.1 calls per day.

- Structure and outside fire calls combined made up 14 percent of fire calls, an average of 0.4 calls per day, or about one call every three days.

## EMS-RELATED RISK

As with fire risks, an indication of the community's pre-hospital emergency medical risk is the type and number of EMS calls to which the fire department responds. During the CPSM data analysis study period the MFD responded to 3,714 EMS-related calls for service. The following table outlines the call types and call type totals for these types of EMS risks.

## TABLE 3-6: EMS Call Types

| Call Type | Total Calls | Calls per Day | Call Percentage |
|---|---|---|---|
| Medical and other | 3,538 | 9.7 | 72.9 |
| MVA | 176 | 0.5 | 3.6 |
| **EMS Subtotal** | **3,714** | **10.2** | **76.5** |

**FIGURE 3-20: EMS Calls by Type**
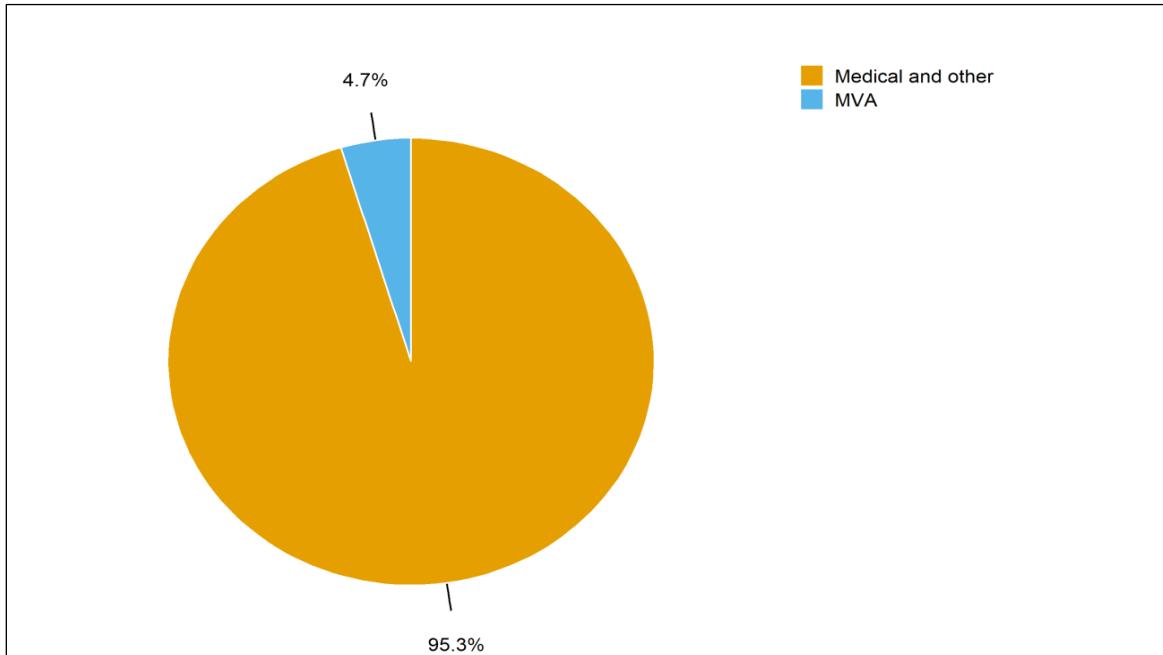


Key takeaways from the data in this table and figure are:

- EMS calls for the year totaled 3,714 (76.5 percent of all calls), an average of 10.2 calls per day.

- Medical and other calls were the largest category of EMS calls at 95.3 percent of EMS calls, an average of 9.7 calls per day. It should be noted that this and MVA are the only classification of EMS calls that the MFD utilizes.

- Motor vehicle accidents made up 3.6 percent of EMS calls, an average of 0.5 calls per day.

- Aggregately (Fire, EMS, canceled calls, and mutual aid), the department received an average of 13.3 calls per day, including 0.1 canceled calls (0.5 percent of all calls) and 0.6 mutual aid calls (4.3 percent of all calls).

## COMMUNITY LOSS AND SAVE INFORMATION

Fire loss is an estimation of the total loss from a fire to the structure and contents in terms of replacement. Fire loss includes contents damaged by fire, smoke, water, and overhaul. Fire loss does not include indirect loss, such as business interruption. In a 2023 report published by the National Fire Protection Association on trends and patterns of U.S. fire losses, it was determined that home fires still cause most civilian fire deaths, civilian injuries, and property loss due to fire. Key findings from this report include:[50]

- In 2022, local fire departments responded to an estimated 1.5 million fires in the United States. These fires caused 3,790 civilian fire deaths and 13,250 reported civilian fire injuries. The property damage caused by these fires was estimated at $18 billion. From 2021 to 2022, the total number of fires increased 11.1 percent, civilian deaths decreased 0.3 percent, and civilian injuries fell 9.9 percent. The increase in total fires was statistically significant.

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50. Fire loss in the United States 2022 (NFPA 2023).

- A home structure fire was reported every 88 seconds, a home fire death occurred every three hours and fourteen minutes, and a home fire injury occurred every 53 minutes.

- The 280,000 one- or two-family home structure fires (19 percent of the total fires that year) caused 2,240 civilian fire deaths (59 percent); 7,190 civilian fire injuries (54 percent); and $8.6 billion in direct property damage (44 percent). From 2021 to 2022, fires in one- or two-family homes rose 9 percent, while deaths fell 8 percent, injuries fell 10 percent, and property damage rose 24 percent.

- The 80,000 apartment or other multifamily housing fires (5 percent of the total fires that year) caused 470 civilian fire deaths (12 percent); 2,750 civilian fire injuries (21 percent); and $1.9 billion in direct property damage (11 percent). From 2021 to 2022, apartment fire deaths rose 14 percent, injuries rose 7 percent, and property damage rose 6 percent.

- In 1980, there were 7.1 deaths per 1,000 reported home fires overall. This was also true for one- or two-family homes and apartments. In 2022, the 7.5 deaths per 1,000 reported one- or two-family home fires was actually 14 percent higher than in 1980. In comparison, the death rate per 1,000 reported apartment fires dropped 17 percent to 5.9.

- Occupants who are alerted by smoke alarms may handle a small fire without fire department assistance, resulting in fewer small fires being reported.

- Many apartment buildings have monitored fire detection systems that can lead to a fire department response even when the system is triggered by a minor fire.

The following table shows overall fire loss in Minot in terms of dollar value for the data study year, and over a five-year period (2018-2022). This information should be reviewed regularly and discussed in accordance with response times to actual fire incidents, company level training, effectiveness on the fireground, and effectiveness of incident command.

**TABLE 3-7: Community Loss in Minot, 2018–2022**

| Year | Number of Incidents | Loss in Dollars as Recorded by the MFD | Average Per Incident |
|------|---------------------|----------------------------------------|----------------------|
| 2018 | 55 | $1,262,547 | $22,955 |
| 2019 | 25 | $947,300 | $37,892 |
| 2020 | 13 | $603,450 | $46,419 |
| 2021 | 47 | $917,500 | $19,521 |
| 2022 | 22 | $1,351,750 | $61,443 |

The next table presents the number of outside and structure fires that occurred during the study period, broken out by levels of fire loss. The subsequent table then shows the amount of property and content loss for outside and structure fires inside Minot from October 1, 2022, to September 30, 2023.

**TABLE 3-8: Total Fire Loss Above and Below $25,000**

| Call Type | No Loss | Under $25,000 | $25,000 plus | Total |
|-----------|---------|---------------|--------------|-------|
| Outside fire | 46 | 1 | 0 | 47 |
| Structure fire | 70 | 9 | 4 | 83 |
| **Total** | **116** | **10** | **4** | **130** |

## TABLE 3-9: Content and Property Loss, Structure and Outside Fires

| Call Type | Property Loss | | Content Loss | |
|---|---|---|---|---|
| | Loss Value | Number of Calls | Loss Value | Number of Calls |
| Outside fire | $500 | 1 | $0 | 0 |
| Structure fire | $560,500 | 12 | $117,000 | 6 |
| **Total** | **$561,000** | **13** | **$117,000** | **6** |

**Note:** The table includes only fire calls with a recorded loss greater than $0.

Key takeaways from the data in the tables from the study period are:

- 46 outside fires and 70 structure fires had no recorded loss.

- Four structure fires had $25,000 or more in loss.

- Structure fires:

  □ The highest total loss for a structure fire was $336,000.

  □ The average total loss for all structure fires was $8,163.

  □ Six structure fires had content losses with a combined $117,000 in losses.

  □ Out of 83 structure fires, 12 had recorded property losses, with a combined $560,500 in losses.

- Outside fires:

  □ The highest total loss for an outside fire was $500.

  □ The average total loss for all outside fires was $11.

  □ Out of 47 outside fires, one had recorded property loss, with a combined $500 in losses.

It is also important to rememberthat in the context of fire loss, one large fire can cause millions of dollars in loss, which can signifacntly skew the overall data.

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# FIRE AND EMS DEMAND

The fire and EMS risk in terms of numbers and types of incidents is important when analyzing a community's risk, as outlined above. Analyzing where the fire and EMS incidents occur, and the demand density of fire and EMS incidents, helps to determine adequate fire management zone resource assignment and deployment. The following figures illustrate fire and EMS demand in the MFD fire management zones. For the MFD, the entire city is basically divided into five fire management zones.

The following demand maps (with current fire station locations shown) tell us that:

- Structure/outside fire-related and EMS incident demand is highest in the older, central portion of the city, with some intensity in other scattered areas of the city as illustrated. The highest incident concentration is in Station 1 and 2 first due areas.

- Fire/false alarm demand and other types of fire incidents (hazardous conditions, service calls) are scattered throughout the city as illustrated.

## FIGURE 3-21: Fire Incident Demand Density
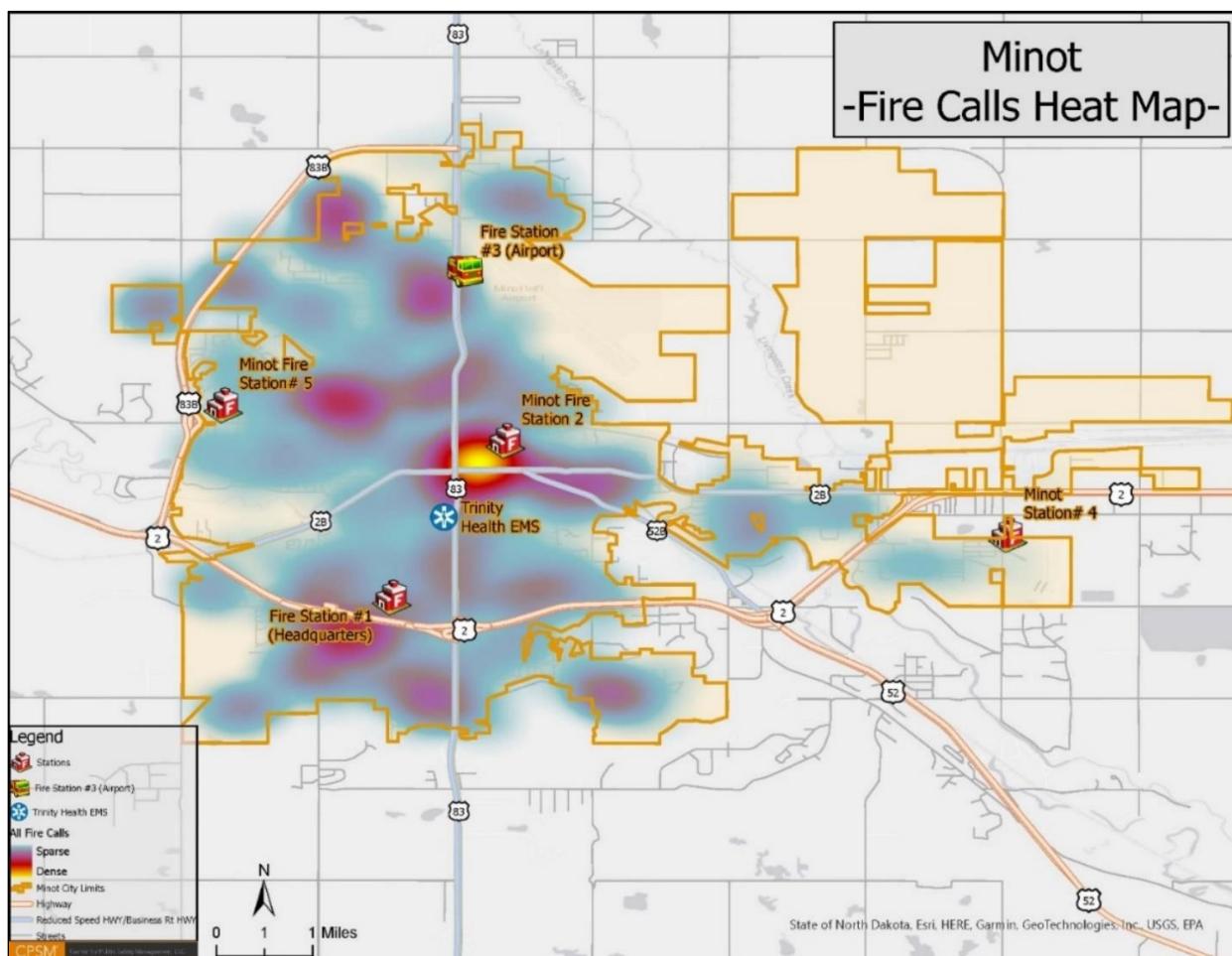
**FIGURE 3-22: Structure Fire Incident Locations**
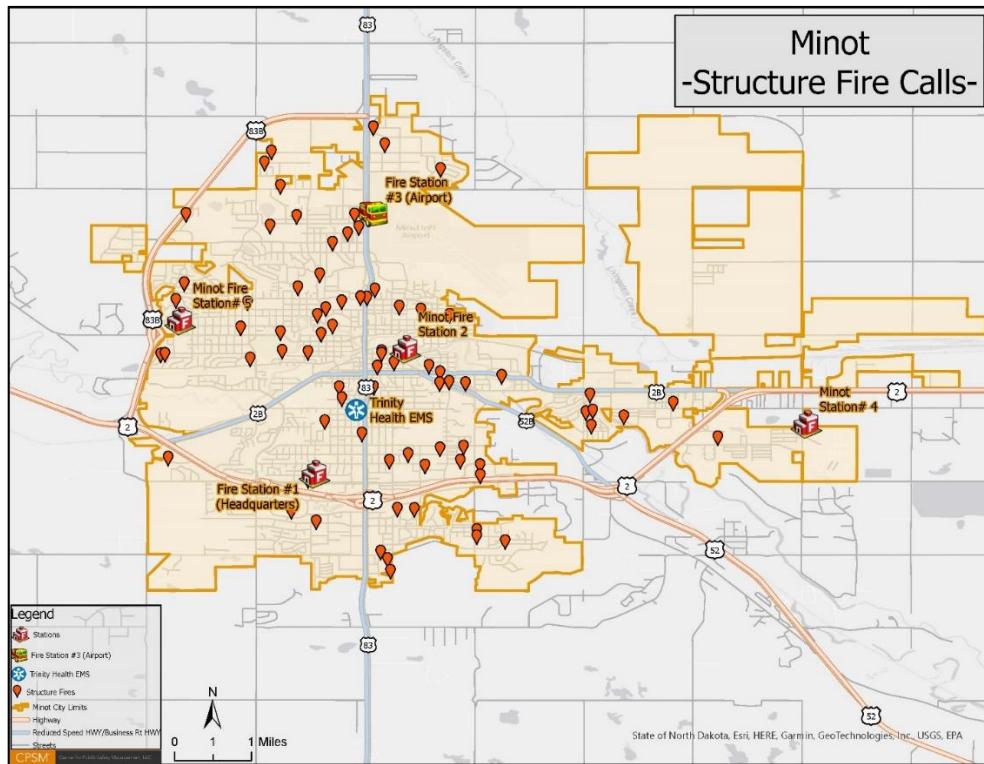


**FIGURE 3-23: Outside Fire Incident Locations**
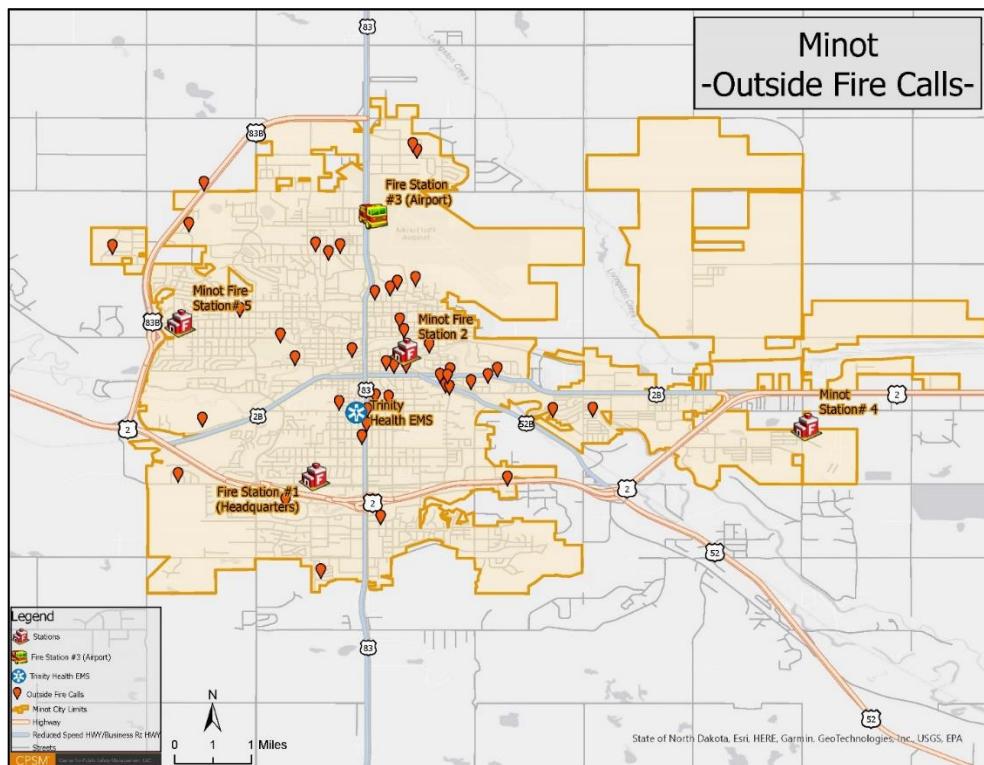
**FIGURE 3-24: False Alarm Incident Locations**
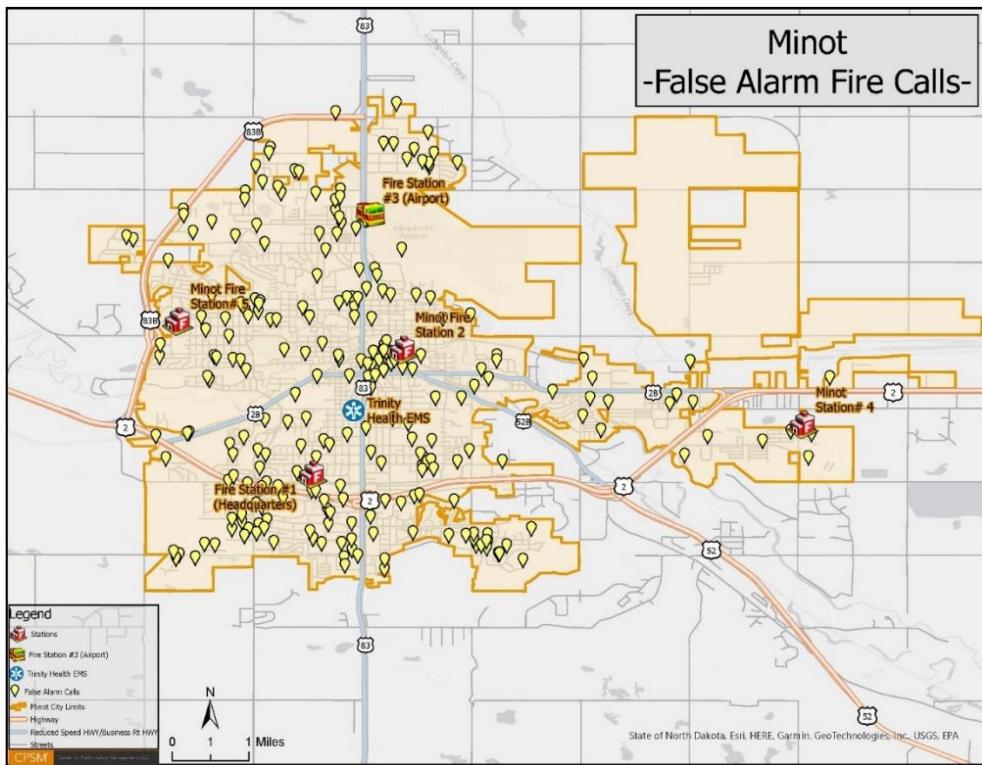


**FIGURE 3-25: Hazardous Condition, Public Service, Good Intent Incident Locations**
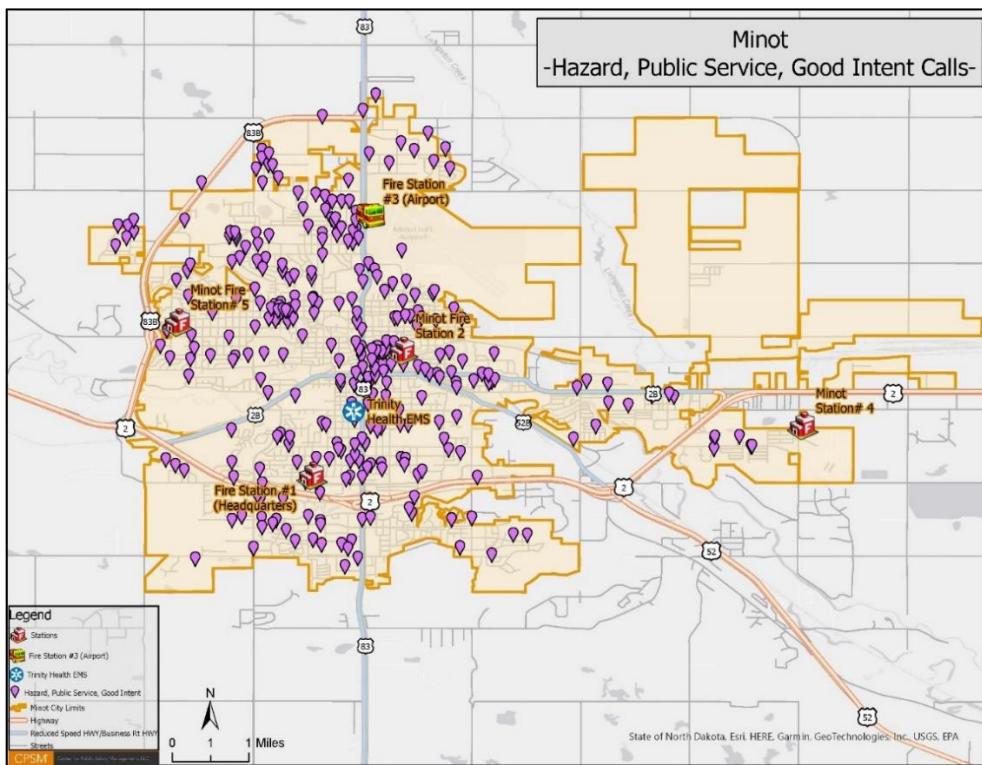
## FIGURE 3-26: MVA Incident Locations
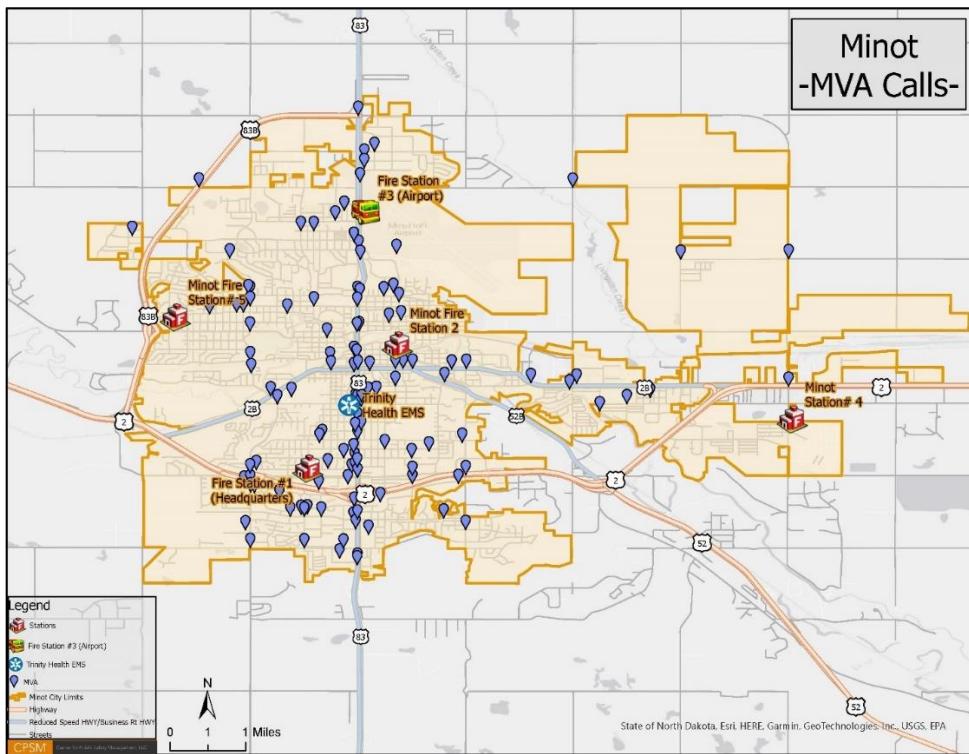


## FIGURE 3-27: EMS Incident Locations
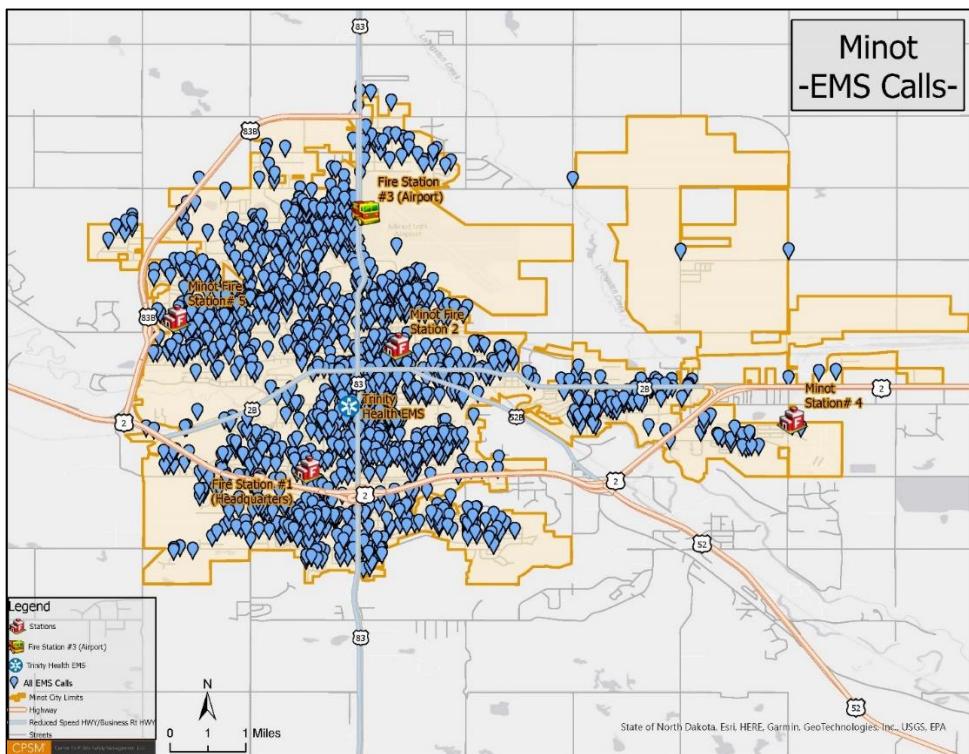
**FIGURE 3-28: EMS Incident Demand Density**
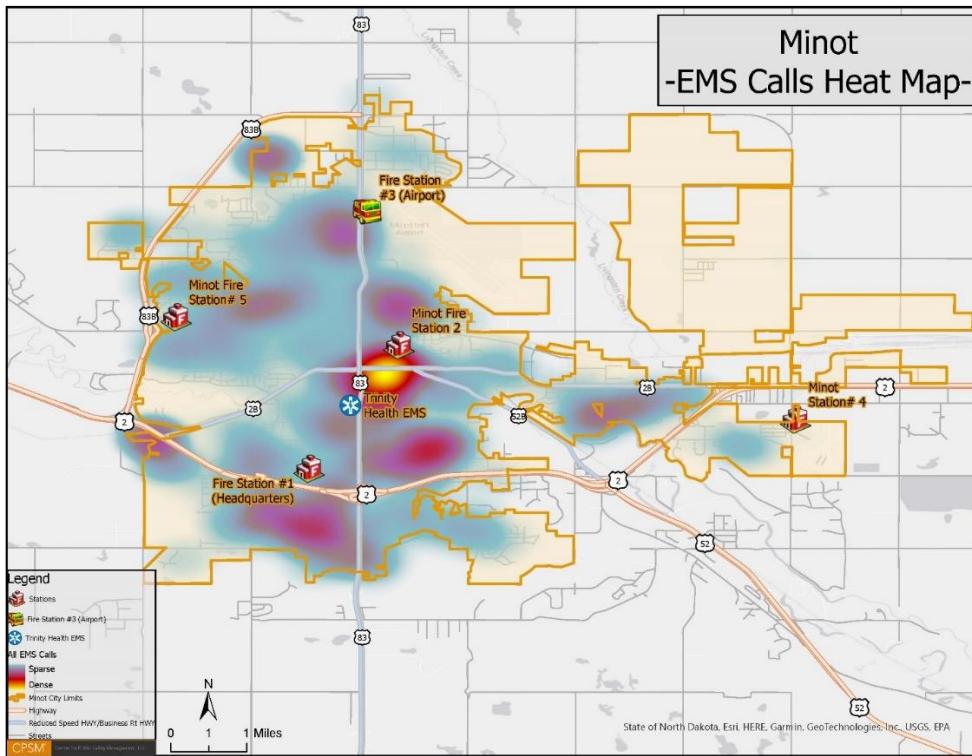


## MFD RESILIENCY

Resiliency as defined by the Center for Public Safety Excellence (CPSE) in the FESSAM 9th edition is: "an organization's ability to quickly recover from an incident or events, or to adjust easily to changing needs or requirements." Greater resiliency can be achieved by constant review and analysis of the response system and focuses on three key components:

- **Resistance:** The ability to deploy only resources necessary to safely and effectively control an incident and bring it to termination, which is achieved through the development and implementation of critical tasking and its application to the establishment of an effective response force for all types of incidents.

- **Absorption:** The ability of the agency to quickly add or duplicate resources necessary to maintain service levels during heavy call volume or incidents of high resource demand.

- **Restoration:** The agency's ability to quickly return to a state of normalcy.

Resistance is controlled by the MFD through staffing and response protocol, with MFD resources dependent on the level of staffing and units available at the time of the alarm.

Absorption is accomplished through initial responding units available to respond by the MFD.

Restoration is managed by MFD unit availability as simultaneous calls occur, recall of personnel to staff fire units during campaign events when warranted, and efficient work on incidents for a quick return to service.

Regarding restoration, the following tables analyze the station availability to respond to calls.

**TABLE 3-10: Frequency Distribution of the Number of Calls**

| Calls in an Hour | Frequency | Percentage |
|---|---|---|
| 0 | 5,123 | 58.5 |
| 1 | 2,654 | 30.3 |
| 2 | 790 | 9.0 |
| 3 | 156 | 1.8 |
| 4+ | 37 | 0.4 |
| **Total** | **8,760** | **100.0** |

**TABLE 3-11: Frequency of Overlapping Calls**

| Area | Scenario | Number of Calls | Percent of All Calls | Total Hours |
|---|---|---|---|---|
| MFD1 | No overlapped call | 1,771 | 92.9 | 650.7 |
| | Overlapped with one call | 128 | 6.7 | 23.0 |
| | Overlapped with two calls | 8 | 0.4 | 1.2 |
| MFD2 | No overlapped call | 1,546 | 93.7 | 558.1 |
| | Overlapped with one call | 97 | 5.9 | 20.4 |
| | Overlapped with two calls | 6 | 0.4 | 1.3 |
| | Overlapped with three calls | 1 | 0.1 | 0.0 |
| MFD3 | No overlapped call | 879 | 96.4 | 381.5 |
| | Overlapped with one call | 32 | 3.5 | 8.2 |
| | Overlapped with two calls | 1 | 0.1 | 0.2 |
| MFD4 | No overlapped call | 287 | 99.0 | 124.2 |
| | Overlapped with one call | 3 | 1.0 | 0.7 |
| MFD5* | No overlapped call | 71 | 100.0 | 0.5 |
| Aid Given | No overlapped call | 24 | 96.0 | 19.9 |
| | Overlapped with one call | 1 | 4.0 | 0.0 |

**Note**: *MFD 5 was a new station in service on 8/20/2023. It was included in the analysis only for 42 days.

The next table focuses on each station's availability to respond to calls within its first due area. At the same time, it focuses on calls where an MFD unit eventually arrived and ignores calls where no unit arrived. Out of 4,830 calls that are not mutual aid, there were 260 calls where an MFD unit responded but no unit arrived. For this reason, the individual rows, and the total in this table's second column, do not match the corresponding values in the table above.

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## TABLE 3-12: Station Availability to Respond to Calls

| Area | Calls in Area | First Due Responded | Percent Responded | First Due Arrived | Percent Arrived | First Due First | Percent First |
|------|------|------|------|------|------|------|------|
| MFD1 | 1,809 | 1,632 | 90.2 | 1,609 | 88.9 | 1,582 | 87.5 |
| MFD2 | 1,551 | 1,365 | 88.0 | 1,333 | 85.9 | 1,289 | 83.1 |
| MFD3 | 864 | 796 | 92.1 | 784 | 90.7 | 775 | 89.7 |
| MFD4 | 276 | 259 | 93.8 | 253 | 91.7 | 246 | 89.1 |
| MFD5 | 70 | 62 | 88.6 | 61 | 87.1 | 60 | 85.7 |
| **Total** | **4,570** | **4,114** | **90.0** | **4,040** | **88.4** | **3,952** | **86.5** |

For the table above, for each station, CPSM counted the number of calls within its first due area where at least one MFD unit arrived. Next, we focused on units from the first due station to see if any unit responded, arrived, or arrived first; Unit HZMT4 rotates between Station 1 and 4. When LAD5 was out of service in Station 5's area, the reserve Eng 5 would run out of that location.

## TABLE 3-13: Workload by Unit

| Station | Unit | Type | Minutes per Run | Hours | Percent | Minutes per Day | Runs | Runs per Day |
|---------|------|------|------|------|------|------|------|------|
| MFD1 | BAT1 | BC | 26.4 | 211.2 | 8.7 | 34.7 | 480 | 1.3 |
| | BAT2 | BC | 52.2 | 20.9 | 0.9 | 3.4 | 24 | 0.1 |
| | ENG1 | Engine | 20.8 | 665.4 | 27.5 | 109.4 | 1,916 | 5.2 |
| | ENG5 | Res. Engine | 23.4 | 34.6 | 1.4 | 5.7 | 89 | 0.2 |
| | HZMT1 | Hazmat | 4.2 | 0.1 | 0.0 | 0.0 | 1 | 0.0 |
| | LAD1* | Ladder | 1.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 |
| | PLAT1 | Platform | 20.3 | 53.2 | 2.2 | 8.8 | 157 | 0.4 |
| | RES1* | Rescue | 20.6 | 1.7 | 0.1 | 0.3 | 5 | 0.0 |
| | TEMS1 | Rescue | 0.1 | 0.0 | 0.0 | 0.0 | 1 | 0.0 |
| | **Total** | | **22.2** | **987.2** | **40.7** | **162.3** | **2,674** | **7.3** |
| MFD2 | ENG2 | Engine | 19.2 | 143.8 | 5.9 | 23.6 | 449 | 1.2 |
| | LAD2* | Ladder | 19.3 | 506.7 | 20.9 | 83.3 | 1,572 | 4.3 |
| | RES2 | Rescue | 26.3 | 22.4 | 0.9 | 3.7 | 51 | 0.1 |
| | SOTV | Rescue | 54.6 | 3.6 | 0.2 | 0.6 | 4 | 0.0 |
| | **Total** | | **19.6** | **676.5** | **27.9** | **111.2** | **2,076** | **5.7** |
| MFD3 | AIR302 | ARFF | 15.8 | 1.1 | 0.0 | 0.2 | 4 | 0.0 |
| | ENG3 | Engine | 23.1 | 458.3 | 18.9 | 75.3 | 1,191 | 3.3 |
| | **Total** | | **23.1** | **459.4** | **19.0** | **75.5** | **1,195** | **3.3** |
| MFD4 | ENG4 | Engine | 20.7 | 243.3 | 10.0 | 40.0 | 705 | 1.9 |
| | HZMT4** | Hazmat | 42.0 | 39.9 | 1.6 | 6.6 | 57 | 0.2 |
| | **Total** | | **22.3** | **283.2** | **11.7** | **46.6** | **762** | **2.1** |
| MFD5 | LAD5 | Ladder | 18.7 | 16.8 | 0.7 | 2.8*** | 54 | 0.1*** |
| **Total** | | | **21.5** | **2,423.1** | **100.0** | **398.3** | **6,761** | **18.5** |

**Note**: *No longer at this station; **Unit rotates between Stations 1 and 4; ***Station 5 started service on 8/20/2023 for a total of 42 days in the study period. However, Ladder 5 was only in service at Station 5 for 21 days. It was out for maintenance for another 19 days, and at Station 2 replacing L2 for two days. All "per day" measurements are divided by 365 days for consistency.

Regarding the MFD's resiliency to respond to calls, analysis of these tables tells us:

- On average the MFD made 18.5 runs per day.

- On average, calls had a duration of 21.5 minutes per run.

- On a station level, Station 1 made the most runs (2,674, or an average of 7.3 runs per day) and had the highest total annual deployed time (987.2 hours, or an average of 2.7 hours per day).

- On a unit level, Engine 1 made the most runs (1,916, or an average of 5.2 runs per day), and had the highest total annual deployed time (665.4 hours, or an average of 109.4 minutes per day).

- 88.5 percent of the time there was no call or a single call (no call overlap).

- 9.0 percent of the time a call overlapped with one other call.

- 1.8 percent of the time there were three or more calls in an hour.

- 0.4 percent of the time there were 4 or more calls in an hour.

- 88.4 percent of the time the first due unit responded to calls in its first due area.

- 86.5 percent of the time the first due unit arrived first in its first due area.

The MFD has moderate resiliency with the current deployment model. Resiliency increases when contemplating the assembling of an Effective Response Force for structural fire responses, which typically means all companies in the city will respond, leaving no resources available to respond to an overlapping call until the incident commander determines resource needs/allocation.

## RISK CATEGORIZATION

A comprehensive risk assessment is a critical aspect of creating standards of cover and can assist the MFD in quantifying the risks that it faces. Once those risks are known, the department is better equipped to determine if the current response resources are sufficiently staffed, equipped, trained, and positioned. In this component, the factors that drive the service needs are examined and then link directly to discussions regarding the assembling of an effective response force (EFR) and when contemplating the response capabilities needed to adequately address the existing risks, which encompasses the component of critical tasking.

The risks that the department faces can be natural or human-caused and may be affected by the changing demographics of the community served. With the information available from the CPSM data analysis, the MFD, the city, and public research, CPSM and the MFD can begin an analysis of the city's risks and can begin working towards recommendations and strategies to mitigate and minimize their effects. This section contains an analysis of the various risks considered within the MFD's service area.

Risk is often categorized in three ways: consequence of the event on the community, the probability the event will occur in the community, and the impact on the fire department. The following three tables look at the probability of the event occurring which ranges from unlikely to frequent; consequence to the community, which is categorized as ranging from insignificant to catastrophic; and the impact to the organization, which ranges from insignificant to catastrophic.

## TABLE 3-14: Event Probability

| Probability | Chance of Occurrence | Description | Risk Score |
|---|---|---|---|
| Unlikely | 2%-25% | Event may occur only in exceptional circumstances. | 2 |
| Possible | 26%-50% | Event could occur at some time and/or no recorded incidents. Little opportunity, reason, or means to occur. | 4 |
| Probable | 51%-75% | Event should occur at some time and/or few, infrequent, random recorded incidents, or little anecdotal evidence. Some opportunity, reason, or means to occur; may occur. | 6 |
| Highly Probable | 76%-90% | Event will probably occur and/or regular recorded incidents and strong anecdotal evidence. Considerable opportunity, means, reason to occur. | 8 |
| Frequent | 90%-100% | Event is expected to occur. High level of recorded incidents and/or very strong anecdotal evidence. | 10 |

## TABLE 3-15: Impact on MFD

| Impact | Impact Categories | Description | Risk Score |
|---|---|---|---|
| Insignificant | Personnel and Resources | One apparatus out of service for period not to exceed one hour. | 2 |
| Minor | Personnel and Resources | More than one but not more than two apparatus out of service for a period not to exceed one hour. | 4 |
| Moderate | Personnel and Resources | More than 50 percent of available resources committed to incident for over 30 minutes. | 6 |
| Significant | Personnel and Resources | More than 75 percent of available resources committed to an incident for over 30 minutes. | 8 |
| Catastrophic | Personnel, Resources, and Facilities | More than 90 percent of available resources committed to an incident for more than two hours or event which limits the ability of resources to respond. | 10 |

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## TABLE 3-16: Consequence to Community Matrix

| Impact | Impact Categories | Description | Risk Score |
|---|---|---|---|
| **Insignificant** | Life Safety | 1 or 2 people affected, minor injuries, minor property damage, and no environmental impact. | **2** |
| **Minor** | Life Safety<br><br>Economic and Infrastructure<br><br>Environmental | A small number of people affected, no fatalities, and a small number of minor injuries with first aid treatment. Minor displacement of people for <6 hours and minor personal support required.<br>Minor localized disruption to community services or infrastructure for <6 hours. Minor impact on environment with no lasting effects. | **4** |
| **Moderate** | Life Safety<br><br>Economic and Infrastructure<br><br>Environmental | Limited number of people affected (11 to 25), no fatalities, but some hospitalization and medical treatment required. Localized displacement of small number of people for 6 to 24 hours. Personal support satisfied through local arrangements. Localized damage is rectified by routine arrangements. Normal community functioning with some inconvenience.<br>Some impact on environment with short-term effects or small impact on environment with long-term effects. | **6** |
| **Significant** | Life Safety<br><br>Economic and Infrastructure<br><br>Environmental | Significant number of people (>25) in affected area impacted with multiple fatalities, multiple serious or extensive injuries, and significant hospitalization.<br>A large number of people displaced for 6 to 24 hours or possibly beyond. External resources required for personal support. Significant damage that requires external resources. Community only partially functioning, some services unavailable.<br>Significant impact on environment with medium- to long-term effects. | **8** |
| **Catastrophic** | Life Safety<br><br>Economic and Infrastructure<br><br>Environmental | A very large number of people in affected area(s) impacted with significant numbers of fatalities, large number of people requiring hospitalization, serious injuries with long-term effects. General and widespread displacement for prolonged duration; extensive personal support required. Extensive damage to properties in affected area requiring major demolition.<br>Serious damage to infrastructure. Significant disruption to, or loss of, key services for a prolonged period. Community unable to function without significant support.<br>Significant long-term impact on environment and/or permanent damage. | **10** |

This section also contains an analysis of the various risks considered in the city. In this analysis, information presented and reviewed in this section (All-Hazards Risk Assessment of the Community) have been considered. Risk is categorized as Low, Moderate, High, or Special.

Prior risk analysis has only attempted to evaluate two factors of risk: probability and consequence. Contemporary risk analysis considers the impact of each risk to the organization, thus creating a three-axis approach to evaluating risk as depicted in the following figure. A contemporary risk analysis now includes probability, consequences to the community, and impact on the organization, in this case the MFD.

**FIGURE 3-29: Three-Axis Risk Calculation (RC)**

1 - Y-Axis: Probability

2 - X-Axis: Consequences

3 - Z-Axis: Impacts

10
8
6
4
2

**Magnitude of the Risk**

*Greater the surface area, the greater the risk*

$$RC = \frac{\sqrt{PC^2 + CI^2 + IP^2}}{2}$$
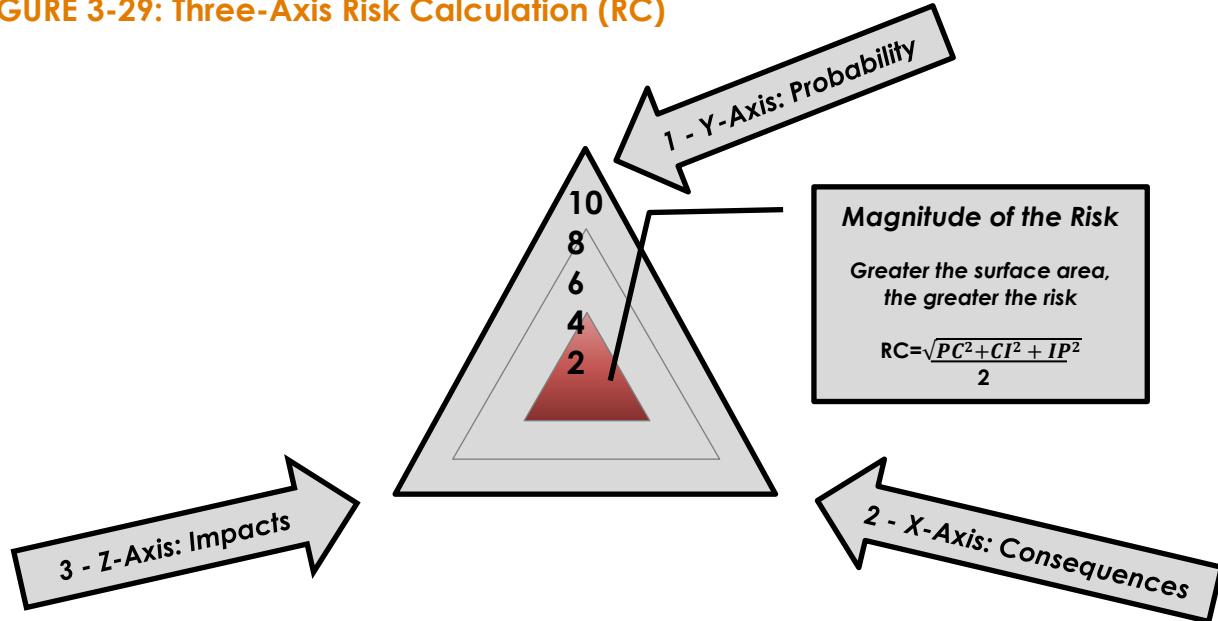
The following factors/hazards were identified and considered:

- **Demographic factors** such as age, socio-economic, vulnerability.

- **Natural hazards** such as flooding, snow and ice events, wind events, wild land fires.

- **Manufactured hazards** such as rail lines, roads and intersections, target hazards.

- **Structural/building risks**.

- **Fire and EMS incident numbers and density**.

The assessment of each factor and hazard as listed below took into consideration the likelihood of the event, the impact on the city itself, and the impact on MFD's ability to deliver emergency services, which includes automatic aid capabilities as well. The list is not all inclusive but includes categories most common or that may present to the city and the MFD.

### Low Risk

- Automatic fire/false alarms.

- BLS EMS Incidents.

- Low-risk environmental event.

- Motor vehicle accident (MVA).

- Good intent/hazard/public service fire incidents with no life-safety exposure.

- Outside fires such as grass, rubbish, dumpster, vehicle with no structural/life-safety exposure.

### FIGURE 3-30: Low Risk

**Low Risk**



Typically calls involving one fire and/or one EMS Unit.

Some include two fire or two EMS Units.

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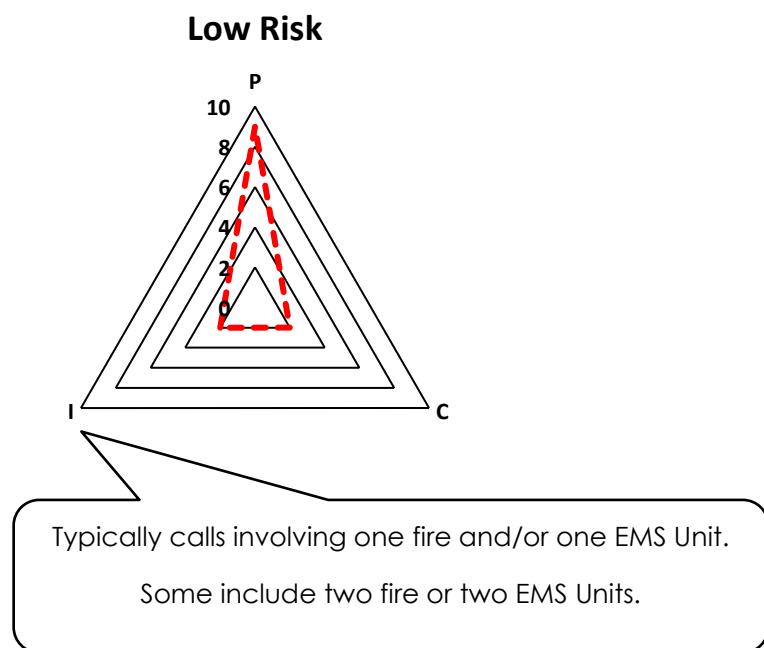
## Moderate Risks

- Fire incident in a single-family dwelling where fire and smoke or smoke is visible, indicating a working fire.

- Suspicious substance investigation involving multiple fire companies and law enforcement agencies.

- ALS EMS incident.

- MVA with entrapment of passengers.

- Grass/brush fire with structural endangerment/exposure.

- Low angle rescue involving ropes and rope rescue equipment and resources.

- Surface water rescue.

- Good intent/hazard/public service fire incidents with life-safety exposure.

- Rail event with no release of product or fire, and no threat to life safety.

## FIGURE 3-31: Moderate Risk

**Moderate Risk**

P

10
8
6
4
2
0

I

C

Typically calls involving multiple fire and EMS Units.

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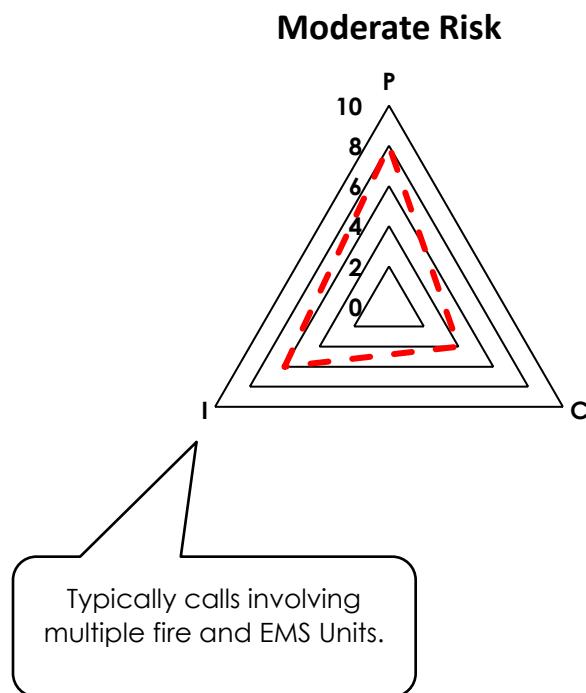
### *High Risk*

- Working fire in a target hazard.

- Cardiac arrest.

- Mass casualty incident of more than 10 patients but fewer than 25 patients.

- Confined space rescue.

- Structural collapse involving life-safety exposure.

- High-angle rescue involving ropes and rope rescue equipment.

- Trench rescue.

- Suspicious substance incident with multiple injuries.

- Industrial leak of hazardous materials that causes exposure to persons or threatens life safety.

- Weather events that create widespread flooding, heavy snow, heavy winds, building damage, and/or life-safety exposure.

### FIGURE 3-32: High Risk

**High Risk**

P

10
8
6
4
2
0

I

C

Typically calls involving multiple fire and EMS Units.

§ § §
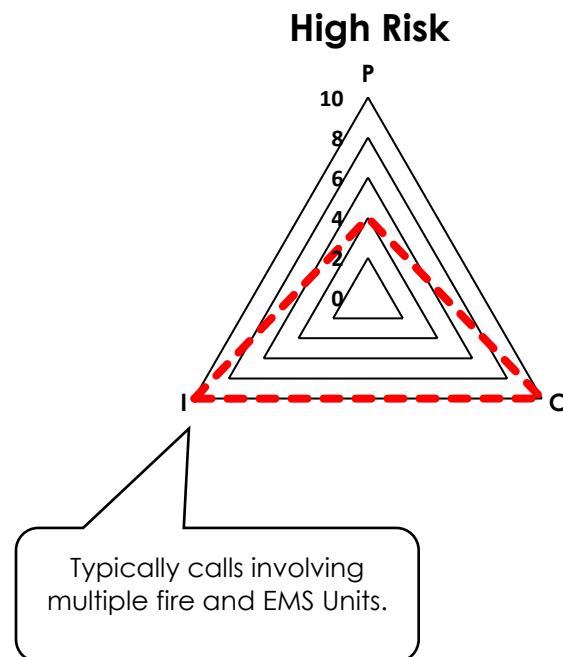
## Special Risk

- Working fire in a structure of more than three floors.

- Fire at an industrial building or complex with hazardous materials.

- Fire in an occupied targeted hazard with special life-safety risks such as age, medical condition, or other identified vulnerabilities.

- Mass casualty incident of more than 25 patients.

- Rail or transportation incident that causes life-safety exposure or threatens life safety through the release of hazardous smoke or materials and evacuation of residential and business occupancies.

- Explosion in a building that causes exposure to persons or threatens life safety or outside of a building that creates exposure to occupied buildings or threatens life safety.

- Massive river/estuary flooding, fire in a correctional or medical institution, high-impact environmental event, pandemic.

- Mass gathering with threat of fire and threat to life safety or other civil unrest, weapons of mass destruction release.

## FIGURE 3-33: Special Risk



Typically calls involving multiple fire and EMS Units.

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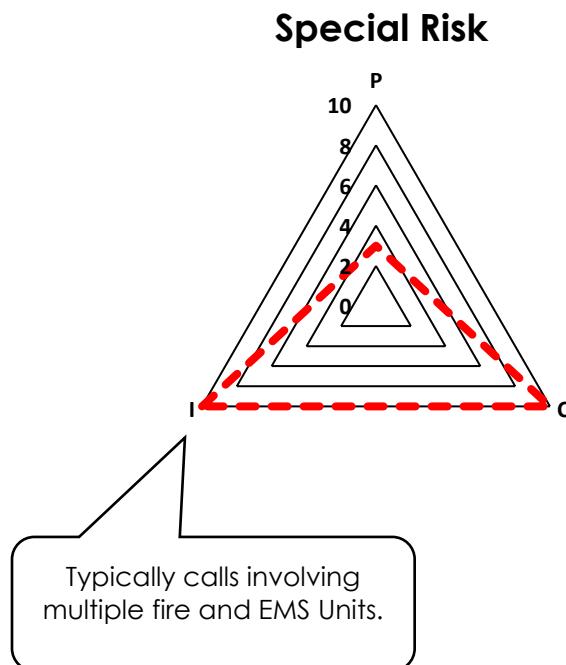
# SECTION 4. ADMINISTRATIVE AND OPERATIONAL ASSESSMENT

## ADMINISTRATIVE AND ORGANIZATIONAL ASSESSMENT

MFD is a career fire department that employs 71 full-time personnel consisting of administrative, support, and operational level officers and firefighters. Along with its complement of officers and firefighters, MFD deploys four engine companies and one quint/ladder company out of five fire stations. MFD operates on a rotational shift work schedule with a shift or platoon configuration working 48 hours on and 96 hours off (48/96).

The following positions are part of the Fire Chief's Administrative Staff. It is important to note that these positions while assigned to Fire Administration have a significant role in the operations of the department and are available to assume command and fill support roles at any emergency and non-emergency incident during work, after hours, and weekends if needed.

### *Fire Chief*

The MFD is led by a Fire Chief who has overall responsibility for the management and leadership of the department. The Fire Chief provides leadership and direction for all Fire Department functions in support, operations, and personnel through the supervision of subordinate staff and review of their activities.

The Fire Chief is an inclusive and collaborative leader and exemplifies the vision, standards, and expectations of the city and will work closely with the community to ensure that all members feel safe and included at all times.

The Fire Chief exercises strategic and visionary thinking that will have long-term organization-wide application and impact, including the development and implementation of critical programs, and supervision of multiple assigned functions, divisions, and significant resources.

The Chief works closely with City Department Directors and staff members to achieve the mission of the city and its citizens. The Chief is assisted by Two Battalion Chiefs providing assistance with Operations, Training, and Prevention.

Responsibilities include reviewing the general operation of the department to determine efficiency, ensure operational readiness, providing direction on major projects or problem areas, developing and implementing policies and procedures, administration of the labor relations program; and providing policy guidance. Works in conjunction with the City's Emergency Management Coordinator, EMS Liaison, Fire Prevention Personnel, operational personnel, and civilian support staff. The Fire Chief works Monday-Friday with night and weekend duties and responsibilities for the protection of life and property for the city and is expected to be available 24/7. This position reports to the City Manager or their designee.

### *Administrative Battalion Chief*

Position is responsible for leading, planning, organizing, and controlling all emergency and non-emergency functions of the Operations and Support Services; such duties may include leading and managing fire operations in coordination with the operational Battalion Chiefs, Trinity emergency medical services (EMS), safety, training, fire prevention, administration of disciplinary procedures along with supervision of maintenance operations, supply, and logistics. This position

provides strategic input and assistance in carrying out the day-to-day functions of the department. This is a Monday-Friday assignment with at times night and weekend duties and responsibilities. This position is under the general supervision of the Fire Chief.

### Training Battalion Chief
Position is the chief fire official responsible for overseeing all emergency and non-emergency fire training activities, Training is one of the most important factors in any fire department and must be a priority for the MFD. "Train like your life depends on it, because it does" is a mantra that fire departments live by. The Training Chief is responsible for emergency and non-emergency activities and develops schedules, and presents department training programs that are current, and adhere to department medical protocols, The Training Chief is responsible to ensure that all firefighters and staff meet the training needs of all departmental personnel as well as state, Federal, and other nationally recognized criteria, and requirements. The Training Chief will represent the department as a member of applicable fire training associations and groups related to assigned duties and responsibilities. The Training Chief may also respond to emergency and non-emergency incidents as required. This is a Monday-Friday assignment with at times night and weekend duties and responsibilities. This position is under the general supervision of the Fire Chief.

### Fire Inspector
Position provides service to the engineering, architectural, construction community, and other citizens and stakeholders through the enforcement, interpretation, and application of fire codes, fire department inspections, and building codes in coordination with the city's Building Official. Conducts inspections of identified buildings and structures, including new and existing construction in the city for fire prevention purposes. Evaluates and enforces existing fire safety conditions, along with federal, state, and local codes applicable to fire safety. This position is currently under the general supervision of the Administrative Battalion Chief.

### Executive Assistant to the Fire Chief and Battalion Chief
Position handles complex and confidential administrative support to Fire Chief and Battalion Chiefs including scheduling of calendars; tracking and following up on projects; reviewing mail; coordinating travel; organizing, coordinating, and preparing documents for public and staff meetings; drafting correspondence; and advising executive staff of complex complaints and issues. This position was largely responsible for departmental payroll that has recently been transitioned to the Shift Battalion Chiefs.

The following positions make up the operational staffing, which represents the largest staffing complement in the MFD, which is typical across the country.

### Battalion Chiefs: Fire Operations
The position is responsible for all emergency and non-emergency activities along with the daily staffing of all emergency units and for ensuring that their personnel follow departmental policies and SOGs. Position makes rounds to the stations within in their battalion, on a shift basis, to ensure the standardization of procedures, communication of departmental information, and assess the physical and behavioral health and wellness of personnel for operational readiness. Position has ancillary duties in addition to their shift operational and administrative duties, which include community activities, technology, health and safety, support services such as fleet, facilities and equipment, emergency operations, and training of shift personnel. Will assume the position of Incident Commander on all major EMS and fire incidents. This position must hold certification in Paramedicine and/or Emergency Medical Technician (EMT) and other requirements set forth by the city. Position is exposed to a variety of emergency situations at fire

scenes and engages in decision making to determine appropriate procedures for a wide variety of life-threatening situations. This position reports directly to the Fire Chief. Battalion Chiefs work a rotational shift schedule of 48/96. Battalion Chiefs are often recalled if necessary to cover vacancies or emergency incidents. This position is under the general supervision of the Fire Chief.

### Shift Captains

The position is responsible for the protection, safety, and welfare of subordinates, peers, and citizens as directed by Fire Department Standard Operating Procedures. The Fire Captain participates in emergency or non-emergency activities as assigned or directed by Fire Department Standard Operating Procedures or a higher-ranking officer. At the direction of, or in the absence of, a higher-ranking officer, the Fire Captain assumes the responsibilities, activities, and duties of a higher rank until relieved . This position must hold certification in Paramedicine and/or Emergency Medical Technician (EMT) and other requirements set forth by the city. Position is exposed to a variety of emergency situations at fire scenes and engages in decision making to determine appropriate procedures for a wide variety of life-threatening situations. The position works a rotational shift schedule and reports directly to the Shift Battalion Chief.

### Senior Firefighters

Position is responsible for all operational and non-operational requirements of a firefighter. In addition, this position is responsible for the safe operation of the apparatus and must adhere to all driving and safety standards as described in the department's Standard Operating Procedure (SOP) as well as local, state, and federal laws. Participates in fire prevention and training as needed and maintains the fire station and firefighting equipment in a constant state of readiness. Position is exposed to a variety of emergency situations at fire scenes and engages in decision making to determine appropriate procedures for a wide variety of life-threatening situations. The position works a rotational shift schedule of 48/96 and reports directly to the Shift Captain. Personnel can be assigned as a lead driver position but its rotated among senior firefighters as needed.

### Firefighters

Position responds to fire alarms, structural fires, medical emergencies, hazardous materials, urban rescue, and other calls to protect life and property. Participates in fire prevention and training as needed and maintains the fire station and firefighting equipment in a constant state of readiness. This position must hold certifications in Emergency Medical Technician (EMT) and other requirements set forth by the city. Position is exposed to a variety of emergency situations at fire scenes and engages in decision making to determine appropriate procedures for a wide variety of life-threatening situations The position works a rotational shift schedule and reports directly to the Shift Captain.

## TIME ALLOCATION PRINCIPLES

To effectively operate in an organization, an employee must understand his or her role and, as importantly, where he/she should allocate his/her time during the workday or shift to be most effective. Understanding this concept is essential in an organization such as MFD, which has a lean organizational chart. Managers and firefighters have a responsibility to understand their organizational roles and responsibilities, and to effectively perform the tasks related to these roles and responsibilities. One would not expect senior-level officers to spend as much time operating the system as a frontline service provider does. Conversely, one would not expect a first-line or midlevel officer to spend as much time as a senior-level officer planning for the future of the

organization. In this way, each level of the organization has a separate set of priorities and employees at each level should allocate their time accordingly.

Three segments of organizational time allocation are central to achieving the goals and objectives of any organization and, more importantly, to enable the organization to fulfill its mission and realize its vision. These segments are (1) operating the system; (2) improving the system; and (3) creating the future.

**Operating the system** is that time during the workday that an organizational member is implementing service deliverables, touching those components of the organization that make it go.

**Improving the system** is the time during the workday that an organizational member spends seeking ways to make service deliverables and organizational components more efficient, or, more simply put, improved and better.

**Creating the future** is that critical piece of time allocation when an organizational member develops goals and objectives that link to strategic planning and considers the vision of the organization in a way that focuses on successful, effective outcomes.

In the time allocation model, each level in the organization spends a percentage of their day either *Operating the System*, *Improving the System*, or *Creating the Future*. Where a staff member may allocate their time is directly tied to the position in the organization they fill.

## FIGURE 4-1: Time Allocation Model
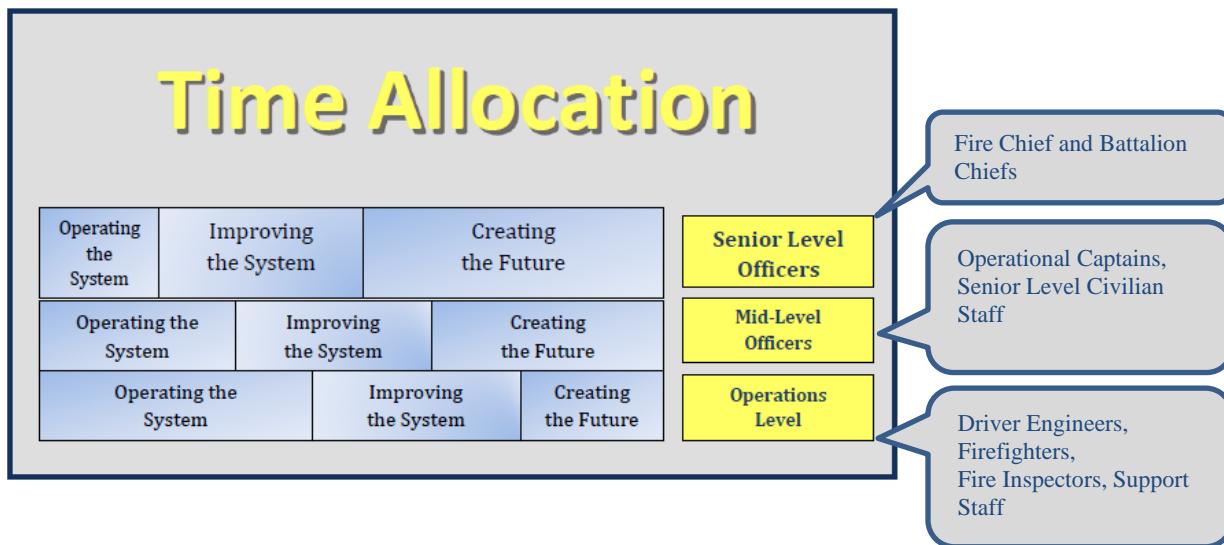


In the MFD, senior level officers include the Fire Chief and two Administrative Battalion Chiefs. These positions should spend the majority of their time creating the future for the department, the next greatest portion of their time improving the system, and the least amount of time operating the system. When senior management delves into operating the system more than improving the system and creating the future, several things occur, which may include: critical planning goes undone; unclear organizational priorities and goals; a lack of transparency in decision-making; low morale and employee engagement; employees do not reach their expectation level due to their lack of motivation; employees may not feel welcome or respected.

Middle managers in MFD include the shift Battalion Chiefs. These positions should allocate their time evenly across the three categories of creating the future for the department, improving the system, and operating the system. In this scenario these positions plan, organize, lead, and evaluate the shift operations for the career staff. This level in the organization is important in that it creates the conduit of information between those who operate the system and those who improve the system and create the future. This level of the organization should be linked to committees, processes, and continuous improvement of the organization on a regular basis. They should also be included in strategic planning concepts through input and development of goals and objectives. Importantly, this level manages and leads those who operate the system and is responsible for ensuring this level of the organization is continuously prepared to respond and mitigate emergencies. This is often the most difficult in regards to time allocation since time is spent in both planning and operation given the fact that some elements of operating the system cannot be defined and at times are incident driven.

Those who operate the system in MFD include Captains and firefighters. These positions should be allocating their time in reverse of senior leadership. This includes the greatest percentage of the day spent operating the system, the next greatest percent improving the system, and the least amount of time creating the future. While it is natural for this level of the organization to spend most of their time operating the system (preparation and response to emergencies), they are a valuable resource and should not be ignored when systems, processes, equipment, and response require improvement. Equally, when strategic goals and objectives are developed, this level operates the very pieces of the organization for which goals and objectives are being developed. Inclusion of this level empowers and creates trust and buy-in to organizational concepts and strategies.

Ideally, even in a compact organization such as MFD, it is critical that the appropriate time be spent at the appropriate level in the organization to continuously operate the system, make improvements, and create the future. Given this, it is recommended that MFD organize the department to optimize and empower subordinate officers to the Fire Chief to include senior level chief officers and company officers within the leadership and management of all department operations. This includes the concepts of a Functional Organizational Chart, the Time Allocation Model to ensure a more efficient alignment of organizational resources, and the effective use of all members of the organization to achieve the organization's mission and core values.

## FUNCTIONAL TABLE OF THE ORGANIZATION

MFD, as a small career department, has a small administrative staffing count and commits most of its total staffing count to fire and EMS operations. Smaller departments deal with the same issues and challenges of much larger departments, just on a smaller scale. Nevertheless, the issues still must be managed, and solutions implemented.

Because there are many of the same functions, programs, and supportive tasks required in MFD as there are in larger fire and EMS departments, it is important for MFD to staff administrative and support roles from a functional standpoint and not necessarily by title or person. This may be accomplished utilizing a functional table of the organization.

A functional table of the organization will provide a clear picture of the leadership functions at each level, and as well will illustrate the work of leadership to be performed at every level in the organization. Integrating the functional table of the organization with the traditional organizational model (typically a scalar model) directs leadership's attention from that of a

specific focus of an individual to one of leadership viewed from an organizational perspective. This breaks down organizational silos and creates leadership teams within each organizational component, which promotes lateral team building between organizational shifts and divisions.

Additionally, a functional table of the organization illustrates to the community a clear picture of what and where key services of the organization are located within an organization. In this type of chart, each task or functional area becomes a focal point. Specialization is centralized and employees who are doing these specialized jobs or tasks are identified. A functional chart will enable the MFD to better visualize its division of responsibilities and offer a high level of transparency to both internal and external stakeholders.

The next figure outlines a basic fire department functional organizational table with four key elements that include the chief's office, fire suppression and rescue, training and education, and community risk reduction.

## FIGURE 4-2: Sample Functional Table of the Organization



**Office of the Fire Chief**
Provides leadership and direction; establishes long-term vision for mission direct services; formulates departmental policy; provides planning, research, continuous improvement; provides employee relations oversight; provides administrative supportuive services; and creates the future.

Finance; Public Affairs; Emergency Management; ISO-PPC functions.

Includes the Fire Chief's Command Staff, and Non-Sworn Positions.

**Fire Suppression, Rescue & EMS**
Provides efficient and effective fire suppression services, EMS first response and EMS transport; performs specialized protection services such as hazardous materials, technical rescue, and water rescue; maintain skills through continuous training and company improvement; engages heatlth and safety best practices.

**Training and Compliance**
Provides federal, state, and locally mandated minimum standard training; career development, and advanced fire and EMS training; oversees new and incumbent employee development; monitors employee training/certification for documentation and compliance; works directly with medical direction to ensure medical protocols and advanced skill levels are linked for optimum patient care.

**Community Risk Reduction**
Provides management of fire prevention, investigation, and public education programs; directs all levels of building and prevention inspections; manages agency origin and cause investigations and effectively investigates arson-related fires; provides community outreach, educating the public continuously on fire, EMS, and relevant community safety topics.

# SUCCESSION PLANNING

During our analysis, CPSM was advised of impending retirements of middle and command staff level officers in the near term. While retirement of employees occurs organically in all organizations, because of the small size of MFD the impacts are greater given the short bandwidth of these retirements. The approaching retirements include:

- Fire Chief.
- Admin Battalion Chief (2).
- Operations Battalion Chief.

**Command Staff**

- Captain A-Shift.
- Captain B-Shift.
- Captain C-Shift.

**Middle Management**
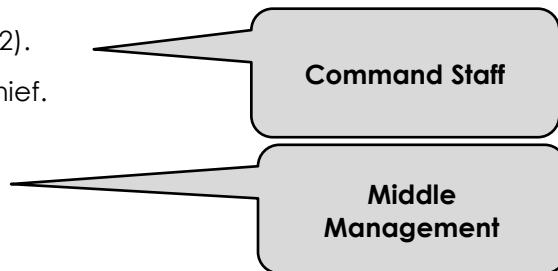
One important organizational concept for an organization that is experiencing turnover of personnel at management and leadership ranks, is to implement programs that identify the future leaders of the organization; that is, programs that go beyond the technical courses for career advancement preparation. A key to this is to develop and implement a formal succession plan, focused on developing potential successors to ensure organizational leadership stability, and serve as a retention plan. This type of planning is typically designed to identify, develop, and nurture potential future leaders.

There are a few examples of succession planning that work well in fire departments:

- Development-Based Processes: A succession planning model that equips an employee or group of employees for future roles and responsibilities through diverse organizational program exposure and assignments.

- Replacement Planning: A process of identifying replacement staff for key positions and functions and developing these employees over the short term.

- Career Path Training: A program that identifies technical and organizational development courses and/or formal education that must be completed as employees prepare to elevate responsibility or position in the organization. Ideally the officer candidate for any officer level in the department is experienced and has the foundational technical and formal education and training to be successful with each new level promoted to. To ensure this and to ensure the MFD is preparing future officers, a formal program that identifies those foundational technical and organizational courses germane to each level in the organization should be selected and implemented.

- Succession Planning: A more future-focused process of categorizing the knowledge, skills, and abilities needed to perform organizational functions. Linked to this is the development of a plan that has the intent of preparing multiple employees to potentially perform those functions and which creates opportunity for advancement in the organization.

Critical to the success of succession planning is the engagement and commitment of the senior leaders to the program, as well as the commitment of other members of the organization to their own personal and professional development. To be a part of the succession plan, one must commit to one's own professional development to be able to compete for and fill critical organizational leadership roles. CPSM recommends MFD work with the city's Human Resources Director to develop a succession plan that is diverse, includes the entire organization, and has a

focus on preparing current and future members to take on additional roles and responsibilities, and as well as prepares members for advancement and promotion into key roles in the organization.

## MFD FIRE OPERATIONS, OPERATIONS STAFFING, AND SERVICE DELIVERY MODEL

When exploring staffing and deployment of fire departments it is prudent to design an operational strategy around the actual circumstances that exist in the community and the fire and risk problems that are identified. The strategic and tactical challenges presented by the widely varied hazards that a department protects against need to be identified and planned for through a community risk analysis planning and management process as completed in this report.

There are budgetary factors that must be considered when deciding on the level of staffing and risk a community must undertake.

Effectively managing a fire department requires an understanding of and an ability to demonstrate how changes to resources will affect community outcomes. It is imperative that fire department leaders, as well as political decision makers, know how fire department resource deployment in their local community affects community outcomes in three critical areas: firefighter injury and death; civilian injury and death; and property loss. If fire department resources (both mobile and personnel) are deployed to match the risk levels inherent to hazards in the community, it has been scientifically demonstrated that the community will be far less vulnerable to negative outcomes in all three areas.[51]

Even with a thorough risk evaluation, staffing fire and EMS companies continues to remain a hotly debated topic among firefighters and governmental leadership since risk assessment models include high-risk/low-frequency situations. Technical rescue and hazmat incidents are examples of these risk profiles. While a situation may be low frequency, they can and do exist and require operational readiness to mitigate.

The federal government is aware of staffing issues for local municipality fire departments as well. In response to concerns over the adequacy of firefighter staffing, the Staffing for Adequate Fire and Emergency Response Act, known as the SAFER Act, was enacted by the 108th Congress as Section 1057 of the FY2004 National Defense Authorization Act (P.L. 108-136). The SAFER Act authorizes grants to career, volunteer, and combination local fire departments for the purpose of increasing the number of firefighters to help communities meet industry-minimum standards and attain 24-hour staffing to provide adequate protection from fire and fire-related hazards. Also authorized are grants to volunteer fire departments for recruitment and retention of volunteers. SAFER is administered by the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security (DHS).[52] The goal of SAFER is to enhance the local fire department's ability to comply with staffing, response, and operational standards established by the NFPA (NFPA 1710 and/or NFPA 1720). For details, review the National Fire Protection Association's codes and standards.[53]

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51. Fire Service Deployment, Assessing Community Vulnerability, Metropolitan Chiefs, 2011.
52. Congressional Budget Research Service, informing the legislative debate since 1914. *Staffing for Adequate Fire and Emergency Response:* The SAFER Grant Program, updated April 25, 2019.
53. https://www.fema.gov/grants/preparedness/firefighters/safer

While NFPA 1710 and OSHA provide guidelines as to the level of staffing and response of personnel, the acceptance of these agency documents varies from state to state, and department to department. NFPA 1710 has addressed the recommended staffing in terms of four types of occupancies. The needed staffing to accomplish the critical tasks for each specific occupancy are determined to be the Effective Response Force (ERF). The ERF for each of these occupancies is detailed in NFPA 1710 (2020 edition) section 5.2.4 Deployment.

One of the factors that has helped the fire service in terms of staffing is technology. The fire service continues to experience several technological advances that help firefighters extinguish fires more effectively. More advanced equipment in terms of nozzles, thermal imaging systems, advancements in self-contained breathing apparatus, incident command strategies, and devices used to track personnel air supply are some of the advancements of technologies and techniques that help firefighters extinguish fires faster and manage the fireground more effectively. While some of these technologies do not reduce staffing or workforce required, it can have an impact on workload, property loss, and crew fatigue.

One such technology that can assist in the rapid extinguishment of fires is a foam agent such as Class A or Compressed Air Foam System (CAFS), which have an extinguishing factor that has several advantages over water. Significant advantages of Class A Foam are cooling ability and vapor suppression. The increased surface area of the foam bubbles compared to plain water droplets increases the spray's ability to absorb heat dramatically.

Regarding vapor suppression, the foam blanket effectively covers, and coats burned or partially burned fuels, thereby trapping escaping vapors.[54] Class A foam will increase wetting effectiveness, which allows for greater penetration into Class A fuels such as ordinary combustibles. It also gives water a foaming ability, which allows it to remain and cling to vertical and horizontal surfaces without run-off and allows water to absorb more heat. By adding a small quantity of a Class A foam concentrate into a water stream, the effectiveness of the water can be increased up to five times.[55]

CAFS can also help provide some potential advantages vs. water-only systems. CAFS has been shown to reduce water use, provide for less extinguishment time, and reduce firefighter fatigue.[56]

Even with many advances in technology and equipment, the fireground is an unforgiving and dynamic environment where critical tasks must be completed by firefighters. Providing adequate staffing (Effective Response Force) for these environments depends on many factors. A community fire risk assessment and the expectations of the community are factors that will drive the critical tasks needed to be completed on the fireground.

Staffing and deployment of fire services is not an exact science. While there are many benchmarks that communities and management utilize in justifying certain staffing levels, there are certain considerations that are data driven and reached through national consensus that serve this purpose as well. CPSM has developed metrics it follows and recommends that communities consider when making recommendations regarding staffing and deployment of fire resources.

In addition to metrics, staffing is also linked to station location, what type of apparatus is responding: engine, ladder, ambulance, or specialty piece. These combined factors help to determine what level of fire and EMS service is going to be delivered in terms of workforce,

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54. www.chemguard.com
55. ibid
56. Fire Engineering, 2013, Compressed Air Foam and Firefighting Research, Dicus et al.

response time, and resources. Linked to these components of staffing and deployment are 11 critical factors that drive various levels and models from which fire and EMS departments staff and deploy. These factors are:

**Fire Risk and Vulnerability of the Community:** A fire department collects and organizes risk evaluation information about individual properties and based on the rated factors then derives a "fire risk score" for each property. The community risk and vulnerability assessment are used to evaluate the community. With regard to individual property, the assessment is used to measure all property and the risk associated with that property and then segregate the property as either a high-, medium-, or low-hazard depending on factors such as the life and building content hazard and the potential fire flow and the staffing and apparatus types required to mitigate an emergency in the specific property. Factors such as fire protection systems are considered in each building evaluation. Included in this assessment should be both a structural and nonstructural (weather, wildland-urban interface, transportation routes, etc.) analysis.

**Population, Demographics, and Socioeconomics of a Community:** Population and population density drives calls for local government service, particularly public safety. The risk from fire is not the same for everyone, with studies telling us age, gender, race, economic factors, and what region in the country one might live in contribute to the risk of death from fire. Studies also tell us these same factors affect demand for EMS, particularly population increase and the more frequent use of hospital emergency departments, since many uninsured or underinsured patients rely on EDs for their primary and emergent care, utilizing pre-hospital EMS transport systems as their entry point.

**Call Demand:** Demand is made up of the types of calls to which units are responding and the location of the calls. This drives workload and station staffing considerations. Higher population centers with increased demand require greater resources.

**Workload of Units:** The types of calls to which units are responding and the workload of each unit in the deployment model. This tells us what resources are needed and where; it links to demand and station location, or in a dynamic deployed system, the area(s) in which to post units, and acceptable travel time when measured against national benchmarks.

**Travel Times from Fire Stations:** Analyzes the ability to cover the fire management zone/response district in a reasonable and acceptable travel time when measured against national benchmarks such as NFPA 1710, 1720, and the ISO-Fire Service Rating Schedule (ISO-FSRS) engine and ladder company grading parameters. This metric links to demand, risk assessment, unit workload, and resiliency.

**NFPA Standards, ISO, OSHA requirements (and other national benchmarking).**

**EMS Demand:** Community demand; demand on available units and crews; demand on non-EMS units responding to calls for service (fire/police units); availability of crews in departments that utilize cross-trained EMS staff to perform fire suppression.

**Critical Tasking:** The ability of a fire and EMS department to comprise an effective response force when confronted with the need to perform required tasks on a fire or EMS incident scene defines its capability to provide adequate resources to mitigate each event. Department-developed and measured against national benchmarks. Links to risk and vulnerability analysis.

**Innovations in Staffing and Deployable Apparatus:** The fire department's ability and willingness to develop and deploy innovative apparatus (combining two apparatus functions into one to maximize available staffing, as an example). Deploying quick response vehicles (light vehicles

equipped with medical equipment and some light fire suppression capabilities) on those calls (typically the largest percentage) that do not require heavy fire apparatus.

**Community Expectations:** Measuring, understanding, and meeting community expectations. Stakeholders expect that when they request the fire department to respond to an emergency, the fire department will be available to respond and that the fire department will deliver the services necessary to resolve an emergency situation. They further expect that regardless of the day or time of the response, consistent services will be delivered, and that fire department personnel will be courteous and professional in enacting their responsibilities.[57]

**Ability to Fund:** The community's ability and willingness to fund all local government services and understanding how the revenues are divided up to meet the community's expectations.

### FIGURE 4-3: Ability to Fund: Community Expectations.



While each component presents its own metrics of data, consensus opinion, and/or discussion points, aggregately they form the foundation for informed decision making geared toward the implementation of sustainable, data- and theory-supported, effective fire and EMS staffing and deployment models that fit the community's profile, risk, and expectations.

Minot has a mix of commercial areas, professional office buildings, multifamily, and single-family residential structures (low and moderate density), and healthcare facilities. The service area has a diverse mix of buildings ranging from single family to mixed occupancy types with multiple stories.

MFD responds with fire suppression apparatus with crews from five fire station locations and utilizes Trinity Ambulance EMS ALS/BLS Transport while supporting with fire department-based BLS. At certain times MFD may request mutual aid assistance from Minot Rural or the Minot Air Force Base fire support as well as other departments in the area to assist with working structural fires when MFD resources are strained. More coordination is needed with Minot Rural and this will be discussed later in this report. The department is part of the Northwest Regional Response Team that provides response and equipment for Technical Rescue and Hazardous Materials response throughout North Dakota. *. It is important to note here that Minot is an island city, meaning the city is not contiguous with jurisdictions providing municipal services. Fire services automatic and mutual aid are not readily available, leaving the MFD to manage multiple calls and large incidents on their own. This should be considered when contemplating staffing and deployment of resources.*

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57. Stakeholders Have Explicit Expectations of Fire Departments, Dr. Robert Fleming, Rowan University, 2020

## Response Platforms

- Engine Companies, which are primarily designed for firefighting operations, the transport of crew members, hose (fire attack and larger supply), tank water, ground ladders, self-contained breathing apparatus, and storage of an assortment of hand tools used for a broad spectrum of fire operational tasks. As engines are often utilized as first response units on EMS calls, they also carry an assortment of EMS equipment to treat patients and provide life-saving measures prior to the arrival of EMS transport units. Minot Fire Department personnel and apparatus will be trained and equipped for response to all hazards that may affect the community. Engines will be set up for fire suppression as well as emergency medical response and will be staffed with Emergency Medical Technicians (EMTs)who can deliver Basic Life Support (BLS) care from the engine platform.

- Quint/Ladder Company, which is also primarily designed for firefighting operations, differs from engines in that they also have a hydraulically operated aerial device designed to reach above grade floors to transport crew members, effect rescues, and provide an elevated water stream. Ladder trucks also transport crew members, ground ladders, self-contained breathing apparatus, various forcible entry tools, ventilation equipment, and hydraulic rescue tools as well as other equipment to deal with an assortment of fires and technical rescues. Minot's ladder is a quint platform configuration that carries hose (fire attack and supply) and tank water and can operate as an engine when required.

- Traditional Ladder Company personnel primarily perform such functions as firefighting, ventilation, utility control, above-grade firefighting tasks, and elevated master stream applications. These companies will be equipped and trained to engage in direct fire suppression and can respond to all types of EMS incidents. The staffing complement for the ladder is currently three; however, NFPA 1710 recommends a minimum of four firefighters for engine and ladder response.

- Command Vehicles, which are typically SUV-type vehicles with command centers built into the cargo compartment are designed to carry a command level officer to the scene and are equipped with radio and command boards, as well scene personnel tracking equipment and associated equipment. A command vehicle is assigned to the Operations Shift Battalion Chief. These personnel are responsible for responding to fire and EMS incidents and establishing command and control of the incident.

Fire, rescue, and emergency medical system (EMS) incidents, and the fire department's ability to respond to, manage, and mitigate, them effectively, efficiently, and safely, are mission-critical components of the emergency services delivery system. In fact, fire, rescue, and EMS operations provide the primary, and certainly most important, basis for the very existence of the fire department. Having the right vehicles and equipment are essential to the operational readiness of the department.

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# MFD Operational Staffing Model

The MFD has three operational shifts, A, B, and C. The following table details the positions for each shift.

## TABLE 4-1: MFD Shift Matrix

| A Shift (48 on 96 off) | B Shift (48 on 96 off) | C Shift (48 on 96 off) |
|---|---|---|
| **Station 1** | **Station 1** | **Station 1** |
| ■ Engine 1: 1 Captain | ■ Engine 1: 1 Captain | ■ Engine 1: 1 Captain |
| ■ 1 Engineer | ■ 1 Engineer | ■ 1 Engineer |
| ■ 2 Firefighters | ■ 2 Firefighters | ■ 2 Firefighters |
| ■ Battalion Chief-Shift Commander | ■ Battalion Chief-Shift Commander | ■ Battalion Chief-Shift Commander |
| ■ *Hazmat 1* | ■ *Hazmat 1* | ■ *Hazmat 1* |
| ■ *Platform* 1 | ■ *Platform* 1 | ■ *Platform* 1 |
| **Station 2** | **Station 2** | **Station 2** |
| ■ Engine 2: 1 Captain | ■ Engine 2: 1 Captain | ■ Engine 2: 1 Captain |
| ■ 1 Engineer | ■ 1 Engineer | ■ 1 Engineer |
| ■ 2 Firefighters | ■ 2 Firefighters | ■ 2 Firefighters |
| ■ *Dive Truck* | ■ *Dive Truck* | ■ *Dive Truck* |
| ■ *Rescue 2* | ■ *Rescue 2* | ■ *Rescue 2* |
| **Station 3** | **Station 3** | **Station 3** |
| ■ Engine 3: 1 Captain | ■ Engine 3: 1 Captain | ■ Engine 3: 1 Captain |
| ■ 1 Engineer | ■ 1 Engineer | ■ 1 Engineer |
| ■ 2 Firefighters | ■ 2 Firefighters | ■ 2 Firefighters |
| ■ 1 ARFF Vehicle 1 FF Operator | ■ 1 ARFF Vehicle 1 FF Operator | ■ 1 ARFF Vehicle 1 FF Operator |
| **Station 4** | **Station 4** | **Station 4** |
| ■ Engine 4: 1 Captain | ■ Engine 4: 1 Captain | ■ Engine 4: 1 Captain |
| ■ 1 Engineer | ■ 1 Engineer | ■ 1 Engineer |
| ■ 2 Firefighters | ■ 2 Firefighters | ■ 2 Firefighters |
| ■ *Technical rescue Truck/Trailer* | ■ *Technical Rescue Truck/Trailer* | ■ *Technical Rescue Truck/Trailer* |
| **Station 5** | **Station 5** | **Station 5** |
| ■ Ladder 5: 1 Captain | ■ Ladder 5: 1 Captain | ■ Ladder 5: 1 Captain |
| ■ 1 Engineer | ■ 1 Engineer | ■ 1 Engineer |
| ■ 2 Firefighters | ■ 2 Firefighters | ■ 2 Firefighter |
| ■ *Brush 5* | ■ *Brush 5* | ■ *Brush 5* |

**Note**: *Cross-staffed units

The table above depicts maximum staffing levels for the department. Engines and Ladders have four assigned personnel to each apparatus and run with a minimum of three. At times, the MFD may struggle to fill in for scheduled and unscheduled leave and thus utilizes overtime to fill in to minimum staffing levels. The MFD, like many fire departments across the country, staffs through the constant-staffing level model, meaning that on each shift there is a minimum number of staffed positions to be filled. In the case of the MFD that number is 17 personnel for each shift. When the department is at minimum staffing and a position is vacated by unscheduled leave, the position is backfilled by overtime staffing.

## NFPA 1710

National Fire Protection Association (NFPA) standards are consensus standards and not mandated nor are they the law. Many cites and countries strive to achieve these standards to the extent possible without an adverse fiscal impact to the community. Cities and communities must decide on the level of service they can deliver based on several factors as discussed herein, including budgetary considerations. Questions of legal responsibilities are often discussed in terms of compliance with NFPA standards. Again, these are national consensus standards, representing best practices and applied science and research.

NFPA 1710 outlines organization and deployment of operations by career, and primarily career fire and rescue organizations.[58] It serves as a benchmark to measure staffing and deployment of resources to certain structures and emergencies.

NFPA 1710 was the first organized approach to defining levels of service, deployment capabilities, and staffing levels for career departments. Research work and empirical studies in North America were used by NFPA committees as the basis for developing response times and resource capabilities for those services as identified by the fire department.[59]

According to NFPA 1710, fire departments should base their capabilities on a formal all-hazards community risk assessment, as discussed earlier in this report, and taking into consideration:[60]

- Life hazard to the population protected.

- Provisions for safe and effective firefighting performance conditions for the firefighters.

- Potential property loss.

- Nature, configuration, hazards, and internal protection of the properties involved.

- Types of fireground tactics and evolutions employed as standard procedure, type of apparatus used, and results expected to be obtained at the fire scene.

According to NFPA 1710, if a community follows this standard, engine and ladder companies shall be staffed with a minimum of four on-duty members.[61] Additional staffing parameters in this standard for engine and ladder companies is based on geographical isolation and tactical hazards, and increases each to five or six as a minimum.[62] This staffing configuration is designed to ensure a fire department can complete the critical tasking necessary on building fires and

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58. NFPA 1710 is a nationally recognized standard, but it has not been adopted as a mandatory regulation by the federal government or the State of North Dakota. It is a valuable resource for establishing and measuring performance objectives for the City of Minot but should not be the only determining factor when making local decisions about the city's fire services.
59. NFPA, Origin and Development of the NFPA 1710, 1710-1
60. NFPA 1710, 5.2.1.1, 5.2.2.2
61. NFPA 1710, 5.2.3.1.1; 5.2.3.2.1
62. NFPA 1710, 5.2.3.1.2, 5.2.3.1.2.1.,5.2.3.2.2.,5.3.2.3.2.2.1

other emergency incidents simultaneously rather that consecutively, and can efficiently assemble an effective response force for each risk the department may encounter. *NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with the assembling of on-scene personnel to complete critical tasks as outlined in the standard.*

## Code of Federal Regulations, NFPA 1500, and Two-In/Two-Out

Another consideration, and one that links to critical tasking and assembling an Effective Response Force, is that of two-in/two-out regulations. Essentially, prior to starting any fire attack in an immediately dangerous to life and health (IDLH) environment [with no confirmed rescue in progress], the initial two-person entry team shall ensure that there are sufficient resources on-scene to establish a two-person initial rapid intervention team (IRIT) located outside of the building.

This critical tasking model has its genesis with the Occupational Safety and Health Administration, specifically 29 CFR 1910.134(g)(4). Currently, North Dakota does not have its own occupational health and safety regulatory program (often called a "state plan"). Instead, federal OSHA laws apply for North Dakota workers, including most private-sector workers.[63]

The MFD responds to structural fires with four engines, a ladder/quint, and a Battalion Chief, equivalent to sixteen-duty fire staff. MFD also dispatches additional personnel to staff companies to backfill their stations on working incidents and who can be sent to the scene if necessary. Under this response model, the MFD provides the minimum number of firefighters on the initial response to comply with CFR 1910.134(g)(4), regarding two-in/two-out rules and an initial rapid intervention team (IRIT).

- CFR 1910.134(g)(4): Procedures for interior structural firefighting. In addition to the requirements as set forth under paragraph (g)(3), interior structural fires, the employer shall ensure that:
  - At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times;
- CFR 1910.134(g)(4)(ii)
  - At least two employees are located outside the IDLH atmosphere; and
- 1910.134(g)(4)(iii)
  - All employees engaged in interior structural firefighting use SCBAs.
    - **Note 1 to paragraph (g):** One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident.
    - **Note 2 to paragraph (g):** Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

According to the standard, one of the two individuals (standby member) shall be permitted to perform other duties outside of the hazard area, such as apparatus operator, incident commander, or technician or aid, provided constant communication is maintained between the standby member and the members of the crew.[64]

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63. https://www.360training.com/osha-campus/north-dakota
64. NFPA 1500, 2018, 8.8.2.4

NFPA 1500, *Standard on Fire Department Occupational Health, Safety, and Wellness,* 2018 Edition, has similar language as CFR 1910.134(g)(4) to address the issue of two-in/two-out, stating *the initial stages of the incident where only one crew is operating in the hazardous area of a working structural fire, a minimum of four individuals shall be required consisting of two members working as a crew in the hazardous area and two standby members present outside this hazard area available for assistance or rescue at emergency operations where entry into the danger area is required.*[65]

NFPA 1500 also speaks to the utilization of the two-out personnel in the context of the health and safety of the firefighters working at the incident. *The assignment of any personnel including the incident commander, the safety officer, or operations of fire apparatus, shall not be permitted as standby personnel if by abandoning their critical task(s) to assist, or if necessary, perform rescue, this clearly jeopardizes the safety and health of any firefighter working at the incident.*[66]

In order to meet CFR 1910.134(g)(4), and NFPA 1500, the MFD must utilize two personnel to commit to interior fire attack while two firefighters remain out of the hazardous area or immediately dangerous to life and health (IDLH) area to form the Initial Rapid Intervention Team (IRIT), while attack lines are charged, and a continuous water supply is established.

However, NFPA 1500 allows for fewer than four personnel under specific circumstances. It states, *Initial attack operations shall be organized to ensure that if on arrival at the emergency scene, initial attack personnel find an imminent life-threatening situation where immediate action could prevent the loss of life or serious injury, such action shall be permitted with fewer than four personnel.*[67]

CFR 1910.134(g)(4) also states that nothing in section (g) is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.[68]

It is also important to note that the OSHA standard (and NFPA 1710) specifically references "interior firefighting." Firefighting activities that are performed from the exterior of the building are not regulated by this portion of the OSHA standard. However, in the end, the ability to assemble adequate personnel, along with appropriate apparatus, on the scene of a structure fire, is critical to operational success and firefighter safety.

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65. NFPA 1500, 2018, 8.8.2.
66. NFPA 1500, 2018, 8.8.2.5.
67. NFPA 1500, 2018 8.8.2.10.
68. CFR 190.134, (g).

## FIGURE 4-4: Two-In/Two-Out Interior Firefighting Model*
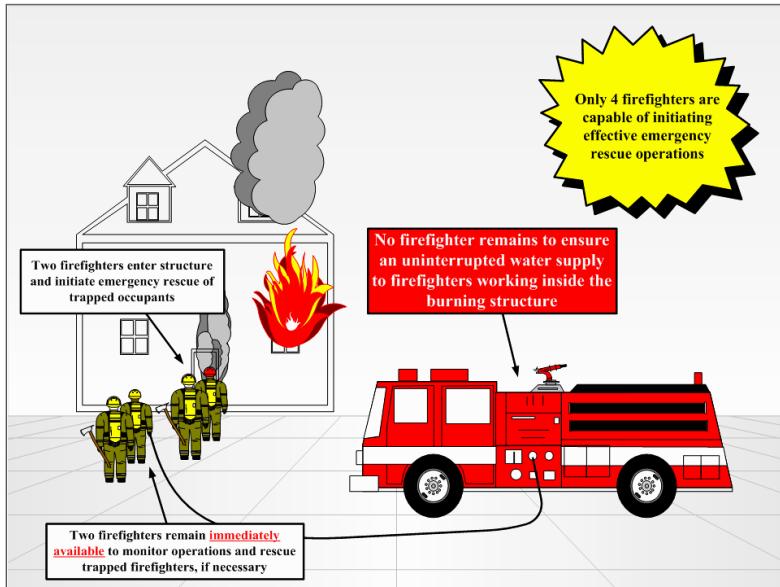


## OSHA and Technical Rescue

Regarding rescue and emergency services: CFR 1926.1211 (b)(1,2,3,4) *requires that (b) an employer whose employees have been designated to provide permit space rescue and/or emergency services must take the following measures and provide all equipment and training at no cost to those employees*:

(1) Provide each affected employee with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train each affected employee so the employee is proficient in the use of that PPE;

(2) Train each affected employee to perform assigned rescue duties. The employer must ensure that such employees successfully complete the training required and establish proficiency as authorized entrants, as provided by 1926.1207 and 1926.1208 of this standard;

(3) Train each affected employee in basic first aid and cardiopulmonary resuscitation (CPR). The employer must ensure that at least one member of the rescue team or service holding a current certification in basic first aid and CPR is available.

(4) Ensure that affected employees practice making permit space rescues before attempting an actual rescue, and at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces, practice rescue is not required where the affected employees properly performed a rescue operation during the last 12 months in the same permit space the authorized entrant will enter, or in a similar permit space. Representative permit spaces must, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.[69]

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69. https://www.osha.gov/sites/default/files/publications/osha2254.pdf

# EFFECTIVE RESPONSE FORCE AND CRITICAL TASKING

NFPA 1710 addresses standards for an Effective Response Force across several types of occupancies.

An effective response force (ERF) is defined as the minimum number of firefighters and equipment that must reach a specific emergency incident location within a maximum prescribed travel [driving] time. The maximum prescribed travel time acts as one indicator of resource deployment efficiency.

NFPA 1710 provides a staffing deployment model and critical tasking guidelines for four specific occupancies. These occupancies are:

- Single-Family Dwelling.

- Open-Air Strip Mall.

- Garden Style Apartment.

- High-Rise.

The Center for Public Safety Excellence (CPSE) has also established benchmarks regarding staffing and deployment. CPSE sets standards for agencies desiring accreditation through the Commission on Fire Accreditation International (CFAI). CFAI uses standards set forth in the *Community Risk Assessment Manual: Standards of Cover*, 10th edition to provide guidance in staffing and deployment to agencies desiring accreditation through Core Competencies.

## Critical Tasking as Defined by CPSE and NFPA

Both CPSE and the NFPA have defined Critical Tasking. CPSE defines Critical Tasking as the application of tasks assigned to the human and physical resources that are minimally required to effectively mitigate pain, suffering, and loss of life and/or property. Critical tasking is relevant to risk classifications and risk categories.[70]

There are 93 Core Competencies required for a department to achieve accreditation status as defined by CPSE. Competency 2C.4 is under the heading of Current Deployment and Performance and addresses Critical Tasking under 2C.4.

**Criterion 2C: Current Deployment and Performance**

*The agency identifies and documents the nature and magnitude of the service and deployment demands within its jurisdiction. Based on risk categorization and service impact considerations, the agency's deployment practices are consistent with jurisdictional expectations and with industry research. Efficiency and effectiveness are documented through quality response measurements that consider overall response, consistency, reliability, resiliency, and outcomes throughout all service areas. The agency develops procedures, practices, and programs to appropriately guide its resource deployment.[71]*

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70. Center for Public Safety Excellence, Quality Improvement for the Fire and Emergency Services, 2020
71. Center for Public Safety Excellence, Quality Improvement for the Fire and Emergency Services, 2020

<u>Core Competency 2C.4</u>

A critical task analysis of each category and risk class has been conducted to determine the first due and effective response force capabilities, and a process is in place to validate and document the results.

Core competency 2C.4 requires that the agency conduct a critical task analysis of each risk category and risk class to determine the first-due and effective response force capabilities, and to have a process in place to validate and document the results. The process considers the number of personnel needed to perform the necessary emergency scene operations. Completion of the process also helps to identify any gaps in the agency's emergency scene practices.

Critical tasks as defined by NFPA 1710 are those activities that must be conducted on time by responders at emergency incidents to control the situation and stop loss. Critical tasking for fire operations is the minimum number of personnel needed to perform the tasks needed to effectively control and mitigate a fire or other emergency. To be effective, critical tasking must assign enough personnel so that all identified functions can be performed simultaneously. However, it is important to note that initial response personnel may manage secondary support functions once they have completed their primary assignment. Thus, while an incident may end up requiring a greater commitment of resources or a specialized response, a properly executed critical tasking assignment will provide adequate resources to immediately begin bringing the incident under control.

The specific number of people required to perform all the critical tasks associated with an identified risk or incident type is referred to as an Effective Response Force (ERF). The goal is to deliver an ERF within a prescribed period. NFPA 1710 provides the benchmarks for effective response forces.

The following discussion and tables will outline how critical tasking and assembling an effective response force is first measured in NFPA 1710, and how the MFD is benchmarked against this standard for the building types existing in Minot. This discussion will cover single-family dwelling buildings, open-air strip mall buildings, and apartment buildings as outlined in the NFPA standard. As mentioned already in this report, the MFD relies on mutual aid to assemble an Effective Response Force.

In all scenarios, the following should be considered:

- Minot Rural Fire Department is a combination agency, and its response time may vary.

- An Auto/Mutual Aid Rapid Intervention Team (RIC) is not part of the initial Attack due to time and distance, and therefore can serve as a Rapid Intervention Crew (RIC), not an IRIT.

- MFD's fourth engine would be considered for an IRIT assignment.

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### Single-Family Dwelling: NFPA 1710, 5.2.4.1

The initial full alarm assignment (ERF) to a structural fire in a typical 2,000 square-foot, two-story, single-family dwelling without a basement and with no exposures must provide for a minimum of 16 members (17 if an aerial device is used). The following figure illustrates this, and the subsequent table outlines the critical task matrix.

**FIGURE 4-5: Effective Response Force for Single-Family Dwelling Fire**
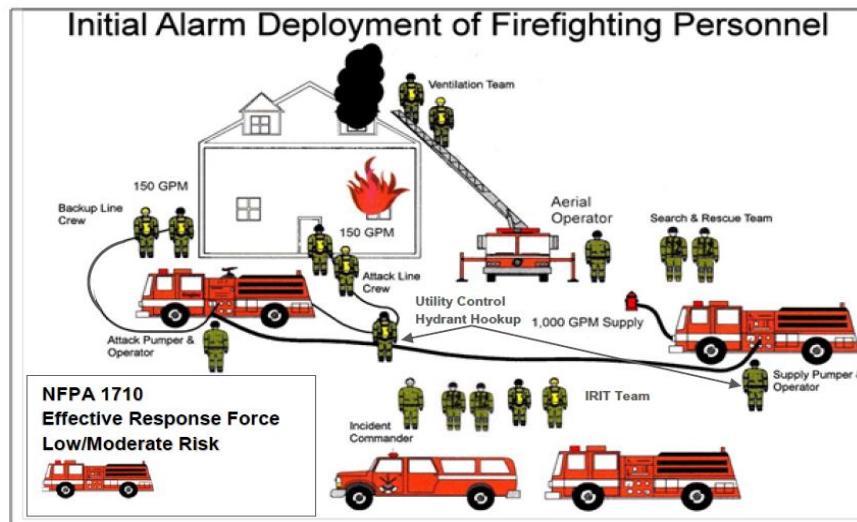


**TABLE 4-2: Effective Response Force for Single-Family Dwelling Fire**

| Critical Tasks | Personnel |
|---|---|
| Incident Command | 1 |
| Continuous Water Supply | 1 |
| Fire Attack via Two Handlines | 4 |
| Hydrant Hook Up - Forcible Entry - Utilities | 2 |
| Primary Search and Rescue | 2 |
| Ground Ladders and Ventilation | 2 |
| Aerial Operator if Aerial is Used | 1 |
| Establishment of IRIC (Initial Rapid Intervention Crew) | 4 |
| **Total Effective Response Force** | **16 (17 If aerial is used)** |

The following table outlines how the MFD assembles staffing and deployable resources as measured against NFPA 1710 benchmarking for an effective response force for a single-family dwelling fire. MFD first alarm units are highlighted.

## TABLE 4-3: MFD Effective Response Force for Single-Family Dwelling Fire

| Apparatus | Personnel |
|---|---|
| MFD Battalion Chief | 1 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Ladder/Quint | 3 |
| **Total MFD ERF** | **16** |

As a single responding agency, MFD meets the minimum benchmarks of NFPA 1710 for an Effective Response Force for a single-family dwelling fire if the aerial ladder is not utilized. MFD will meet this requirement by the addition of  MAFB and MRFD engine/ladder response (depending on their availability) utilizing automatic or  mutual aid. NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with section 5.2 of this standard.

## Open-Air Strip Mall, NFPA 5.4.2

The initial full alarm assignment (ERF) to a structural fire in a typical open-air strip center ranging from 13,000 square feet to 196,000 square feet in size must provide for a minimum of 27 members (28 if an aerial device is used). The following table outlines the critical tasking matrix for this type of fire. This can also be typed as a commercial building fire response.

## TABLE 4-4: Effective Response Force for Open-Air Strip Mall Fire

| Critical Tasks | Personnel |
|---|---|
| Incident Command | 2 |
| Continuous Water Supply | 2 |
| Fire Attack via Two Handlines | 6 |
| Hydrant Hook Up - Forcible Entry - Utilities | 3 |
| Primary Search and Rescue | 4 |
| Ground Ladders and Ventilation | 4 |
| Aerial Operator if Aerial is Used | 1 |
| Establishment of IRIC (Initial Rapid Intervention Crew) | 4 |
| Medical Care Team | 2 |
| **Total Effective Response Force** | **27 (28 If aerial is used)** |

The following table outlines how the MFD assembles staffing and deployable resources as measured against NFPA 1710 benchmarking for an effective response force for an open-air strip mall or commercial building fires. MFD first alarm units are highlighted.

## TABLE 4-5: MFD Effective Response Force for Open-Air Strip Mall/Commercial Fire

| Apparatus | Personnel |
|---|---|
| MFD Battalion Chief | 1 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Ladder/Quint | 3 |
| **Total MFD ERF** | **16** |

As a single responding agency, MFD **does not meet** the minimum benchmarks of NFPA 1710 for an Effective Response Force for an Open-Air Strip Mall fire but can assemble personnel for the initial attack and limited additional critical tasks.  MFD will enhance capabilities by the addition of MAFB and MRFD engine/ladder response (depending on their availability) utilizing automatic or  mutual aid.  NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with section 5.2 of this standard.

## *Apartment Building, NFPA 1710, 5.2.4.3*

The initial full alarm assignment (ERF) to a structural fire in a typical 1,200 square-foot apartment within a three-story, garden-style apartment building must provide for a minimum an Effective Response Force (ERF) of 27 members (28 if an aerial device is used). The following table outlines the critical tasking matrix for this type of building fire.

## TABLE 4-6: Effective Response Force for Apartment Building Fire

| Critical Tasks | Personnel |
|---|---|
| Incident Command | 2 |
| Continuous Water Supply | 2 |
| Fire Attack via Two Handlines | 6 |
| Hydrant Hook Up - Forcible Entry - Utilities | 3 |
| Primary Search and Rescue | 4 |
| Ground Ladders and Ventilation | 4 |
| Aerial Operator if Aerial is Used | 1 |
| Establishment of IRIC (Initial Rapid Intervention Crew | 4 |
| Medical Care Team | 2 |
| **Total Effective Response Force** | **27** **(28 If aerial is used)** |

The following table outlines how the MFD assembles staffing and deployable resources as measured against NFPA 1710 benchmarking for an effective response force for an apartment building or other multi-unit housing type building fire. MFD first alarm units are highlighted.

## TABLE 4-7: MFD Effective Response Force for Apartment Building Fire

| Apparatus | Personnel |
|---|---|
| MFD Battalion Chief | 1 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Ladder/Quint | 3 |
| **Total MFD ERF** | **16** |

As a single responding agency, MFD **does not meet** the minimum benchmarks of NFPA 1710 for an Effective Response Force for an apartment building fire. MFD will enhance capabilities by the addition of MAFB and MRFD engine/ladder response (depending on their availability) utilizing automatic or  mutual aid. NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with section 5.2 of this standard.

### High-Rise, NFPA 5.2.4.4

The initial full alarm assignment to a fire in a building where the highest floor is greater than 75 feet above the lowest level of fire department vehicle access must provide for a minimum of 42 members (43 if the building is equipped with a fire pump). The next table outlines the critical tasking matrix for this type of building fire.

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## TABLE 4-8: Effective Response Force for High-Rise Fire

| Critical Tasks | Personnel |
|---|---|
| Incident Command | 2 |
| Continuous Water Supply | 1/1 1 FF for continuous water. if fire pump exists an additional FF will be required for a total of 2 |
| Fire Attack via Two Handlines | 4 |
| One handline above the Fire Floor | 2 |
| Establishment of IRIC (Initial Rapid Intervention Crew | 4 |
| Primary Search and Rescue Teams | 4 |
| Entry Level Officer with Aide near entry point of Fire Floor | 2 |
| Entry Level Officer with Aide near the entry point above the Fire Floor | 2 |
| Two Evacuation Teams | 4 |
| Elevation Operations | 1 |
| Safety Officer | 1 |
| FF Two floors below Fire to coordinate Staging | 1 |
| Rehabilitation Management | 2 |
| Officer and FFs to Manage Vertical Ventilation | 4 |
| Lobby Operations | 1 |
| Transportation of Equipment below Fire Floor | 2 |
| Officer to Manage Base Operations | 1 |
| Two ALS Medical Care Teams | 4 |
| **Total Effective Response Force** | **42 (43) If building is Equipped with Pump** |

The following table outlines how the MFD assembles staffing and deployable resources as measured against NFPA 1710 benchmarking for an effective response force for a High-Rise Building or other multi-unit housing type building fire. MFD first alarm units are highlighted.

## TABLE 4-9: MFD Effective Response Force for High Rise Building

| Apparatus | Personnel |
|---|---|
| MFD Battalion Chief | 1 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Engine | 3 |
| MFD Ladder/Quint | 3 |
| **Total MFD ERF** | **16** |

As a single responding agency, **MFD does not meet** the minimum benchmarks of NFPA 1710 for an Effective Response Force for a high-rise fire. MFD will enhance capabilities by the addition of

MAFB and MRFD engine/ladder response (depending on their availability) utilizing automatic or mutual aid. NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with section 5.2 of this standard.

## Operational Response Conclusion

The MFD meets the Effective Response Force (ERF) for fire in Residential Structures but does not meet the benchmark for Open-Air Strip Shopping Centers, Apartment Buildings, and High-Rise Structures as a single response agency; however, it can meet with the assistance of mutual aid companies depending on their availability.

It is important to note that four of the mutual aid companies that would be requested and then relied on to respond to assist with structural fires, or for that matter any incident in Minot includes career resources, a combination department (career/volunteer), and all volunteers. Minot Air Force Base's availability depends on the state of air operations being experienced by the base at the time of the request.

Current automatic aid with Minot Rural Fire Department only applies to All Seasons Arena/State Fairgrounds, Highway 83 Bypass, City Landfill, Minot Milling, and City of Minot wildland fires. The status and distance of some mutual aid agencies creates delays and reliability challenges. NFPA 1710 does allow for mutual aid assistance to satisfy 5.2.1.3, it is clear that response time and distance of the mutual aid companies could impact fire/rescue operations in terms of initiating and completing critical tasking.

This said, CPSM suggests the MFD explore auto-aid agreements with Minot Air Force Base, Minot Rural, Surrey FPD, and Burlington Rural Fire for all structural fires so that additional resources are started, minimizing resource delays for those building fires the MFD lacks resources for.

**Note:** MFD relies on call-back of personnel and mutual aid companies to back-fill stations in the event of a working structural fire and subsequently can call them to the scene if needed. In addition, the rate of participation varies from incident to incident and currently has provided adequate staffing over the past few years in the effort to staff additional equipment.

A critical component of the incident command system is the establishment of the role of safety officer to monitor conditions at fires and emergency incident scenes to ensure that appropriate safety procedures are being followed. The incident safety officer is an important member of the incident command team. The safety officer works directly under and with the incident commander to help recognize and manage the risks that personnel take at emergencies.

The concept of a command team recognizes that there is a shared responsibility for the proper and safe performance of personnel operating on the emergency scene. The fact is that one of the roles that the safety officer needs to play is that of challenging and confirming the incident commander's actions. The safety officer should be included in the development and monitoring of the incident action plan. In simple terms, the incident commander and the safety officer command team provide a system of checks and balance designed to keep all personnel on the emergency scene safe. Once the incident action plan is established, the safety officer monitors the plan for effectiveness and efficiency. The safety officer provides the following functions:

- Incident recon.
- Assess the risk/benefit of operations.
- Assess and address safety concerns on the incident scene.

- Communicate and report safety issues to command.

- Intervene as necessary to provide safety.

During larger-scale incidents, the safety officer reviews the incident action plan and specific details of the safety plan. As appropriate, the safety officer confirms that a safety plan is in effect, reviews it, and provides recommendations. The incident commander may request that the safety officer develop a proposed safety plan and recommendations for command.

Beyond the specific emphasis on safety, the role of incident commander is a dynamic and highly stressful position that has numerous critical responsibilities that must be handled simultaneously, and, in a time-critical manner.

Multiple fire departments utilize Field Incident Technicians (FIT), or Battalion Safety Officers (BSO), paired with a Battalion Chief as part of a permanent incident management team. These are company level officers; in the case of MFD these would be Captains who would work in tandem with the command-level officer. This is a concept that the MFD should consider adopting to provide for more effective, efficient, and safer incident command operations.

When teamed with a Battalion Chief, in addition to normal safety officer functions, the FIT/BSO also fulfills the following roles and responsibilities:

- Incident Recon.

- Assess the risk/benefit of operations.

- Assist with managing the incident.

- Define, evaluate, and recommend changes to the incident action plan.

- Provide direction relating to tactical priorities and specific critical fireground factors.

- Become the Incident Safety Officer.

- Assess and address safety concerns on the incident scene.

- Communicate and report safety issues to command.

- Intervene as necessary to provide for safety.

- Manage personnel accountability on the incident.

- Evaluate the need for additional resources.

- Assign logistics responsibilities.

- Assist with the tactical worksheet for control and accountability.

- Evaluate the fireground organization and span of control.

- Assist with personnel air management.

- Manage crew work/rest cycles and rehab.

- Other duties as necessary.

In addition, when not operating on the incident scene these personnel can:

- Conduct training on their assigned shift.

- Assist the Battalion Chief with other administrative duties.

# MFD EMS CRITICAL TASKING

EMS is a vital component of the comprehensive emergency services delivery system in any community. Together with the delivery of police and fire services, it forms the backbone of the community's overall public safety net.

In terms of overall incidents responded to by the emergency agencies in most communities, it could be argued that EMS incidents constitute the greatest number of "true" emergencies, where intervention by trained personnel makes a difference, sometimes literally between life and death. Heart attack and stroke victims require rapid intervention, care, and transport to a medical facility. The longer the time duration without care, the less likely the patient is to fully recover. Contemporary pre-hospital clinical care deploys many clinical treatments one would also receive in the Emergency Department, truly matching the long-time EMS saying, "we bring the Emergency Room to you."

Critical tasks by specific call type in EMS-only agencies assisted by fire departments are not as well-defined as critical tasks in the fire discipline. Notwithstanding, critical tasking in EMS is typical of that in the fire service in that there are certain critical tasks that need to be completed either in succession or simultaneously. EMS on-scene service delivery is based primarily on a focused scene assessment, patient assessment, and then followed by the appropriate basic and advanced clinical care through established medical protocols. Thus, EMS critical tasking is typically developed (in fire-based EMS Standards of Cover documents) in accord with the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) as:

- Basic Life Support (BLS), which is an emergency response by a ground transport unit (and crew) and the provision of medically necessary supplies and services.

- Advanced Life Support, Level 1 (ALS1), which is the transportation by ground ambulance vehicle and the provision of medically necessary supplies and services including the provision of an ALS assessment or at least <u>one</u> ALS intervention.

- Advanced Life Support, Level 2 (ALS2), which is the transportation by ground ambulance vehicle and the provision of medically necessary supplies and services including:

  □ (1) at least three separate administrations of one or more medications by intravenous push/bolus or by continuous infusion (excluding crystalloid fluids), or

  □ (2) ground ambulance transport, medically necessary supplies and services, and the provision of at least one of the ALS2 procedures listed below:

    • a. Manual defibrillation/cardioversion.

    • b. Endotracheal intubation.

    • c. Central venous line.

    • d. Cardiac pacing.

    • e. Chest decompression.

    • f. Surgical airway.

    • g. Intraosseous line.

Currently, MFD is a non-transport Basic Life Support agency. MFD works in concert with Trinity Health First Response Ground Ambulance, which provides ALS care and transport.

MFD has a Captain Paramedic who works with the training division and provides EMS training of skills and protocols, and the maintenance of certifications on the National Registry EMT to all firefighters in MFD.

MFD has two Captains per shift who make up a Steering Committee that meets with Trinity Health and serves as a quality improvement group dedicated to the enhancement and overall quality of service delivery for both departments.

## TABLE 4-10: BLS Critical Tasking, MFD

| Critical Task | # Responders |
|---|---|
| **One Engine** | |
| Incident Command-Officer | 1 |
| Primary Patient Care Firefighter-EMT | 1 |
| Secondary Patient Care Firefighter-EMT | 1 |
| **Effective Response Force** | **3** |

**Resource Deployment:**
**1 Transport Ambulance (2 Staff)**
**Trinity Health**

## TABLE 4-11: BLS Critical Tasking, 1050-I on Bypass In the City Limits

| Critical Task | # Responders |
|---|---|
| **Two Engines** | |
| Incident Command | 1 |
| Apparatus Officer | 1 |
| Primary Patient Care Firefighter-EMT | 2 |
| Secondary Patient Care Firefighter EMT | 2 |
| **Effective Response Force** | **6** |

**Resource Deployment:**
**1 Transport Ambulance (2 Staff)**
**Trinity Health**

## TABLE 4-12: BLS Critical Tasking, Water Emergencies

| Critical Task | # Responders |
|---|---|
| **5 Engines and 1 Battalion** | |
| Incident Command | 1 |
| Apparatus Officer | 5 |
| Primary Patient Care Firefighter-EMT | 5 |
| Secondary Patient Care Firefighter-EMT | 5 |
| **Effective Response Force** | **16** |

**Resource Deployment:**
**1 Transport Ambulance(2 Staff)**
**Trinity Health**

## Administrative and Operational Staffing Recommendations:

Administratively, the MFD lacks some depth in key program management and leadership roles to include the Community Risk Reduction function, and the Fire Chief's office.

Operationally there are several methods a career fire department may consider and implement to ensure safe and effective response, while maintaining an efficient budget and effective service to the end users of the fire department response system. ***Overall, what needs to be achieved for a safe and effective fire unit response in the City of Minot is a daily fire staffing of twenty-two. This includes the current minimum staffing of seventeen, plus three additional firefighters for Engine 5 (new resource-nine total FTEs), one additional firefighter assigned to Ladder 5 (three total FTEs), and 1 Field Incident Technician (three total FTEs). Total new FTEs: Fifteen.***

Based on our assessment and when benchmarking the operational response force against national benchmarking, CPSM recommends the following staffing considerations:

- CPSM recommends the position of Assistant Fire Chief be implemented to assist the Fire Chief with strategic planning and provide supervision to the three Operational and two Administrative Battalion Chiefs. Upon filling this position, the Fire Chef should evaluate the duties and responsibilities of the Administrative and Training Battalion Chiefs in order to reorganize the department as needed (Recommendation No. 23.)

- CPSM recommends the position of Fire Marshall be implemented and assigned to Fire Prevention/Community Risk Reduction. This position should be charged with the responsibility of managing and leading the fire inspection, plans review, fire investigation, and public education programs. This position should also take the lead on program design for Community Risk Reduction programs and performance measures focused on reducing the risk of fire and improving citizen and firefighter safety. Recommendation No. 24.)

- CPSM recommends the addition of three firefighters to be assigned to Ladder 5 to maintain a minimum of four firefighters on this apparatus. This is consistent with NFPA 1710 and as well will support tasks associated with ladder company operations. The department should also establish a strategic and budgetary plan to meet the staffing requirements of NFPA 1710 and an Effective Response Force for the four building types for the department. (Recommendation No. 25.)

- CPSM recommends the establishment of an additional Engine Company to be assigned with the current Ladder Company 5 to form a two-apparatus company. This will allow personnel on Ladder 5 to conduct ladder company operations and not have to function as a primary engine. This will also provide an additional company that will increase resiliency and prevent all stations being vacant on every structure fire response. (Recommendation No. 26.)

- CPSM recommends MFD consider future planning for Field Incident Technicians to enhance and support safety and command-and-control capabilities of the Operational Battalion Chiefs; this would also serve as a key component of a succession plan to prepare members to take on future leadership roles in the department. (Recommendation No. 27.)

- CPSM recommends the addition of an Administrative Assistant position to support the new Assistant Chief and Fire Marshal's Office. This position will assist the with the demands of paperwork on the inspectors, thereby giving them more time in the field. (Recommendation No. 28.)

### Discussion on Recommendations:

### Assistant Fire Chief (1)

Minot has 71 authorized positions; the department is not large; the Fire Chief is an executive management position. Many departments the size of the MFD have either an Assistant or Deputy Chief who serves as a clearly defined second in command of the department.

The position is needed to assist the Fire Chief in planning for the future and proving a level of strategic thinking to prepare the organization for the future. The position would supervise the five Battalion Chiefs and provide leadership to both administrative and operational functions of the department. This position would allow the Fire Chief to implement a reorganization of duties for the two Administrative Battalion Chiefs to programs including but not limited to: Training, Safety, Special Operations, and/or Accreditation. This position can also be used to fill in for the Fire Chief in their absence, prepare individuals for upcoming leadership positions, and would enable the Fire Chief to spend more time creating the future and improving the system.

### Fire Marshal (1)

This position is needed to provide management and direction to three Fire Inspectors. This job is currently being accomplished by the Administrative Battalion Chief who does not have real-time, day-to-day contact with the inspectors. Being a subject matter expert (SME) for the inspectors is necessary as decisions must be made during daily activities that involve interpretation of building and fire prevention codes. This position would also be responsible for work and time allocation that will increase the productivity of the inspection staff.

The MFD has two options for this position. Since the fire prevention/CRR personnel are civilian (non-sworn) personnel, the position of Fire Marshal could also be a civilian hire who possesses the requisite training, certifications, and experience. The other option would be for the MFD to include this position as part of a career development process and designate it as a uniformed position at the rank of Captain.

### Firefighters (3)

It is recommended that the department begin staffing Ladder 5 with a four-person minimum. Currently the ladder is staffed with three firefighters, the same as all other MFD units. While Ladder 5 is a Quint and does act in the capacity of an engine, dedicated ladder personnel who are well-versed in ladder company functions is recommended. In the future, an additional engine with personnel can be budgeted to work in concert with the ladder company in a two-unit configuration; some of the first due engine responsibilities could then be transferred away from the ladder. *It is also recommended that the department begin the planning process and establish timelines and strategic goals to comply with NFPA 1710 staffing requirements, especially in terms of the Effective Response Force when and where possible.*

### Command Aide Assignments: Captains (3)

In order to provide for more effective, efficient, and safe overall incident management, and to enhance critical incident scene safety for all personnel, MFD should implement the position of Field Incident Technician/Battalion Safety Officer (three total added positions), at the rank of Captain, to function as a part of an integrated command team with each Battalion Chief

Command aides can be found in many different roles and in many different places. The most ideal situation is when the command aide is assigned to the command officer on a full-time basis. This allows the pair to develop a comfortable routine and a working relationship where each member of the team can anticipate what the other is thinking and take actions

accordingly. The aide can assume the responsibilities of safety, accountability officer, driving and operating the command vehicle, leaving the command officer in a position to closely monitor radio traffic, review preplan information, evaluate the adequacy of responding units, and mentally digest the on-scene report and initial action plan.[72] This is also another step in the succession plan process.

**Engine 5:** Future budgets and strategic planning should consider adding an additional Engine Company at Station 5 **(9 firefighters total)** to augment Ladder 5 so it can function as a dedicated ladder company and provide the department with an additional company that aids in its resiliency and provides coverage for the city when multiple units are assigned to calls.

As the MFD's administrative and support functions develop and expand, there will be a need to expand the administrative support to these personnel with the addition of an additional Administrative Assistant. If and when this occurs will be dictated by the need generated if the recommended positions contained in this report are created/filled.

## FIGURE 4-6: Recommended Administrative & Operations Staffing



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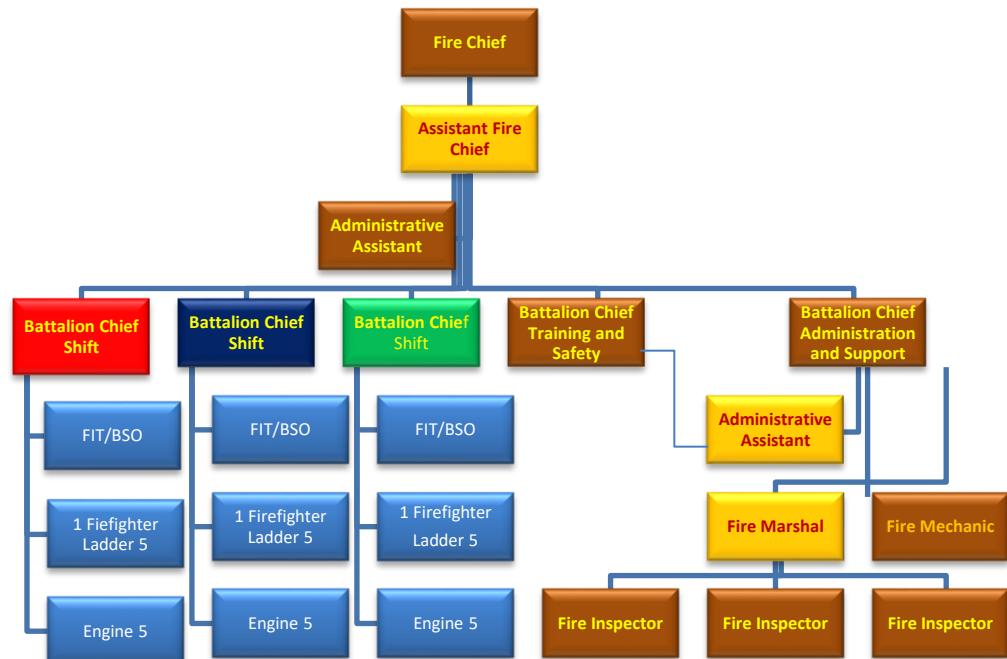
72. https://www.firefighternation.com/firerescue/using-aide-officers-to-enhance-command/#gref 73: Clinton Smoke, *Company Officer*, 2nd ed. (Clifton Park, NY: Delmar, 2005).

# MFD FACILITY LOCATIONS AND RESPONSE TIMES

Response times are typically the primary measurement for evaluating fire and EMS services. Response times are used as a benchmark to determine how well a fire department is currently performing, to help identify response trends, and to predict future operational needs. Achieving the quickest and safest response times possible should be a fundamental goal of every fire department.

However, the actual impact of a speedy response time is limited to very few incidents. For example, in a full cardiac arrest, analysis shows that successful outcomes are rarely achieved if basic life support (CPR) is not initiated within four to six minutes of the onset. Moreover, cardiac arrests occur very infrequently; on average they are 1 percent to 1.5 percent of all EMS incidents. There are also other EMS incidents that are truly life-threatening, and the time of response can clearly impact the outcome. These involve certain cardiac and respiratory emergencies, full drownings, high-risk obstetrical emergencies, allergic reactions, electrocutions, and severe trauma (often caused by gunshot wounds, stabbings, and severe motor vehicle accidents, etc.). Again, the frequency of these types of calls is limited.

A crucial factor in the whole response time question is what we term "detection time." This is the time it takes to detect a fire or a medical situation and notify 911 to initiate the response. In many instances, particularly at night or when automatic detection systems (fire sprinklers and smoke detectors) are not present or inoperable, the fire detection process can be extended. The same holds true for EMS incidents. Many medical emergencies are often thought to be something minor by the patient, treated with home remedies, and the true emergency goes undetected until signs and symptoms are more severe. When the fire-EMS department responds, they often find these patients in acute states. Fires that go undetected and are allowed to expand in size become more destructive, are difficult to extinguish, and require more resources for longer periods of time.

For this analysis, response time is a product of three components: dispatch time, turnout time, and travel time.

*Dispatch time* (alarm processing time) is the difference between the time a call is received and the time a unit is dispatched. Dispatch time includes call processing time, which is the time required to determine the nature of the emergency and types of resources to dispatch. *Turnout time* is when the emergency response units are notified of the incident and ends when travel time begins. *Travel time* is the difference between the time the unit goes en route and its arrival on scene. *Response time* is the total time elapsed between receiving a call to arriving on scene.

For this study, and unless otherwise indicated, response times and travel times measure the first arriving unit only. The primary focus of this section is the dispatch and response time of the first arriving units for calls responded to with lights and sirens.

Turnout time, an aspect of response which is controlled by the responding fire department. NFPA 1710 states that turnout time should be less than or equal to 80 seconds (1.33 minutes) for fire and special operations 90 percent of the time and 60 seconds (1.0 minute) for EMS responses. Again, turnout time is the segment of total response time that the fire department has the most ability to control, primarily through employee behavior and station layout (time to travel by foot from day/night areas to apparatus).

NFPA 1710 states that travel time shall be less than or equal to 240 seconds for the first arriving engine company to a fire suppression incident 90 percent of the time and for the second due engine less than or equal to 360 seconds 90 percent of the time.

The standard further states the initial first alarm assignment should be assembled on scene in 480 seconds, 90 percent of the time, for low/medium hazards, and 610 seconds for high-rise or high hazards. For EMS incidents the standard travel time (NFPA 1710) is less than or equal to 240 seconds for the first arriving engine company with automatic external defibrillator (AED) or higher level capability, and 480 seconds or less travel time of an Advanced Life Support (ALS) unit at an EMS incident where the service is provided by the fire department provided a first responder with an AED or basic life support unit arrived in 240 seconds or less travel time.

The following figure provides an overview of the fire department incident cascade of events.

## FIGURE 4-7: Incident Cascade of Events
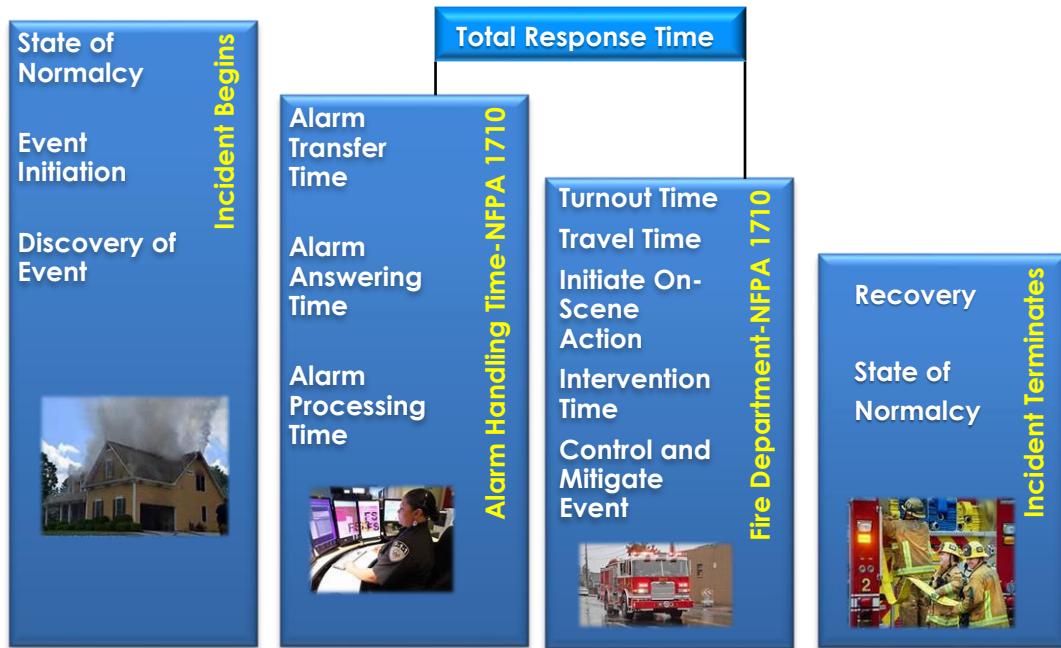


Regarding response times for fire incidents, the criterion is linked to the concept of "flashover." This is the state at which superheated gases from a fire are released rapidly, causing the fire to burn freely, and become so volatile that the fire reaches an explosive state (simultaneous ignition of all the combustible materials in a room). In this situation, usually after an extended period (often eight to twelve minutes after ignition but at times as quickly as five to seven minutes), and a combination of the right conditions (fuel and oxygen), the fire expands rapidly and is much more difficult to contain. When the fire does reach this extremely hazardous state, initial firefighting forces are often overwhelmed, larger and more destructive fire occurs, the fire escapes the room and possibly even the building of origin, and significantly more resources are required to affect fire control and extinguishment.

Flashover occurs more quickly and more frequently today and is caused at least in part by the introduction of significant quantities of plastic- and foam-based products into homes and businesses (e.g., furnishings, mattresses, bedding, plumbing and electrical components, home and business electronics, decorative materials, insulation, and structural components). These materials ignite and burn quickly and produce extreme heat and toxic smoke.

NFPA 1710's travel times are established for two primary reasons: (1) the fire propagation curve, where flashover occurs (threatening property loss and firefighter and public life safety), and

(2) sudden cardiac arrest, where brain damage and permanent brain death occurs in four to six minutes.

According to fire service educator Clinton Smoke, the fire propagation curve establishes that temperature rise and time within in a room on fire corresponds with property destruction and potential loss of life if present.[73] At approximately the eight- to ten-minute mark of fire progression, the fire flashes over (due to superheating of room contents and other combustibles) and extends beyond the room of origin, thus increasing proportionately the destruction to property and potential endangerment of life. The ability to quickly deploy adequate fire staff prior to flashover thus limits the fire's extension beyond the room or area of origin.

Regarding the risk of flashover, the authors of an IAFF report conclude:

*An early aggressive and offensive initial interior attack on a working structural fire results in reduced loss of life and property damage. Consequently, given that the progression of a structural fire to the point of "flashover" (the very rapid spreading of the fire due to super-heating of room contents and other combustibles) generally occurs in less than ten minutes, two of the most important elements in limiting fire spread are the quick arrival of sufficient numbers of personnel and equipment to attack and extinguish the fire as close to the point of its origin as possible.[74]*

The following figure illustrates the time progression of a fire from inception through flashover and full involvement of the structure if the fire is left unchecked. Flashover occurs at eight to ten minutes (***or less depending on fuel***), allowing the fire to extend beyond the room of origin. Typically, if firefighting crews arrive, set up, and begin fire extinguishment prior to flashover, the fire is contained to the room of origin.

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73: Clinton Smoke, *Company Officer*, 2nd ed. (Clifton Park, NY: Delmar, 2005).
74. *Safe Fire Fighter Staffing: Critical Considerations*, 2nd ed. (Washington, DC: International Association of Fire Fighters), 5.

**FIGURE 4-8: Fire Growth from Inception to Flashover[75]**
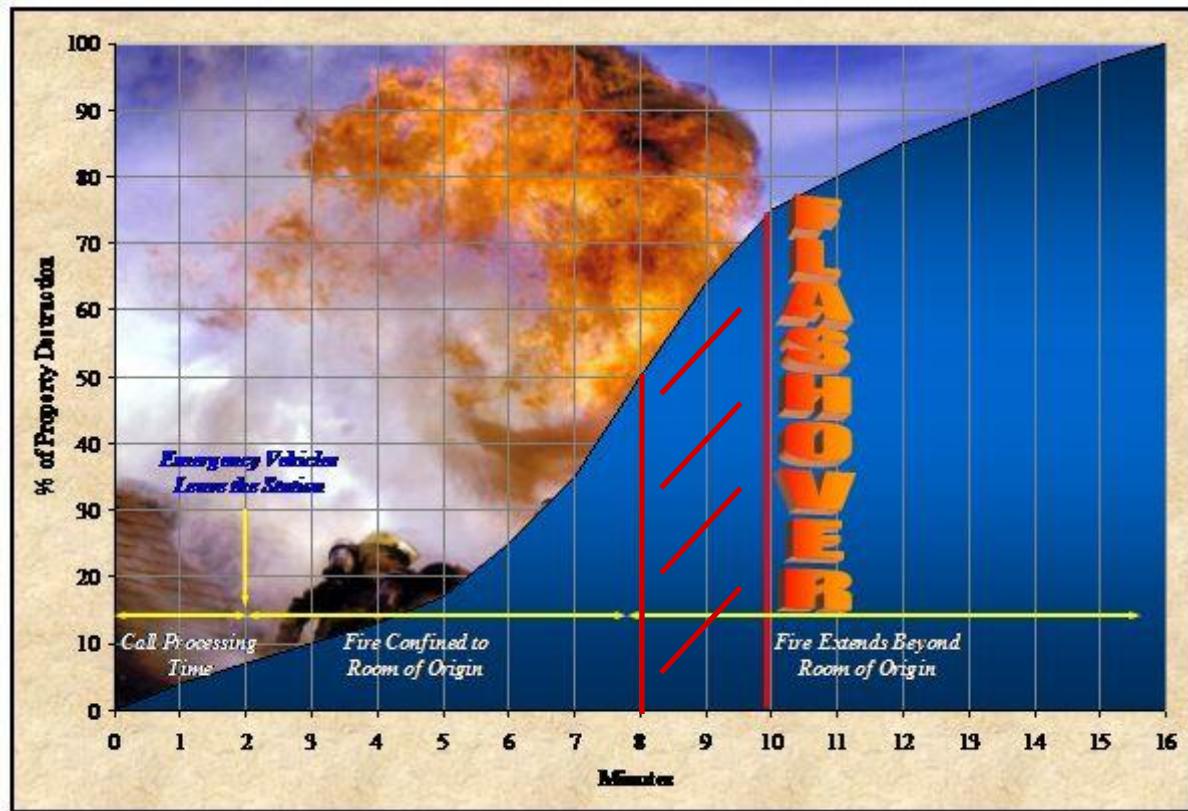


EMS response times are measured differently than fire service response times. Where the fire service uses NFPA 1710 as a response time benchmarking document, the focus for EMS is and should be directed to the evidence-based relationship between clinical outcomes and response times. Much of the current research suggests response times have reduced impact on clinical outcomes outside of a small segment of call types. These include cerebrovascular accidents (stroke); injury or illness compromising the respiratory system; injury or illness compromising the cardiovascular system to include S-T segment elevation emergencies, high acuity medical and pediatric emergencies; cardiac and respiratory arrest; and certain high-risk obstetrical emergencies to name a few. Each requires rapid response times, rapid on-scene treatment and packaging for transport, and rapid transport to the hospital.

Paragraph 4.1.2.1(7) of NFPA 1710 recommends that for EMS incidents a fire unit with first responder or higher-level trained personnel and equipped with an AED should arrive on scene within four minutes of travel time at the 90th percentile. An advanced life support (ALS) unit should arrive on scene within eight minutes travel time at the 90th percentile, provided the fire department responded first with first responder or higher-level trained personnel and equipped with an AED. According the NFPA 1710, "This requirement is based on experience, expert consensus, and science. Many studies note the role of time and the delivery of early defibrillation in patient survival due to heart attacks and cardiac arrest, which are the most time-critical, resource-intensive medical emergency events to which fire departments respond."

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75. Source : https://www.slideserve.com/tavon/the-international-society-of-fire-service-instructors

The next figure illustrates the chance of survival from the onset of cardiac arrest, largely due to ventricular fibrillation in terms of minutes without emergency defibrillation delivered by the public or emergency responders. The chance of survival has not changed over time since this graphic was published by the American Heart Association in 2000.

**FIGURE 4-9: Cardiac Arrest Survival Probability by Minute**
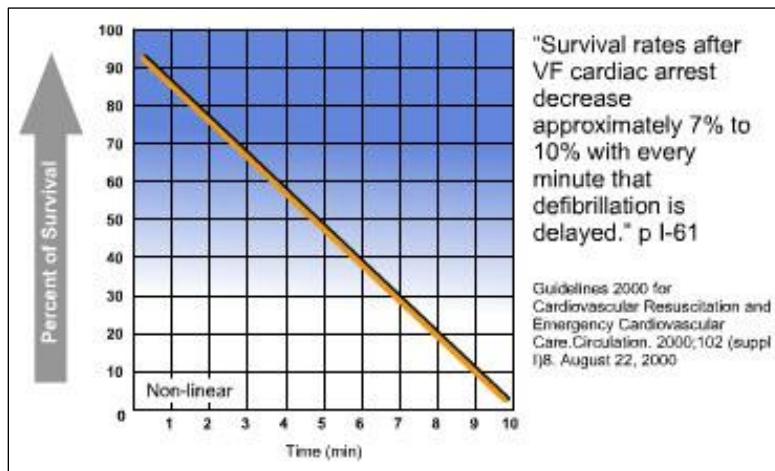


Typically, a low percentage of 911 patients have time-sensitive and advanced life support (ALS) needs. But, for those patients that do, time can be a critical issue. For the remainder of those calling 911 for a medical emergency, though they may not have a medical necessity, they still expect rapid customer service. Response times for patients and their families are often the most important measurement of the EMS department. Regardless of the service delivery model, appropriate response times are more than a clinical issue; they are also a customer service issue and should not be ignored.

In addition, a true emergency is when an illness or injury places a person's health or life in serious jeopardy and treatment cannot be delayed. Examples include severe trauma with cardiovascular system compromise, difficulty breathing, chest pain with S-T segment elevation (STEMI), a head injury, stroke, or ingestion of a toxic substance.[76] The next figure illustrates the out-of-hospital chain of survival for a stroke emergency, which is a series of actions that, when put in motion, reduce the mortality of a stroke emergency.

**FIGURE 4-10: Cerebrovascular Emergency (Stroke) Chain of Survival**
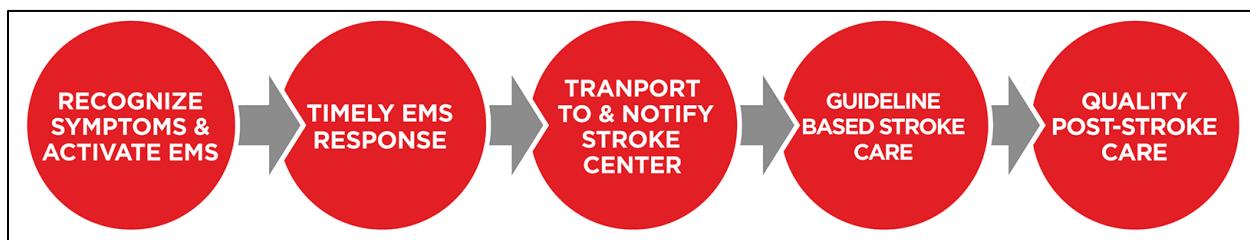


**Source** : https://nhcps.com/lesson/acls-acute-stroke-care/

If a person is experiencing severe pain, that is also an indicator of an emergency. Again, the frequencies of these types of calls are infrequent as compared to the routine, low-priority EMS incident responses. In some cases, these dire emergencies often make up a low percent of all

76. Mills-Peninsula Health Blog, Bruce Wapen, MD.

EMS calls.[77] Cardiac arrest is one emergency for which EMS response times were initially built around. Science tells us that the brain begins to die without oxygenated blood flow at the four-to six-minute mark. Without immediate cardiopulmonary resuscitation (CPR) and rapid defibrillation, the chances of survival diminish rapidly at the cessation of breathing and heart pumping activity. Further, only 10 percent of victims who suffer cardiac arrest outside of the hospital survive.[78]

The following figure illustrates the out-of-hospital chain of survival, which is a series of actions that, when put in motion, reduce the mortality of sudden cardiac arrest. Adequate EMS response times coupled with community and public access defibrillator programs potentially can impact the survival rate of sudden cardiac arrest victims by deploying early CPR, early defibrillation, and early advanced life support care provided in the prehospital setting.

### FIGURE 4-11: Sudden Cardiac Arrest Chain of Survival



**From:** "Out of Hospital Chain of Survival,"
https://cpr.heart.org/en/resources/cpr-facts-and-stats/out-of-hospital-chain-of-survival

## ASSESSING THE FIRE MANAGEMENT ZONE

Travel time is key to understanding how fire and EMS station location influences a community's aggregate response time performance. Travel time can be mapped when existing and proposed station locations are known. The location of responding units is one key factor in response time; reducing response times, which is typically a key performance measure in determining the efficiency of department operations, often depends on this factor. The goal of placement of a single fire station or creating a network of responding fire stations in a single community is to optimize coverage with short travel distances, when possible, while giving special attention to natural and manmade barriers, and response routes that can create response-time problems.[79] This goal is generally budget-driven and based on demand intensity of fire and EMS incidents, response times, and identified risks.

As already discussed, MFD responds from five stations and receives automatic and mutual aid from surrounding jurisdictions, most of which are contiguous. This section expands on the earlier discussion on travel times and depicts how travel times of 240, 360, and 480 seconds look when mapped from the current fire station locations. Illustrating response time is important when

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77. www.firehouse.com/apparatus/article/10545016/operations-back-to-basics-true-emergency-and-due-regard
78. American Heart Association. *Latest Statistics on Cardiac Arrest Reveal Little Progress*. 2019
79. NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Departments, 2020 Edition.

considering the location from which assets should be deployed. When historic demand is coupled with risk analysis, a more informed decision can be made.

For our response time analysis, we included all calls to which at least one non-administrative unit arrived. Canceled and mutual aid calls were not included. In addition, calls with a total response time exceeding 30 minutes were excluded. Finally, we focused on units that had complete time stamps, that is, units with all components recorded, so that we could calculate each segment of response time. Calls labeled with "Low" priority were not included in this analysis.

Between October 1, 2022, and September 30, 2023, MFD responded to 4,855 calls, of which 77 percent were EMS calls. The total combined workload (deployed time) for MFD units was 2,423.1 hours. In responding to calls that involved the fire department, the average dispatch time was 2.8 minutes, and the average response time was 7.6 minutes. The 90th percentile dispatch time was 4.3 minutes and the 90th percentile response time was 10.8 minutes.

Based on the methodology above, for 4,855 calls, we excluded 211 canceled, 25 mutual aid calls, 62 low priority calls, 127 calls where no units recorded a valid on-scene time, 51 calls with a total response time exceeding 30 minutes, and 444 calls where one or more segments of the first arriving unit's response time could not be calculated due to missing or faulty data. As a result a total of 3,935 calls are included in the response time analysis.

The next table breaks down the average and 90th percentile dispatch, turnout, travel, and total response times by call type. A 90th percentile means that 90 percent of calls had response times at or below that number. For example, the table shows an overall 90th percentile response time of 10.8 minutes, which means that 90 percent of the time a call had a response time of no more than 10.8 minutes.

## TABLE 4-13: Average and 90th Percentile Response Time of First Arriving Unit, by Call Type

| Call Type | Average Response Time, Min. | | | | 90th Percentile Response Time, Min. | | | |
|---|---|---|---|---|---|---|---|---|
| | Dispatch | Turnout | Travel | Total | Dispatch | Turnout | Travel | Total |
| Medical and other | 3.0 | 1.0 | 3.9 | 7.8 | 4.4 | 1.8 | 6.2 | 10.8 |
| MVA | 2.9 | 0.8 | 3.1 | 6.9 | 5.6 | 1.6 | 5.3 | 10.5 |
| **EMS Subtotal** | **3.0** | **0.9** | **3.9** | **7.8** | **4.4** | **1.8** | **6.2** | **10.8** |
| False alarm | 1.9 | 1.0 | 3.7 | 6.7 | 3.2 | 1.9 | 6.5 | 10.0 |
| Good intent | 1.6 | 0.8 | 4.1 | 6.5 | 3.0 | 1.6 | 7.1 | 9.6 |
| Hazard | 2.4 | 0.9 | 4.2 | 7.5 | 3.6 | 1.9 | 8.1 | 11.9 |
| Outside fire | 2.2 | 0.8 | 3.4 | 6.4 | 3.0 | 1.4 | 5.6 | 8.3 |
| Public service | 3.5 | 0.8 | 3.6 | 7.9 | 7.5 | 1.9 | 5.9 | 12.1 |
| Structure fire | 1.8 | 1.1 | 3.4 | 6.2 | 2.6 | 1.7 | 5.6 | 8.8 |
| Technical rescue | 4.4 | 0.6 | 3.6 | 8.6 | 12.2 | 1.4 | 6.1 | 16.3 |
| Fire subtotal | **2.1** | **1.0** | **3.8** | **6.9** | **3.5** | **1.8** | **6.7** | **10.6** |
| **Total** | **2.8** | **0.9** | **3.8** | **7.6** | **4.3** | **1.8** | **6.2** | **10.8** |

This table tells us:

- The average dispatch time was 2.8 minutes.

- The average turnout time was 0.9 minutes.

- The average travel time was 3.8 minutes.

- The average total response time was 7.6 minutes.

- The average response time was 7.8 minutes for EMS calls and 6.9 minutes for fire calls.

- The average response time was 6.4 minutes for outside fires and 6.2 minutes for structure fires.

- The 90th percentile dispatch time was 4.3 minutes **(does not meet NFPA 1710 standards)**.

- The 90th percentile turnout time was 1.8 minutes **(does not meet NFPA 1710 standards for EMS or Fire responses)**.

- The 90th percentile travel time for structure fires was 5.6 minutes **(does not meet NFPA 1710 standards)**.

- The 90th percentile total response time was 10.8 minutes.

- The 90th percentile response time was 10.8 minutes for EMS calls and 10.6 minutes for fire calls.

The following figures use GIS mapping to illustrate travel time bleeds of 240 seconds, 360 seconds, and 480 seconds using the existing street network from the current MFD stations.

The GIS data for streets includes speed limits for each street segment and allows for "U-turns" for dead-end streets and intersections, as well as other travel obstacles.

It is, however, important to note that while these maps are GIS-drawn, theoretical travel times do reflect favorably on the adequacy of station facilities and their corresponding locations within the city to support efficient fire and EMS response to the current built-upon areas. Keep in mind, the benefits of favorable travel time findings are only meaningfully realized when apparatus can be predictably staffed for response and have aggressive turnout times.

It is important to understand that measuring and analyzing response times and response time coverage are measurements of performance. When we discussed community risk above, we identified that the MFD, like most other fire departments in the nation, is an all-hazards response agency. While different regions of the country respond to different environmental risks, the remaining hazards that fire departments confront remain the same. Linking response data to community risks lays the foundation for future fire department planning in terms of fire station location, the need for additional fire stations, and staffing levels whether supplied by the fire department or a combination of a city's fire department and automatic aid. Managing fire department response capabilities to the identified community's risk focuses on three components which are:

- Having a full understanding of the total risk in the community and how each risk impacts the fire department in terms of resiliency, what the consequences are to the community and fire department should a specific risk or combination of two or more occur, and preparing for and understanding the probability that the risk may occur.

- Linking risk to the deployment of resources to effectively manage every incident. This includes assembling an Effective Response Force for the response risk in measurable times benchmarked against NFPA standards, deploying the appropriate apparatus (engines, ladders, heavy rescues, ambulances), and having a trained response force trained to combat a specific risk.

- Understanding that each element of response times plays a role in the management of community risk. Low response times of the initial arriving engine and low time to assemble an Effective Response Time on fire and other incidents are associated with positive outcomes.

The following two figures look at the travel time projections at 240 seconds and 360 seconds from MFD stations. From this mapped projection we can see that at 240 seconds, the MFD stations can cover the central and northwest portions of the fire management zone. There are some small deficiencies in the southeast and southwest areas of the city; however, approximately 90 percent of the city is covered within 240 seconds of travel time.

When benchmarked against the 360-second standard, the five stations cover the built areas of the city at almost full coverage.

## FIGURE 4-12: 240-Second Travel Time



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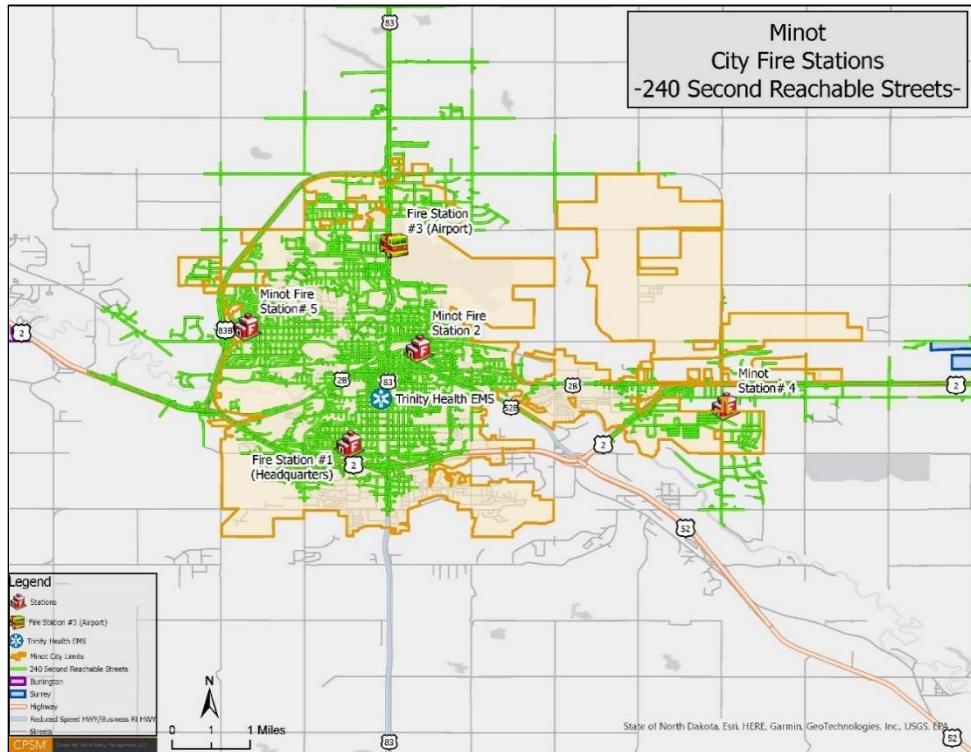
## FIGURE 4-13: 360-Second Travel Time
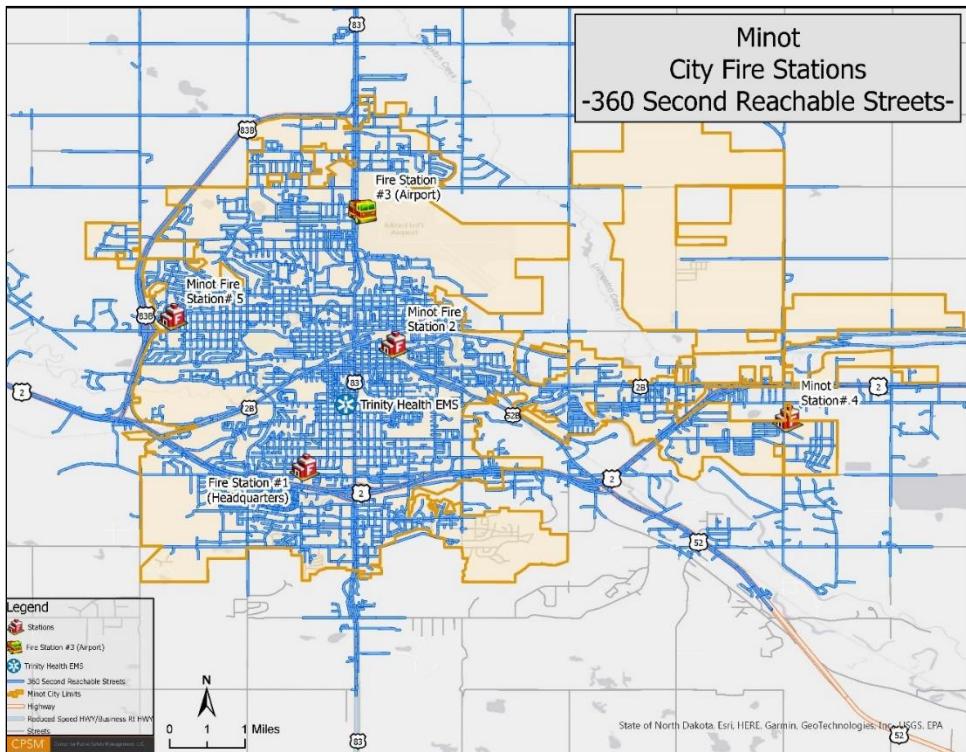


The next map evaluates the 480-second travel time standard, which is the standard for the arrival of first alarm assignment on a structural fire. When benchmarked against the 480-second standard, the five stations cover the built areas of the city at nearly 100 percent.

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**FIGURE 4-14: 480-Second Travel Time**
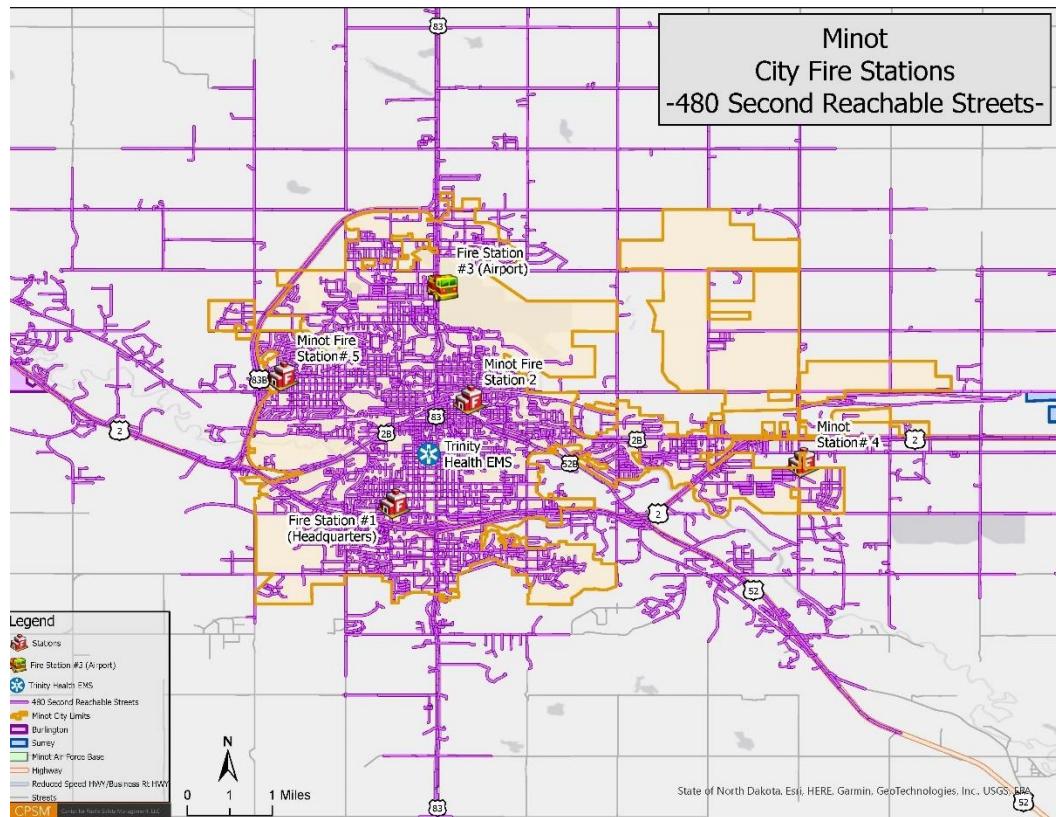


Overall, the MFD has deficiencies in call processing and turnout times when benchmarked against the NFPA 1710 standard. As these are most closely related to human behaviors and efficiency, they should be addressed internally by the Fire Chief and 911 Center Director.

*Travel times are dependent on many factors as discussed herein, to include station location, traffic patterns, and the environment. For structural fires and EMS-related calls for service, the MFD may consider adopting a travel time performance objective of six minutes, as it is more realistic based on our analysis.*

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# AUTO AID AND MUTUAL AID AGREEMENTS

**Automatic aid** refers to a written agreement under which a municipality agrees to provide an initial response to fires, rescues, and emergencies that may occur in a part of another municipality where a fire department is capable of responding more quickly than the fire department situated in the other municipality; or a municipality agrees to provide a supplemental response to fires, rescues, and emergencies that may occur in a part of another municipality where a fire department in the municipality is capable of providing the quickest supplemental response to fires, rescues, and emergencies occurring in the part of another municipality.[80]

There are several advantages to engaging surrounding jurisdictions/departments in automatic aid agreements. First, such an arrangement can get the closest emergency units to the call for service faster, as auto aid can be based on the closest location to the request for service. There are areas in Minot where Minot Rural Fire units are closer to areas of the City of Minot where the addition of MRFD would in most cases place the MRFD on the scene first, and vice versa for the auto aid departments assisting MRFD.

Automatic aid is also a force multiplier (supplemental response) as neighboring jurisdictions can respond to muti-unit incident responses to home jurisdictions and establish an Effective Response Force (ERF) for the completion of critical fireground tasks as required by NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, and Special Operations to the Public by Career Fire departments.*[81] NFPA 1710 permits fire departments to use established automatic aid and mutual aid agreements to comply with section 5.2 of this standard.[82] These agreements can also add to elements needed for ISO scoring since Auto-aid agencies are part of the initial response assignment.

It is recommended that MFD establish automatic aid written agreements with neighboring jurisdictions of MRFD and Minot Air Force Base; these agreements should cover an all-hazard response. Currently, MFD has an automatic aid agreement with MRFD to cover All Seasons Arena/State Fairgrounds, Highway 83 bypass, city landfill, and City of Minot Wildland Fires.[83]

**Mutual aid** is similar to auto aid, with the exception of the immediate response. Mutual-aid agreements are based on the assisting agencies being specifically requested by the home agency. Both auto and mutual aid agreements are contingent on the assisting agency's ability to provide assistance as their jurisdiction must maintain priority.

Mutual aid agreements provide response by assisting agencies in areas of muti-alarm fires, technical rescue and specialty responses, and where the home agency is low or out of resources and needs assistance from neighboring jurisdictions to provide direct response to the incident or provide backfills to their fire stations that are vacant to do a working fire or large incident response.

Currently the MFD has mutual aid agreements with the departments listed in the next table.

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80. https://www.lawinsider.com/dictionary/automatic-aid
81. NFPA 1710, 2020 edition, 5.2, 5.2.4.1, 5.2.4.2, 5.2.4.3, 5.2.4.4 Standard for the Organization and Deployment of Fire Suppression Operations, and Special Operations to the Public by Career Fire departments
82. NFPA 1710, 2020 edition, 5.2.1.3 Standard for the Organization and Deployment of Fire Suppression Operations, and Special Operations to the Public by Career Fire departments
83. Minot Auto-Aid Agreement, Minot Rural Fire

## TABLE 4-14: Mutual Aid Companies

| Department | Makeup |
|---|---|
| Bismarck Fire Department | Full Time |
| Burlington Fire Department | Volunteer |
| Grand Forks Fire Department | Full Time |
| Minot Air Force Base | Full Time |
| Minot Rural Fire Department | Combination |
| Mouse River Firefighters Association | Volunteer and Career Department |

# EMERGENCY MANAGEMENT

The City of Minot utilizes Ward County for emergency management services. MFD provides a liaison/representative Battalion Chief and/or Fire Chief to the county when required.

Ward County Emergency Management coordinates and facilitates the use of resources to minimize the impact of emergencies and disasters on people, property, and the environment

Ward County Emergency Management is responsible for:

- Performing technical work in plan development, including implementation and management of countywide disaster prevention, preparedness, response, recovery, mitigation, and risk reduction.

- Administering the State Homeland Security Program (SHSP) grant funds at the direction of the Ward County Emergency Resource Council Steering Committee, a representative group given legal authority by the Ward County Commission to expend these funds.

- Working with the Ward County Local Emergency Resource Council to develop and maintain the Ward County Hazard Mitigation Plan (HMP) and the Emergency Operations Plan (EOP), which defines agency roles and responsibilities and includes the evacuation, sheltering, warning, and terrorism annex.

- Organizing and operating the Ward County Emergency Operations Center (EOC) and coordinating support from state and federal organizations during an emergency.

- Providing county-wide training and exercises to prepare for local, regional, and state emergencies and disasters to include classroom-based training in the National Incident Management System (NIMS) for all personnel who may be involved in disaster response and recovery activities.

- Providing guidance to municipalities on the development of disaster management plans.

- Acting as the applicant agent for county and townships for state and federal funding when funding is approved after a disaster has occurred.

- Coordinating and facilitating the use of resources in order to minimize the impact of emergencies and disasters on people, property, and the environment from disasters such as tornadoes, flooding, severe weather, etc.

## SPECIALIZED FIRE-TECHNICAL RESPONSE CAPABILITIES

Specialized response capabilities include hazardous materials (Haz-Mat), high angle rope rescue, trench collapse, building collapse, complicated heavy auto extrication, elevated rescue with an aerial platform, and confined space rescue. MFD personnel are trained to certain specialized levels and have the response assets and capabilities to mitigate a complex specialized or technical rescue incident. This requires a properly trained and equipped response force. When needed, these assets are obtained through partnerships and agreements with surrounding automatic aid departments and the Northwest Regional Response Team that has additional personnel and resources in place to respond to local emergencies that are beyond their capability.

The Anchor Capability Regional Response Concept was developed in 2005. It began with a study to address the need for improving North Dakota's ability to respond to a CBRNE (Chemical, Biological, Radioactive, Nuclear, Explosive) events across the entire state.

To meet this need, the North Dakota Department of Emergency Services entered into a cooperative agreement beginning in 2008 with Fargo, Grand Forks, Bismarck, and Minot to initiate a statewide comprehensive regional response program. The program places personnel and resources into four geographic regions to provide the mechanism for a coordinated response to a CBRNE incident. The program originally only supported hazardous materials emergency response teams but has grown over the years to include bomb squads, special weapons and tactical teams, ambus teams, and search and rescue teams.

The four regional coordinators provide technical support on planning, training, and exercise activities to the regional teams; city, county, and tribal emergency managers; and all other first responder disciplines. They assist in helping jurisdictions determine their equipment needs and they act as a liaison between local jurisdictions and the state during emergency or disaster events.[84]

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84. https://www.des.nd.gov/preparedness/regional-response

## FIGURE 4-15: Emergency Management Northwest Region



ND EMERGENCY MANAGEMENT NORTH WEST REGION
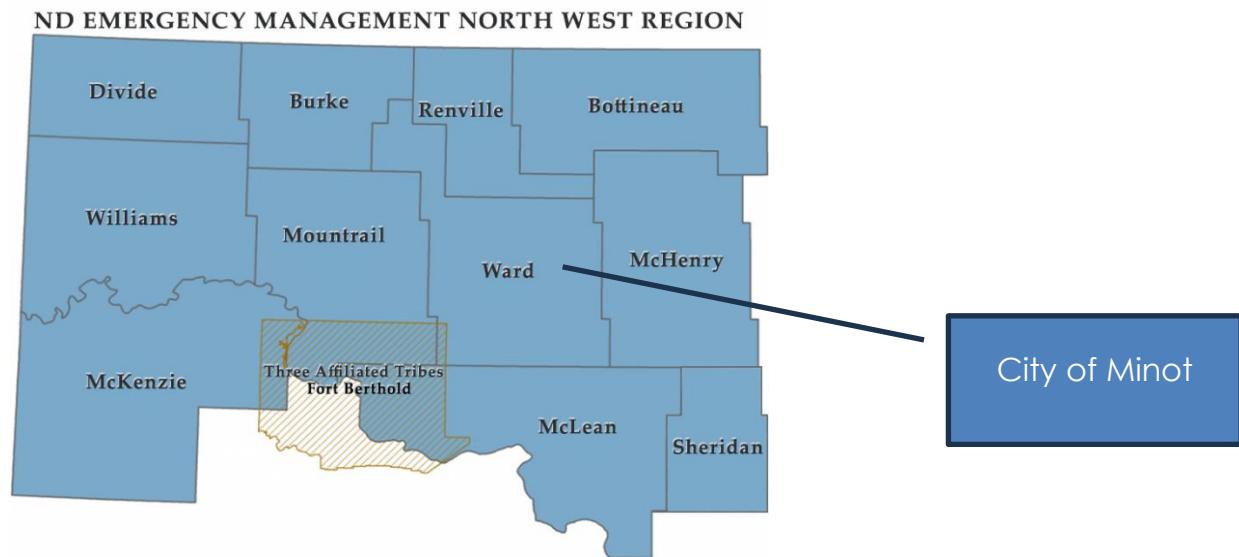
The MFD's aim is to have a Northwest Regional Response Team that consists of five members of the HazMat team and five members of the Technical Rescue team from each battalion. It can be 6/4 or 4/6 if needed. The goal is to have 30 total team members.

Minot Northwest Regional Response Team policies for team members includes the following:

- A minimum of a five-year commitment is needed.

- Team members will attend a minimum of two trainings in their discipline and a minimum of one training class in the other discipline. Team members need to attend a minimum of four trainings annually.

- Any outside trainings attended will count as one training per class attended for that discipline.

- Battalion trainings will follow HazMat and Technical Rescue team trainings.

- All members must be a minimum of senior firefighter.

- HazMat leads will set the HazMat skill standards for the technical rescue members, and the Technical Rescue leads will set the Technical Rescue skill standards for the HazMat members.

- Members must have certifications ICS 100, 200, 300, 400, 700, 800.

- Members will be chosen by the Captain, Battalion Chief, and team leads of their discipline.

- Selection consists of an Application and Interview process.

- Members are chosen amongst the three battalions then established if that candidate is able to change battalions to fill an open spot.

- Each member must be Hazardous Materials Technician level certified.

- Regional response team members will receive first choice of outside training opportunities.

The department's goal is to have 10 members from each shift for a total of 30 members. Currently, the team consists of 23 members (19 firefighters and 4 Battalion Chiefs). The department is actively recruiting members to fill out the remainder of the team.

Operational Battalion Chiefs and some firefighters stated that there is at times some ambiguity regarding how the team is staffed depending on the call type, Technical Rescue vs. Hazmat. These decisions are often based on the availability of the members to respond and may not represent those members assigned to only one specialty. CPSM recommends that cross-training in both disciplines can assist in alleviating difficulty staffing the team when response is needed.

The regional response equipment capabilities of the team are in good order and sufficient for response. There is some concern that the rescue apparatus, which was purchased with grant funds, cannot be replaced without securing additional state or federal monies. Continuing to pursue Assistance to Firefighter Grants (AFG) as well as state grant programs for upgrading equipment is essential in the continuity of many of these specialty fire programs.

## Operational Planning Considerations and Recommendations

The MFD is entrusted with community emergency response responsibilities and assets, and the city recognizes the intrinsic services the department provides. This is evidenced by the city's forethought to have this analysis completed. On a day-to-day basis the MFD responds to emergency and non-emergency calls for service in and outside of the city as a part of an automatic and mutual aid system in which it participates.

This report is comprised of a comprehensive analysis between October 1, 2022, and September 30, 2023 of the administrative and operational components of the MFD and includes an all-hazards community risk analysis, benchmarking MFD response against the NFPA 1710 standard and ISO-FSRS grading schedule; GIS mapping that illustrates call demand in the city, the extent of response time, and coverage of the city; and a comprehensive data analysis of fire and EMS call types, unit workload, department resiliency, and response times.

CPSM found the MFD to be a well-managed, prepared, dedicated, and capable department that delivers effective services to the residents of Minot. The Fire Chief and her immediate staff and firefighters were highly responsive to our requests for information and assisted in collecting data from outside sources.

Based on our analysis, CPSM did determine areas where improvements and/or enhancements to service can be made and are stated throughout this report.

One last observation/recommendation to consider is the placement of a second multi-functional company (Quint) that can also function as a ladder when needed and which would provide additional 2.5-mile (ISO standard) coverage and provide an additional ladder for high-rise operations. Moving the current Quint from Station 5 to Station 4 may be a current consideration to provide more coverage on the east side of the city and evenly distribute ladder response.

§ § §

## FIGURE 4-16: ISO 2.5-Mile Ladder Coverage
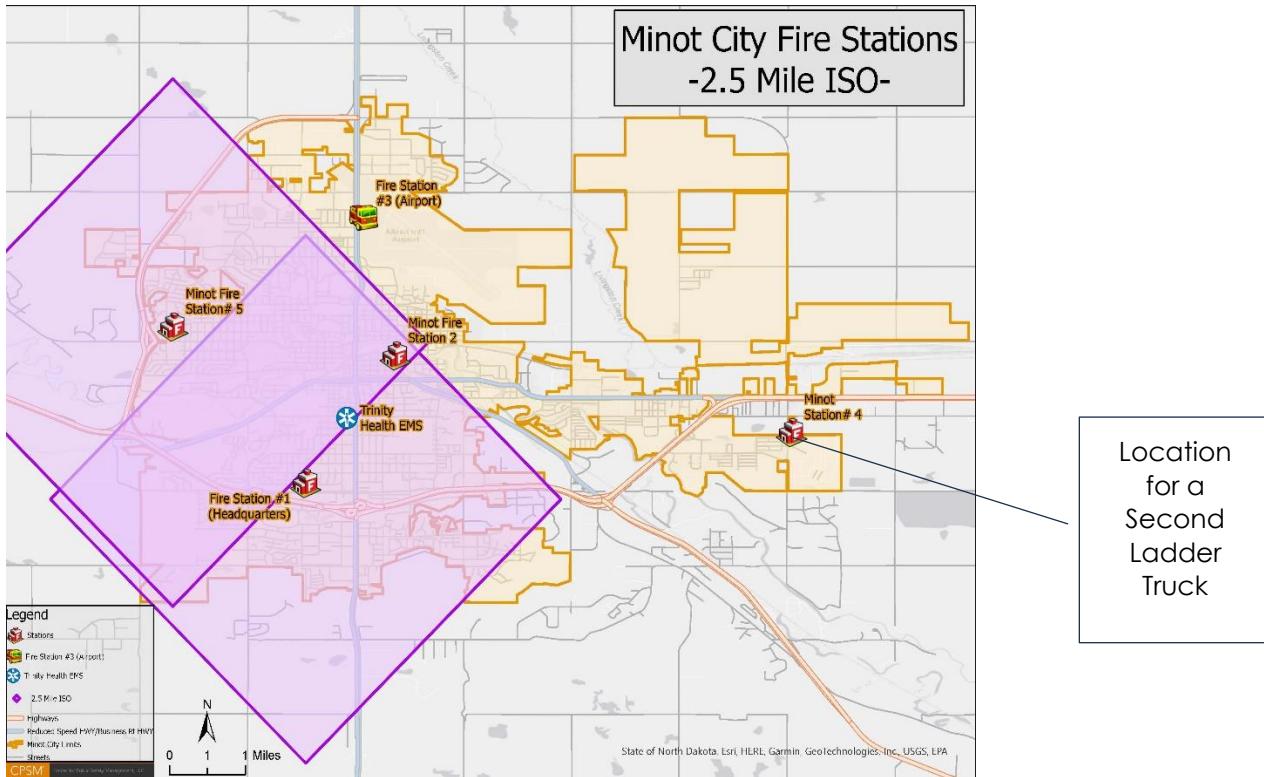


- CPSM recommends that the Fire Chief begin working with city leadership to begin a succession plan, given that several command level retirements will occur in the next four to five years. (Recommendation No. 29.)

- Establish a process to improve turnout times for fire and EMS calls. The turnout time should align with current NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Departments*, 2020 Edition. (Recommendation No. 30.)

- CPSM recommends the Fire Chief work on call processing times with the 911 Center. (Recommendation No. 31.)

- Continue the Steering Committee with Trinity Health with fire department stakeholders; this is viewed by CPSM as a *Best Practice*. (Recommendation No. 32.)

- CPSM recommends engaging Minot Rural Fire Department (MRFD) and Minot Air Force Base to strengthen some of their Automatic Aid and Mutual Aid Responses. MAFB and MRFD (a volunteer company) are the closest assistance for MFD in the event of a large incident. (Recommendation No. 33.)

§ § §

# SECTION 5. DATA ANALYSIS

This data analysis was prepared as a key component of the study of the fire services provided by the Minot Fire Department (MFD). This analysis examines all calls for service from October 1, 2022, to September 30, 2023, as recorded in the Minot Central Dispatch's Computer-Aided Dispatch (CAD) system and MFD's National Fire Incident Reporting System (NFIRS) records.

This analysis is made up of four parts. The first part focuses on call types and dispatches. The second part explores the time spent and the workload of individual units. The third part presents an analysis of the busiest hours in the year studied. The fourth and final part provides a response time analysis of responding units.

Located in the county seat of Ward County, the Minot City Fire Department serves a population of about 47,800 people in an area of more than 17.5 square miles. MFD is an all-hazards response fire department, providing service and protection for fire and medical emergencies, hazardous material responses, vehicle accidents, and other incidents where life and property are threatened. The MFD operates out of five fire stations with 21 full staff and 17 minimum staff on duty 24/7. The frontline units include two Battalion Chiefs, an aerial truck, four engines, a hazmat truck, two rescue trucks, and a typhoon quint. The MFD also operated a reserve engine that was occasionally in service when the frontline engine was out of service and a reserve ladder as a backup when another ladder truck was out of service.

From October 1, 2022, to September 30, 2023, MFD responded to 4,855 calls, of which 77 percent were EMS calls. The total combined workload (deployed time) for MFD units for the year studied was 2,423.1 hours. In responding to calls that involved the fire department, the average dispatch time was 2.8 minutes, and the average response time was 7.6 minutes. The 90th percentile dispatch time was 4.3 minutes and the 90th percentile response time was 10.8 minutes.

## METHODOLOGY

In this report, CPSM analyzes calls and runs. A call is an emergency service request or incident. A run is a dispatch of a unit (i.e., a unit responding to a call). Thus, a call may include multiple runs.

We received CAD data and NFIRS data for the Minot Fire Department. We first matched the NFIRS and CAD data based on the incident numbers provided. Then, we classified the calls in a series of steps. We first used the NFIRS incident type to identify canceled calls and to assign emergency medical service (EMS), motor vehicle accident (MVA), and fire category call types. For calls without matched NFIRS data, we instead used the incident type description in the CAD data to identify the call type. The type of calls that occurred outside MFD's fire district were identified as mutual aid. The method used to categorize incident types is shown in Attachment III.

We received records for a total of 4,964 calls that occurred between from October 1, 2022, to September 30, 2023. We removed seven calls without a dispatched MFD unit and 100 calls to which the dispatched unit did not have at least an en route or an arrival time. In addition, two calls that only involved administrative units were not included in the analysis. However, the work associated with these calls is included in the analysis of additional personnel in Attachment I.

# CALL TOTALS AND RUNS

From October 1, 2022, to September 30, 2023, MFD responded to 4,845 calls. Of these, 47 were outside fire calls and 83 were structure fire calls within the City of Minot.

## Calls by Type

Table 5-1 shows the number of calls that MFD responded to by call type, average calls per day, and the percentage of calls that fall into each call type category. Figures 5-1 and 5-2 show the percentage of calls that fall into each EMS (Figure 5-1) and fire (Figure 5-2) type category.

### TABLE 5-1: Calls by Type

| Call Type | Total Calls | Calls per Day | Call Percentage |
|---|---|---|---|
| Medical and other | 3,538 | 9.7 | 72.9 |
| MVA | 176 | 0.5 | 3.6 |
| **EMS Subtotal** | **3,714** | **10.2** | **76.5** |
| False alarm | 400 | 1.1 | 8.2 |
| Good intent | 76 | 0.2 | 1.6 |
| Hazard | 186 | 0.5 | 3.8 |
| Outside fire | 47 | 0.1 | 1.0 |
| Public service | 95 | 0.3 | 2.0 |
| Structure fire | 83 | 0.2 | 1.7 |
| Technical rescue | 18 | 0.0 | 0.4 |
| **Fire Subtotal** | **905** | **2.5** | **18.6** |
| Canceled | 211 | 0.6 | 4.3 |
| Mutual aid | 25 | 0.1 | 0.5 |
| **Total** | **4,855** | **13.3** | **100.0** |

**Note**: *Calls outside MFD's fire district were labeled as mutual aid. Out of 25 mutual aid calls, one was canceled.

**FIGURE 5-1: EMS Calls by Type**
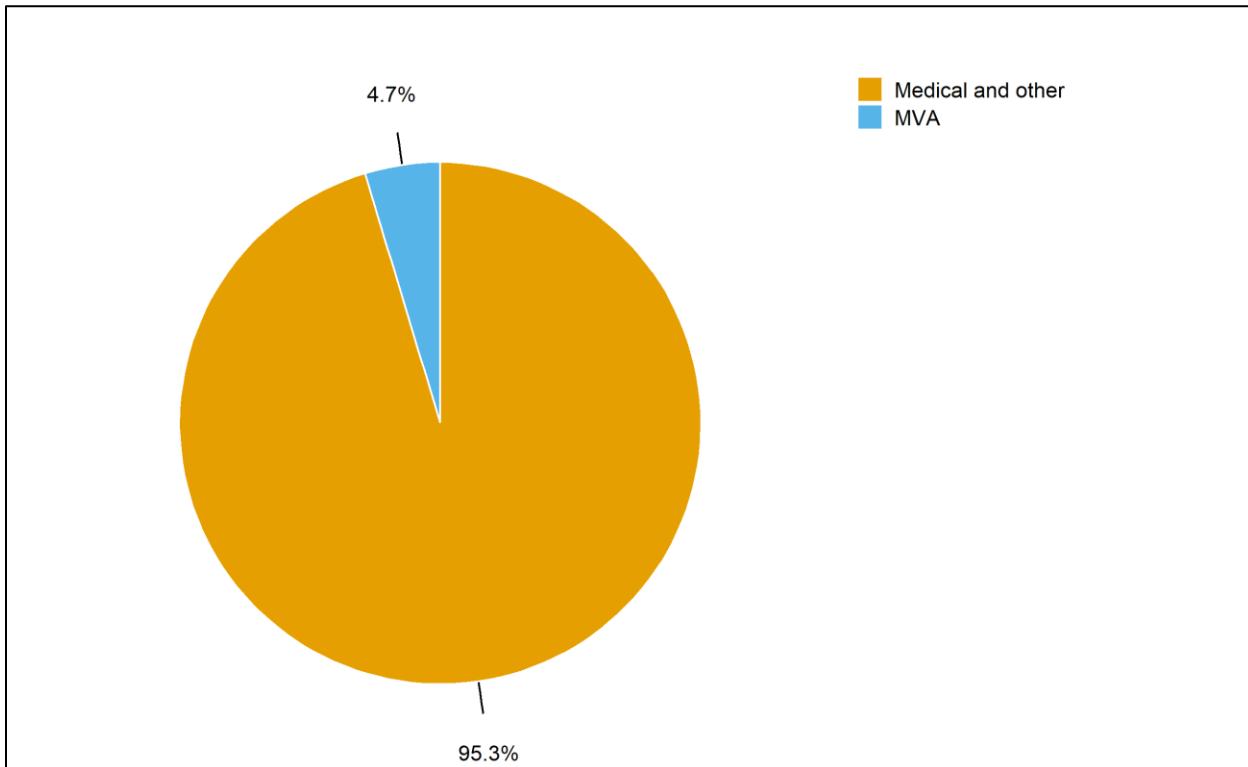


**FIGURE 5-2: Fire Calls by Type**
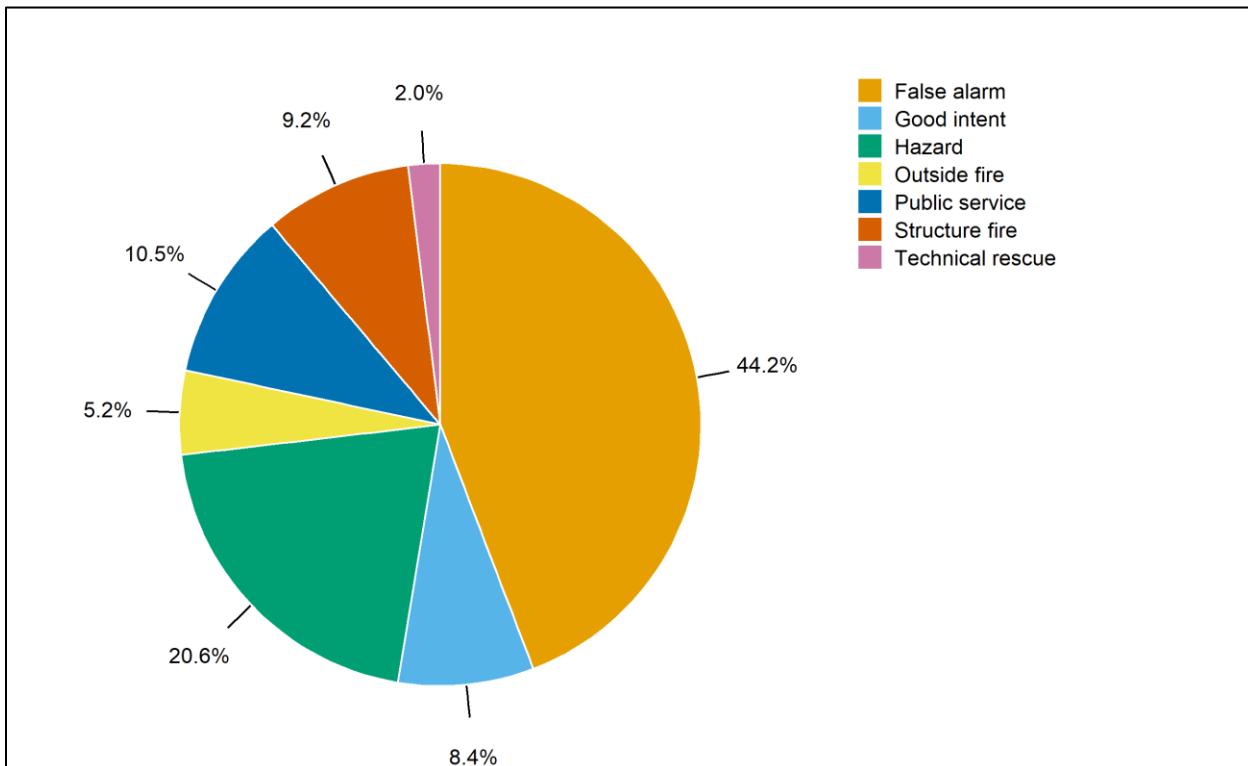
## Observations:

- MFD responded to an average of 13.3 calls, including 0.6 canceled and 0.1 mutual aid calls, per day.

- EMS calls for the year totaled 3,714 (76 percent of all calls), an average of 10.2 calls per day.

  - Medical and other calls made up 95 percent of EMS calls, an average of 9.7 calls per day.

  - Motor vehicle accidents made up five percent of EMS calls, an average of 0.5 calls per day.

- Fire calls for the year totaled 905 (19 percent of all calls), an average of 2.5 per day.

  - False alarm calls were the largest category of fire calls at 44 percent of fire calls, an average of 1.1 calls per day.

  - Structure and outside fire calls combined made up 14 percent of fire calls, an average of 0.4 calls per day, or one call every three days.

## Calls by Type and Duration

The following table shows the duration of calls by type using four duration categories: less than 30 minutes, 30 minutes to one hour, one to two hours, and two or more hours.

### TABLE 5-2: Calls by Type and Duration

| Call Type | Less than 30 Minutes | 30 Minutes to One Hour | One to Two Hours | Two or More Hours | Total |
|---|---|---|---|---|---|
| Medical and other | 3,144 | 345 | 43 | 6 | 3,538 |
| MVA | 88 | 59 | 26 | 3 | 176 |
| **EMS Subtotal** | **3,232** | **404** | **69** | **9** | **3,714** |
| False alarm | 330 | 56 | 13 | 1 | 400 |
| Good intent | 54 | 18 | 3 | 1 | 76 |
| Hazard | 78 | 64 | 37 | 7 | 186 |
| Outside fire | 31 | 10 | 6 | 0 | 47 |
| Public service | 75 | 13 | 5 | 2 | 95 |
| Structure fire | 38 | 17 | 15 | 13 | 83 |
| Technical rescue | 11 | 6 | 1 | 0 | 18 |
| **Fire Subtotal** | **617** | **184** | **80** | **24** | **905** |
| Canceled | 207 | 4 | 0 | 0 | 211 |
| Mutual aid | 11 | 7 | 4 | 3 | 25 |
| **Total** | **4,067** | **599** | **153** | **36** | **4,855** |

## Observations:

- A total of 3,636 EMS calls (98 percent) lasted less than one hour, and 78 EMS calls (two percent) lasted more than one hour.

  □ On average, 0.2 EMS calls per day lasted more than one hour.

  □ A total of 147 motor vehicle accidents (84 percent) lasted less than one hour, and 29 motor vehicle accidents (16 percent) lasted more than one hour.

- A total of 801 fire calls (89 percent) lasted less than one hour, 80 fire calls (nine percent) lasted one to two hours, and 24 fire calls (three percent) lasted two or more hours.

  □ On average, 0.3 fire calls per day lasted more than one hour.

  □ A total of 41 outside fire calls (87 percent) lasted less than one hour, and six outside fire calls (13 percent) lasted one to two hours.

  □ A total of 55 structure fire calls (66 percent) lasted less than one hour, 15 structure fire calls (18 percent) lasted one to two hours, and 13 structure fire calls (16 percent) lasted two or more hours.

## Calls by Month and Hour of Day

Figure 5-3 shows the monthly variation in the average daily number of calls handled by MFD from October 1, 2022, to September 30, 2023. Similarly, Figure 5-4 illustrates the average number of calls received each hour of the day.

### FIGURE 5-3: Calls per Day by Month
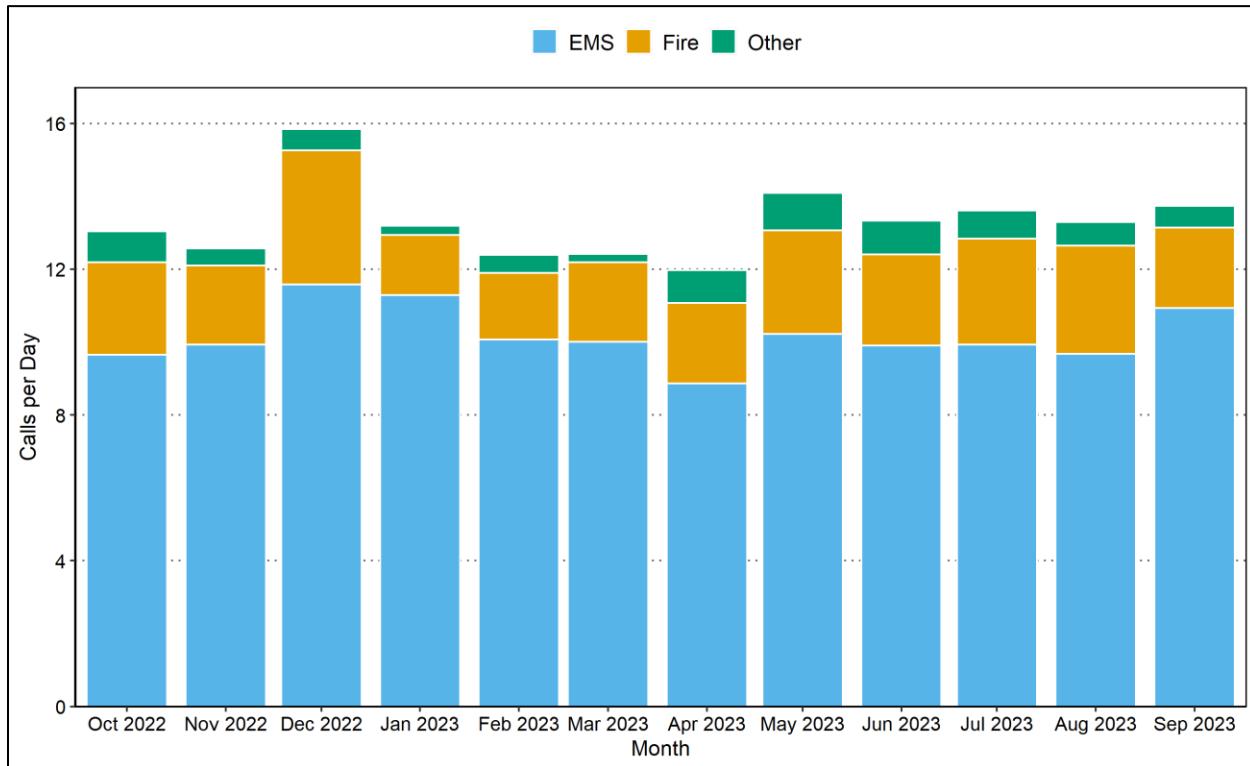


## Observations:

- Average EMS calls per day ranged from 8.9 in April 2023 to 11.6 in December 2022.

- Average fire calls per day ranged from 1.6 in January 2023 to 3.7 in December 2022.

- Average other calls per day ranged from 0.2 in March 2023 to 1.0 in May 2023.

- Average calls per day overall ranged from 12.0 in April 2023 to 15.8 in December 2022.

**FIGURE 5-4: Average Calls by Hour of Day**
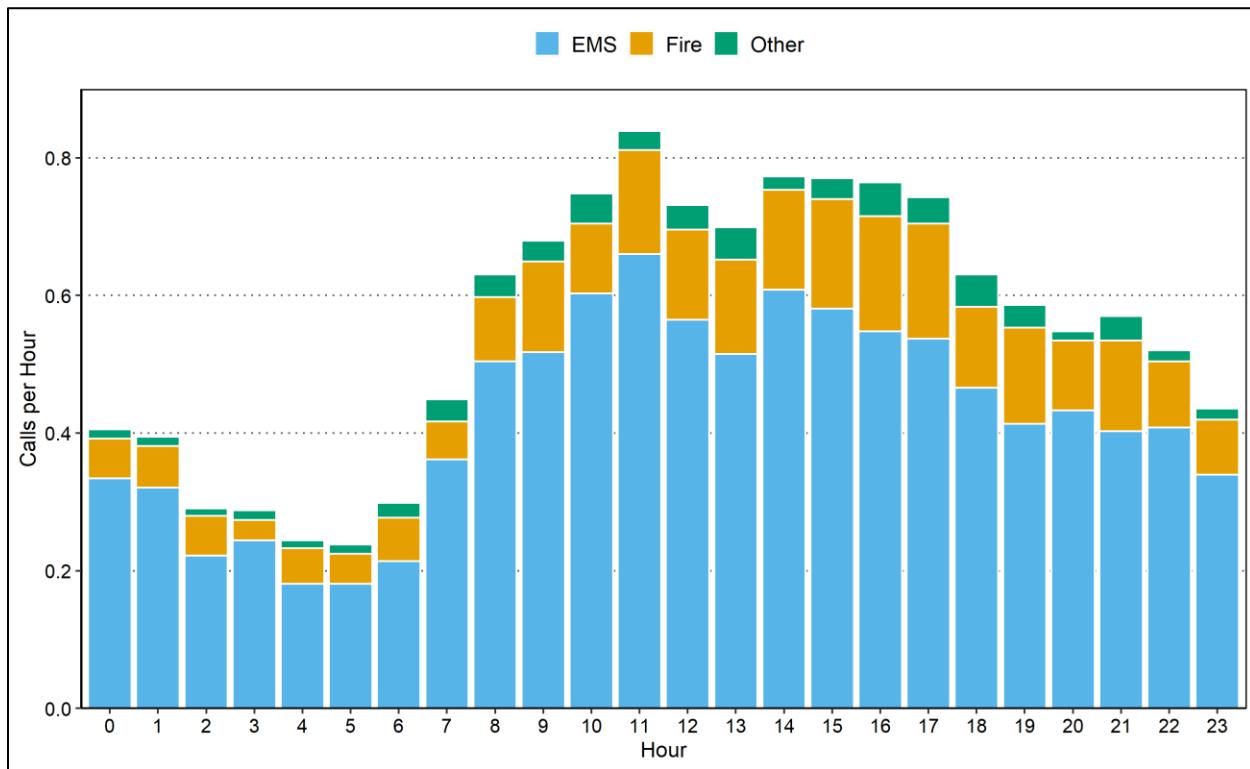


## Observations:

- Average EMS calls per hour ranged from 0.18 between 4:00 a.m. and 5:00 a.m. to 0.66 between 11:00 a.m. and noon.

- Average fire calls per hour ranged from 0.03 between 3:00 a.m. and 4:00 a.m. to 0.17 between 5:00 p.m. and 6:00 p.m.

- Average other calls per hour ranged from 0.01 between 2:00 a.m. and 3:00 a.m. to 0.05 between 4:00 p.m. and 5:00 p.m.

- Average calls per hour overall ranged from 0.24 between 5:00 a.m. and 6:00 a.m. to 0.84 between 11:00 a.m. and noon.

## Units Arriving at Calls

In this section, we limit ourselves to calls where a unit from MFD arrives. For this reason, there are 265 fewer calls in Table 5-3 than in Table 5-1. Table 5-3, along with Figures 5-5 and 5-6, detail the number of calls with one, two, and three or more MFD units arriving at a call, broken down by call type.

### TABLE 5-3: Calls by Type and Number of Arriving MFD Units

| Call Type | Number of Units | | | | Total Calls |
|---|---|---|---|---|---|
| | One | Two | Three | Four or More | |
| Medical and other | 3,367 | 67 | 2 | 1 | 3,437 |
| MVA | 93 | 48 | 28 | 5 | 174 |
| **EMS Subtotal** | **3,460** | **115** | **30** | **6** | **3,611** |
| False alarm | 213 | 115 | 36 | 22 | 386 |
| Good intent | 44 | 18 | 3 | 11 | 76 |
| Hazard | 121 | 35 | 14 | 11 | 181 |
| Outside fire | 25 | 11 | 7 | 3 | 46 |
| Public service | 66 | 14 | 5 | 5 | 90 |
| Structure fire | 19 | 15 | 20 | 28 | 82 |
| Technical rescue | 12 | 3 | 2 | 0 | 17 |
| **Fire Subtotal** | **500** | **211** | **87** | **80** | **878** |
| Canceled | 76 | 5 | 0 | 0 | 81 |
| Mutual aid | 7 | 6 | 6 | 1 | 20 |
| **Total** | **4,043** | **337** | **123** | **87** | **4,590** |
| **Total Percentage** | **88.1** | **7.3** | **2.7** | **1.9** | **100.0** |

**Note**: Out of 265 calls that did not have an arriving unit, 130 were canceled calls, 103 were EMS calls, 27 were fire calls, and five were mutual aid calls.

**FIGURE 5-5: Number of Arriving MFD Units for EMS Calls**
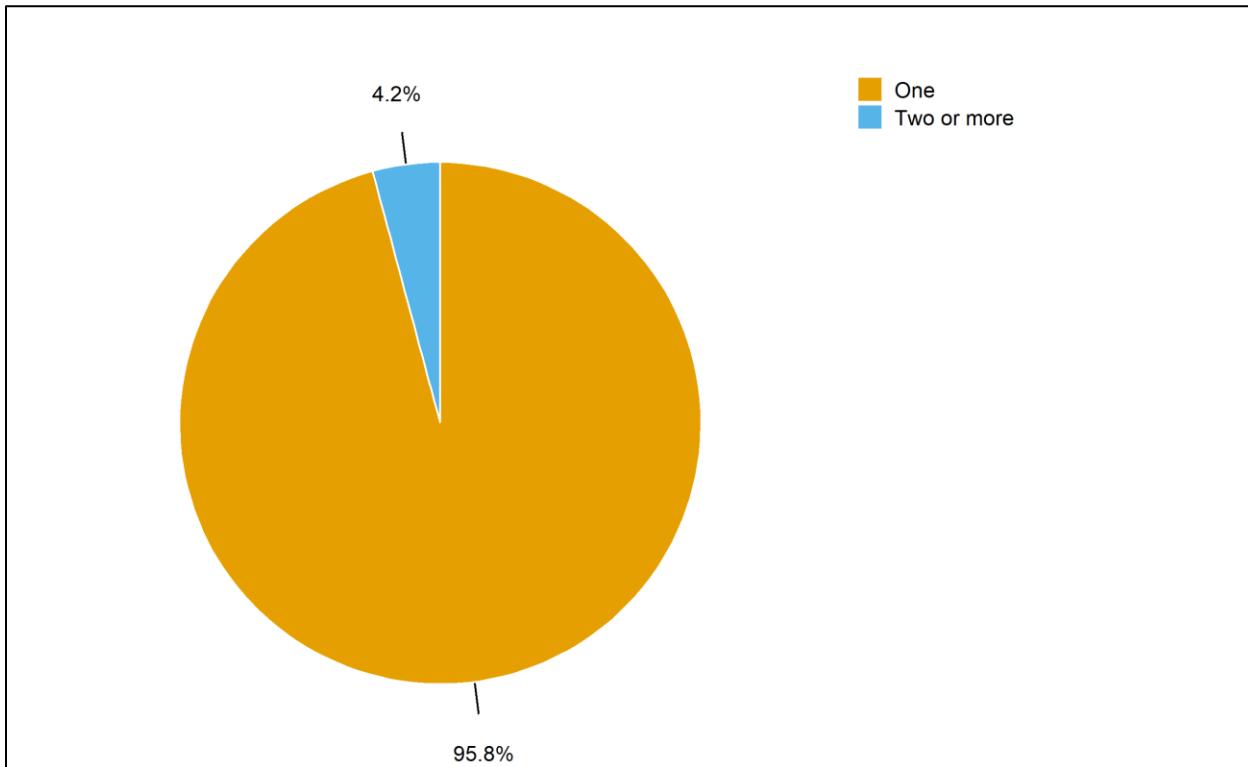


**FIGURE 5-6: Number of Arriving MFD Units for Fire Calls**
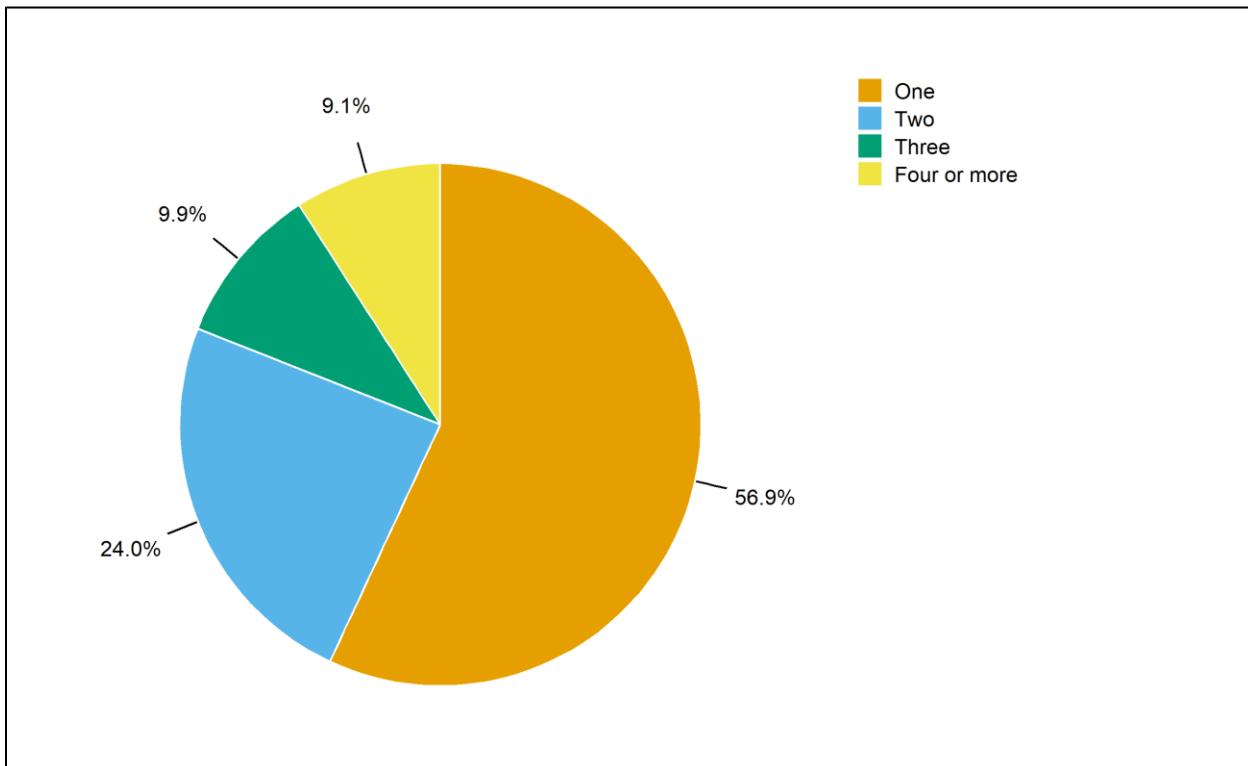
# Observations:

### *Overall*

- On average, 1.2 units arrived at all calls; for 88 percent of calls, only one unit arrived.

- Overall, four or more units arrived at two percent of calls.

### *EMS*

- On average, 1.1 units arrived per EMS call.

- For EMS calls, one unit arrived 96 percent of the time, two units arrived 3 percent of the time, and three or more units arrived 1 percent of the time.

### *Fire*

- On average, 1.8 units arrived per fire call.

- For fire calls, one unit arrived 57 percent of the time, two units arrived 24 percent of the time, three units arrived 10 percent of the time, and four or more units arrived 9 percent of the time.

- For outside fire calls, three or more units arrived 22 percent of the time.

- For structure fire calls, three or more units arrived 59 percent of the time.

# WORKLOAD: RUNS AND TOTAL TIME SPENT

The workload of MFD's units is measured in two ways: runs and deployed time. The deployed time of a run is measured from the time a unit is dispatched through the time the unit is cleared. Because multiple units respond to some calls, there are more runs (6,761) than calls (4,855) and the average deployed time per run varies from the average duration per call.

## Runs and Deployed Time

Deployed time, also referred to as deployed hours, is the total deployment time of MFD units deployed on all runs. Table 5-4 shows the total deployed time, both overall and broken down by type of run, for all non-administrative MFD units. Table 5-5 and Figure 5-7 present the average deployed minutes by hour of day.

### TABLE 5-4: Annual Runs and Deployed Time by Type

| Run Type | Minutes per Run | Total Hours | Percent of Hours | Minutes per Day | Total Runs | Runs per Day |
|---|---|---|---|---|---|---|
| Medical and other | 20.2 | 1,266.9 | 52.3 | 208.3 | 3,755 | 10.3 |
| MVA | 24.9 | 174.5 | 7.2 | 28.7 | 421 | 1.2 |
| **EMS Subtotal** | **20.7** | **1,441.5** | **59.5** | **237.0** | **4,176** | **11.4** |
| False alarm | 16.6 | 277.9 | 11.5 | 45.7 | 1,003 | 2.7 |
| Good intent | 21.7 | 68.9 | 2.8 | 11.3 | 190 | 0.5 |
| Hazard | 33.4 | 201.6 | 8.3 | 33.1 | 362 | 1.0 |
| Outside fire | 17.7 | 41.2 | 1.7 | 6.8 | 140 | 0.4 |
| Public service | 23.2 | 70.4 | 2.9 | 11.6 | 182 | 0.5 |
| Structure fire | 44.0 | 244.3 | 10.1 | 40.2 | 333 | 0.9 |
| Technical rescue | 20.1 | 11.4 | 0.5 | 1.9 | 34 | 0.1 |
| **Fire Subtotal** | **24.5** | **915.7** | **37.8** | **150.5** | **2,244** | **6.1** |
| Canceled | 5.1 | 24.5 | 1.0 | 4.0 | 289 | 0.8 |
| Mutual aid | 47.8 | 41.5 | 1.7 | 6.8 | 52 | 0.1 |
| **Other Subtotal** | **11.6** | **65.9** | **2.7** | **10.8** | **341** | **0.9** |
| **Total** | **21.5** | **2,423.1** | **100.0** | **398.3** | **6,761** | **18.5** |

# Observations:

### *Overall*

- The total deployed time for the year was 2,423.1 hours. The daily average was 6.6 hours for all units combined.

- There were 6,761 runs, including 289 runs dispatched for canceled calls and 52 runs dispatched for mutual aid calls. The daily average was 18.5 runs.

### *EMS*

- EMS runs accounted for 59 percent of the total workload.

- The average deployed time for EMS runs was 20.7 minutes. The deployed time for all EMS runs averaged 3.9 hours per day.

### *Fire*

- Fire runs accounted for 38 percent of the total workload.

- The average deployed time for fire runs was 24.5 minutes. The deployed time for all fire runs averaged 2.5 hours per day.

- There were 473 runs for structure and outside fire calls combined, with a total workload of 285.5 hours. This accounted for 12 percent of the total workload.

- The average deployed time for outside fire runs was 17.7 minutes per run, and the average deployed time for structure fire runs was 44.0 minutes per run.

## TABLE 5-5: Deployed Minutes by Hour of Day

| Hour | EMS | Fire | Other | Total |
|---|---|---|---|---|
| 0 | 7.7 | 5.8 | 0.3 | 13.7 |
| 1 | 7.2 | 5.0 | 0.0 | 12.3 |
| 2 | 6.7 | 5.9 | 0.1 | 12.7 |
| 3 | 4.6 | 4.3 | 0.1 | 9.0 |
| 4 | 4.6 | 3.1 | 0.3 | 8.0 |
| 5 | 4.2 | 4.5 | 0.4 | 9.1 |
| 6 | 3.9 | 3.4 | 0.5 | 7.8 |
| 7 | 6.9 | 1.8 | 0.5 | 9.2 |
| 8 | 12.1 | 3.3 | 0.3 | 15.7 |
| 9 | 11.3 | 7.8 | 0.2 | 19.4 |
| 10 | 13.3 | 6.8 | 0.5 | 20.5 |
| 11 | 16.1 | 7.3 | 0.5 | 23.9 |
| 12 | 13.2 | 5.4 | 0.4 | 19.0 |
| 13 | 13.0 | 6.5 | 0.3 | 19.7 |
| 14 | 14.0 | 11.2 | 0.5 | 25.7 |
| 15 | 14.4 | 9.7 | 0.5 | 24.6 |
| 16 | 12.0 | 9.0 | 0.6 | 21.6 |
| 17 | 12.9 | 9.1 | 0.7 | 22.7 |
| 18 | 11.1 | 8.5 | 0.8 | 20.4 |
| 19 | 11.0 | 6.8 | 1.1 | 18.9 |
| 20 | 9.7 | 6.7 | 0.7 | 17.1 |
| 21 | 9.9 | 5.7 | 0.6 | 16.3 |
| 22 | 9.2 | 7.1 | 0.6 | 16.8 |
| 23 | 7.9 | 5.6 | 0.6 | 14.1 |
| **Total** | **237.0** | **150.5** | **10.8** | **398.3** |

## FIGURE 5-7: Average Deployed Minutes by Hour of Day
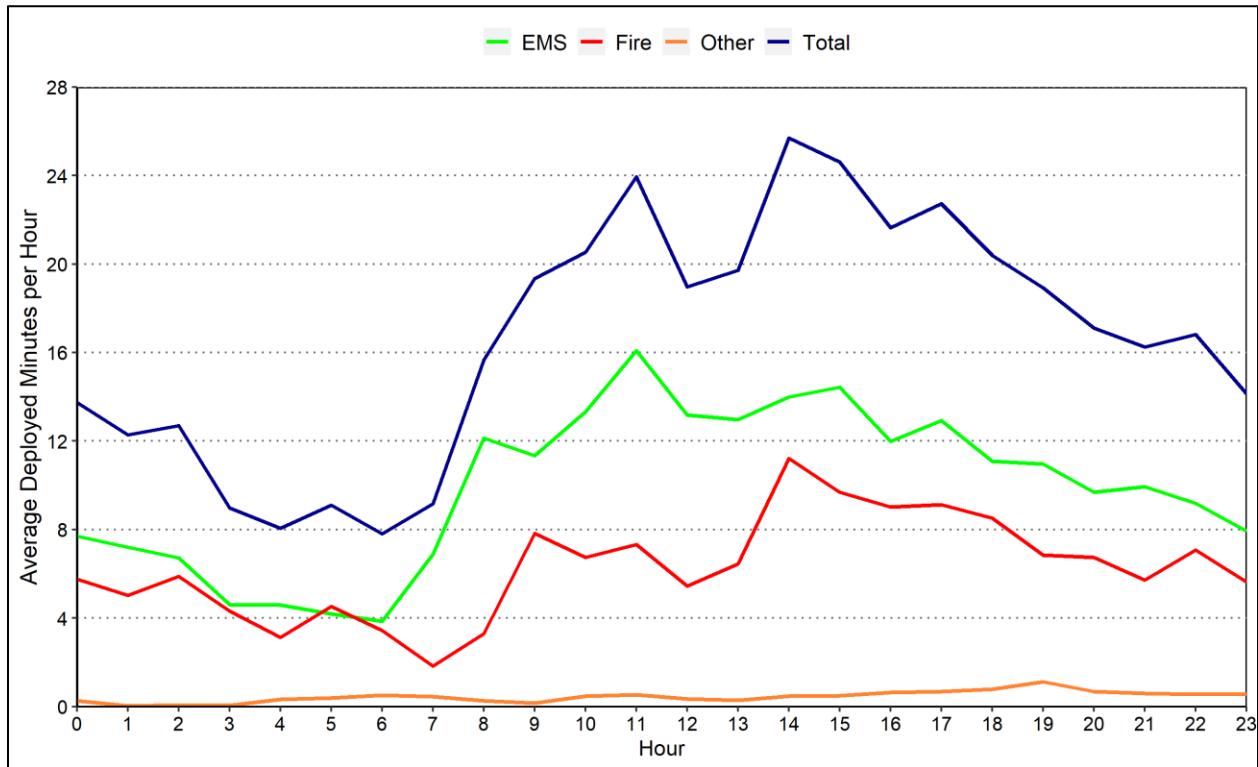


## Observations:

- Hourly deployed time was highest during the day from 9:00 a.m. to 7:00 p.m., averaging between 19 minutes and 26 minutes.

- Average deployed time peaked between 2:00 p.m. and 3:00 p.m., averaging 26 minutes.

- Average deployed time was lowest between 6:00 a.m. and 7:00 a.m., averaging eight minutes.

## Workload by Unit

Table 5-6 provides a summary of each MFD unit's workload for the period from October 1, 2022, to September 30, 2023. Tables 5-7 and 5-8 provide a more detailed view of the workload, showing each unit's runs broken out by run type (Table 5-7) and its daily average deployed time by run type (Table 5-8).

### TABLE 5-6: Workload by Unit

| Station | Unit | Type | Minutes per Run | Hours | Percent | Minutes per Day | Runs | Runs per Day |
|---------|------|------|-----------------|-------|---------|-----------------|------|--------------|
| MFD1 | BAT1 | BC | 26.4 | 211.2 | 8.7 | 34.7 | 480 | 1.3 |
| | BAT2 | BC | 52.2 | 20.9 | 0.9 | 3.4 | 24 | 0.1 |
| | ENG1 | Engine | 20.8 | 665.4 | 27.5 | 109.4 | 1,916 | 5.2 |
| | ENG5 | Res. Engine | 23.4 | 34.6 | 1.4 | 5.7 | 89 | 0.2 |
| | HZMT1 | Hazmat | 4.2 | 0.1 | 0.0 | 0.0 | 1 | 0.0 |
| | LAD1* | Ladder | 1.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 |
| | PLAT1 | Platform | 20.3 | 53.2 | 2.2 | 8.8 | 157 | 0.4 |
| | RES1* | Rescue | 20.6 | 1.7 | 0.1 | 0.3 | 5 | 0.0 |
| | TEMS1 | Rescue | 0.1 | 0.0 | 0.0 | 0.0 | 1 | 0.0 |
| | **Total** | | **22.2** | **987.2** | **40.7** | **162.3** | **2,674** | **7.3** |
| MFD2 | ENG2 | Engine | 19.2 | 143.8 | 5.9 | 23.6 | 449 | 1.2 |
| | LAD2* | Ladder | 19.3 | 506.7 | 20.9 | 83.3 | 1,572 | 4.3 |
| | RES2 | Rescue | 26.3 | 22.4 | 0.9 | 3.7 | 51 | 0.1 |
| | SOTV | Rescue | 54.6 | 3.6 | 0.2 | 0.6 | 4 | 0.0 |
| | **Total** | | **19.6** | **676.5** | **27.9** | **111.2** | **2,076** | **5.7** |
| MFD3 | AIR302 | ARFF | 15.8 | 1.1 | 0.0 | 0.2 | 4 | 0.0 |
| | ENG3 | Engine | 23.1 | 458.3 | 18.9 | 75.3 | 1,191 | 3.3 |
| | **Total** | | **23.1** | **459.4** | **19.0** | **75.5** | **1,195** | **3.3** |
| MFD4 | ENG4 | Engine | 20.7 | 243.3 | 10.0 | 40.0 | 705 | 1.9 |
| | HZMT4** | Hazmat | 42.0 | 39.9 | 1.6 | 6.6 | 57 | 0.2 |
| | **Total** | | **22.3** | **283.2** | **11.7** | **46.6** | **762** | **2.1** |
| MFD5 | LAD5 | Ladder | 18.7 | 16.8 | 0.7 | 2.8*** | 54 | 0.1*** |
| **Total** | | | **21.5** | **2,423.1** | **100.0** | **398.3** | **6,761** | **18.5** |

**Note**: *No longer at this station; **Unit rotates between Stations 1 and 4; ***Station 5 started service on 8/20/2023 for a total of 42 days in the study period. However, Ladder 5 was only in service at Station 5 for 21 days. It was out for maintenance for another 19 days and at Station 2 replacing L2 for two days. All "per day" measurements are divided by 365 days for consistency.

## TABLE 5-7: Total Runs by Type and Unit

| Station | Unit | Unit Type | EMS | False Alarm | Good Intent | Hazard | Outside Fire | Public Service | Struct Fire | Tech Rescue | Cancel | Mutual Aid | Total |
|---------|------|-----------|-----|-------------|-------------|--------|--------------|----------------|-------------|-------------|--------|------------|-------|
| MFD1 | BAT1 | BC | 78 | 168 | 31 | 49 | 25 | 26 | 65 | 5 | 20 | 13 | 480 |
| | BAT2 | BC | 4 | 3 | 1 | 1 | 3 | 1 | 9 | 0 | 0 | 2 | 24 |
| | ENG1 | Engine | 1,375 | 214 | 41 | 73 | 23 | 32 | 57 | 8 | 88 | 5 | 1,916 |
| | ENG5 | Res. Engine | 55 | 20 | 1 | 5 | 4 | 2 | 2 | 0 | 0 | 0 | 89 |
| | HZMT1 | Hazmat | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | LAD1* | Ladder | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | PLAT1 | Platform | 95 | 25 | 2 | 6 | 4 | 4 | 9 | 1 | 10 | 1 | 157 |
| | RES1* | Rescue | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | TEMS1 | Rescue | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | **Total** | | **1,614** | **430** | **76** | **135** | **59** | **65** | **142** | **14** | **118** | **21** | **2,674** |
| MFD2 | ENG2 | Engine | 311 | 44 | 7 | 16 | 10 | 16 | 13 | 3 | 27 | 2 | 449 |
| | LAD2* | Ladder | 1,026 | 234 | 32 | 72 | 28 | 41 | 58 | 8 | 69 | 4 | 1,572 |
| | RES2 | Rescue | 27 | 17 | 0 | 0 | 0 | 5 | 1 | 0 | 1 | 0 | 51 |
| | SOTV | Rescue | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 4 |
| | **Total** | | **1,364** | **295** | **39** | **88** | **38** | **62** | **72** | **12** | **98** | **8** | **2,076** |
| MFD3 | AIR302 | ARFF | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | ENG3 | Engine | 765 | 168 | 35 | 68 | 23 | 27 | 60 | 6 | 37 | 2 | 1,191 |
| | **Total** | | **765** | **168** | **35** | **72** | **23** | **27** | **60** | **6** | **37** | **2** | **1,195** |
| MFD4 | ENG4 | Engine | 394 | 103 | 26 | 33 | 19 | 25 | 55 | 1 | 34 | 15 | 705 |
| | HZMT4** | Hazmat | 3 | 2 | 11 | 31 | 0 | 1 | 1 | 0 | 2 | 6 | 57 |
| | **Total** | | **397** | **105** | **37** | **64** | **19** | **26** | **56** | **1** | **36** | **21** | **762** |
| MFD5 | LAD5*** | Ladder | 36 | 5 | 3 | 3 | 1 | 2 | 3 | 1 | 0 | 0 | 54 |
| | **Total** | | **4,176** | **1,003** | **190** | **362** | **140** | **182** | **333** | **34** | **289** | **52** | **6,761** |

**Note**: *No longer at this station; **Unit rotates between Stations 1 and 4; ***L5 was in service for 23 days during the study period.

## TABLE 5-8: Deployed Minutes per Day by Type and Unit

| Station | Unit | Unit Type | EMS | False Alarm | Good Intent | Hazard | Outside Fire | Public Service | Struct Fire | Tech Rescue | Cancel | Mutual Aid | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MFD1 | BAT1 | BC | 5.9 | 8.2 | 2.0 | 3.8 | 1.4 | 1.5 | 9.4 | 0.2 | 0.3 | 1.9 | 34.7 |
| | BAT2 | BC | 0.4 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 2.2 | 0.0 | 0.0 | 0.5 | 3.4 |
| | ENG1 | Engine | 77.9 | 10.9 | 2.8 | 7.0 | 1.1 | 1.7 | 5.5 | 0.3 | 1.7 | 0.4 | 109.4 |
| | ENG5 | Res. Engine | 3.6 | 0.9 | 0.0 | 0.3 | 0.4 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 5.7 |
| | HZMT1 | Hazmat | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | LAD1* | Ladder | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | PLAT1 | Platform | 5.2 | 1.3 | 0.3 | 0.6 | 0.2 | 0.2 | 0.8 | 0.1 | 0.1 | 0.0 | 8.8 |
| | RES1* | Rescue | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| | TEMS1 | Rescue | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **Total** | | **93.2** | **21.4** | **5.1** | **11.7** | **3.1** | **3.8** | **18.2** | **0.7** | **2.1** | **2.9** | **162.3** |
| MFD2 | ENG2 | Engine | 16.6 | 1.6 | 0.3 | 1.1 | 0.7 | 1.1 | 1.5 | 0.2 | 0.3 | 0.2 | 23.6 |
| | LAD2* | Ladder | 53.7 | 9.1 | 1.6 | 7.1 | 1.2 | 2.3 | 6.7 | 0.4 | 0.7 | 0.5 | 83.3 |
| | RES2 | Rescue | 1.5 | 0.8 | 0.0 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 |
| | SOTV | Rescue | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 |
| | **Total** | | **71.9** | **11.5** | **1.9** | **8.2** | **2.0** | **4.6** | **8.3** | **0.6** | **1.0** | **1.2** | **111.2** |
| MFD3 | AIR302 | ARFF | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| | ENG3 | Engine | 46.0 | 8.2 | 2.1 | 7.5 | 1.3 | 1.8 | 7.5 | 0.5 | 0.3 | 0.2 | 75.3 |
| | **Total** | | **46.0** | **8.2** | **2.1** | **7.7** | **1.3** | **1.8** | **7.5** | **0.5** | **0.3** | **0.2** | **75.5** |
| MFD4 | ENG4 | Engine | 23.9 | 4.4 | 0.8 | 2.2 | 0.5 | 1.1 | 5.4 | 0.0 | 0.5 | 1.2 | 40.0 |
| | HZMT4** | Hazmat | 0.2 | 0.1 | 1.2 | 2.7 | 0.0 | 0.2 | 0.7 | 0.0 | 0.1 | 1.4 | 6.6 |
| | **Total** | | **24.1** | **4.5** | **2.1** | **4.9** | **0.5** | **1.3** | **6.1** | **0.0** | **0.5** | **2.5** | **46.6** |
| MFD5 | LAD5*** | Ladder | 1.7 | 0.2 | 0.1 | 0.6 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 2.8 |
| **Total** | | | **237.0** | **45.7** | **11.3** | **33.1** | **6.8** | **11.6** | **40.2** | **1.9** | **4.0** | **6.8** | **398.3** |

**Note**: *No longer at this station; **Unit rotates between Station 1 and 4; *** LAD5 was in Station 5 for 23 days during the study period.

## Observations:

- Station 1 made the most runs (2,674 or an average of 7.3 runs per day) and had the highest total annual deployed time (987.2 hours or an average of 2.7 hours per day).

  - EMS calls accounted for 60 percent of runs and 57 percent of the total deployed time.

  - Structure and outside fire calls accounted for eight percent of runs and 13 percent of the total deployed time.

- Station 2 made the second most runs (2,076 or an average of 5.7 runs per day) and had the second-highest total annual deployed time (676.5 hours or an average of 1.9 hours per day).

  - EMS calls accounted for 66 percent of runs and 65 percent of the total deployed time.

  - Structure and outside fire calls accounted for five percent of runs and nine percent of the total deployed time.

- ENG1 made the most runs (1,916 or an average of 5.2 runs per day) and had the highest total annual deployed time (665.4 hours or an average of 109.4 minutes per day).

  - EMS calls accounted for 72 percent of runs and 71 percent of the total deployed time.

  - Structure and outside fire calls accounted for four percent of runs and six percent of the total deployed time.

- LAD2 made the second most runs (1,572 or an average of 4.3 runs per day) and had the second-highest total annual deployed time (506.7 hours or an average of 83.3 minutes per day).

  - EMS calls accounted for 65 percent of runs and 65 percent of the total deployed time.

  - Structure and outside fire calls accounted for five percent of runs and 10 percent of the total deployed time.

## Workload by Station Area

Table 5-9 breaks down the workload of MFD by areas within its fire district where the calls occurred. Table 5-10 provides further detail on the workload associated with structure and outside fire calls, also broken down by area. Each area is associated with a first due station.

### TABLE 5-9: Annual Workload by Area

| Area | Calls | Percent Calls | Runs | Runs Per Day | Minutes Per Run | Work Hours | Percent Work | Minutes Per Day |
|---|---|---|---|---|---|---|---|---|
| MFD1 | 1,907 | 39.3 | 2,672 | 7.3 | 20.4 | 906.4 | 37.4 | 149.0 |
| MFD2 | 1,650 | 34.0 | 2,295 | 6.3 | 20.2 | 774.3 | 32.0 | 127.3 |
| MFD3 | 912 | 18.8 | 1,271 | 3.5 | 23.6 | 501.0 | 20.7 | 82.4 |
| MFD4 | 290 | 6.0 | 379 | 1.0 | 26.3 | 165.8 | 6.8 | 27.3 |
| MFD5* | 71 | 1.5 | 92 | 0.3 | 22.2 | 34.1 | 1.4 | 5.6 |
| **MFD Subtotal** | **4,830** | **99.5** | **6,709** | **18.4** | **21.3** | **2,381.6** | **98.3** | **391.5** |
| MRFD | 19 | 0.4 | 40 | 0.1 | 37.8 | 25.2 | 1.0 | 4.1 |
| Burlington | 3 | 0.1 | 5 | 0.0 | 76.5 | 6.4 | 0.3 | 1.0 |
| Sawyer | 1 | 0.0 | 1 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 |
| Surrey | 1 | 0.0 | 3 | 0.0 | 33.1 | 1.7 | 0.1 | 0.3 |
| Velva | 1 | 0.0 | 3 | 0.0 | 164.0 | 8.2 | 0.3 | 1.3 |
| **Aid Given Subtotal** | **25** | **0.5** | **52** | **0.1** | **47.8** | **41.5** | **1.7** | **6.8** |
| **Total** | **4,855** | **100.0** | **6,761** | **18.5** | **21.5** | **2,423.1** | **100.0** | **398.3** |

**Note**: *MFD 5 was a new station in service on 8/20/2023. It was only considered a separate location for 42 days; MRFD=Minot Rural Fire Department

### TABLE 5-10: Runs for Structure and Outside Fires by Area

| Area | Structure Fires | | Outside Fires | | Total Deployed Hours | Percent Work |
|---|---|---|---|---|---|---|
| | Runs | Minutes per Run | Runs | Minutes per Run | | |
| MFD1 | 83 | 32.0 | 30 | 13.0 | 50.8 | 17.5 |
| MFD2 | 149 | 45.3 | 72 | 17.4 | 133.3 | 46.0 |
| MFD3 | 67 | 42.0 | 32 | 21.3 | 58.3 | 20.1 |
| MFD4 | 33 | 73.4 | 4 | 10.2 | 41.1 | 14.2 |
| MFD5* | 1 | 20.6 | 2 | 53.0 | 2.1 | 0.7 |
| **MFD Subtotal** | **333** | **44.0** | **140** | **17.7** | **285.5** | **98.4** |
| MRFD | 3 | 36.0 | 6 | 27.2 | 4.5 | 1.6 |
| **Total** | **336** | **43.9** | **146** | **18.0** | **290.0** | **100.0** |

**Note**: *MFD 5 was a new station in service on 8/20/2023. It was only considered a separate location for 42 days; MRFD=Minot Rural Fire Department.

## Observations:

### *MFD Service Area*

- There were 4,830 calls or 99 percent of the total calls.

- There were 6,709 runs, including 289 runs dispatched for canceled calls. The daily average was 18.4 runs.

- The total deployed time for the year was 2,381.6 hours. The daily average was 6.5 hours for all units combined.

### *Aid Given*

- There were 25 calls or one percent of the total calls.

- There were 52 runs, including one run dispatched for canceled calls. The daily average was 0.1 runs.

- The total deployed time for the year was 41.5 hours. The daily average was 7.2 minutes for all units combined.

# ANALYSIS OF BUSIEST HOURS

In this analysis, we included all 4,855 calls given in Table 5-1. For these calls, there is significant variability in the number of calls from hour to hour. One special concern relates to the resources available for hours with the heaviest workload. We tabulated the data for each of the 8,760 hours from October 1, 2022, to September 30, 2023. Table 5-11 shows the number of hours in which there were zero to four or more calls during the hour. Table 5-12 shows the ten one-hour intervals that had the most calls during the studied period. Table 5-13 examines the number of times a call overlapped with another call.

## TABLE 5-11: Frequency Distribution of the Number of Calls

| Calls in an Hour | Frequency | Percentage |
|---|---|---|
| 0 | 5,123 | 58.5 |
| 1 | 2,654 | 30.3 |
| 2 | 790 | 9.0 |
| 3 | 156 | 1.8 |
| 4+ | 37 | 0.4 |
| **Total** | **8,760** | **100.0** |

## TABLE 5-12: Top Ten Hours with the Most Calls Received

| Hour | Number of Calls | Number of Runs | Total Deployed Hours |
|---|---|---|---|
| 7/10/2023, 11:00 p.m. to midnight | 5 | 8 | 2.0 |
| 11/13/2022, noon to 1:00 p.m. | 5 | 7 | 1.8 |
| 1/8/2023, 2:00 p.m. to 3:00 p.m. | 5 | 6 | 1.9 |
| 2/22/2023, 2:00 p.m. to 3:00 p.m. | 5 | 6 | 1.5 |
| 1/9/2023, 2:00 p.m. to 3:00 p.m. | 5 | 5 | 1.9 |
| 5/30/2023, 5:00 p.m. to 6:00 p.m. | 4 | 11 | 4.3 |
| 3/10/2023, 1:00 p.m. to 2:00 p.m. | 4 | 10 | 2.4 |
| 11/7/2022, 2:00 p.m. to 3:00 p.m. | 4 | 9 | 4.9 |
| 12/27/2022, 2:00 p.m. to 3:00 p.m. | 4 | 9 | 4.1 |
| 7/6/2023, noon to 1:00 p.m. | 4 | 9 | 1.6 |

**Note:** Total deployed hours is a measure of the total time spent responding to calls received in the hour. The deployed time from these calls may extend into the next hour or hours.

## Observations:

- During 37 hours (0.4 percent of all hours), four or more calls occurred; in other words, the department responded to four or more calls in an hour roughly once every 10 days.

  □ The highest number of calls to occur in an hour was five, which happened five times.

- The hour with the most calls and runs was 11:00 p.m. to midnight on July 10, 2023.

  □ The hour's five calls involved eight dispatches resulting in 2.0 hours of deployed time.

  □ These five calls included three medical and other calls, one false alarm call, and one good intent call.

## TABLE 5-13: Frequency of Overlapping Calls

| Area | Scenario | Number of Calls | Percent of All Calls | Total Hours |
|---|---|---|---|---|
| MFD1 | No overlapped call | 1,771 | 92.9 | 650.7 |
| | Overlapped with one call | 128 | 6.7 | 23.0 |
| | Overlapped with two calls | 8 | 0.4 | 1.2 |
| MFD2 | No overlapped call | 1,546 | 93.7 | 558.1 |
| | Overlapped with one call | 97 | 5.9 | 20.4 |
| | Overlapped with two calls | 6 | 0.4 | 1.3 |
| | Overlapped with three calls | 1 | 0.1 | 0.0 |
| MFD3 | No overlapped call | 879 | 96.4 | 381.5 |
| | Overlapped with one call | 32 | 3.5 | 8.2 |
| | Overlapped with two calls | 1 | 0.1 | 0.2 |
| MFD4 | No overlapped call | 287 | 99.0 | 124.2 |
| | Overlapped with one call | 3 | 1.0 | 0.7 |
| MFD5* | No overlapped call | 71 | 100.0 | 0.5 |
| Aid Given | No overlapped call | 24 | 96.0 | 19.9 |
| | Overlapped with one call | 1 | 4.0 | 0.0 |

**Note**: *MFD 5 was a new station in service on 8/20/2023. It was included in the analysis only for 42 days.

Table 5-14 focuses on each station's availability to respond to calls within its first due area. At the same time, it focuses on calls where an MFD unit eventually arrived and ignores calls where no unit arrived. Out of 4,830 calls that are not mutual aid, there were 260 calls where an MFD unit went en route but no unit arrived. For this reason, the individual rows and the total in Table 5-14's second column do not match the corresponding values for Table 5-13.

## TABLE 5-14: Station Availability to Respond to Calls

| Area | Calls in Area | First Due Responded | Percent Responded | First Due Arrived | Percent Arrived | First Due First | Percent First |
|---|---|---|---|---|---|---|---|
| MFD1 | 1,809 | 1,632 | 90.2 | 1,609 | 88.9 | 1,582 | 87.5 |
| MFD2 | 1,551 | 1,365 | 88.0 | 1,333 | 85.9 | 1,289 | 83.1 |
| MFD3 | 864 | 796 | 92.1 | 784 | 90.7 | 775 | 89.7 |
| MFD4 | 276 | 259 | 93.8 | 253 | 91.7 | 246 | 89.1 |
| MFD5* | 70 | 62 | 88.6 | 61 | 87.1 | 60 | 85.7 |
| **Total** | **4,570** | **4,114** | **90.0** | **4,040** | **88.4** | **3,952** | **86.5** |

**Note**: For each station, we count the number of calls within its first due area where at least one MFD unit arrived. Next, we focus on units from the first due station to see if any unit responded, arrived, or arrived first; Unit HZMT4 rotates between Station 1 and 4. *When LAD5 was out of service in Station 5's area, the reserve Eng5 would run out of that location. In addition, unit HZMT4 rotated between Stations 1 and 4.

## RESPONSE TIME

In this part of the analysis, we present response time statistics for different call types. We separate response time into its identifiable components. *Dispatch time* is the difference between the time a call is received and the time a unit is dispatched. Dispatch time includes call processing time, which is the time required to determine the nature of the emergency and the types of resources to dispatch. *Turnout time* is the difference between dispatch time and the time a unit is en route to a call's location. *Travel time* is the difference between the time en route and arrival on scene. *Response time* is the total time elapsed between receiving a call to arriving on scene.

In this analysis, we included all calls to which at least one non-administrative unit arrived. Canceled and mutual aid calls were not included. In addition, calls with a total response time exceeding 30 minutes were excluded. Finally, we focused on units that had complete time stamps, that is, units with all components recorded, so that we could calculate each segment of response time. Calls labeled with "Low" priority were not included in this analysis.

Based on the methodology above, for 4,855 calls (Table 5-1), we excluded 211 canceled, 25 mutual aid calls, 62 low priority calls, 127 calls where no units recorded a valid on-scene time, 51 calls with a total response time exceeding 30 minutes, and 444 calls where one or more segments of the first arriving unit's response time could not be calculated due to missing or faulty data. As a result, in this section, a total of 3,935 calls are included in the analysis.

## Response Time by Type of Call

Table 5-15 breaks down the average and 90th percentile dispatch, turnout, travel, and total response times by call type. A 90th percentile means that 90 percent of calls had response times at or below that number. For example, Table 5-15 shows an overall 90th percentile response time of 10.8 minutes, which means that 90 percent of the time, a call had a response time of no more than 10.8 minutes. Figure 5-8 illustrates the average response time by call type.

**TABLE 5-15: Average and 90th Percentile Response Time of First Arriving Unit, by Call Type**

| Call Type | Average Response Time, Min. | | | | 90th Percentile Response Time, Min. | | | | Call Count |
|---|---|---|---|---|---|---|---|---|---|
| | Dispatch | Turnout | Travel | Total | Dispatch | Turnout | Travel | Total | |
| Medical and other | 3.0 | 1.0 | 3.9 | 7.8 | 4.4 | 1.8 | 6.2 | 10.8 | 3,132 |
| MVA | 2.9 | 0.8 | 3.1 | 6.9 | 5.6 | 1.6 | 5.3 | 10.5 | 129 |
| **EMS Subtotal** | **3.0** | **0.9** | **3.9** | **7.8** | **4.4** | **1.8** | **6.2** | **10.8** | **3,261** |
| False alarm | 1.9 | 1.0 | 3.7 | 6.7 | 3.2 | 1.9 | 6.5 | 10.0 | 308 |
| Good intent | 1.6 | 0.8 | 4.1 | 6.5 | 3.0 | 1.6 | 7.1 | 9.6 | 63 |
| Hazard | 2.4 | 0.9 | 4.2 | 7.5 | 3.6 | 1.9 | 8.1 | 11.9 | 133 |
| Outside fire | 2.2 | 0.8 | 3.4 | 6.4 | 3.0 | 1.4 | 5.6 | 8.3 | 36 |
| Public service | 3.5 | 0.8 | 3.6 | 7.9 | 7.5 | 1.9 | 5.9 | 12.1 | 57 |
| Structure fire | 1.8 | 1.1 | 3.4 | 6.2 | 2.6 | 1.7 | 5.6 | 8.8 | 72 |
| Technical rescue | 4.4 | 0.6 | 3.6 | 8.6 | 12.2 | 1.4 | 6.1 | 16.3 | 5 |
| **Fire Subtotal** | **2.1** | **1.0** | **3.8** | **6.9** | **3.5** | **1.8** | **6.7** | **10.6** | **674** |
| **Total** | **2.8** | **0.9** | **3.8** | **7.6** | **4.3** | **1.8** | **6.2** | **10.8** | **3,935** |

**FIGURE 5-8: Average Response Time of First Arriving Unit, by Call Type**
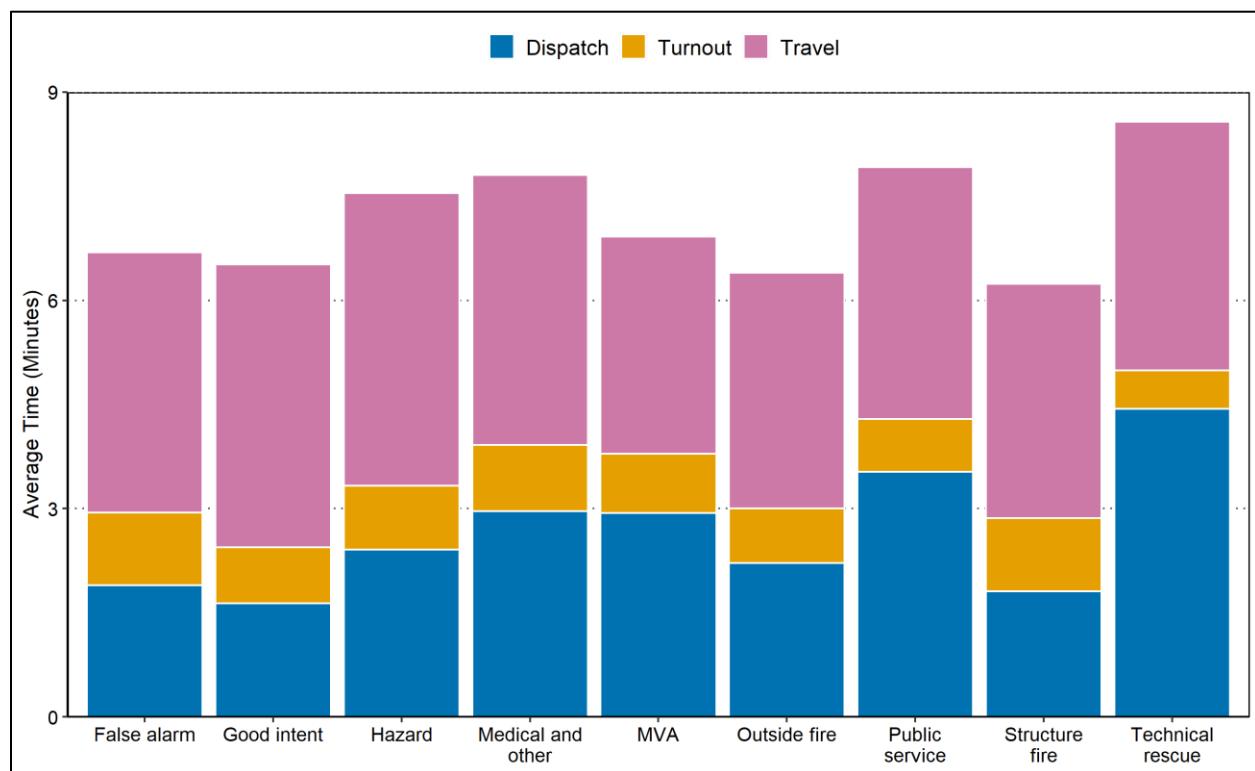
## Observations:

- The average dispatch time was 2.8 minutes.

- The average turnout time was 0.9 minutes.

- The average travel time was 3.8 minutes.

- The average total response time was 7.6 minutes.

- The average response time was 7.8 minutes for EMS calls and 6.9 minutes for fire calls.

- The average response time was 6.4 minutes for outside fires and 6.2 minutes for structure fires.

- The 90th percentile dispatch time was 4.3 minutes.

- The 90th percentile turnout time was 1.8 minutes.

- The 90th percentile travel time was 6.2 minutes.

- The 90th percentile total response time was 10.8 minutes.

- The 90th percentile response time was 10.8 minutes for EMS calls and 10.6 minutes for fire calls.

- The 90th percentile response time was 8.3 minutes for outside fires and 8.8 minutes for structure fires.

Table 5-16 shows the average response time by the time of day. The table also shows the 90th percentile response times. Figure 5-9 shows the average response time by the time of day.

**TABLE 5-16: Average and 90th Percentile Response Times of First Arriving Unit, by Hour of Day**

| Hour | Minutes | | | | | Number of Calls |
|------|---------|---------|--------|------------------|-------------------------------|-----------------|
|      | Dispatch | Turnout | Travel | Response Time | 90th Percentile Response Time | |
| 0 | 2.9 | 1.5 | 4.0 | 8.3 | 11.3 | 133 |
| 1 | 3.1 | 1.5 | 3.9 | 8.5 | 11.4 | 129 |
| 2 | 2.8 | 1.6 | 3.8 | 8.2 | 13.3 | 88 |
| 3 | 2.8 | 1.5 | 4.0 | 8.3 | 11.1 | 92 |
| 4 | 3.0 | 1.6 | 4.3 | 8.8 | 11.3 | 80 |
| 5 | 3.2 | 1.6 | 3.9 | 8.7 | 11.9 | 78 |
| 6 | 2.7 | 1.2 | 4.1 | 8.1 | 11.1 | 94 |
| 7 | 2.9 | 1.1 | 4.0 | 8.0 | 11.3 | 141 |
| 8 | 2.8 | 0.8 | 3.7 | 7.3 | 9.9 | 183 |
| 9 | 2.6 | 0.8 | 3.9 | 7.4 | 10.9 | 202 |
| 10 | 2.9 | 0.8 | 3.8 | 7.4 | 10.4 | 204 |
| 11 | 2.7 | 0.8 | 3.7 | 7.3 | 9.8 | 262 |
| 12 | 2.8 | 0.9 | 3.7 | 7.4 | 10.8 | 213 |
| 13 | 2.8 | 0.8 | 4.1 | 7.7 | 11.5 | 188 |
| 14 | 2.7 | 0.7 | 3.7 | 7.2 | 9.8 | 218 |
| 15 | 2.9 | 0.7 | 3.9 | 7.5 | 11.1 | 206 |
| 16 | 2.9 | 0.8 | 4.1 | 7.8 | 11.0 | 211 |
| 17 | 2.7 | 0.8 | 3.8 | 7.3 | 10.2 | 216 |
| 18 | 2.7 | 0.8 | 3.5 | 7.0 | 10.1 | 178 |
| 19 | 2.9 | 0.8 | 3.8 | 7.5 | 11.0 | 180 |
| 20 | 2.9 | 0.7 | 3.6 | 7.2 | 10.5 | 164 |
| 21 | 2.8 | 0.8 | 3.7 | 7.4 | 10.0 | 179 |
| 22 | 3.0 | 1.0 | 3.6 | 7.6 | 10.4 | 159 |
| 23 | 2.7 | 1.3 | 3.8 | 7.8 | 10.4 | 137 |
| **Total** | **2.8** | **0.9** | **3.8** | **7.6** | **10.8** | **3,935** |

## FIGURE 5-9: Average Response Time of First Arriving Unit, by Hour of Day
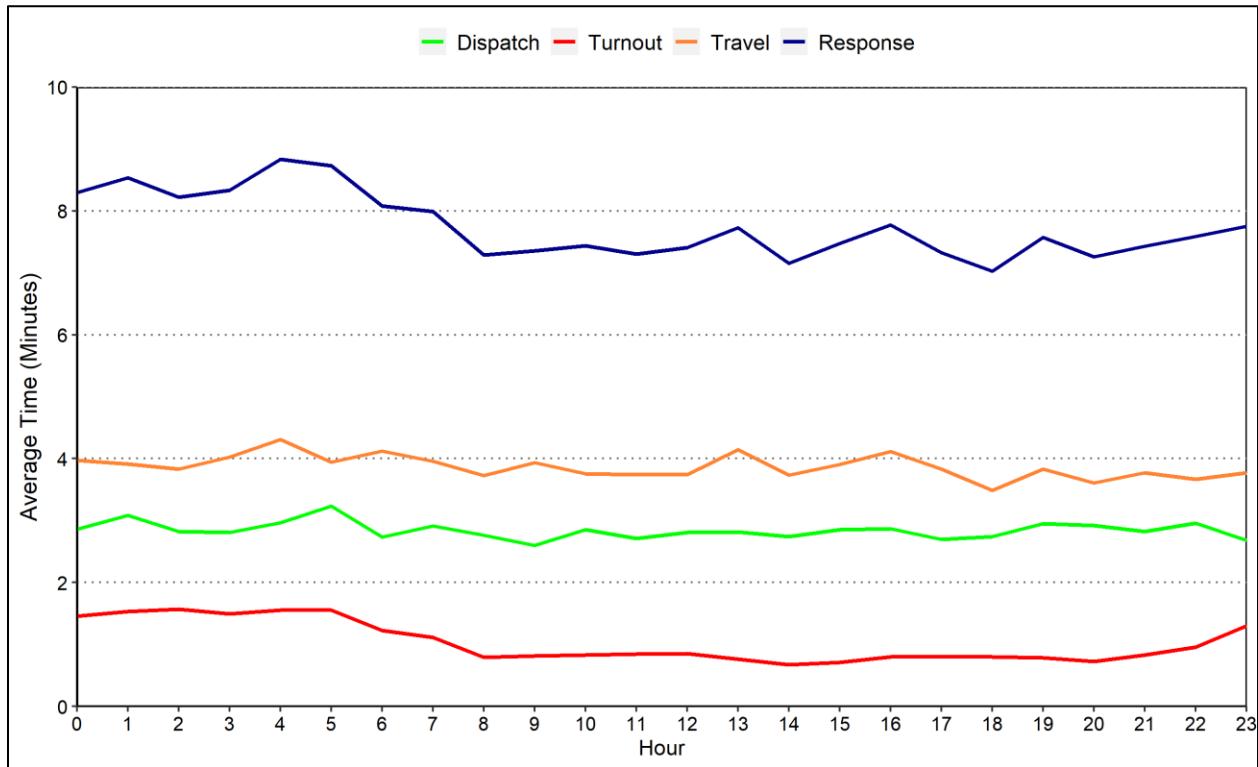


## Observations:

- Average dispatch time was between 2.6 minutes (9:00 a.m. to 10:00 a.m.) and 3.2 minutes (5:00 a.m. to 6:00 a.m.).

- Average turnout time was between 0.7 minutes (2:00 p.m. to 3:00 p.m.) and 1.6 minutes (2:00 a.m. to 3:00 a.m.).

- Average travel time was between 3.5 minutes (6:00 p.m. to 7:00 p.m.) and 4.3 minutes (4:00 a.m. to 5:00 a.m.).

- Average response time was between 7.0 minutes (6:00 p.m. to 7:00 p.m.) and 8.8 minutes (4:00 a.m. to 5:00 a.m.).

- The 90th percentile response time was between 9.8 minutes (2:00 p.m. to 3:00 p.m.) and 13.3 minutes (2:00 a.m. to 3:00 a.m.).

# Response Time by First Due Station Area

Here, we detail the average and 90th percentile response times to calls that occurred in different first due station areas.

**TABLE 5-17: Average and 90th Percentile Response Time of First Arriving Unit, by Station Area**

| Area | Average Response Time, Min. | | | | 90th Percentile Response Time, Min. | | | | Call Count |
|---|---|---|---|---|---|---|---|---|---|
| | Dispatch | Turnout | Travel | Total | Dispatch | Turnout | Travel | Total | |
| MFD1 | 2.8 | 1.0 | 4.0 | 7.9 | 4.4 | 1.9 | 6.1 | 10.7 | 1,533 |
| MFD2 | 2.8 | 0.9 | 3.4 | 7.0 | 4.2 | 1.7 | 6.1 | 10.5 | 1,309 |
| MFD3 | 2.8 | 1.0 | 3.9 | 7.7 | 4.3 | 1.8 | 6.6 | 10.8 | 782 |
| MFD4 | 2.9 | 1.1 | 4.9 | 8.8 | 4.2 | 2.1 | 7.2 | 11.9 | 253 |
| MFD5 | 3.0 | 0.6 | 3.5 | 7.2 | 4.5 | 1.5 | 5.6 | 9.3 | 58 |
| **Total** | **2.8** | **0.9** | **3.8** | **7.6** | **4.3** | **1.8** | **6.2** | **10.8** | **3,935** |

**Note**: *MFD 5 was a new station in service on 8/20/2023. It was included in the analysis only for 42 days.

## Response Time by Month

Table 5-18 presents the average and 90th percentile response times for each month between October 1, 2022, and September 30, 2023. MFD added Station 5 on 8/20/2023. This analysis examines the impact of the new station on MFD's response time.

**TABLE 5-18: Average and 90th Percentile Response Time of First Arriving Unit, by Year and Month**

| Year | Month | Average Response Time, Min. | | | | 90th Percentile Response Time, Min. | | | | Call Count |
|------|-------|----------|---------|--------|-------|----------|---------|--------|-------|------|
| | | Dispatch | Turnout | Travel | Total | Dispatch | Turnout | Travel | Total | |
| 2022 | 10 | 3.0 | 0.8 | 3.8 | 7.6 | 4.3 | 1.6 | 6.7 | 10.7 | 325 |
| 2022 | 11 | 2.7 | 1.0 | 3.8 | 7.5 | 4.3 | 1.8 | 6.2 | 10.7 | 329 |
| 2022 | 12 | 3.0 | 1.0 | 4.0 | 8.0 | 4.8 | 1.8 | 6.7 | 11.3 | 413 |
| 2023 | 1 | 3.0 | 1.0 | 4.0 | 8.0 | 4.4 | 2.0 | 6.1 | 11.1 | 355 |
| 2023 | 2 | 2.8 | 1.0 | 4.0 | 7.8 | 4.3 | 1.8 | 6.5 | 11.0 | 294 |
| 2023 | 3 | 2.8 | 0.9 | 3.9 | 7.6 | 4.3 | 1.9 | 6.2 | 10.6 | 322 |
| 2023 | 4 | 2.4 | 1.0 | 3.8 | 7.2 | 3.6 | 1.9 | 6.1 | 9.9 | 287 |
| 2023 | 5 | 2.8 | 0.9 | 3.7 | 7.4 | 4.2 | 1.8 | 6.0 | 10.9 | 340 |
| 2023 | 6 | 3.2 | 0.9 | 4.0 | 8.0 | 4.8 | 1.9 | 6.0 | 11.3 | 300 |
| 2023 | 7 | 2.7 | 1.0 | 4.2 | 7.8 | 4.1 | 1.9 | 6.9 | 11.1 | 338 |
| **10 Month Subtotal** | | **2.8** | **1.0** | **3.9** | **7.7** | **4.3** | **1.8** | **6.4** | **10.9** | **3,303** |
| 2023 | 8 | 2.6 | 1.0 | 3.6 | 7.1 | 4.1 | 1.9 | 6.0 | 9.9 | 321 |
| 2023 | 9 | 2.9 | 0.8 | 3.4 | 7.1 | 4.4 | 1.6 | 5.5 | 9.7 | 311 |
| **Total** | | **2.8** | **0.9** | **3.8** | **7.6** | **4.3** | **1.8** | **6.2** | **10.8** | **3,935** |

## Observations:

- Between October 2022 and July 2023, before Station 5 was in service, the average and 90th percentile response times were 7.7 and 10.9 minutes, respectively.

- After Station 5 was in service, in September 2023, the average response time decreased eight percent from 7.7 to 7.1 minutes, and the 90th percentile response time decreased 11 percent from 10.9 to 9.7 minutes.

# Response Time Distribution

Here, we present a more detailed look at how response times to calls are distributed. The cumulative distribution of total response time for the first arriving unit to EMS calls is shown in Figure 5-10 and Table 5-19. Figure 5-10 shows response times for the first arriving unit to EMS calls as a frequency distribution in whole-minute increments, and Figure 5-11 shows the same for the first arriving unit to outside and structure fire calls.

The cumulative percentages here are read in the same way as a percentile. In Figure 5-10, the 90th percentile of 10.8 minutes means that 90 percent of EMS calls had a response time of 10.8 minutes or less. In Table 5-19, the cumulative percentages of 61.3 and 82.4, for example, means that 61.3 percent of EMS calls and 82.4 percent of outside and structure fire calls had a response time under 8 minutes, respectively.

**FIGURE 5-10: Cumulative Distribution of Response Time, First Arriving Unit, EMS**
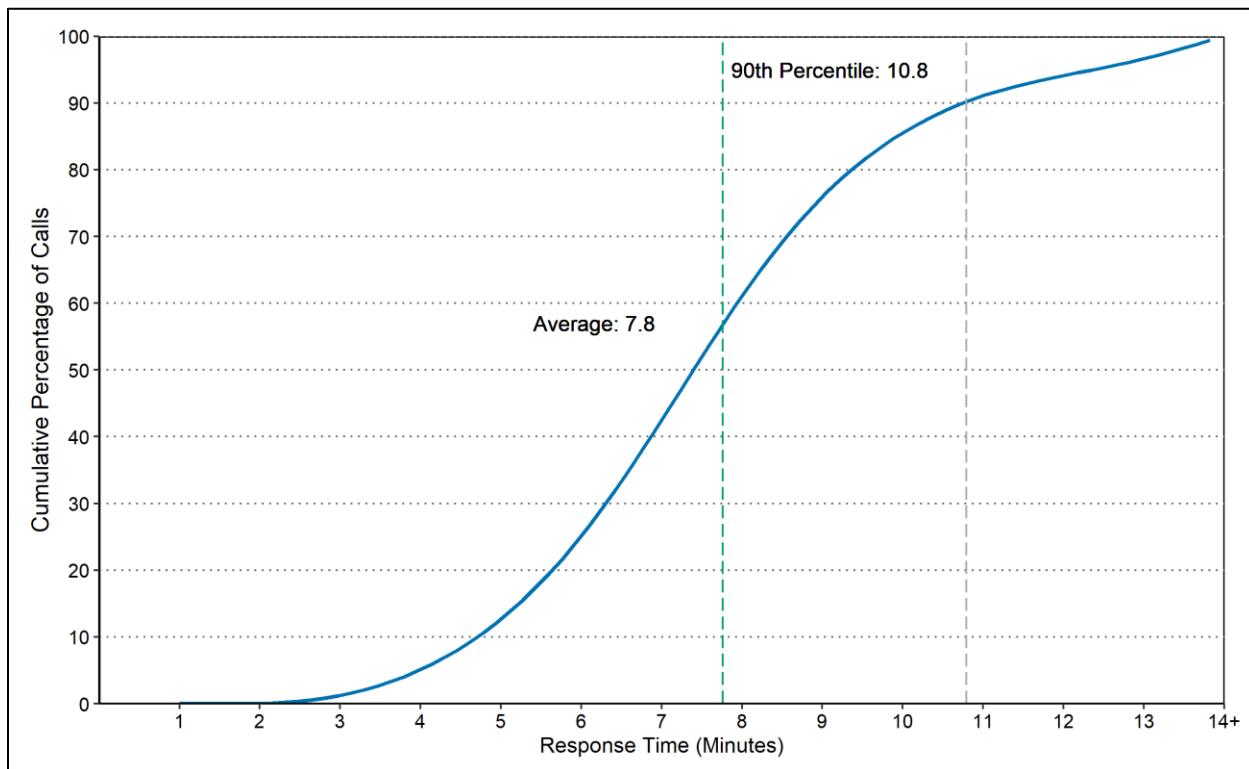
**FIGURE 5-11: Cumulative Distribution of Response Time, First Arriving Unit, Outside and Structure Fires**
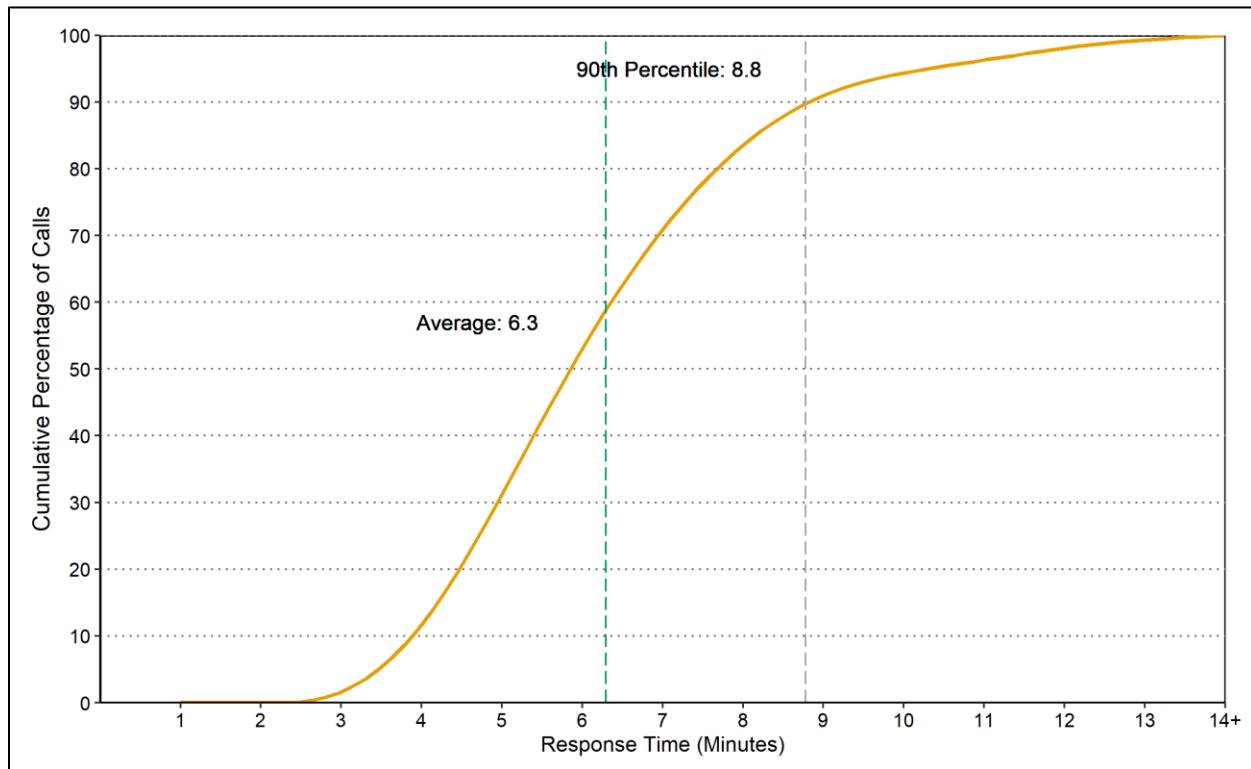


**TABLE 5-19: Cumulative Distribution of Response Time, First Arriving Unit**

| Response Time (minute) | EMS | | Structure and Outside Fires | |
|---|---|---|---|---|
| | Frequency | Cumulative Percentage | Frequency | Cumulative Percentage |
| 1 | 0 | 0.0 | 0 | 0.0 |
| 2 | 2 | 0.1 | 0 | 0.0 |
| 3 | 32 | 1.0 | 2 | 1.9 |
| 4 | 140 | 5.3 | 8 | 9.3 |
| 5 | 237 | 12.6 | 25 | 32.4 |
| 6 | 394 | 24.7 | 22 | 52.8 |
| 7 | 584 | 42.6 | 21 | 72.2 |
| 8 | 610 | 61.3 | 11 | 82.4 |
| 9 | 478 | 76.0 | 10 | 91.7 |
| 10 | 318 | 85.7 | 3 | 94.4 |
| 11 | 170 | 90.9 | 1 | 95.4 |
| 12 | 112 | 94.4 | 3 | 98.1 |
| 13 | 59 | 96.2 | 0 | 98.1 |
| 14+ | 125 | 100.0 | 2 | 100.0 |

# ATTACHMENT I: ADDITIONAL PERSONNEL

## TABLE 5-20: Workload of Administrative Units

| Unit ID | Unit Type | Annual Hours | Annual Runs |
|---------|-----------|--------------|-------------|
| CHF | Fire Chief | 0.1 | 3 |

# ATTACHMENT II: FIRE LOSS

Table 5-21 presents the number of outside and structure fires, broken out by levels of fire loss. Table 5-22 shows the amount of property and content loss for outside and structure fires inside Minot from October 1, 2022, to September 30, 2023.

## TABLE 5-21: Total Fire Loss Above and Below $25,000

| Call Type | No Loss | Under $25,000 | $25,000 plus | Total |
|---|---|---|---|---|
| Outside fire | 46 | 1 | 0 | 47 |
| Structure fire | 70 | 9 | 4 | 83 |
| **Total** | **116** | **10** | **4** | **130** |

## TABLE 5-22: Content and Property Loss, Structure and Outside Fires

| Call Type | Property Loss | | Content Loss | |
|---|---|---|---|---|
| | Loss Value | Number of Calls | Loss Value | Number of Calls |
| Outside fire | $500 | 1 | $0 | 0 |
| Structure fire | $560,500 | 12 | $117,000 | 6 |
| **Total** | **$561,000** | **13** | **$117,000** | **6** |

**Note:** The table includes only fire calls with a recorded loss greater than $0.

## Observations:

- 46 outside fires and 70 structure fires had no recorded loss.

- Four structure fires had $25,000 or more in loss.

- Structure fires:

  - The highest total loss for a structure fire was $336,000.

  - The average total loss for all structure fires was $8,163.

  - Six structure fires had content losses with a combined $117,000 in losses.

  - Out of 83 structure fires, 12 had recorded property losses, with a combined $560,500 in losses.

- Outside fires:

  - The highest total loss for an outside fire was $500.

  - The average total loss for all outside fires was $11.

  - Out of 47 outside fires, one had recorded property loss, with a combined $500 in losses.

# ATTACHMENT III: CALL TYPE IDENTIFICATION

When available, NFIRS data serves as our primary source for assigning call categories. For 4,785 non-mutual aid calls, NFIRS incident type codes were used to assign call types for canceled, EMS, fire, and motor vehicle accident (MVA) calls. Table 5-23 summarizes the method used to identify call types. For 45 additional calls without NFIRS incident types, the CAD data's nature description was used as described in Table 5-24. In both tables, the 25 mutual aid calls were not included.

## TABLE 5-23: Call Types by NFIRS Incident Type Code and Description

| Call Type | Code | Description | Count |
|-----------|------|-------------|-------|
| Canceled | 611 | Dispatched and canceled en route | 193 |
| | 622 | No incident found on arrival | 18 |
| False Alarm | 700 | False alarm or false call, other | 6 |
| | 711 | Municipal alarm system, malicious false alarm | 3 |
| | 713 | Telephone, malicious false alarm | 3 |
| | 714 | Central station, malicious false alarm | 2 |
| | 715 | Local alarm system, malicious false alarm | 8 |
| | 721 | Bomb scare | 1 |
| | 730 | System or detector malfunction, other | 4 |
| | 731 | Sprinkler activated due to the failure or malfunction | 9 |
| | 733 | Smoke detector activation due to malfunction | 53 |
| | 734 | Heat detector activation due to malfunction | 5 |
| | 735 | Alarm system activation due to malfunction | 32 |
| | 736 | Carbon monoxide detector activation due to malfunction | 18 |
| | 740 | Unintentional transmission of alarm, other | 4 |
| | 741 | Sprinkler activation (no fire), unintentional | 15 |
| | 742 | Extinguishing system activation | 1 |
| | 743 | Smoke detector activation (no fire), unintentional | 89 |
| | 744 | Detector activation (no fire), unintentional | 25 |
| | 745 | Alarm system activation (no fire), unintentional | 101 |
| | 746 | Carbon monoxide detector activation | 14 |
| Good Intent | 600 | Good intent call, other | 3 |
| | 651 | Smoke scare, odor of smoke, not steam (652) | 23 |
| | 652 | Steam, vapor, fog, or dust thought to be smoke | 9 |
| | 653 | Smoke from barbecue or tar kettle | 2 |
| | 671 | Hazardous material release investigation | 39 |
| Hazard | 213 | Overpressure rupture of pressure or process vessel | 1 |
| | 221 | Overpressure rupture of air or gas pipe or pipeline | 1 |
| | 223 | Overpressure rupture of pressure or process vessel | 1 |
| | 243 | Fireworks explosion | 2 |
| | 251 | Excessive heat, overheat scorch burns with no ignition | 6 |
| | 400 | Hazardous condition (no fire), other | 1 |
| | 410 | Combustible and flammable gas or liquid spills or leaks | 1 |
| | 411 | Gasoline or other flammable liquid spill | 4 |

| Call Type | Code | Description | Count |
|---|---|---|---|
| | 412 | Gas leak | 48 |
| | 413 | Oil or other combustible liquid spill | 5 |
| | 420 | Toxic chemical condition, other | 1 |
| | 421 | Chemical hazard | 1 |
| | 422 | Chemical spill or leak | 4 |
| | 423 | Refrigeration leak | 2 |
| | 424 | Carbon monoxide incident | 35 |
| | 440 | Electrical wiring/equipment problem, other | 3 |
| | 441 | Heat from short circuit | 7 |
| | 442 | Overheated motor or wiring | 10 |
| | 443 | Breakdown of light ballast | 3 |
| | 444 | Power line down | 12 |
| | 445 | Arcing, shorted electrical equipment | 7 |
| | 461 | Building or structure weakened or collapsed | 2 |
| | 462 | Aircraft standby | 4 |
| | 463 | Vehicle accident, general cleanup | 20 |
| Medical & Other | 311 | Medical assist | 3,519 |
| Motor Vehicle Accident | 322 | Motor vehicle accident with injuries | 64 |
| | 323 | Motor vehicle/pedestrian accident | 3 |
| | 324 | Motor vehicle accident with no injuries | 104 |
| Outside Fire | 130 | Mobile property (vehicle) fire, other | 1 |
| | 131 | Passenger vehicle fire | 6 |
| | 137 | Camper or recreational vehicle (RV) fire | 1 |
| | 140 | Natural vegetation fire, other | 1 |
| | 142 | Brush or brush-and-grass mixture fire | 2 |
| | 143 | Grass fire | 2 |
| | 150 | Outside rubbish fire, other | 1 |
| | 151 | Outside rubbish, trash, or waste fire | 16 |
| | 154 | Dumpster or other outside trash receptacle fire | 12 |
| | 155 | Outside stationary compactor or compacted trash fire | 1 |
| | 160 | Special outside fire, other. | 1 |
| | 162 | Outside equipment fire | 2 |
| Public Service | 510 | Person in distress, other | 2 |
| | 511 | Lock-out | 3 |
| | 512 | Ring or jewelry removal, without transport to hospital | 1 |
| | 521 | Water (not people) evacuation | 2 |
| | 522 | Water or steam leak | 3 |
| | 531 | Smoke or odor removal | 31 |
| | 542 | Animal rescue | 2 |
| | 551 | Assist police or other governmental agency | 9 |
| | 552 | Police matter | 2 |
| | 553 | Public service | 22 |

| Call Type | Code | Description | Count |
|---|---|---|---|
| | 554 | Assist invalid | 1 |
| | 555 | Defective elevator, no occupants | 2 |
| | 561 | Unauthorized burning | 2 |
| | 571 | Cover assignment | 2 |
| | 911 | Citizen's complaint | 3 |
| Structure Fire | 111 | Building fire | 30 |
| | 113 | Cooking fire | 31 |
| | 115 | Incinerator overload or malfunction | 1 |
| | 116 | Fuel burner/boiler, delayed ignition or malfunction, | 1 |
| | 118 | Trash or rubbish fire in a structure | 16 |
| | 121 | Fire in mobile home used as a fixed residence | 4 |
| Technical Rescue | 331 | Lock-in | 2 |
| | 341 | Extrication of victim(s) from building or structure, | 2 |
| | 352 | Extrication of victim(s) from vehicle | 3 |
| | 353 | Removal of victim(s) from stalled elevator | 6 |
| | 355 | Confined space rescue | 1 |
| | 356 | High-angle rescue | 1 |
| | 361 | Swimming/Recreational water areas rescue | 1 |
| | 381 | Rescue or EMS standby for hazardous conditions | 2 |
| **Total** | | | **4,785** |

## TABLE 5-24: Call Type by CAD Nature

| Call Type | Call Description | Calls |
|---|---|---|
| False alarm | Fire - Alarm | 5 |
| | Fire - Alarm Waterflow | 2 |
| Hazard | Fire - Public Works | 2 |
| | Fire - Smoke/Odor/Chemical | 3 |
| Medical and Other | Ambulance Request | 16 |
| | Gunshots | 1 |
| | Welfare Check | 2 |
| Motor Vehicle Accident | Accident – No Injuries | 3 |
| | Accident – W/Injuries | 2 |
| Outside Fire | Fire - Grass/Brush | 1 |
| Public Service | Animal Call | 1 |
| | Assist Public | 2 |
| | Domestic | 1 |
| | Public Works | 1 |
| | Stalled Vehicle | 1 |
| | Terrorizing | 1 |
| | Warrant Service | 1 |
| **Total** | | **45** |

- END -

# POLICE OPERATIONS AND DATA REPORT

## MINOT POLICE DEPARTMENT, MINOT, N.D.

## FINAL REPORT



# CPSM®

# ABOUT THE ASSOCIATION AND THE COMPANY

## INTERNATIONAL CITY/COUNTY MANAGEMENT ASSOCIATION (ICMA)

The International City/County Management Association (ICMA) is a 109-year-old, non-profit professional association of local government administrators and managers, with approximately 13,000 members located in 32 countries.

Since its inception in 1914, ICMA has been dedicated to assisting local governments and their managers in providing services to their citizens in an efficient and effective manner. ICMA advances the knowledge of local government best practices with its website, www.icma.org, publications, research, professional development, and membership.

## CENTER FOR PUBLIC SAFETY MANAGEMENT (CPSM)

The ICMA Center for Public Safety Management (ICMA/CPSM was launched by ICMA to provide support to local governments in the areas of police, fire, and Emergency Medical Services.

The Center also represents local governments at the federal level and has been involved in numerous projects with the Department of Justice and the Department of Homeland Security. In 2014, as part of a restructuring at ICMA, the Center for Public Safety Management (CPSM) spun out as a separate company and is now the exclusive provider of public safety technical assistance for ICMA. CPSM provides training and research for the Association's members and represents ICMA in its dealings with the federal government and other public safety professional associations such as CALEA, PERF, IACP, IFCA, IPMA-HR, DOJ, BJA, COPS, NFPA, etc.

The Center for Public Safety Management, LLC, maintains the same team of individuals performing the same level of service that it had for ICMA. CPSM's local government technical assistance experience includes workload and deployment analysis using our unique methodology and subject matter experts to examine department organizational structure and culture, identify workload and staffing needs, and identify industry best practices.

We have conducted more than 400 such studies in 46 states and provinces and more than 275 communities ranging in population size 3,300 (Lewes, DE) to 800,000 (Indianapolis, IN).

**Thomas Wieczorek** is the Director of the Center for Public Safety Management.
**Leonard Matarese** serves as the Managing Partner for Research and Project Development.
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# SECTION 1. EXECUTIVE SUMMARY

The Center for Public Safety Management, LLC (CPSM) was commissioned to review the operations of the Minot Police Department (MPD). While our analysis covered all aspects of the department's operations, particular areas of focus of this study included identifying appropriate staffing of the department given the workload, community demographics, and crime levels; the effectiveness of the organizational structure; and efficiency and effectiveness of division/unit processes.

We analyzed the department workload using operations research methodology and compared that workload to staffing and deployment levels. We reviewed other performance indicators that enabled us to understand the implications of the service demand on current staffing. Our study involved data collection, interviews with key operational and administrative personnel, focus groups with line-level department personnel, on-site observations of the job environment, data analysis, comparative analysis, the development of alternatives and recommendations, and engagement with key city stakeholders.

Based upon CPSM's detailed assessment of the Minot Police Department, we conclude that the department is doing an outstanding job—considering the challenges of policing in today's environment—with a staff dedicated to the department's mission of providing quality police service. Throughout this report, we will strive to allow the reader to look inside the department to understand its strengths and challenges. We sincerely hope that all parties constructively utilize the information and recommendations contained herein to improve the operations of the Minot Police Department to provide an even higher level of service to the community.

As part of this Executive Summary, we offer general observations that identify some of the department's more significant issues. We also list key recommendations for consideration; we believe these recommendations will enhance organizational effectiveness. Often, these types of recommendations require a substantial financial commitment. It is important to note that this report will examine specific sections of the department and offer a discussion of our observations and recommendations for each.

The list of recommendations is extensive. Should the Minot Police Department choose to implement any or all recommendations, it must be recognized that this process will not take just weeks or even months to complete but perhaps years. The recommendations are intended to form the basis of a long-term improvement plan for the city and department. Though lengthy, this list of recommendations is standard in our operational assessments of agencies around the country and should not be interpreted as an indictment of the department. While all of the recommendations are important, we suggest the Minot Police Department, in conjunction with the City Manager and community members, decide which recommendations should take priority for implementation.

§ § §

# GENERAL OBSERVATIONS

- The employees of the Minot Police Department spoke very highly of the Minot community. Employees cited tremendous community support for the officers of the department as well as law enforcement in general. Many employees cited this dynamic as being among the greatest draws to wanting to work in the City of Minot.

- The Minot Police Department is a mid-sized police department in a mid-sized community. However, in many respects it is a large police agency in a large community by North Dakota standards. As such, the department performs functions and is equipped better than most of its comparable peer-sized agencies around the country. This makes sense considering the department's role in policing within the northwestern area of the state. However, in other ways the department is similar to smaller departments and communities where everybody knows one another and most employees perform multiple roles for the operational success of the agency.

- As with any police department, there is always concern about the welfare and morale of the workforce. Although some employees cited concerns about many of the common complaints we normally hear (staffing, communication, leadership, etc.) during an assessment, we found the MPD employees to be professional and positive during our interactions, interviews, and group sessions. This is not to imply we conducted a survey of morale and asked specifically if employees were happy. However, we have conducted many of these assessments, and MPD employees were generally positive compared to most assessment projects.

- This report will make some limited recommendations for additional personnel. However, in general we found the Minot Police Department to be well-staffed to manage the patrol and investigative workload of the agency.

- The department is well-equipped and possesses most of the modern technology that is present in contemporary police agencies.

- The management team of the MPD is professional and engaged and appeared to be taking steps to either move the agency toward positive change or keep the agency contemporary in modern policing principals.

- There are some long-term planning concerns that should be addressed by the department and the City of Minot. This includes a decision on the future home of the department, the future management structure of the community's consolidated dispatch center, and staffing considerations associated with the Minot International Airport.

§ § §

# KEY RECOMMENDATIONS

## Section 3. Department Overview

*(See pp. 12-25.)*

1. CPSM recommends the Minot Police Department engage in a facilitated strategic planning process.

2. We recommend that MPD establish a succession planning document that will outline necessary and desired training for employees in key positions in the department.

3. We recommend the MPD include an effective date and an expiration date when issuing a department directive.

4. We recommend that MPD establish a process whereby long-term directives are added to the department's policy manual.

5. We recommend that MPD establish a process whereby employees acknowledge receipt of department directives as required by policy.

6. We recommend MPD update the department's organizational chart that accurately depicts current operations and functions.

7. CPSM recommends that MPD convert one captain position to a deputy/assistant chief position.

8. We recommend the department add an FTE administrative assistant to the department organizational structure.

9. We recommend that MPD take steps to clarify its personnel rosters and keep those rosters updated on a regular basis.

10. We recommend a printable complaint form be offered on the police department's website.

11. We recommend the department take steps to separately classify, investigate, and track service complaints against the department.

12. We recommend that MPD take steps to involve sergeants in low-level internal investigations.

13. MPD should conduct an audit of all internal investigations going back three years to ensure all investigations were completed as required by policy.

14. CPSM recommends that MPD explore off-the-shelf software solutions for tracking and maintaining internal investigations and other personnel matters.

## Section 4. Administration

### Community Outreach

*(See pp. 26-27.)*

15. We recommend that MPD enhance overall community engagement with training afforded to employees on expectations of community engagement and interaction.

### Recruitment, Hiring, and Training

*(See pp. 27-28.)*

16. We recommend that recruitment, hiring, and training functions be denoted on the department organization chart.

17. CPSM recommends that MPD explore the various changes to the recruitment and training efforts outlined in our discussion.

18. CPSM recommends MPD develop a strategic plan for the P&E Unit and begin to transition sworn personnel to a civilian property and evidence administrator and evidence technicians.

19. CPSM recommends an after-hours and emergency process be documented in the Lexipol policy system for organizational reference.

20. CPSM recommends that MPD continue to develop the section manual as a usable guide for P&E personnel. CPSM also recommends that MPD ensure that all members assigned to the P&E Unit become formal members of the IAPE and use IAPE resources to continue to update and expand the section property manual.

21. CPSM recommends MPD consider developing a "Property Staff and Activity Report" to measure productivity in Property and Evidence. IAPE can provide guides for developing an activity report that meets the standards expected of a P&E section.

22. CPSM recommends MPD consider using part-time (sometimes retired personnel) as evidence technicians to provide the extra effort to improve systems and provide "back-up" for the current evidence technician.

23. It is recommended that the MPD develop an audit schedule annually or bi-annually that produces an administrative report of activity.

24. CPSM recommends that MPD complete the workspace study and initiate a process to reduce the number of property room storage locations.

25. CPSM recommends a written check-in and check-out signature board at the entry/exit points of the main property rooms.

26. It is recommended that MPD seek professional assistance and when appropriate purchase a design storage system that will reduce the backlog and create open space in a legal and proper method. This will reduce the chances of misplaced items, improve the ability to track and locate evidence, and guard against workplace injuries.

27. CPSM highly recommends MPD utilize the capabilities of the records management system to develop a regular monthly report that documents incoming and outgoing items, and how many items are disposed of each month. This approach is highly recommended by IAPE and will reduce liability exposure while improving risk management.

28. CPSM recommends MPD strongly consider a temporary task force comprised of part-time (trained) personnel to conduct a complete audit of the property room and dispose of unneeded items.

29. MPD should seek out a formal property room audit through IAPE once the workspace project is completed in 2024.

*Records Unit*

*(See pp. 34-38.)*

30. It is recommended that MPD begin to develop a multiyear plan to transition the sergeant and master officer positions to professional (civilian) staff to oversee the Records and the Property and Evidence Units.

31. CPSM strongly supports the current approach by MPD to cross-train the Records staff to achieve the outcomes identified in this report.

32. CPSM recommends MPD use its RMS system and other systems to provide a monthly statistical report on the total tasks the Records staff perform.

33. CPSM recommends the MPD consider an online reporting system to decrease the need for patrol officers to respond to "report only" calls for service.

34. CPSM recommends MPD increase training and develop skill levels among the records technicians; MPD should establish an in-house training system to meet mandated training requirements for all new Records personnel by using a training matrix.

35. It is recommended that Records supervisors use national organization membership to participate in webinars and learn contemporary methods that may help solve current and future challenges.

36. CPSM recommends MPD consider hiring part-time records personnel to offset the increasing workload and increase the current number of full-time staff.

## Section 5. Operations

### Patrol

*(See pp. 39-58.)*

37. CPSM recommends that MPD establish a training matrix for patrol officers and sergeants that includes the benefits of patrol officers being proactively engaged with the community and other modern policing strategies.

38. CPSM recommends that Minot PD divide up its geographic beat structure into a greater number of beats that are smaller in size than its existing beats.

39. We also recommend the department establish smaller reporting districts that will aid in future crime analysis work.

40. We recommend MPD adjust some officers on the evening (mid) shift from reporting for duty from 4:00 p.m. to 2:00 a.m. to reporting for duty from 2:00 p.m. until midnight in order to increase the number of available officers during peak call volume times.

41. CPSM recommends that MPD explore the expansion of the use of civilian, non-sworn employees to assist the patrol division. This includes the reclassification of the Parking Control Officer (PCO) to a Community Service Officer (CSO) and adding one FTE civilian CSO.

42. We recommend MPD pursue an online reporting option.

### Tactical Team (SWAT)

*(See pp. 61-63.)*

43. CPSM recommends Minot increases its SWAT team training to 16 hours per month in compliance with NTOA.

44. MPD should consider equipping patrol officers who are SWAT team members with SWAT resources in order to have trained tactical officers available to immediately respond to a critical incident. Additionally, we recommend allowing SWAT officers to check out their assigned department-issued SWAT rifle daily to be secured in their assigned patrol vehicle rather than the shared patrol rifle.

45. We recommend MPD train sergeants in the use of less-lethal munitions and equip the supervisor vehicles with less-lethal force options.

### K-9 Operations and Bomb Team

*(See p. 63.)*

46. CPSM recommends MPD assign one of the K-9 teams to the Focused Enforcement Unit.

### Focused Enforcement Unit

*(See p. 64.)*

47. CPSM recommends MPD assign one of the K-9 teams to the Focused Enforcement Unit.

48. CPSM recommends at least one police officer be assigned full-time to the Focused Enforcement Unit.

49. We recommend MPD develop a policy for the Focused Enforcement Unit outlining the mission of the unit, specific goals, and procedures for deployment and use. This policy should clearly specify intelligence-led policing initiatives that will be used to make the Focused Enforcement Unit effective.

### Police Patrol Fleet

*(See pp. 64-65.)*

50. CPSM recommends MPD assign no more than two officers to each marked police vehicle and purchase additional marked police vehicles to allow for this.

51. We recommend officers check-out a patrol rifle daily and it be inspected at the beginning and end of each shift. The rifles should be zeroed in on the range regularly.

### Animal Control and Parking Control

*(See pp. 65-66.)*

52. CPSM recommends MPD reclassify the Parking Control Officer position to Community Service Officer (CSO). The CSOs can be cross-trained for animal control, parking enforcement, traffic control, vehicle impounds, driver information exchange on non-reportable, minor vehicle accidents, handling report-only lower-level criminal offenses that are not in progress, and a variety of other administrative tasks currently handled by patrol officers. The CSO positions can also assist the Community Outreach sergeant with community events.

53. One additional CSO position is recommended in FY 25 by converting the fleet manager position from part-time to full-time and reclassifying it as a CSO.

54. We recommend cross-training the Animal Control Officers (ACO) as Community Service Officers (CSOs) in addition to their ACO duties for use during peak times on patrol and as a force multiplier.

## Section 6. Investigations

*(See pp. 67-88.)*

55. CPMS recommends the MPD expand its current investigator (600) policy to include specific assignments within CID and define the position of senior/master officer positions.

56. CPSM recommends MPD expand Policy 600 and provide a written matrix of detective rotation assignments and the process of how investigators are selected.

57. CPSM recommends CID consider a detective rotation schedule of three to five years, with the ability to extend individual rotations based on investigative needs.

58. With the constant changes in BWV laws, redacting software, and new technologies by Axon, MPD will need to invest and possibly expand the evidence technician position. CPSM recommends MPD increase the training level of the evidence technician and provide ongoing professional development.

59. CPSM recommends CID establish an SOP, inclusive of templates and resources to further the professional development of all personnel.

60. CPSM recommends MPD's CID develop a more comprehensive list of professional training through a training matrix and evaluate the need for additional courses as CID develops new specialized assignments in the future.

61. CPSM recommends that CID develop an Excel spreadsheet or other document to track special operations and search warrants involving CID personnel.

62. CPSM recommends that as the workspace project is completed MPD should seek out the ability to provide private workspace for sexual assaults and domestic violence detectives with consideration for the sensitive nature of their victim relationships and types of investigations.

63. CPSM recommends the MPD consider the reassignment of personnel to structured areas of investigations such as violent and property crimes as well as into smaller workgroups such as burglaries, robberies, sex crimes, thefts, and homicides.

64. CPSM recommends MPD to use its RMS system to develop a 30- or 60-day reporting system to track updates and progress of investigations.

65. CPSM recommends the Minot Police Department develop a database (preferably with RMS) to track and report on the number of cases assigned to each detective and the number of investigations closed by patrol officers.

66. CPSM also recommends that MPD seek out a solution to ensure that the arrests made by warrant service are entered into the RMS system and updated in the county system to better track clearance rates related to warrant arrest. This may be a feature best accomplished by a full-time crime analyst position as recommended in this report.

67. CPSM recommends MPD develop a policy with the assistance of Lexipol to guide the Bomb Unit and define operational standards and protocols that meet and exceed industry standards.

68. It is recommended that CID assign the narcotics unit to an intelligence-led unit of detectives trained to use 21st-century policing strategies to focus on career criminals, crime trends, and violent crimes.

69. It is recommended that MPD utilize one to two former (retired) police officers with investigative experience to assist in evaluating and reviewing unsolved homicides and missing persons cases on an annual and as-needed basis.

70. Based on the number of Part I crimes and the number of police officers, CPSM recommends that MPD consider the addition of one full-time or part-time civilian analyst.

71. CPMS recommends that the crime analyst receive ongoing professional training from the IACA and other entities.

72. CPSM also recommends that MPD continue to develop and advance the role of the evidence technician position by advancing their annual training to include national conferences and out-of-state training with entities such as the Secret Service in order to advance MPD's capabilities.

73. CPSM recommends that MPD continue to assign personnel to regional, state, and federal task forces and attempt to ensure full-time commitment when resources are available.

74. CPSM recommends MPD assign one full-time investigator to the ICAC task force to fulfill its task force obligation while promoting the ICAC initiative throughout the region.

75. CPSM recommends that CSRU develop an ongoing training matrix to ensure ongoing professional development.

76. CPSM recommends that MPD consider developing a standalone crime scene (civilian) technician unit in support of the continued use of the CSRU component.

77. CPSM recommends the MPD restructure CID in striving for an intelligence-led policing model suggested by IACP and PERF to pursue career criminals and known suspects through intelligence-led strategies.

78. MPD should seek out national leadership training courses for frontline personnel and which are focused on self-leadership, fortitude, and providing an understanding of today's policing challenges.

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# SECTION 2. METHODOLOGY

## Data Analysis

CPSM used numerous sources of data to support our conclusions and recommendations for the Minot Police Department. Information was obtained from the FBI Uniform Crime Reporting (UCR) Program, Part I offenses, along with numerous sources of internal information. UCR Part I crimes are defined as murder, rape, robbery, aggravated assault, burglary, larceny-theft, and larceny of a motor vehicle. Internal sources included data from the computer-aided dispatch (CAD) system for information on calls for service (CFS).

All data, analysis, and recommendations, especially for patrol operations, are based upon CPSM's examination of 32,206 CAD events during the period of October 1, 2022, through September 31, 2023, which are those calls handled by the department's patrol officers. Of those 32,206 calls noted, 22,413 were community-initiated calls requiring service, and 9,197 were calls initiated by MPD police officers.

## Interviews

This study relied extensively on intensive interviews with personnel. Remote (Zoom meetings), on-site, and in-person interviews were conducted with people throughout the organization and the city.

## Focus Groups

A focus group is an unstructured group interview in which the moderator actively encourages discussion among participants. Group discussion permits greater exploration of topics. For the purposes of this study, focus groups were held with a representative cross-section of employees within the department.

## Document Review

CPSM consultants were furnished with numerous reports and summary documents by the Minot Police Department. Information on planning, personnel staffing, deployment, monthly reports, annual reports, operations manuals, evaluations, training records, and performance statistics were all reviewed by project team staff. Follow-up emails and phone calls were used to clarify information as needed.

## Operational/Administrative Observations

Numerous observations were conducted over the course of the evaluation period. These included observations of general patrol operations, investigations, and administrative services such as records, property and evidence, professional standards, and administrative functions. CPSM representatives engaged in all facets of department operations from a "participant observation" perspective.

## Staffing Analysis

In virtually all CPSM studies, we are asked to identify appropriate staffing levels. That is the case in this study as well. This report will discuss workload, operational and safety conditions, and other factors to be considered in establishing appropriate staffing levels. Staffing recommendations are based on our comprehensive evaluation of all relevant factors.

# SECTION 3. COMMUNITY AND DEPARTMENT OVERVIEW

## COMMUNITY

The City of Minot is located in the north-central part of the State of North Dakota. It is the county seat for Ward County and is the fourth most populous city in North Dakota. The city was founded in 1886 during the construction of the Great Northern Railroad and today serves as a primary city of the Minot micropolitan area, consisting of McHenry, Renville, and Ward counties. The city is within 50 miles of the United States–Canada border.

U.S. Census data places the city size at 27.2 square miles, which represents a growth of 10 square miles from the city's geographic size in 2010 (17.4 square miles).
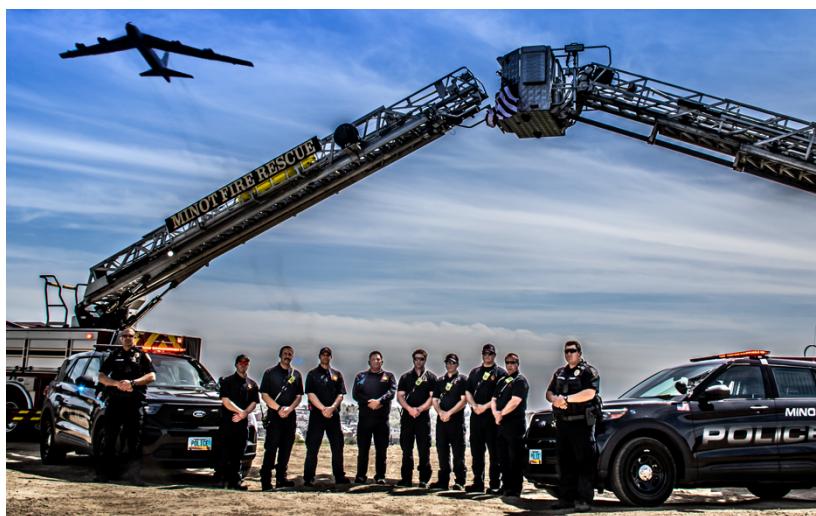


The city is well known as the home of Minot Air Force Base, which is located 13 miles north and is the city's largest employer. The Minot AFB is among the most important military installations in the United States because of its role in the national nuclear capabilities. The community is also home to Minot State University, the third-largest university in the State of North Dakota, and a campus of the North Dakota University system. The oil industry is also a significant employer and economic driver for the Minot community. While many in this industry live in Minot, the industry also has a significant transient workforce that impacts the population of the community.

Minot's climate is known for very cold winters with an average snowfall of 42 inches and almost 40 days annually of below-zero temperatures, while summers are warm to moderately hot with frequent thunderstorms.

Minot uses a council-manager system of government with seven council members elected from within the city's seven wards. The city's mayor is separately elected. The city manager handles the city's day-to-day business.

### Demographics

According to the U.S. Census, the estimated population in Minot was 47,759 in 2022. That is a slight decline from the 2020 census, which showed the population to be 48,377. Since 1980, the city has experienced moderate growth, including 18 percent growth between 2010 and 2020 (40,888 to 48,377).

The following table provides a breakdown of select demographic data in Minot compared to Ward County, the State of North Dakota, and the United States.

## TABLE 3-1: Select Demographic Data (2020 Census)

| | Minot, ND | Ward County, ND | North Dakota | United States |
|---|---|---|---|---|
| Population | 48,377 | 69,919 | 779,094 | 331,449,281 |
| White | 82.30% | 87.10% | 86.60% | 75.50% |
| Black or African American | 4.70% | 4.70% | 3.60% | 13.60% |
| American Indian | 2.30% | 2.80% | 5.30% | 1.30% |
| Asian Alone | 2.00% | 1.80% | 1.70% | 6.30% |
| Hispanic or Latino | 7.10% | 7.00% | 4.60% | 19.10% |
| Owner Occupied Housing | 55.30% | 59.80% | 63.00% | 64.50% |
| Median Value of Housing | $217,500 | $224,200 | $209,900 | $244,900 |
| Median Gross Rent | $893 | $951 | $853 | $1,163 |
| Persons Per Households | 2.24 | 2.4 | 2.37 | 2.6 |
| High School Grad Over Age 25 | 92.90% | 93.80% | 93.30% | 88.90% |
| Bachelor's Degree of Higher | 30.30% | 29.40% | 31.10% | 33.70% |
| Median Household Income | $68,453 | $72,227 | $68,131 | $69,021 |
| Persons in Poverty | 11.70% | 9.40% | 11.50% | 11.50% |
| Population per Square Mile | 1,774 | 34.7 | 11.3 | 93.8 |

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# LAW ENFORCEMENT SERVICES

The Minot Police Department is a full-service law enforcement agency and is the primary law enforcement agency serving the City of Minot. Due to the department's size and geographic remoteness, it is among the larger police agencies in North Dakota and provides assistance to many agencies and communities in the region when requested. Although the Ward County Sheriff's Department is headquartered in Minot, it is much smaller and relies on the MPD for assistance when needed.

We inquired with MPD staff about who it might rely on in a mutual aid event. The department said Ward County Sheriff and the State Patrol would be the most capable to assist but both agencies are far more limited with their available assets to assist. There are also smaller communities with police departments around the greater Minot area, but most are very small agencies that would be unlikely to offer any significant assistance.

Neither the local school district nor Minot State University have police departments; both rely on MPD for all law enforcement services to their campuses. Minot Air Force base does have security and police services but because these are military assets, their ability to aid MPD is very limited.

## Uniform Crime Reports / Crime Trends

While communities differ from one another in population, demographics, geographical landscape, and socioeconomic distinctions, comparisons to other jurisdictions can be helpful in illustrating how crime rates in Minot measure up against those of other North Dakota communities as well as the State of North Dakota and the nation overall.

The FBI's Uniform Crime Reporting (UCR) Program assembles data on crime from police departments across the United States; the reports are utilized to measure the extent, fluctuation, and distribution of crime. For reporting purposes, criminal offenses are divided into two categories: Part 1 offenses and Part 2 offenses. For Part 1 offenses, representing the most serious crimes, the UCR index is split into two categories: violent crimes and property crimes. Violent crimes include murder, rape, robbery, and aggravated assault. Property crimes include burglary, larceny, and motor vehicle theft. Crime rates are expressed (indexed) as the number of incidents per 100,000 population to allow for comparison.

The following tables and figures include the most recent information that is publicly available at the national level. This includes crime reports for 2013 through 2022 and clearance rates for 2021 and 2022.

In comparing Minot data with other North Dakota jurisdictions, one can see that MPD reports a violent crime rate similar to the North Dakota average and a property crime rate significantly lower than the state average. Both categories of crime numbers are significantly lower than the national average.

## TABLE 3-2: Reported Crime Rates in 2021 and 2022, by City

| Municipality | State | 2021 | | | | 2022 | | | |
| | | Population | Crime Rates | | | Population | Crime Rates | | |
| | | | Violent | Property | Total | | Violent | Property | Total |
|---|---|---|---|---|---|---|---|---|---|
| Bismarck | ND | 75,396 | 281 | 1,576 | 1,857 | 74,604 | 307 | 1,391 | 1,698 |
| Dickinson | ND | 24,179 | 252 | 922 | 1,175 | 24,577 | 236 | 879 | 1,115 |
| Fargo | ND | 127,313 | 500 | 3,194 | 3,694 | 127,649 | 607 | 3,037 | 3,644 |
| Jamestown | ND | 14,879 | 302 | 1,425 | 1,727 | 15,772 | 222 | 1,116 | 1,338 |
| Grand Forks | ND | 56,253 | 299 | 1,547 | 1,845 | 58,620 | 292 | 1,733 | 2,025 |
| Mandan | ND | 23,292 | 365 | 3,332 | 3,697 | 24,666 | 235 | 2,903 | 3,138 |
| West Fargo | ND | 39,704 | 161 | 1,007 | 1,169 | 39,987 | 180 | 913 | 1,093 |
| Williston | ND | 31,680 | 287 | 909 | 1,196 | 25,513 | 494 | 1,634 | 2,128 |
| **Minot** | **ND** | **48,086** | **250** | **821** | **1,071** | **47,278** | **281** | **662** | **943** |
| **North Dakota** | | **774,948** | **241** | **1,398** | **1,639** | **779,261** | **266** | **1,335** | **1,601** |
| **National** | | **\*332,031,554** | **396** | **1,933** | **2,329** | **332,403,650** | **380** | **1,954** | **2,334** |

**Note**: *We used national crime and clearance rates estimated in the FBI's report _The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates._

The following figure visually represents the violent and property crime rates for Minot from 2013 through 2022. Violent crime has remained static, while property crime overall has declined considerably over that period of time.

## FIGURE 3-1: Reported Minot Violent and Property Crime Rates, by Year
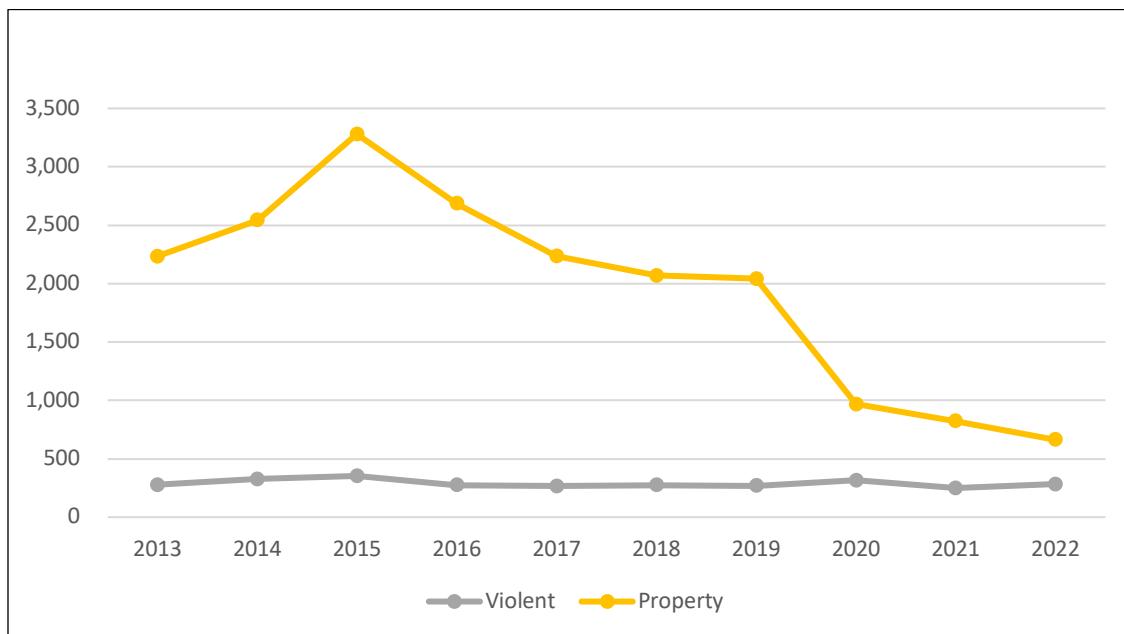


The next figure shows that prior to 2017, the overall crime rate in Minot was above the North Dakota average, yet by 2019–2020, the overall crime rate fell below the North Dakota average. This also occurred at a time when overall crime in the state was declining.

## FIGURE 3-2: Reported City and State Crime Rates, by Year



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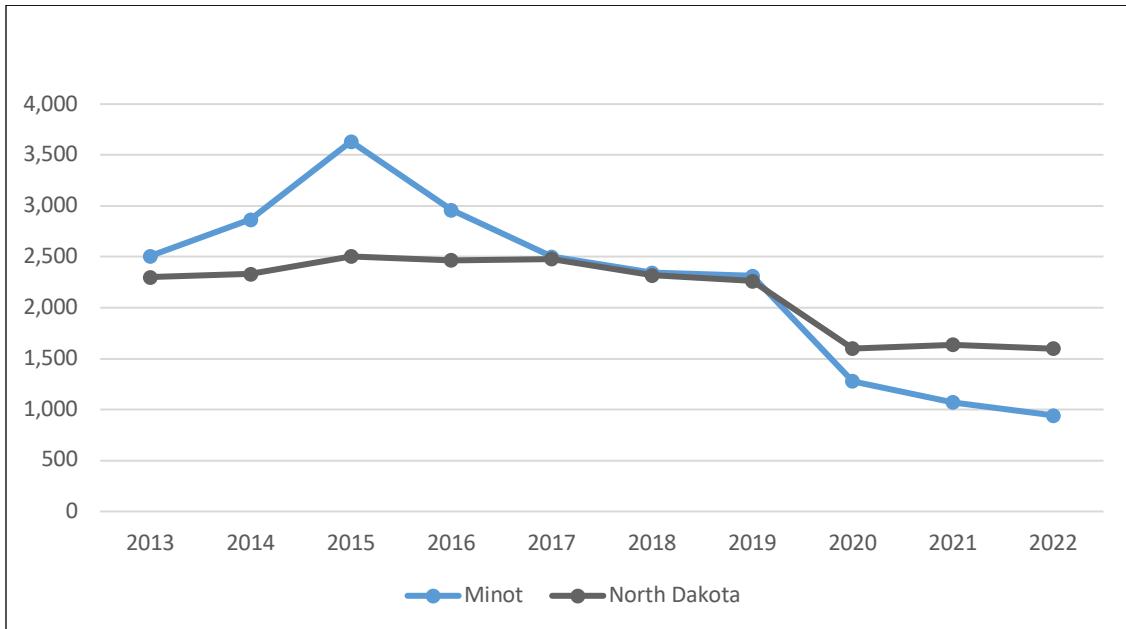
## TABLE 3-3: Reported Minot, North Dakota, and National Crime Rates, by Year

| Year | Minot | | | | North Dakota | | | | National | | | |
|------|------------|---------|----------|-------|------------|---------|----------|-------|-------------|---------|----------|-------|
| | Population | Violent | Property | Total | Population | Violent | Property | Total | Population | Violent | Property | Total |
| 2013 | 44,635 | 276 | 2,234 | 2,509 | 747,626 | 261 | 2,040 | 2,301 | 321,947,240 | 362 | 2,627 | 2,989 |
| 2014 | 47,682 | 325 | 2,542 | 2,867 | 764,102 | 261 | 2,072 | 2,333 | 324,699,246 | 357 | 2,464 | 2,821 |
| 2015 | 49,842 | 353 | 3,280 | 3,633 | 781,773 | 247 | 2,257 | 2,504 | 327,455,769 | 368 | 2,376 | 2,744 |
| 2016 | 51,265 | 273 | 2,686 | 2,959 | 783,900 | 244 | 2,224 | 2,468 | 329,308,297 | 383 | 2,353 | 2,736 |
| 2017 | 50,118 | 267 | 2,235 | 2,502 | 755,393 | 281 | 2198 | 2,479 | 325,719,178 | 383 | 2,362 | 2,745 |
| 2018 | 48,829 | 274 | 2,070 | 2,344 | 760,077 | 281 | 2040 | 2,321 | 327,167,434 | 369 | 2,200 | 2,568 |
| 2019 | 48,185 | 270 | 2,042 | 2,312 | 762,062 | 285 | 1977 | 2,262 | 328,239,523 | 379 | 2,010 | 2,489 |
| 2020 | 48,108 | 314 | 967 | 1,280 | 765,309 | 244 | 1356 | 1,600 | 331,449,281 | 399 | 1,958 | 2,357 |
| 2021 | 48,086 | 250 | 821 | 1,071 | 774,948 | 241 | 1398 | 1,639 | 332,031,554 | 396 | 1,933 | 2,329 |
| 2022 | 47,278 | 281 | 662 | 943 | 779,261 | 266 | 1335 | 1,601 | 332,403,650 | 380 | 1,954 | 2,334 |

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The following tables show the reported crime clearance rates for the Minot Police Department in 2021 and 2022. In general, Minot shows a clearance rate that is on par with or better than the state and national average for those crime categories with a higher volume of reported crimes (assault, burglary, larceny, and vehicle theft).

**TABLE 3-4: Reported Minot, State of North Dakota, and National Crime Clearance Rates, 2021**

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 3 | 100% | 17 | 16 | 94% | 22,900 | 11,500 | 50% |
| Rape | 41 | 7 | 17% | 340 | 66 | 19% | 144,300 | 16,500 | 11% |
| Robbery | 4 | 1 | 25% | 186 | 65 | 35% | 202,200 | 48,800 | 24% |
| Aggravated Assault | 72 | 52 | 72% | 1,321 | 796 | 60% | 943,800 | 297,500 | 32% |
| Burglary | 115 | 14 | 12% | 2,899 | 358 | 12% | 899,700 | 107,200 | 12% |
| Larceny | 143 | 23 | 16% | 5,958 | 751 | 13% | 4,627,000 | 508,900 | 11% |
| Vehicle Theft | 137 | 25 | 18% | 1,979 | 406 | 21% | 890,200 | 68,500 | 8% |

**Note**: *We used national crime and clearance rates estimated in the FBI's report *The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates*

**TABLE 3-5: Reported Minot, State of North Dakota, and National Crime Clearance Rates, 2022**

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 2 | 67% | 30 | 23 | 77% | 21,797 | 10,752 | 49% |
| Rape | 37 | 3 | 8% | 379 | 72 | 19% | 132,997 | 27,856 | 21% |
| Robbery | 8 | 3 | 38% | 216 | 83 | 38% | 215,760 | 51,930 | 24% |
| Aggravated Assault | 85 | 54 | 64% | 1,448 | 853 | 59% | 756,601 | 334,405 | 44% |
| Burglary | 92 | 15 | 16% | 2,585 | 409 | 16% | 916,970 | 125,838 | 14% |
| Larceny | 89 | 17 | 19% | 5,818 | 876 | 15% | 4,947,709 | 633,098 | 13% |
| Vehicle Theft | 132 | 28 | 21% | 1,999 | 428 | 21% | 953,827 | 87,140 | 9% |

## Strategic Planning

Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future.

Effective strategic planning articulates where an organization is headed, and the actions needed to make progress and how it will know if it is successful.

The MPD does not have a written strategic plan. Most planning done by the department is made at the management level and is often an informal process connected to the annual budget process. Contained within this report will be a number of suggestions and recommendations; some of the recommendations may require long-term planning. We encourage the Minot Police Department to engage a cross-section of the department as well as community stakeholders to chart a path forward in a facilitated strategic planning process. A process that involves long-term planning with measurable goals and objectives is the most effective manner of strategic planning, and a process that involves a cross-section of the community, including elected officials, facilitates a commitment to an agreed-upon plan.

## Recommendation:

- CPSM recommends the Minot Police Department engage in a facilitated strategic planning process. (Recommendation No. 1.)

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## Succession Planning

For many smaller and mid-sized police departments, such as the Minot Police Department, succession planning is difficult and often informal. Oftentimes, resources can be scarce, and it can be difficult to have key management personnel away for any length of time for professional development.

MPD does not have a written succession plan. Nor does the department have an established training matrix for employees in key positions to ensure professional development for the benefit of both the employee and the city. We encourage the MPD to establish a succession plan in the form of a training matrix that will commit personnel to a professional training and development plan. An effective plan should successfully position key personnel for future positions and leadership within the department and the policing industry.

## Recommendation:

- We recommend that MPD establish a succession planning document that will outline necessary and desired training for employees in key positions in the department. (Recommendation No. 2.)

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A succession plan should not be confused with "succession of command." MPD does have a succession of command document that outlines the department authority structure in the absence of key command personnel.

## Minot Police Department Mission Statement

The Mission Statement of the Minot Police Department is as follows:

> The Minot Police Department will provide excellent police services to the citizens and guests of the City of Minot. We will strive to reduce and prevent crime, instill a sense of safety and security, and to work in partnership with our community to preserve a high quality of life. We will use our training and resources along with our values of honor, integrity, and trustworthiness to serve our citizens. Our goal is

*to make Minot a better place for all to live through our commitment to our profession.*

## Department Policy Manual

The Minot Police Department uses a subscription-based policy service provided by Lexipol. In our experience, subscription-based services for department policy manuals are an industry best practice. Departments that manage their own policy manuals struggle to keep up with timely updates as changes in the law enforcement profession occur; additionally, any policy that gets created or updated should be legally vetted to ensure the policy will stand up to outside scrutiny if and when litigation occurs. Subscription-based services provide these up-to-date changes in a timely manner with industry best practice policies that have been legally reviewed.

Services such as Lexipol will provide an agency with an off-the-shelf manual that requires minimal customization. Some agencies elect to adopt the manual "as is" with minimal customization (i.e., inserting the agency name where appropriate). However, the implementation process allows agencies to modify the Lexipol policy as much as they like to either fit their operational culture or to match past policies out of a previous manual. When modifications are made, those modifications are not typically vetted by Lexipol's legal services and are, therefore, potentially outside the policy's original intent. We discussed this with MPD staff and learned that modifications to the Lexipol policy were made, but up to this point, any updates distributed by Lexipol have not resulted in any significant conflicts.

In addition to the policy, Lexipol also offers a policy attestation tool that creates a record that all employees have reviewed and understood the policy. The service also offers a training tool called Daily Training Bulletins (DTBs) that challenge an employee's understanding and application of policy through scenario-based training. The Minot Police Department uses this module of the Lexipol service.

MPD also uses a "Department Directive" method of disseminating information about a temporary change in procedure or practice. This is very common in agencies; in the MPD it is covered in department Policy 201, Departmental Directives. The policy states that the department will ensure that employees receive and acknowledge receipt of the department directive; additionally, policy states that long-term department directives should be added to the permanent policy manual at some point. There is ambiguity regarding when directives expire or should be converted into policy. We could not find evidence of this policy being followed consistently. Some employees expressed frustration at not always being aware of changes and some changes were reported to happen by word of mouth versus a written directive. An example was given that COVID protocols implemented in 2020 technically never went away; employees reported that they simply stopped doing some of the practices such as wearing masks.

We believe this situation can be mitigated by including an effective date and an expiration date on the directives when issued. Management should then be cognizant to either extend the directive as the expiration date approaches, add the directive into the department policy manual as a permanent practice/procedure, or allow the directive to expire. The department also needs to establish a procedure of ensuring employees have received department directives as outlined in policy.

## Recommendations:

- We recommend that MPD include an effective date and an expiration date when issuing a department directive. (Recommendation No. 3.)

- We recommend that MPD establish a process whereby long-term directives are added to the department's policy manual. (Recommendation No. 4.)

- We recommend that MPD establish a process whereby employees acknowledge receipt of department directives as required by policy. (Recommendation No. 5.)

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## Accreditation

*Law enforcement agency (LEA) accreditation is a self-initiated process of adopting and maintaining standardized policies and procedures. LEAs operate within a specific set of state- and/or nationally recognized standards that are determined and defined by an accreditation body.[1]*

Within the United States, one nationally recognized accreditation program called the Commission on Law Enforcement Accreditation (CALEA) applies to a municipal police department such as the Minot Police Department. In many states, there is a separate accreditation process either through a state police chiefs association or through the state itself. North Dakota does not have a state accreditation program, meaning that options for North Dakota police departments, including Minot PD, are limited to the CALEA process. In our experience, agencies that have pursued accreditation through CALEA have found the process to be labor intensive and costly. Yet, some agencies have reported positive organizational change that has resulted from these processes.

MPD has not pursued accreditation through CALEA, and it is unclear if past administrations ever evaluated the need to pursue accreditation. Due to the department's embrace of Lexipol to ensure policies are up to date, and based on our observations of the department, we do not see a need to specifically recommended that MPD pursue accreditation. However, this is a department choice and being an accredited agency can provide an additional layer of confidence to the community that their police department is contemporary and embracing the most up-to-date concepts of constitutional policing. The decision about accreditation should be regularly evaluated by the agency, with the benefits weighed against the cost and operational impact.

## Department Structure / Chain of Command

The Minot Police Department is led by a police chief and is divided into three divisions, each led by a police captain. The three captains, as well as the professional standards lieutenant, report directly to the Police Chief. The three divisions are Operations (Patrol), Administration, and Investigations.

The organizational chart that follows is a functional chart created by CPSM and based on a Microsoft Excel document "chart" provided by the department. The department's chart showed individual employees such as each officer position in patrol but not necessarily every position in the department. The department chart also showed some functions that did not include FTE employees, and not all functions were listed. One example is bike patrol is included under Operations even though bike patrol is only a part-time function staffed by certain officers as time, weather, and staffing permit; at the same time, personnel and training, a function that is a vital part of the department's day-to-day business, was not included as a function.

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1 https://cops.usdoj.gov/LEA_accreditation

Finally, there were listings found on the department's chart that had either been moved to another area of department operations or had been eliminated from the department. For example, court services were included in the department's chart under the administration captain, yet these services are no longer managed by the department. School resource officers were listed under Operations, yet they had been moved under Community Outreach several months prior to this assessment.

**FIGURE 3-3: Minot Police Department Organizational Chart (Functional, December 2023)**
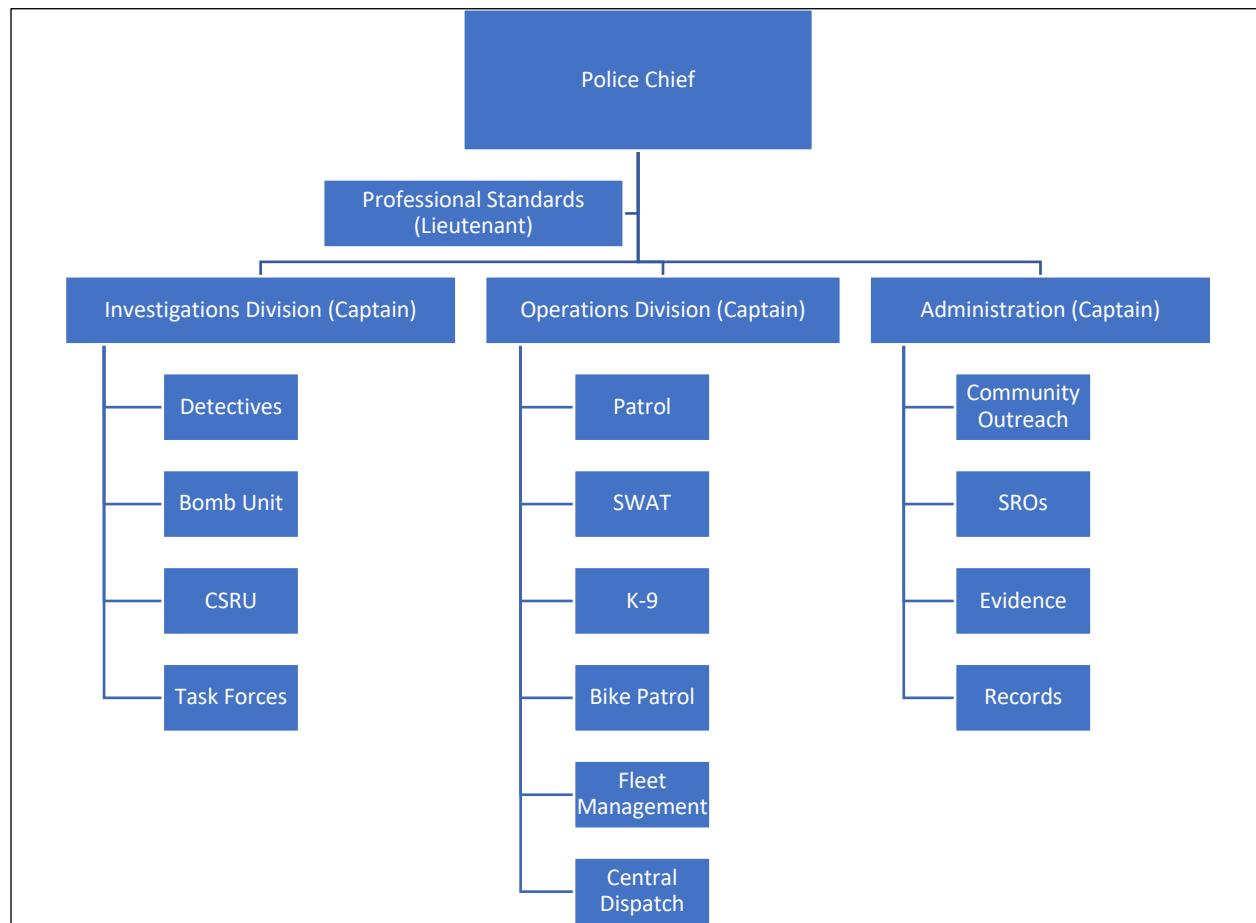


As noted above, this chart was compiled by CPSM, not the police department. It includes the functions that were on the department's chart, but not all functions in the department are listed. MPD should have an up-to-date and accurate organizational chart (similar to what is depicted above) on hand at all times. Organizational charts should be dated and archived when updates are made.

## Recommendation:

- We recommend MPD update the departmental organizational chart to accurately depict current operations and functions. (Recommendation No. 6.)

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Overall, the number of managers and supervisors for an agency the size of MPD is appropriate for proper management and supervision. However, we do have some concerns with the management structure. There is a significant imbalance in personnel within the agency and who commands those personnel. Because most department personnel fall under "Operations," the Operations captain is tasked with significantly more oversight than the other two captains.

We believe a solution to this is to convert one captain position to a Deputy Chief/Assistant Chief position in the organization. This Deputy Chief would serve as department's number 2, and under normal circumstances, the Chief and Deputy Chief would never be away from the agency at the same time, thereby always ensuring a police leadership position is present in the city at all times. The Deputy would fall directly under the Chief on the organizational chart, and would manage the day-to-day functions of the Operations and Investigations Divisions of the department. Additionally, the department's administrative functions and professional standards would report directly to the Deputy. This structure should allow the Chief an enhanced ability to focus on community needs and external relationship building, which we believe would benefit the organization.

An additional administrative element that we see lacking in MPD is the presence of an administrative assistant. Administrative assistants perform a wide variety of tasks, organizing the administrative needs of an agency.

Agencies use these positions to maintain organizational needs and department records, take meeting minutes, and keep administrative records up to date. In MPD, the typical duties of an administrative assistant is a shared responsibility between the Chief and the various managers in the department. With this situation we often see that institutional knowledge is lost when members transfer or retire. A professional and talented administrative assistant will establish protocols and workflows that will translate to future assistants; by virtue of the job classification, administrative assistants remain in their positions far longer than police managers, who spend a majority of their career climbing the police career ladder before reaching department administration near the end of their career.

This need was apparent during our interaction with department staff. There were a number of times where questions were asked of staff, who in turn needed to confer with others on matters that should be clearly documented. Small examples included up-to-date personnel rosters, up-to-date organizational charts, the lack of meeting minutes, project assignment flowcharts, and the maintenance of personnel records. Ultimately, MPD was able to produce what we asked for but that process is far more streamlined when agencies have a professional administrative assistant on staff.

## Recommendations:

- CPSM recommends that MPD convert one captain position to a deputy/assistant chief position. (Recommendation No. 7.)

- We recommend the department add an FTE administrative assistant to the department organizational structure. (Recommendation No. 8.)

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## Department Staffing

The Minot Police Department is currently authorized for 84 sworn officers and 14 civilian employees. The sworn position breakdown and numbers of filled positions are noted in the following table.

### TABLE 3-6: MPD Sworn Officer Staffing

| Position | Authorized | Funded | Actual |
|---|---|---|---|
| Police Chief | 1 | 1 | 1 |
| Captain | 3 | 3 | 3 |
| Lieutenant | 5 | 5 | 5 |
| Sergeant | 14 | 14 | 14 |
| Sworn Officers* | 61 | 58 | 52 |
| **Totals** | **84** | **81** | **75** |

**Note**: *Includes MPOs, Sr. Officers, Officers, and Detectives.

The above information was provided by MPD. It was compiled by extracting personnel information from different documents and through discussions with MPD staff to clarify information. There were discrepancies in the information that was provided by the department that required clarification. For instance, there is a document that lists all sworn personnel and some of the civilian personnel; this document shows each employee by assignment (patrol shift, detectives etc.). That document had the same personnel included two times in different places. The document did not show where the vacancies were being carried in the department, clarification on those numbers was obtained through discussions with MPD staff. There was no list that included the same information for civilian employees.

It was obvious to us that certain members of the MPD management team had the information that was needed either in memory or in various other databases and records, but it did not exist in one location / report that was simple to access. An effective way of managing this information is to have a roster of all positions in the department including vacant positions, who is occupying the position, the date of hire, and the date of their current position / rank. Another document should exist that shows the assignments of every position in the department, including where the identified vacancies are being carried.

## Recommendation:

- We recommend that MPD take steps to clarify its personnel rosters and keep those rosters updated on a regular basis. (Recommendation No. 9.)

## Department Budget

The following table shows the 2021, 2022, and 2023 budget figures as provided by MPD.

### TABLE 3-7: MPD Budget, 2021–2023

| Year | Total MPD Budget | MPD Budgeted Overtime | Actual Overtime Usage |
|---|---|---|---|
| 2021 | $10,183,876 | $169,998 | $203,431 |
| 2022 | $11,438,892 | $185,997 | $310,742 |
| 2023 | $11,944,699 | $204,596 | $322,120 (YTD 1/6/23) |

The MPD follows a calendar-year budget. The overtime budget amount comes from general fund overtime funds available to the department. The actual overtime usage includes grant-funded overtime (reimbursable to the department) and staffing backfill that was offset by salary savings connected to unfilled positions. MPD did not exceed its overall budget amount in any of the years noted.

## Professional Standards

The department's professional standards (internal affairs) function is managed by a lieutenant who reports directly to the Police Chief. All personnel complaints are routed through the professional standards lieutenant, who either investigates the matter or refers the investigation to the appropriate manager or supervisor in the department for investigation.

Personnel complaints are covered in Department Policy 1005, which states in part that the department will accept and address all complaints of misconduct in accordance with policy and the law. This policy also states that complaint forms are available in the public lobby as well as through the department website.

We tested the availability of the form, and we were able to navigate to a portal that allowed for general city complaints. It required clicking on a city link from the department's webpage and then clicking on "requests" (not apparent unless you saw those instructions on the department webpage). From requests, the user clicks on "create a request," where a login page appears. That requires a user to create an account to proceed. There is an option to "create anonymously." After several steps, we followed the prompts and came to a page that allowed for a typed entry of one's "service requests" that included a drop-down menu for police matters, including a complaint. Without completing the process to "file a complaint," we concluded that the portal appears to work as intended and meets the policy of the department.

However, the system does require several steps and may not be considered very user-friendly by many. We believe the department should also offer a form one can print directly off the department website and mail to the department. This would allow for a simpler option for many in the community who may find technology frustrating.

## Recommendation:

- We recommend a printable complaint form be offered on the police department's website. (Recommendation No. 10.)

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### *Personnel Complaints vs Service Complaints*

In reviewing the complaint matrices provided by MPD, we noticed that tracked complaints were personnel complaints in nature. None of the complaints were service-level complaints against the agency. In discussing this with the agency, we learned that there was no distinction within its process. Furthermore, if a service-type complaint were received it would likely be handled informally versus under the established personnel complaint process. Most agencies separate these types of complaints and track them separately from personnel complaints. An example found in the department records occurred earlier this year where there was a documented investigation of a citizen that "did not get the result they wanted." Three employees were listed in this investigation and the outcome stated that "no policy violation observed." This

investigation likely should have been classified as a service complaint and not a personnel complaint against department employees.

For clarification, a service complaint is when a citizen is unhappy about the service level provided by the department but does not allege misconduct by an employee. Examples might include slow response times, unhappy with an investigation outcome, etc. MPD should take steps to formalize and track service complaints made against the department. Formally tracking this metric and ensuring there is a process to investigate these concerns properly may yield management benefits by being able to recognize operational or procedural shortfalls that should be addressed.

## Recommendation:

- We recommend the department take steps to separately classify, investigate, and track service complaints against the department. (Recommendation No. 11.)

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### *Investigative Process and Case Summaries*

As noted, the professional standards lieutenant receives all complaints, assigns a case number, and distributes those investigations appropriately to an assigned investigator. Although investigations can be disseminated to other lieutenants, most are investigated by the professional standards lieutenant. For investigations that involve someone above the rank of sergeant, the investigation is assigned to a captain (in one case, the Chief conducted an investigation). Data provided by the department indicated that since 2021, the Police Chief investigated one internal case, captains handled seven cases, and lieutenants handled the balance (43) of cases investigated by the department. The department's past practice has been to not involve sergeants in internal investigations. The department should consider involving sergeants in lower-level internal investigations. Doing so on minor allegations will expose sergeants to the process, better prepare them to understand the role if/when they are promoted to lieutenant, and will allow the department to see the administrative capabilities of its sergeant workforce. At minimum, that type of exposure works to expand a supervisor's knowledge base of what to look for when they are tasked with receiving a citizen complaint.

## Recommendation:

- We recommend that MPD take steps to involve sergeants in low-level internal investigations. (Recommendation No. 12.)

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We were provided a department matrix of complaints investigated by MPD since 2021. The matrix included the date the complaint was received, the nature of the complaint, the source of the complaint (internal/external), the file number, redacted employee names, who the investigation was assigned to, and what the outcome of the investigation was determined to be. This matrix was developed internally and intended to provide a quick snapshot of open and past investigations. On the surface, the matrix may serve its intended purpose, but looking more closely at the report, we see inconsistencies that may not meet the policy intent of the department.

For instance, not all cases had sensible file numbers. Most had a sequential number that should be aligned with an IA process, some had no number and had a note that it was referred to a lieutenant in patrol (unknown if an investigation was even done), and others had what appears

to be a crime report number from a different source. Not all of the entries had an outcome and none of the cases had a close date. Therefore we don't know if or when the investigation was completed.

The department should audit all internal cases for the past three years and complete the matrix to ensure all cases were appropriately investigated and closed. Future records should include the close date.

## Recommendation:

- MPD should conduct an audit of all internal investigations going back three years to ensure all investigations were completed as required by policy. (Recommendation No. 13.)

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The department's internal tracking mechanism for complaints and other reporting areas, such as the use of force tracking, is done on department-generated spreadsheets. This is not unusual for agencies in the size range of MPD. Large police agencies have been forced to develop more sophisticated tracking procedures to ensure accuracy, consistency, and completeness. Many agencies in the size category of Minot have been able to adjust accordingly and incorporate tracking in a more rudimentary form because the volume of incidents and cases is not as high. The existing spreadsheets and investigations are on a shared department drive with access limited to all department managers.

However, we have highlighted some problematic areas in MPD's tracking documents and observed some similar concerns in other internal reports. There are off-the-shelf software programs that MPD could use for tracking all aspects of complaints and investigations. Software platforms such as IA Pro[2] offer solutions that can streamline the process and provide operational insight into areas of MPD's operations that need to be addressed.

These programs will digitally track and store all cases and evidence associated with internal investigations. They can be used to categorize cases, provide summary reports, provide reminders and alarms when cases have been open too long, and provide a tracking mechanism of who has accessed a case file. Additionally, data such as use of force incidents, pursuits, employee injuries, etc., can all be tracked on these platforms, which provides department leadership insights into employee performance or concerns that should be addressed.

MPD should perform an assessment of the products available for this purpose and determine what platform works best for the department. MPD should improve its internal tracking and reporting and have better control over file access, regardless of the platform used.

## Recommendation:

- CPSM recommends that MPD explore off-the-shelf software solutions for tracking and maintaining internal investigations and other personnel matters. (Recommendation No. 14.)

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2. We are not promoting any one product; IA Pro is used as an example since the author is familiar with the workflow of this program. Other similar products exist, and MPD should perform its own evaluation.

# SECTION 4. ADMINISTRATION

The Minot Police Department's administrative commander is a police captain who oversees the following department functions:

- Community Outreach.

- School Resource Officers.

- Property and Evidence.

- Records.

- Personnel, Training, Hiring.

The existing organizational chart also lists the municipal court function under the administrative commander, but this function was moved under the city manager in early 2023. The existing organizational chart has not been updated to reflect this change.

With the municipal court being moved out of this division/department, the administration division has the fewest direct reports in the department. We suggest the functions of this division should be merged into other areas of department operations and/or the proposed Deputy Chief, as outlined in this report.

## COMMUNITY OUTREACH

The MPD organizational chart has a section titled Community Outreach. The section includes one "administrative sergeant" and one community outreach officer. Currently, one of the police officer vacancies in the department is being held within this unit, leaving one sergeant to fulfill the department's community outreach efforts.

In our discussions with MPD about community outreach efforts, we learned that limited proactive community outreach is taking place, largely a byproduct of the department culture and because of limited staffing dedicated to the effort. The department will intentionally host one to two "coffee with a cop" events per year and plan efforts around events such as National Night Out and other opportunities that may present themselves. Outside of those efforts, the remaining official outreach involves responding to community requests to be present at community discussions about policing issues or for a specific request, such as a police station tour. In this case, the community outreach sergeant may solicit other members of the department to assist.

The department also employs a civilian position that manages community messaging through traditional public information officer duties and social media engagement. This employee shares their work time between the police and fire departments and largely works out of an office in City Hall. In reviewing the department's social media posts on Facebook, it appears that as of late, there are regular posts occurring that balance crime news and positive "get to know your police department" type posts. The Facebook contributors include the PIO mentioned above and the administrative sergeant managing community outreach.

We also learned that the expectations of other employees throughout the department in relation to community outreach were mixed. The patrol workload was deemed to be too busy to allow for engagement beyond the calls they were dispatched to handle, and culturally, many in those other assignments felt that community outreach was more of the responsibility of

the community outreach unit (i.e., one sergeant) rather than a collective effort of all employees. This is not to imply there is any lack of professionalism in the department as officers interact with the public, just an observation of ownership of "community outreach" responsibilities.

This report will have some recommendations designed to realign some staffing within the agency to allow for a greater personnel investment within "community outreach." However, we believe the department is missing an opportunity for better community interaction, and improvements should be made. Specifically, there should be a better understanding of how all employees play a critical role in community outreach and engagement and that all employees have that responsibility within their work expectations. This should be done through an outline of department expectations as well as training on what the department expects, including examples of desirable conduct and ownership of engagement and outreach efforts.

## Recommendation:

- We recommend that MPD enhance overall community engagement with training afforded to employees on expectations of community engagement and interaction. (Recommendation No. 15.)

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Additionally, the department told us it desires to have the police officer position that is assigned to community outreach permanently moved to patrol and have the community outreach coordination function done by a civilian employee. This function is commonly performed by civilian employees in police organizations nationwide and this change would serve the department well.


## RECRUITMENT, HIRING, AND TRAINING

The MPD administrative sergeant who manages community outreach spends most of her workday dedicated to the department's recruitment, hiring, and training process. These functions are not outlined on the department's organizational chart. One may argue that the current organizational chart is more aligned with identifying personnel and their chain of command; however, in reality, it outlines many units and functions that do not have FTE employees (CSRU, Bomb, SWAT, Bike Patrol, etc.).

## Recommendation:

- We recommend that recruitment, hiring, and training functions be denoted on the department organization chart. (Recommendation No. 16.)

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MPD engages in a hiring process that, per the department, is defined and limited by the city's civil service rules. The department will have three to four recruitment periods per year during which it accepts applications. Once that application period closes, it will process those applicants through various traditional policing hiring processes. Prospective employees who successfully pass the process and are offered employment with the department enter into an internal training program that the department manages.

The internal training program consists of in-house classroom training provided by MPD employees and is followed up by the field training program. Police officers, at some point, will leave the MPD training program within their first year on the job to attend a state-certified academy. In our

experience, most departments around the country will first send a new police officer to an academy before allowing them to enter into a field training program and serve as a sworn police officer. However, we understand that MPD and the State of North Dakota have a dynamic different from many states, and there are simply limited academy training dates and classes available, thereby necessitating the current practice. We agree with MPD's approach of ensuring that all new employees attend their in-house program before working in uniform on the streets.

MPD cited concerns over its inability to garner a larger pool of candidates and reach "full staffing." In discussions with the department, we found it believes it has identified many issues and where it may be falling short in recruiting. For instance, the Air Force base and the university should be fertile recruiting grounds. Many of the current employees of the department have come from one of these recruitment feeders. However, the department cited COVID-19 as a disruptor in the Air Force recruitment program, and the relationship it previously enjoyed with the university is not as strong as it has been.

From an outside perspective, we see some structural issues that might be hindering the department's efforts. For instance, the primary employee who runs these programs and recruiting efforts is the administrative sergeant. Her time and efforts are stretched thin with her multiple responsibilities. The function is important, yet, as noted before, it does not appear on the department organizational chart, and at best it is an ancillary responsibility within the department's day-to-day business.

We have already suggested that one captain (administration) be upgraded to a Deputy Chief position. Making this change should allow for that Deputy Chief to handle most day-to-day business, thereby allowing the Police Chief to focus on certain external relationships, such as with the Air Force and the university, to improve those recruitment programs. We also believe the department should consider merging the professional standards lieutenant with the administrative functions of the department. The IA function itself is not that busy and the lieutenant position appears to have excess capacity that could be better utilized elsewhere. There is a natural relationship between the training function and the professional standards of a department. For efficiency, the functions could be merged, thereby adding capacity to both functions.

Finally, the department does not have a streamlined process for lateral applicants that may present themselves outside of the traditional recruitment periods. MPD cited the civil service process as being the hinderance that does not allow it to separately process and expedite those applicants through the hiring / training process. The department did not have data available on how many laterals may become available at any given time outside the recruitment period or how many it may be losing because of the internal process. But we believe there should be a process for those applicants that already have attended a state academy and can be expedited into an FTO program. MPD should ensure that this is possible.

## Recommendation:

- CPSM recommends that MPD explore the various changes to the recruitment and training efforts outlined in our conclusions. (Recommendation No. 17.)

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# SCHOOL RESOURCE OFFICER PROGRAM

MPD has a relationship and MOU with the local school district for school resource officers. In our review of the program we did not determine any issues of concern and it appears that the best practices are in place (including a funding component from the school district). Currently, the SRO program is supervised by the administrative sergeant. This is a recent structural change that has more to do with her relationship with the program (past SRO herself) and less to do with where the SROs may be best positioned within the department structure.

We have made structural recommendations that would impact the administrative division of the department. If the department follows those recommendations we believe the SRO program should be moved back to operations.

# PROPERTY & EVIDENCE SECTION

Property management is one of the most important jobs in the entire police operation. Increased drug law enforcement, the use of DNA testing, and other developments have greatly complicated the task of logging, tracking, storing, and inventorying evidence in recent years. The two biggest challenges in operating a property room are avoiding occurrences of mismanagement and incidents such as missing monies or drugs that appear to indicate corruption. To oversee the property function effectively, managers must understand the management procedures, be aware of the liabilities, and continually search for ways to improve the system. Property rooms are usually overcrowded, so unnecessary items should be purged regularly. Safeguards include proper packaging, lockers, and security measures. Computer software and other technology are available to automate parts of the property management system. Police agencies should also have clear policies and procedures regarding property room management. The intake, processing, storage, and disposal of evidence and property are important and high-risk functions of any law enforcement agency. It is especially true for weapons, narcotics dangerous drugs, currency, and jewelry.

Police agencies across the country regularly face consequences of mismanaged property and evidence sections, and which result in terminations and arrests of police employees, from janitors to police chiefs, for thefts of narcotics, cash, jewelry, guns, and other items of value. In some cases, audits that revealed unaccounted-for property and evidence have led to the termination of police executives, though they were not suspected of being implicated in the theft/loss of the evidence. Controlling access to the property and evidence areas, inventory control, and regular audits are critical to the effective management of the property and evidence function to ensure community trust and confidence.

National organizations such as the International Association of Police Chiefs, the U.S. Department of Justice, and the International Association for Property & Evidence (IAPE) offer reports, training, and other material to ensure a high quality of professional standards in property & evidence sections. During this assessment, CPSM found several areas of concern regarding the storage and condition of the MPD's Property and Evidence (P&E) Section. Although these issues are not directly related to the current management or oversight by the evidence technician or the Command staff, MPD will need to address several issues that can lead to larger risk management issues if not properly handled soon.

## Staffing and Operation

Property and Evidence (P&E) is under the command of the Criminal Investigations Division captain; staffing includes one full-time police sergeant, one master officer position, and one

professional staff technician. Each of these positions is also assigned responsibility for the administrative functions of the Records Unit. The P&E Unit administrator is the current police sergeant who recently transferred to the P&E assignment. While CPSM understands MPD's need to assign sworn personnel to P&E during this transitional period for operational improvements and enhancements, a long-range strategic plan should be developed. CPSM recommends MPD develop a strategic plan for the P&E Unit and begin to transition sworn personnel to a trained civilian property and evidence administrator. This approach is highly suggested by the Police Executive Research Forum (PERF) as well as IAPE as a contemporary and modern approach to property and evidence management.

The operational hours of P&E are from 8:00 a.m. to 4:30 p.m. and appointments are made as needed for the public. In case of an emergency after hours, the P&E sergeant or master officer is available for response. This process is not memorialized in any official documents or authorities. CPSM recommends an after-hours and emergency process be documented in the Lexipol policy system for organizational reference.

## Policy & Administrative

Policies for the Property and Evidence Section govern general procedures, such as how officers book evidence and property into the system. MPD's Lexipol policies guide property room management as well as how evidence is processed into the evidence room. We found related policies were properly up-to-date and reflected current minimum law enforcement standards; however, higher industry standards are recommended to prevent future evidence-related issues from occurring. In support of the Lexipol policies, the property room custodian has created a usable and well-prepared "how to" manual that meets industry standards.

CPSM recommends that MPD continue to develop the section manual as a usable guide for P&E personnel. CPSM also recommends that MPD ensure that all members assigned to the P&E Unit become formal members of the IAPE and use IAPE's available resources set to continue to update and expand the section property manual. By achieving these objectives, the evidence technician can offer industry-standard recommendations for the command staff as well as develop proven methods to resolve property-related issues that emerge.

Industry-standard administrative and operational functions are a core principle for P&E sections; MPD utilizes the Tyler RMS that integrates into other department domains such as "Evidence.com." Axon's "Evidence.com" can create an audit trail of every single action around digital evidence; however, currently, MPD does not utilize this function.

During CPSM's query of various functions in P&E, some relevant information was readily available, while some was not. The evidence technician primarily uses the records management system (RMS) to track, manage, and purge evidence and limits the use of off-shelf products or the need to use Excel spreadsheets to manage property. MPD's approach is a national standard that is highly recommended, as many police departments often use off-shelf products.

We found the RMS offers a property and evidence management feature, and it is effective in managing evidence/property as well as activity reports. CPSM recommends MPD consider developing a "Property Staff and Activity Report" to measure productivity. IAPE can provide guidance on developing an activity report that meets the standards expected of a P&E section. The report should include data on P&E requests, discovery, lab runs, destruction/purging, property intake, clerical activities, and staffing. It was evident that the MPD has produced usable reports and systems; however, considering the need to exceed minimum standards, MPD should enhance its P&E audit and report systems.

The most pressing need in Property and Evidence is to hire and train permanent personnel and to provide assistance when there is only one evidence technician. CPSM recommends MPD consider preparing part-time (sometimes retired personnel) evidence technicians to provide the extra effort to improve systems and provide "back-up" for the current evidence technician. During this assessment, it was determined the P&E/Records staff spend about 70 percent of time managing the property and evidence room and another 30 percent overseeing the Records Unit and other responsibilities. It would benefit MPD to evaluate the need for additional personnel to divide the responsibilities between the workgroups.

The department should develop a formalized system to ensure all the evidence technicians are trained annually in critical topical areas and adequately document the training. This will ensure that industry standards will continually be sought to avoid potential problems.

## Audits

MPD is not under state POST mandates or internal timelines to conduct audits and reviews of P&E; however, the current P&E staff has recently conducted inventories in order to legally destroy adjudicated case evidence, re-package items, and reorganize several of the six areas of property and evidence storage. There are no recent audits that CPSM was able to review nor any written guidelines on how the process is to be conducted. However, the P&E Unit is conducting ongoing, in-depth reviews and assessments. CPSM conducted a physical walk-through of the various property storage areas and viewed photographs taken before the current effort to reorganize P&E. There was a notable improvement in how evidence is processed, stored, and managed. CPSMs found that the current approach to managing the P&E Unit meets industry standards as recommended by IAPE, PERF, and IACP; however, there is a need to continue the current effort to improve operations, administrative systems, and storage.

It is recommended that the MPD develop an audit schedule annually or bi-annually that produces an administrative report of activity. The audit report should consider the following suggested items:

- Intake, recording, and storing all property booked by police employees.

- Safeguarding property.

- Releasing evidence to detectives for court.

- Releasing property to the public.

- Missing or misplaced items.

- Destruction plan for evidence and property.

- Compliance with state law and policy regarding the disposition and purging of property.

- Evaluation of ventilation and proper storage of chemicals and other hazardous item.

## Security & Physical Assessment

MPD's P&E has video cameras installed in the main evidence storage area and the evidence processing area where officers have access to the two-way locker system to book and store property 24 hours a day. The current staff was unable to answer questions as to whether the cameras were operational or how the system was managed. CPSM recommends that MPD develop a written procedure or Lexipol update that provides an overview of the system and how it is managed. The equipment is positioned in areas that are expected and would record any improper behavior or performance issues when entering and exiting the property room.

However, it was unknown at the time of CPSM's visit if the cameras were operational or where saved videos are maintained. It is recommended that MPD follow the IAPE recommendation and ensure a 24-hour monitoring video system for when personnel enter the storage areas, with recordings maintained for up to two years.

The physical property rooms include the following areas of storage:

- The main property room allows officers to package and store items in two-way lockers that connect to a secured area, with an access door combination code for P&E staff to enter and process evidence.

- A secondary storage area of secured guns and drugs to include a separate area for marijuana evidence.

- A secured area in the "SWAT Bay" for evidence and long-term evidence storage.

- Two secured evidence refrigerators for sexual assault evidence, blood items, and other evidence that needs to be refrigerated.

- An off-site, outside storage area for larger items, with the capability to temporarily store hazardous items and fireworks.

Having various locations for evidence storage is not recommended by CPSM or other national organizations such as IAPE. CPSM understands that MPD is currently conducting a workplace study regarding workspace, storage, and potential structural upgrades. CPSM recommends that MPD complete the study and initiate a process to reduce the number of property storage locations. As an example, the evidence refrigerators can be relocated into the main property intake area, allowing both officer and P&E Unit personnel access. CPSM recognizes this approach cannot be undertaken until the workspace study is completed in 2024.

The International Association of Property and Evidence (IAPE) provides valuable training and technical support for guidance in building a professional and secure security and video monitoring system. IAPE's website features links to sample policies and procedures as well as additional resources to improve security. As an example, CPSM was required to check in or out at any of the entry points to the various property rooms. CPSM recommends a written check-in and check-out signature board at the entry/exit points of the main property rooms.

The door to the property room does not require any authentication to access and the door is not designed to withstand forced entry. MPD should upgrade its systems to provide for double authentication for entry. The evidence room lacks a gun safe to store guns and narcotics; however, the security conditions of the property room with security doors and videos prevent unauthorized entry or removal of property. However, this issue remains a concern. In the rear of the property room there is a large open container with rifles and other long guns stored in the area.

Based on IAPE best practice recommendations, it is preferred to have a secured and ground-bolted gun, monies, and narcotics safe for higher level security and storage. It is recommended that MPD consider the purchase and installation of a commercial-grade safe to store all firearms. The P&E room was safe from dangerous chemicals, fireworks, and other dangerous items and, per policy, these items are required to be safely and securely stored in the evidence garage. CPSM inventoried the evidence garage and found the area to be safely secured, with the proper precautions to avoid health issues. The property room faces a challenge with the backlog of found and safekeeping items and this has produced a storage space issue for the MPD.

MPD has taken initial steps to resolve this issue and should be commended for its current effort. As the workspace project is finalized the storage space issue will need to be rectified with the new design system. The room was previously overcrowded and it was hazardous to access needed evidence. The current storage and space design has reduced overcrowding and the potential for work-related injuries. It is recommended that MPD seek professional assistance and when appropriate purchase a design storage system that will reduce the backlog and create open space in a legal and proper method. This will reduce the chances of misplaced items, increase the ability to track and locate evidence, and guard against workplace injuries.

Overall, without significant improvement in property purging, the department will likely see maxed-out storage space in two to three years. Fortunately, MPD has taken significant steps over the past six months to improve storage space by relocating evidence and purging items. Unfortunately, during the CPSM visit, the P&E staff was unable to supply a report of property checked in, items processed into the P&E area, or the amount of overall property disposed of per year. CPSM highly recommends the MPD utilize the capabilities of the RMS to develop a regular monthly report that documents incoming and outgoing items and how many items are disposed of each month. This approach is highly recommended by IAPE and will reduce liability exposure while improving risk management.

The internal system tracks items temporarily checked out for court purposes and the property custodian manually tracks items released for court purposes. The manual process ensures accountability, but the MPD should begin to build a barcoded system under the current RMS system for improved long-term accountability.

Currently, MPD is pursuing methods to improve space, tracking of evidence, and auditing but the efforts are limited until the workspace project is completed.

CPSM recommends MPD strongly consider a temporary task force comprised of (trained) personnel to conduct a complete audit of the property room and dispose of unneeded items. Space must be freed up in the property room and there must be a more organized system to intake property and evidence. It is also recommended that MPD seek out a formal property room audit through IAPE once the workspace project is completed in 2024.

## Property and Evidence Section Recommendations:

- CPSM recommends MPD develop a strategic plan for the P&E Unit and begin to transition sworn personnel to a civilian property and evidence administrator and evidence technicians. (Recommendation No. 18.)

- CPSM recommends an after-hours and emergency process be documented in the Lexipol policy system for organizational reference. (Recommendation No. 19.)

- CPSM recommends that MPD continue to develop the section manual as a usable guide for P&E personnel. CPSM also recommends that MPD ensure that all members assigned to the P&E Unit become formal members of the IAPE and use IAPE's available resources to continue to update and expand the P&E manual. (Recommendation No. 20.)

- CPSM recommends MPD consider developing a "Property Staff and Activity Report" to measure productivity. IAPE can provide guidance on developing an activity report that meets the standards expected of a P&E section. (Recommendation No. 21.)

- CPSM recommends MPD consider using part-time (sometimes retired personnel) as evidence technicians to provide the extra effort to improve systems and provide "back-up" for the current evidence technician. (Recommendation No. 22.)

- It is recommended that the MPD develop an audit schedule annually or bi-annually that produces an administrative report of activity. (Recommendation No. 23.)

- CPSM recommends that MPD complete the workspace project and initiate a process to reduce the number of property room storage locations. (Recommendation No. 24.)

- CPSM recommends a written check-in and check-out signature board at the entry/exit points of the main property rooms. (Recommendation No. 25.)

- It is recommended that MPD seek professional assistance and when appropriate purchase a design storage system that will reduce the backlog and create open space in a legal and proper method. This will reduce the chances of misplaced items, improve the ability to track and locate evidence, and guard against workplace injuries. (Recommendation No. 26.)

- CPSM highly recommends MPD utilize the capabilities of the RMS to develop a regular monthly report, documenting incoming and outgoing items, and how many items are disposed of each month. This approach is highly recommended by IAPE and will reduce liability exposure while improving risk management. (Recommendation No. 27.)

- CPSM recommends MPD strongly consider a temporary task force comprised of part-time (trained) personnel to conduct a complete audit of the property room and dispose of unneeded items. (Recommendation No. 28.)

- MPD should seek out a formal property room audit through IAPE once the workspace project is completed in 2024. (Recommendation No. 29.)

# RECORDS

The MPD Records Unit is the central repository of incident, traffic accident, and related reports and reviews; the unit also classifies incident reports according to the FBI National Incident-Based Reporting System (NIBRS) standards. The MPD's Records Unit falls under the command of the Criminal Investigations Division.

## TABLE 4-1: MPD Records Unit Staffing, 2023

| Rank | Authorized | Actual | Vacant |
|---|---|---|---|
| Records Sergeant | 1 | 1 | 0 |
| Records Specialist Supervisor | 1 | 1 | 0 |
| Records Master Officer | 1 | 1 | 0 |
| Police Specialists/Technicians | 4 | 4 | 0 |
| FOIA Clerk | 1 | 1 | 0 |
| **Total** | **8** | **8** | **0** |

**Source**: MPD Records Staffing

## Policy and Structure

The Records Unit functions as a support unit for the Minot Police Department. All incident reports written by officers are entered into a computer system and maintained by state law. The Records Unit is responsible for all records functions, criminal warrant files, police statistical data, and preparation of police reports.

The Records Unit is properly structured with personnel trained to review and classify police reports while classifying incidents by the National Incident Reporting System (NIBRS). Records also

includes a Freedom of Information Act (FOIA) clerk to process all incoming requests made by the public as well as by the judicial system.

CPSM noted the records policy exceeds national expectations and the procedural manual maintained by the Records Unit provides a foundation to encourage professional growth. CPSM also noted that the Records Unit is mostly digital and does not file or store hard copies of reports or other documents. This is an achievement most police agencies never attain.

The structure of the Records Unit includes sworn positions at the sergeant and master officer ranks. It is recommended that MPD begin to develop a multi-year plan to transition the sergeant and master officer positions to professional (civilian) staff to oversee the Records and the Property and Evidence Units. The integration of professional staff will reduce costs and enable MPD to repurpose these sworn personnel to more essential operational positions. MPD may consider developing the positions as administrators and managers who can oversee the Records and Property & Evidence Units.

## Work Schedules & Public Access Hours

Records Unit personnel work a five-day workweek that covers Monday through Friday with a schedule of 8:00 a.m. to 4:30 p.m.

The regular (public) operating times are from 8:00 a.m. to 4:30 p.m.

## Records Duties & Processing Volume, 2021–2023

The Records Unit maintains statistical recordkeeping that is consistent with contemporary law enforcement agencies in the United States. CPSM reviewed the Records Unit's procedures, management, and report filing. We found a growing pace of incidents including police report entries and public information requests. MPD Records does not track the number of police reports, incoming phone calls, or the number of public counter visitors to MPD for various requests such as obtaining copies of reports, taxi permits, vehicle-related reports, or other public services. CPSM recommends MPD use its RMS and other systems to develop a monthly statistical report on the total tasks the Records staff perform. This will assist the MPD in estimating proper staffing levels and other trending issues related to performance.

Information on MPD Records Unit tasks for 2021, 2022, and 2023 is limited to the data found in the following table.

### TABLE 4-2: Records Unit Work Volume, 2021–2023

|                  | 2021   | 2022   | 2023   |
|------------------|--------|--------|--------|
| Incident Reports | 38,085 | 38,180 | 39,180 |
| FOIA Requests    | 3,049  | 3,268  | 3,064  |

**Source**: Minot Police Records Unit

CPSM found that the total number of FOIA requests exceeds typical levels for a department the size of Minot Police Department. FOIA requests have increased over the past several years. The MPD should be concerned with the growing number of FOIA requests increasing each year, specifically the number of requests by the District Attorney Officer and defense attorneys. MPD utilizes one defined digital evidence technician to complete duties related to body-worn camera video and in-car video content as well as all FOIA requests. CPSM recommends MPD continue its cross-training efforts to enable additional personnel to perform FOIA duties. CPSM also recommends MPD consider part-time personnel to assist with the FOIA requests.

There is a vast array of duties performed in police records units that can be overwhelming. The table above reflects a limited view of the total annual activity as well as the average number of these tasks per category. CPSM found that the Record's staff is performing a high level of daily records tasks, but MPD does not track the entirety of these daily efforts. Some agencies choose to assign specific duties to individual employees who serve as specialists and perform those duties. MPD attempts to cross-train personnel to assist in other areas. CPSM strongly supports the current approach by MPD to cross-train the Records staff to achieve the outcomes identified in this report.

The duties performed in Records include the following:

- Review and process citations and incident reports.

- Conduct criminal history checks and background checks.

- Answer telephone calls related to the operation of the records.

- Handle walk-in customers at the front desk.

- Organize and maintain reports in various databases.

- Respond to document, video, and/or photographic image requests from the public and law enforcement/criminal justice community.

- Accept fees for vehicle releases, copies of reports, and taxi licenses.

- Prepare morning paperwork, including affidavits from officers, served warrants, and citations to be sent to municipal court and city attorneys.

- Monitor and respond to requests received through the agency's central email box

- Respond to requests for the release of various documents/tapes/ photographs as required under the Public Records Act (PRA).

- Receive and distribute incoming and outgoing mail.

- Merge and review officer entries from the Enterprise Law Enforcement Mobile program to the internal tracking program.

- Prepare statistical reports monthly.

- Dictate officers' narratives and statements.

- Enter orders of protection manually into the RMS.

- Create and print taxi licenses.

- Warrant processing, entering, and dismissing of warrants.

The MPD does not use a self-service model (online) reporting system. Such a system enables citizens to make a report over the telephone for any past offense that does not require an officer to go to the scene. These types of services are becoming more common in police departments and are considered a best practice in decreasing the need for patrol officers to respond to specific types of "report-only" calls for service. CPSM recommends the MPD consider an online reporting system to decrease the need for patrol officers to respond to "report-only" calls for service.

The department's records management system, commonly referred to as the Tyler Technology system, allows officers to upload their reports from the in-car computers directly into the records

management system through wireless transmission. The RMS increases officers' in-car access to updated information and speeds up the tracking of items turned in as property or evidence.

Nationally, challenges with RMS products are being experienced by contemporary law enforcement organizations; however, MPD has overcome similar challenges by integrating the RMS system into daily operations.

- MPD regularly migrates the CAD data into the RMS system for effective statistical reports and trend identification.

- MPD has a regional dispatch center and has fully integrated the RMS system into the regional platform for other police agencies to utilize.

- MPD's successful integration allows the ability to obtain CFS trends and fully integrate data for CompStat and other crime-fighting strategies when needed.

The challenge for MPD is ensuring ongoing training for all personnel and ensuring a continued reduction in off-shelf products and Excel spreadsheets to manage data. MPD serves as a model for utilizing its RMS system in administrative and operational data reports.

CPSM recommends MPD increase training and develop skill levels among the records technicians to advance the usage of the RMS. MPD should establish an in-house training system to meet mandated training requirements for all new Records personnel by using a training matrix of skill development. It is also recommended that the Records management and supervisors use national organization membership to participate in webinars and learn new contemporary methods that may help solve current and future challenges. As an example, the National Association of Government Archives and Records Administration (NAGARA) offers membership, training, conferences, and webinars for municipal records management staff and frontline professionals to advance their skill sets.

## FBI UCR Reporting / Clearance Rates

Annually, the Federal Bureau of Investigation produces a Uniform Crime Report (UCR) that provides comprehensive crime and other law enforcement data for agencies across the country. This data is provided by states after each state collects and processes data received from local agencies. CPSM maintains that while preventing a crime is of utmost importance to any law enforcement agency, solving crime should have parity. The solving of crimes which results in the prosecution of offenders not only prevents future crime, but it also provides much-needed closure to crime victims.

Clearance rates, as defined and measured by the FBI Uniform Crime Report (UCR), are the benchmark for a department's effectiveness in solving crimes. MPD has maintained accurate and industry-standard-level reporting mechanisms for crime and clearance rates. In addition, the FBI has transitioned from its traditional UCR reporting to a more comprehensive model, the National Incident-Based Reporting System (NIBRS) and MPD has also made the transition. Many U.S. police departments have not made the transition for various reasons, and this is another positive example of the diligent work performed by MPD's Records Unit.

Overall, the MPD Records Unit is functioning at a positive level of professionalism and operational excellence that is not attained by departments of equal size. However, it should be noted that the number of tasks and operational tempo are quickly increasing, and the size of the Records Unit may need to be expanded in the coming years. CPSM recommends MPD consider hiring part-time records personnel to offset the increasing workload and increase the current number of full-time staff.

It is notable that in CPSM's review of the Records staff, the number of task items is steadily increasing, yet the staff has not allowed a backlog of entries or shown an inability to perform the volume of work. This is not the case in most agencies, as backlogs are growing and becoming a challenge for records units. MPD's Records staff has also been able to integrate Tyler Technologies with no interface issues reported with other internal systems.

## Records Unit Recommendations:

- It is recommended that MPD begin to develop a multiyear plan to transition the sergeant and master officer positions to professional (civilian) staff to oversee the Records and the Property and Evidence Units. (Recommendation No. 30.)

- CPSM strongly supports the current approach by MPD to cross-train the Records staff to achieve the outcomes identified in this report. (Recommendation No. 31.)

- CPSM recommends MPD use its RMS and other systems to provide a monthly statistical report on the total tasks the Records staff perform. (Recommendation No. 32.)

- CPSM recommends the MPD consider an online reporting system to decrease the need for patrol officers to respond to "report only" calls for service. (Recommendation No. 33.)

- CPSM recommends MPD increase training and develop skill levels among the records technicians; MPD should establish an in-house training system to meet mandated training requirements for all new Records personnel by using a training matrix. (Recommendation No. 34.)

- It is recommended that Records supervisors use national organization membership to participate in webinars and learn new contemporary methods that may help solve current and future challenges. (Recommendation No. 35.)

- CPSM recommends MPD consider hiring part-time records personnel to offset the increasing workload and increase the current number of full-time staff. (Recommendation No. 36.)

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# SECTION 5. OPERATIONS

The most visible members of most police departments in America are officers assigned to uniformed patrol functions. Patrol is considered the "backbone" of American policing. Bureau of Justice Statistics indicates that nearly all police departments in the U.S. in the same size category as the Minot Police Department provide uniformed patrol. Patrol commands the largest share of resources committed by the department. It is critical for the allocation of patrol resources to be focused on having officers available to respond to calls for service and provide law enforcement services to the public.

Staffing decisions, particularly for patrol, must be based on actual workload. Once the actual workload is determined the amount of discretionary time is determined and then staffing decisions can be made consistent with the department's policing philosophy and the community's ability to fund it. The MPD's philosophy is to address essentially all requests for service from the community. This is typically done in a reactive style of policing based on the demands for police services. MPD does engage in some community policing initiatives such as Coffee with a Cop; Citizens Police Academy; and National Night Out. However, team members observed that patrol personnel do not generally see community policing efforts as part of their job duties. Most believe proactive policing involves making traffic stops or drug arrests. Effective community policing is an organizational philosophy and not a program. The balance among reaction to calls for service, community policing, and proactive patrol strategies is best accomplished when officers have ongoing training opportunities to broaden their understanding of modern policing best practices. We recommend that MPD establish a training matrix for patrol officers and sergeants that includes the benefits of patrol officers being proactively engaged with the community at all levels.

Understanding the actual workload (the time required to complete certain activities) requires review of the total reported events within the context of how the events originated. This includes events originating through directed patrol, administrative tasks, officer-initiated activities, and citizen-initiated activities. The charts and tables in this section outline this information.

Understanding the difference between the various types of police department events and the resulting staffing implications is critical to determining deployment needs. This portion of the study looks at the total deployed hours of the police department with a comparison to the current time spent to provide services.

The "Rule of 60" can be applied to evaluate patrol staffing. This rule has two parts. The first part states that 60 percent of the sworn officers in a department should be dedicated to the patrol function (patrol staffing) and the second part states that no more than 60 percent of their time should be committed to calls for service, which includes all activities that occupy an officer's time, including calls from the public, self-initiated work, and administrative tasks. This commitment of 60 percent of their time is referred to as the *Patrol Saturation Index*.

The Rule of 60 is not a hard-and-fast rule, but rather a starting point for discussion on patrol deployment. Resource allocation decisions must be made from a policy and/or managerial perspective through which costs and benefits of competing demands are considered. The *Patrol Saturation Index* indicates the percentage of time dedicated by police officers to public demands for service and administrative duties related to their jobs. Effective patrol deployment would exist at amounts where the saturation index was less than 60 percent.

The Rule of 60 for patrol deployment does not mean the remaining 40 percent of time is downtime or break time. It is a reflection of the extent that patrol officer time is saturated by calls for service. The time when police personnel are not responding to calls should be committed to management-directed operations. This is a more focused use of time and can include supervised allocation of patrol officer activities toward proactive enforcement, crime prevention, community policing, and citizen safety initiatives. It will also provide ready and available resources in the event of a large-scale emergency.

From an organizational standpoint, it is important to have uniformed patrol resources available to undertake activities such as proactive enforcement, community policing, and emergency response. Patrol is the most visible and available resource in policing, and the ability to harness this resource is critical for successful operations.

From an officer's standpoint, once a certain level of CFS activity is reached, the officer's focus shifts to a CFS-based reactionary mode. A reactionary mode shifts a patrol officer's mindset from one that looks for ways to deal with crime and quality-of-life conditions in the community to one that continually prepares for the next call. After saturation, officers cease proactive policing and engage in a reactionary style of policing. The outlook becomes "Why act proactively when my actions are only going to be interrupted by a call?" Any uncommitted time is spent waiting for the next call. MPD personnel advised CPSM team members during peak demand times they shift to a reactionary mode.

## RULE OF 60 – PART 1

According to the MPD's personnel data, patrol is authorized 55 sworn officers (2 Lieutenants, 9 sergeants, and 44 Police Officers). These 55 of the approximately 84 sworn officers represent **65 percent** of the sworn officers in the Minot Police Department. When CPSM team members were onsite, MPD had approximately seven vacancies in the patrol division.

This part of the "rule" is not hard-and-fast. Taken on its face, however, this part of the "rule" must be considered when examining the operational elements of the department when staffing recommendations are taken into consideration. The data presented by the department indicates that overall authorized staffing is just above the 60 percent recommendation. This does not imply that fewer people as a percentage should be assigned to the patrol function, it merely shows that the department is assigning an appropriate number of officers to the function.

## RULE OF 60 – PART 2

The second part of the "Rule of 60" examines workload and discretionary time and suggests that no more than 60 percent of time should be committed to calls for service. In other words, CPSM suggests that no more than 60 percent of available patrol officer time be spent responding to the service demands of the community. The remaining 40 percent of the time is the "discretionary time" for officers to be available to address community problems and be available for serious emergencies.

It is CPSM's contention that patrol staffing is optimally deployed when the saturation index (SI) is in the 60 percent range. An SI greater than 60 percent indicates that the patrol manpower is largely reactive and overburdened with CFS and workload demands. An SI of somewhat less than 60 percent indicates that patrol manpower is optimally staffed. SI levels much lower than 60 percent, however, indicate patrol resources that are underutilized.

Departments must be cautious in interpreting the SI too narrowly. One should not conclude that SI can never exceed 60 percent at any time during the day, or that in any given hour no more

than 60 percent of any officer's time be committed to CFS. The SI at 60 percent is intended to be a benchmark to evaluate overall service demands on patrol staffing. When SI levels exceed 60 percent for substantial periods of a given shift, or at specific times during the day, then decisions should be made to reallocate or realign personnel to reduce the SI to levels below 60 percent.

Resource allocation decisions must be made from a policy and/or managerial perspective through which costs and benefits of competing demands are considered. The patrol saturation index indicates the percentage of time dedicated by police officers to public demands for service and administrative duties related to their jobs. Effective patrol deployment would exist at amounts where the saturation index was less than 60.

The CPSM data analysis in the second part of this report provides a rich overview of CFS and staffing demands experienced by the Minot Police Department. The analysis here looks specifically at patrol deployment and how to maximize the personnel resources of the department to meet the demands of calls for service while also engaging in proactive policing to combat crime, disorder, and traffic issues in the community.

## WORKLOAD ANALYSIS

The following section represents workload, staffing, and the "saturation" of patrol resources in the MPD during the two months (seasons) on which we focused our workload analysis. The figures represent the manpower and demand during weekdays and weekends during the period of January 4, 2023, to February 28, 2023 (winter) and July 7, 2023, to August 31, 2023 (Summer). Examination of these figures permits exploration of the second part of the Rule of 60.

### FIGURE 5-1: Deployment and All Workload, Weekdays, Winter 2023
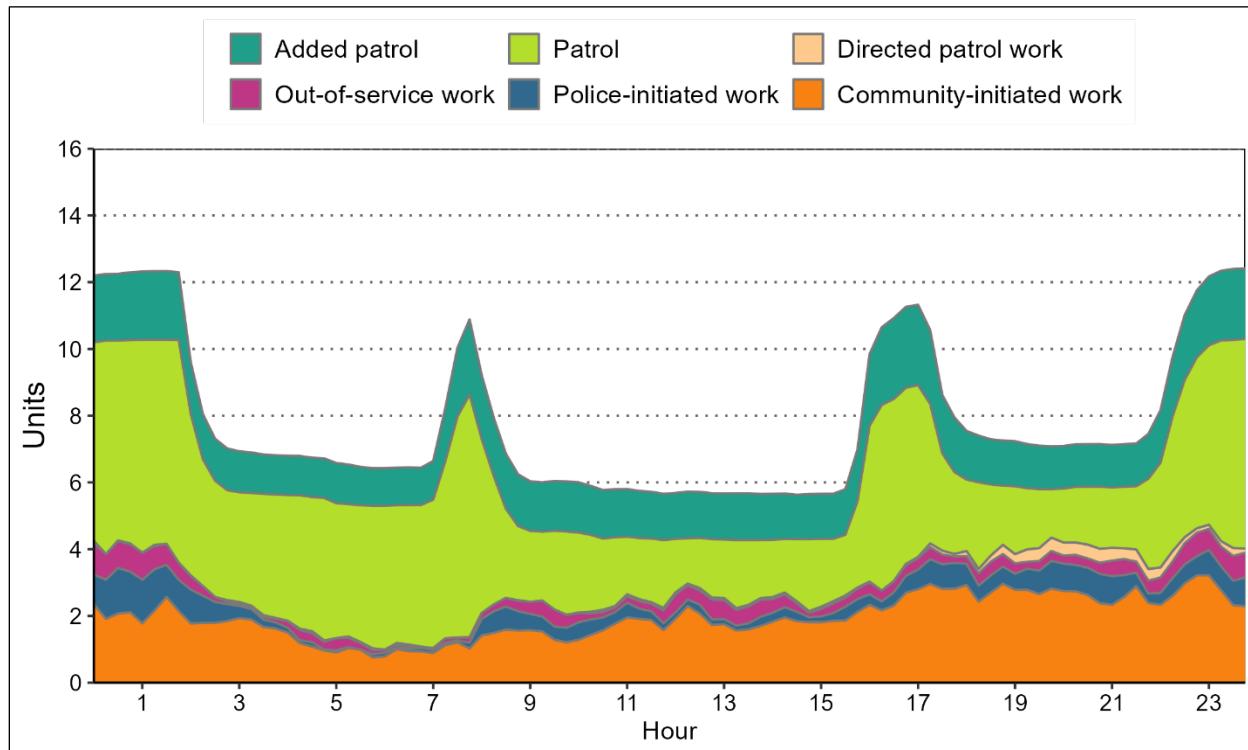
## FIGURE 5-2: Percentage of Workload, Weekdays, Winter 2023
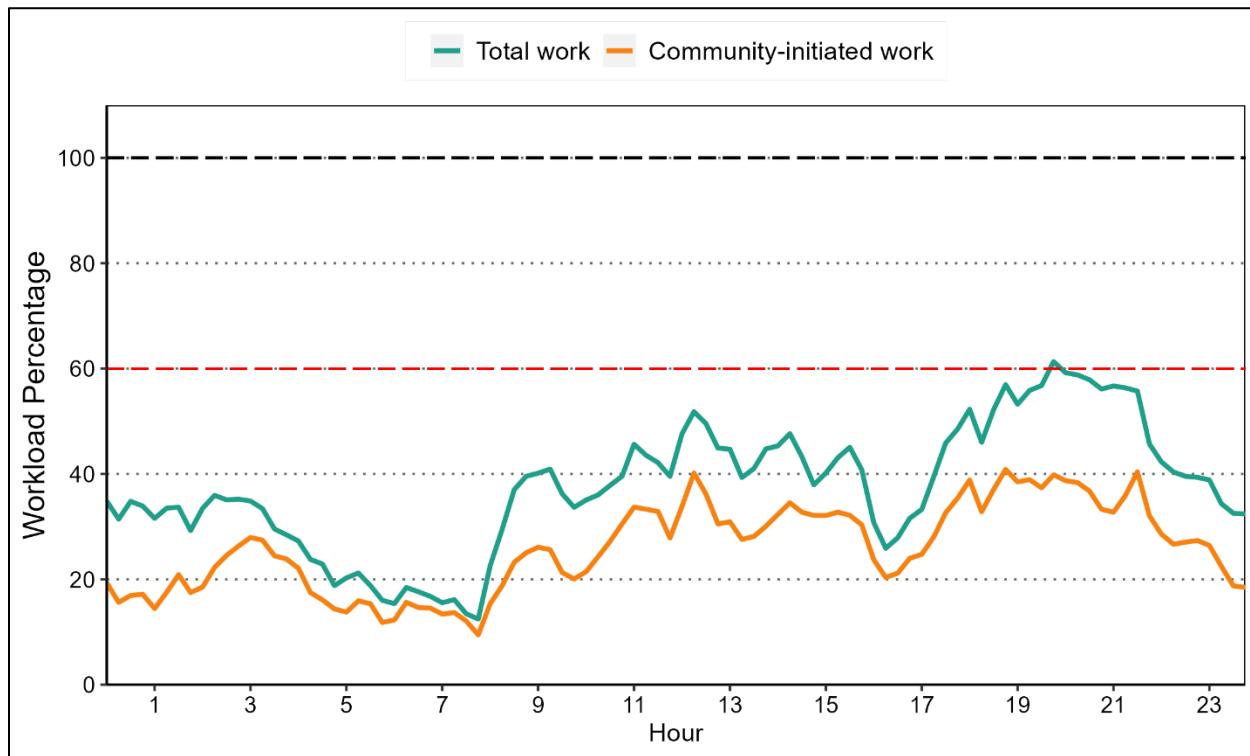


Workload v. Deployment – Weekdays, Winter

Avg. Deployment          7.8 officers per hour
Avg. Workload:           2.9 officers per hour
Avg. % Deployed (SI):    37 percent
Peak SI:                 61 percent
Peak SI Time:            7:45 p.m.

The figures above and the following figures on workload represent a great deal of data. The "Deployment and All Workload" figures show the relationship of all on-duty police officers that were factored into the workload analysis and what work is represented by those officers throughout the course of the day. For weekdays in winter, average deployment throughout the day was 7.8 officers. The average saturation index (SI) was 37 percent, and the peak SI was 61 percent at 7:45 p.m. These figures would suggest that MPD was optimally deployed on the weekdays during the winter months in 2023.

Now for the remainder of the remaining workload figures for the periods analyzed.

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**FIGURE 5-3: Deployment and All Workload, Weekends, Winter 2023**
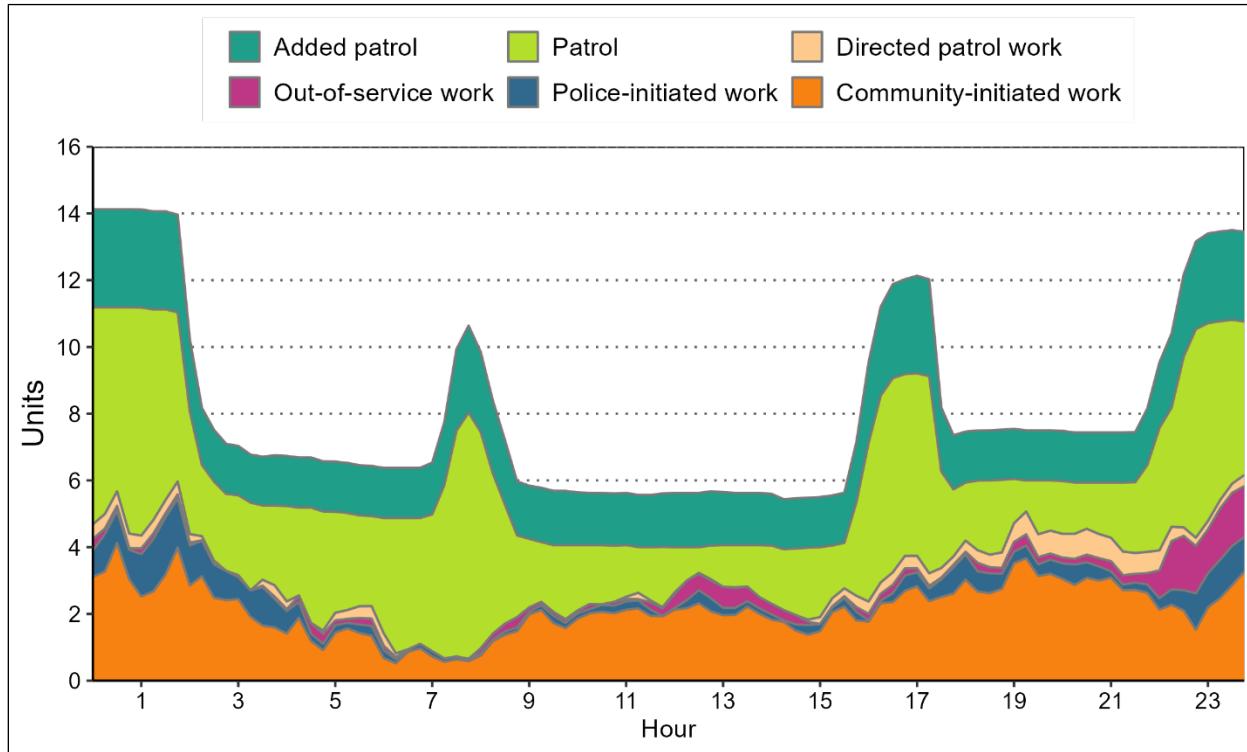


**FIGURE 5-4: Percentage of Workload, Weekends, Winter 2023**
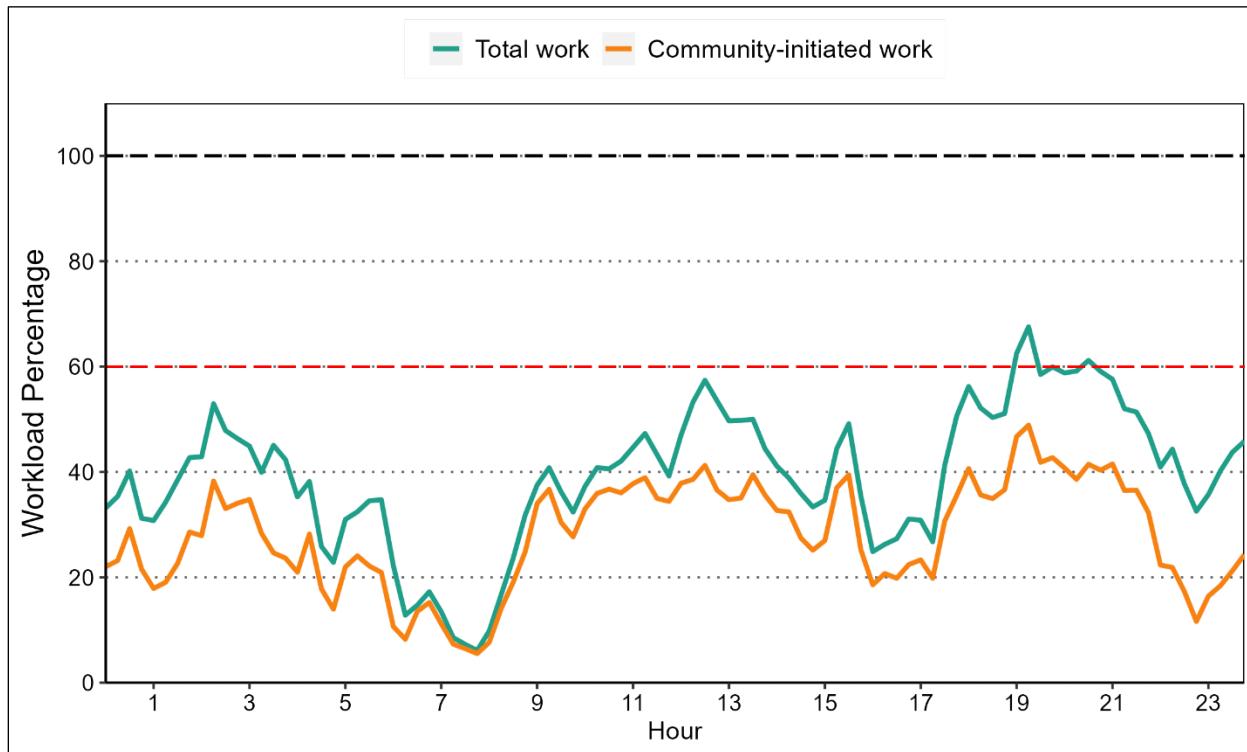
**Workload v. Deployment – Weekends, Winter**

Avg. Deployment:       8.1 officers per hour
Avg. Workload:         3.1 officers per hour
Avg. % Deployed (SI): 37 percent
Peak SI:               68 percent
Peak SI Time:          7:15 p.m.

**FIGURE 5-5: Deployment and All Workload, Weekdays, Summer 2023**



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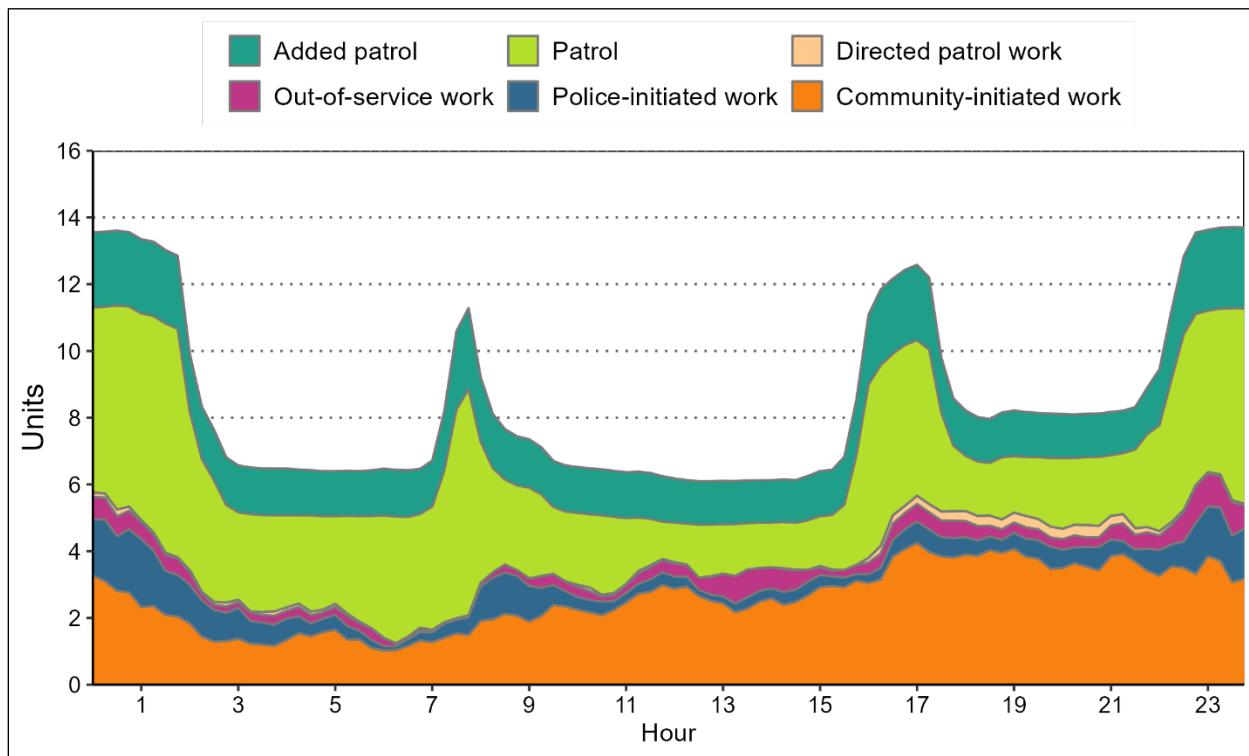
## FIGURE 5-6: Percentage of Workload, Weekdays, Summer 2022
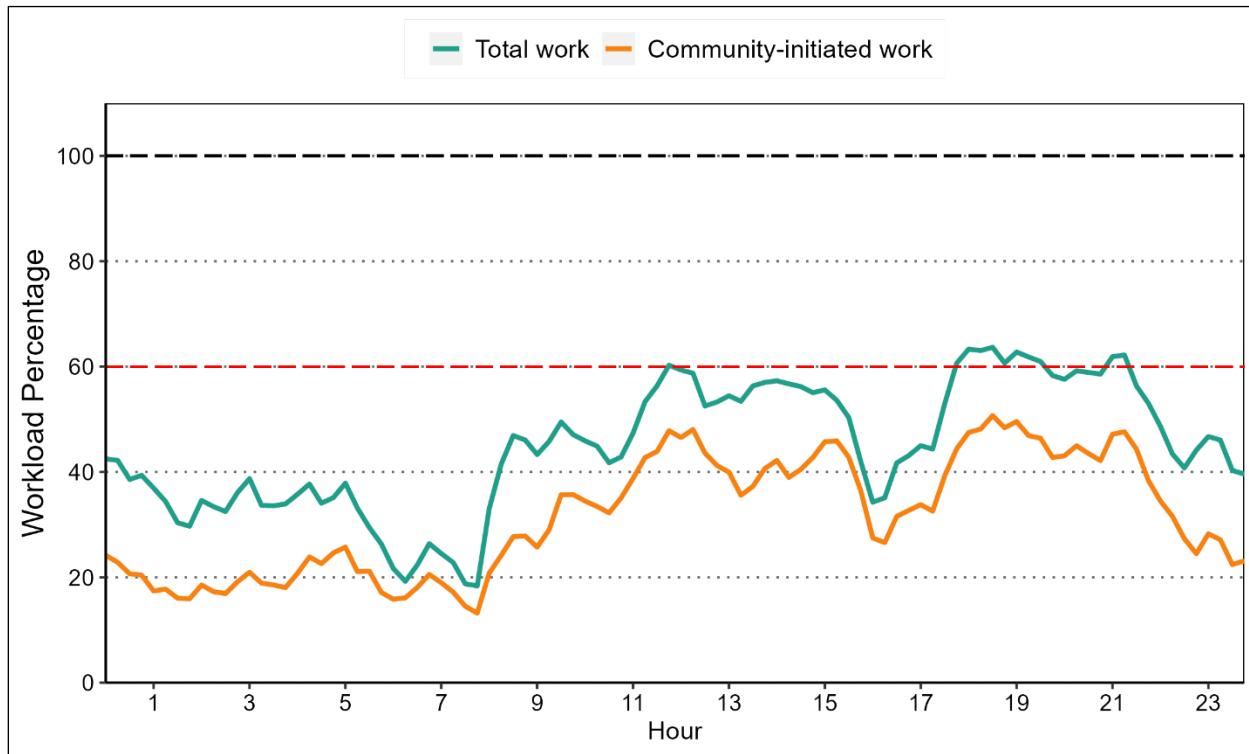


Workload vs. Deployment – Weekdays, Summer

| | |
|---|---|
| Avg. Deployment: | 8.5 officers per hour |
| Avg. Workload: | 3.7 officers per hour |
| Avg. % Deployed (SI): | 44 percent |
| Peak SI: | 64 percent |
| Peak SI Time: | 6:00 p.m. |

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**FIGURE 5-7: Deployment and All Workload, Weekends, Summer 2022**
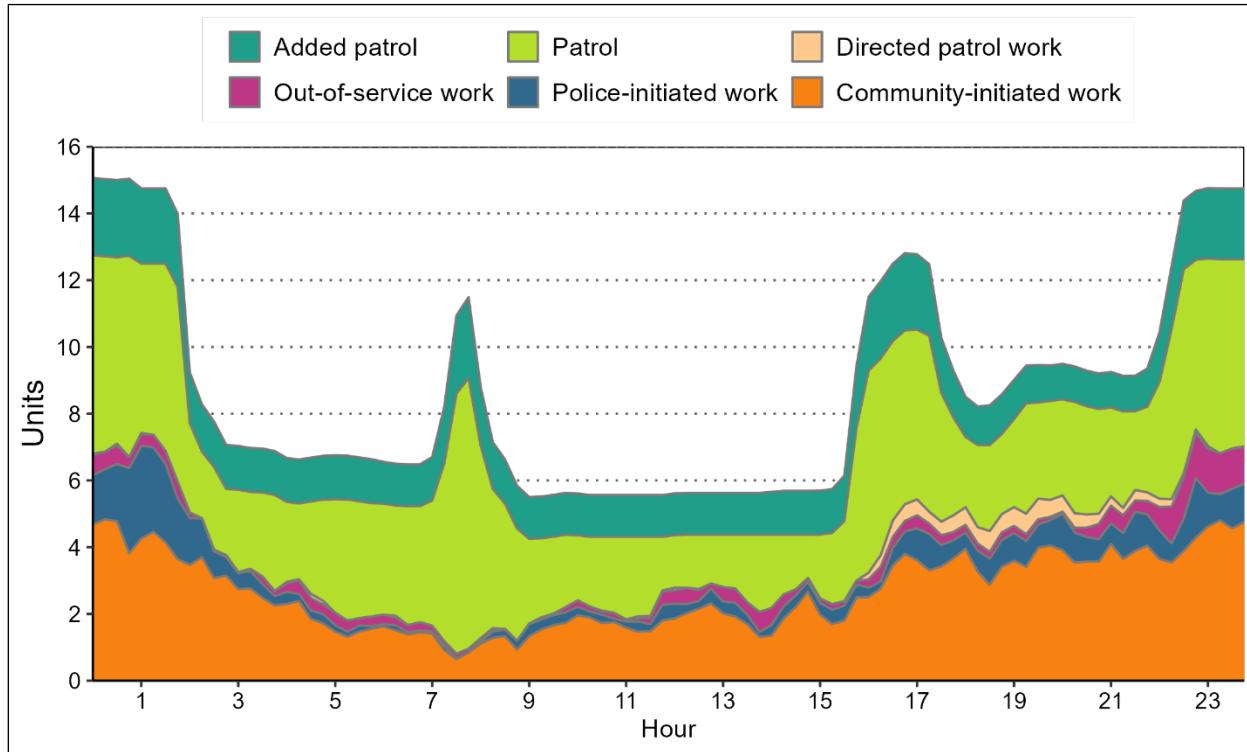


**FIGURE 5-8: Percentage of Workload, Weekends, Summer 2022**
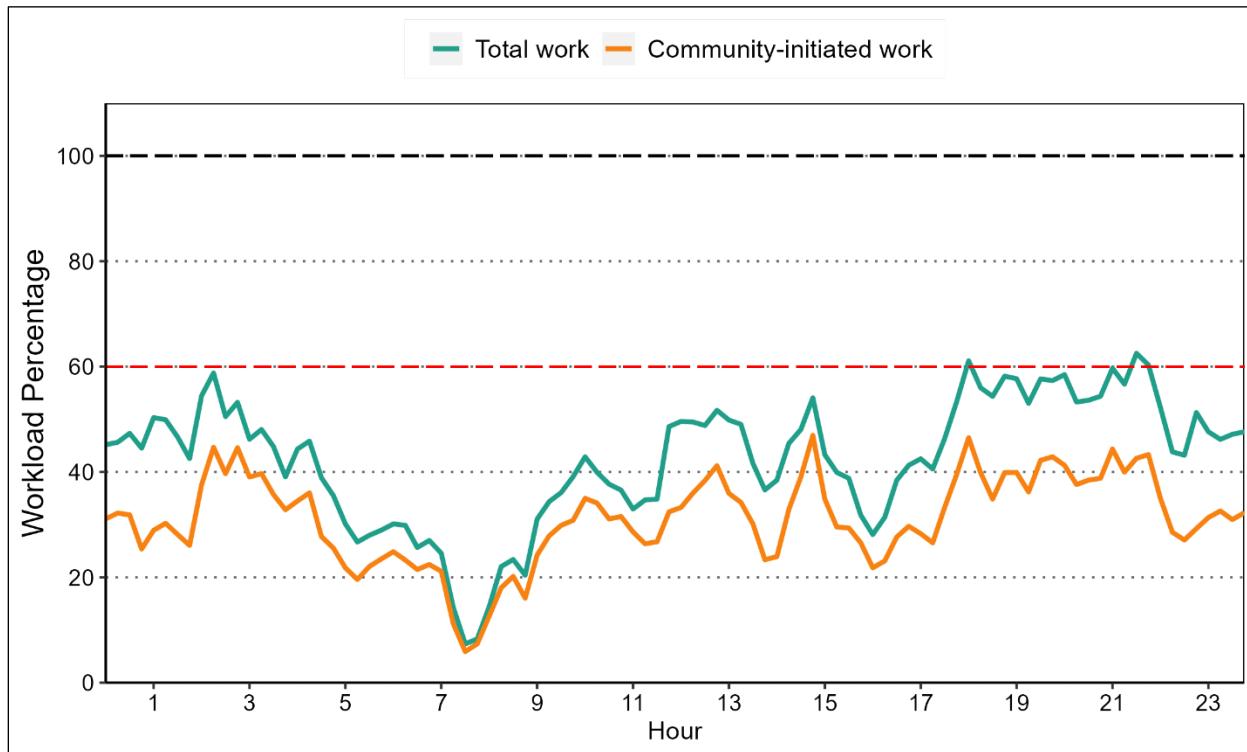
Avg. Deployment:      8.7 officers per hour
Avg. Workload:        3.8 officers per hour
Avg. % Deployed (SI): 43 percent
Peak SI:              63 percent
Peak SI Time:         9:30 p.m.

## Observations:

### *Winter:*

- Community-initiated work:

  - During the week, the workload reached a maximum of 41 percent of deployment between 6:45 p.m. and 7:00 p.m. and between 9:30 p.m. and 9:45 p.m.

  - On weekends, the workload reached a maximum of 49 percent of deployment between 7:15 p.m. and 7:30 p.m.

- All work:

  - During the week, the workload reached a maximum of 61 percent of deployment between 7:45 p.m. and 8:00 p.m.

  - On weekends, the workload reached a maximum of 68 percent of deployment between 7:15 p.m. and 7:30 p.m.

### *Summer:*

- Community-initiated work:

  - During the week, the workload reached a maximum of 51 percent of deployment between 6:30 p.m. and 6:45 p.m.

  - On weekends, the workload reached a maximum of 47 percent of deployment between 2:45 p.m. and 3:00 p.m. and between 6:00 p.m. and 6:15 p.m.

- All work:

  - During the week, the workload reached a maximum of 64 percent of deployment between 6:00 p.m. and 6:15 p.m. and between 6:30 p.m. and 6:45 p.m.

  - On weekends, the workload reached a maximum of 63 percent of deployment between 9:30 p.m. and 9:45 p.m.

As indicated earlier, the figures and data represented above are from two 8-week periods during winter and the summer of 2023; the data is broken down by weekdays and weekends. In evaluating the workload against the available staffing in the MPD patrol division it "appears" the division is properly staffed.

We know from conducting assessments involving departments throughout the country that these workload numbers do not represent all work being done in the department. Police culture by its very nature does not encourage 100 percent accounting of an officer's time. Beat integrity is a cultural element in all departments and beat integrity encourages officers to be available to handle any service call or crime report in their area of responsibility. As a result, officers tend to remain "available" in the department's CAD system and not record all activity such as report writing and other administrative tasks.

It is important to point out that the data that CPSM used to create the above figures was based entirely on information from the computer-aided dispatch (CAD) records. The importance of officers accurately tracking their time cannot be understated. If Minot desires to move into the direction of being a data-driven department and to staff according to real workload, then the real workload must be measured.

Minot PD, like many departments, has its officers voice dispatch themselves whenever they are involved in any activity. This is done so that other officers hear it on the radio and are aware of where their colleague is working and what they are doing. It is deemed a basic safety principle for officers. However, along with that safety protocol, many departments have established protocols where officers can place themselves on a call within their mobile data computer (MDT) in the patrol car to alleviate unnecessary radio traffic. These are all best practice decisions for the agency.

Regardless of what MPD elects to do we encourage it to ensure that all officer activities are accurately captured in CAD. Additionally, not just enforcement work or citizen contact should be captured but administrative time should also be tracked. Examples of administrative time would be meal breaks and report writing when those reports cannot be tracked within the original call. MPD indicated to CPSM team members that all activities of officers are accurately captured in the CAD. Observations by team members during the site visit supported this. We compliment MPD for using best practices in tracking officer activities.

## FIGURE 5-9: Percentage Events per Day, by Initiator
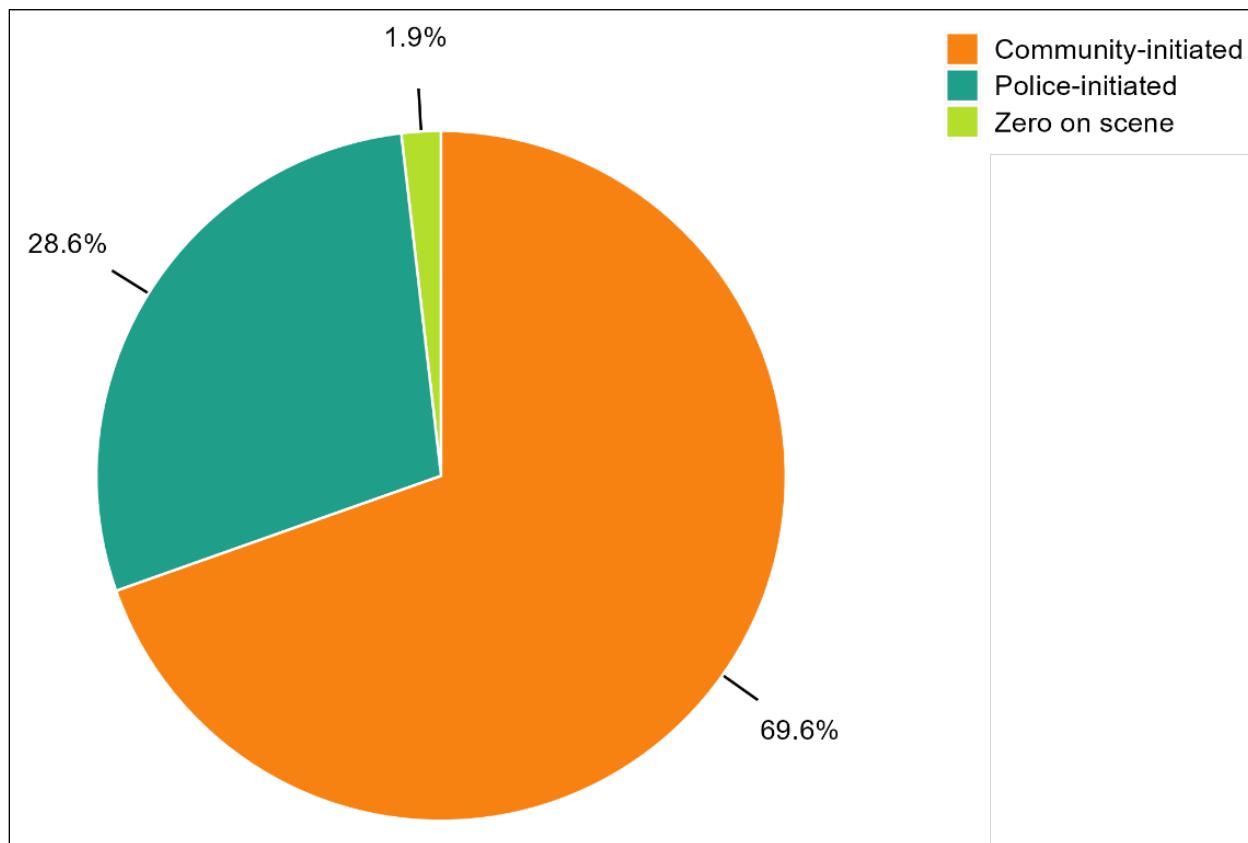


**Note:** Percentages are based on a total of 32,206 events.

## TABLE 5-1: Events per Day, by Initiator

| Initiator | No. of Events | Events per Day |
|---|---|---|
| Community-initiated | 22,413 | 61.4 |
| Police-initiated | 9,197 | 25.2 |
| Zero on scene | 596 | 1.6 |
| **Total** | **32,206** | **88.2** |

## Observations:

- 2 percent of the events had zero time on scene.

- 29 percent of all events were police-initiated.

- 70 percent of all events were community-initiated.

- There was an average of 88 events per day or 3.7 per hour.

The above data shows the percentage of activity occurring daily within MPD. As can be seen there is an average of 61.4 calls for service per day that are initiated by the community (calls into dispatch either through the business line or through 911) representing nearly 70 percent of all workload while officer-initiated activity (primarily traffic stops) represent 28 percent of all workload, or 25.2 calls per day. The zero on-scene category are simply CAD entries that amounted to so little time that they were largely excluded from the analysis.

In many cases with other agencies, we see officer-initiated and community-initiated ratios that are similar to the Minot data. It is common for officer-initiated activity to represent approximately 30 percent of the workload while community-initiated activity typically commands a much larger percentage of an officer's total workload.

The following table and figure further break down the daily events experienced by MPD. The emphasis on traffic-related stops and enforcement plus the directed patrols mentioned in the workload section above are detailed.

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# FIGURE 5-10: Percentage Events per Day, by Category



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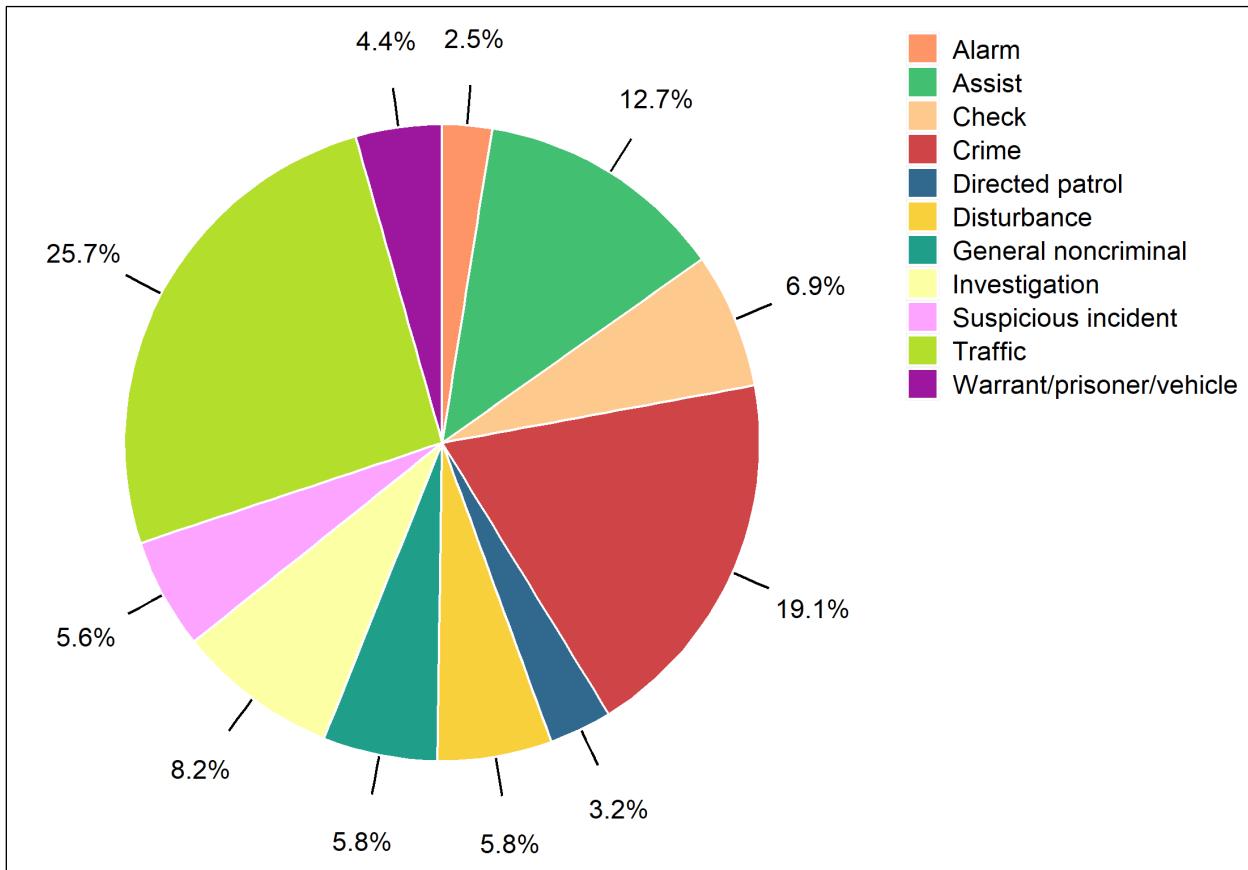
## TABLE 5-2: Events per Day, by Category

| Category | No. of Events | Events per Day |
|---|---|---|
| Accident | 1,234 | 3.4 |
| Accident–criminal | 372 | 1.0 |
| Alarm | 810 | 2.2 |
| Animal call | 632 | 1.7 |
| Assist other agency | 1,769 | 4.8 |
| Assist public | 2,322 | 6.4 |
| Crime against persons | 1,186 | 3.2 |
| Crime against property | 1,742 | 4.8 |
| Crime against society | 2,057 | 5.6 |
| Directed patrol | 1,029 | 2.8 |
| Disturbance | 1,875 | 5.1 |
| Investigation | 2,637 | 7.2 |
| Juvenile | 780 | 2.1 |
| Mental health | 131 | 0.4 |
| Miscellaneous | 335 | 0.9 |
| Special check | 314 | 0.9 |
| Suspicious incident | 1,817 | 5.0 |
| Traffic enforcement | 1,674 | 4.6 |
| Traffic enforcement–criminal | 799 | 2.2 |
| Traffic stop | 5,369 | 14.7 |
| Warrant/prisoner/vehicle | 1,417 | 3.9 |
| Welfare check | 1,905 | 5.2 |
| **Total** | **32,206** | **88.2** |

## Observations:

- The top three categories accounted for 58 percent of events:
  - 26 percent of events were traffic-related.
  - 19 percent of events were crimes.
  - 13 percent of events were assists.

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# POLICE BEATS AND WORKLOAD DISTRIBUTION

The Minot Police Department divides the city into three beats. Beat A is the northern half of the city. Beats B and C divide the southern half of the community. The 'beats' are historical in nature; they are large by municipal policing standards. Call volume is comparable among the beats, with Beat A generating the most calls for service by a small margin compared to Beat C. Patrol command staff advised team members they do not typically utilize all three beats to deploy staff, but rather assign officers to either north (Beat A) or south (Beat B/C). This actually makes the beats exceptionally large when treated as just two for the entire community for deployment purposes. Additionally, it impacts the ability to garner detailed statistics for smaller quadrants of the community, such as specific neighborhoods. Analysis of crime and other statistics allow for improved strategic deployment of patrol resources to address specific problems.

Many law enforcement agencies divide a community into smaller beats or divide up larger areas of the city into reporting districts (RDs) to allow for data-driven decisions to address crime and other public safety issues. Having large beats for deployment as MPD does can increase response times due to officers gathering in one area of the larger geographic north or south deployment or tending to roam the entire larger area. Beat integrity refers to officers remaining in their assigned beat or geographic area. It is an integral part of effective patrol deployment and enhances response times.

Minot State University (MSU) is located in the city limits of Minot. MSU does not have its own police department and relies on the Minot Police Department for police services. MSU does have a security department comprised of 10 security officers. The security officers handle patrol of the campus. Criminal calls and investigations are referred to MPD.

## FIGURE 5-11: Percentage Calls and Work Hours, by Beat
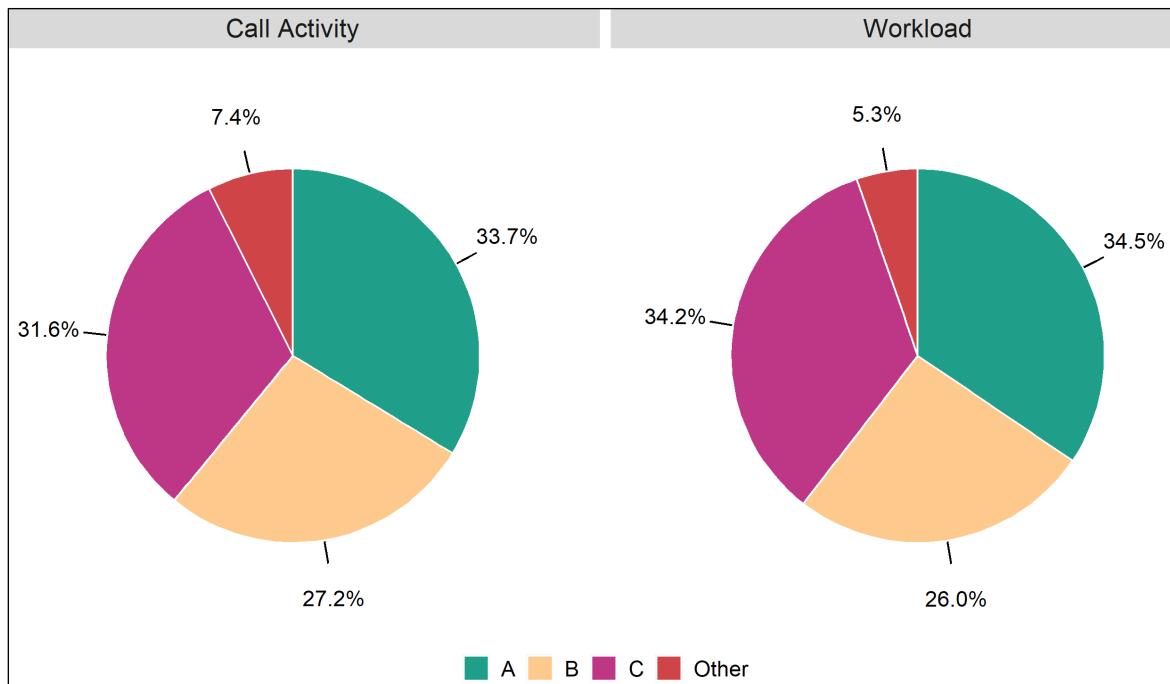


**Note**: The "other" category includes calls at headquarters, miscellaneous beats, and calls missing beats. About 94 percent of calls in the miscellaneous category were in beat "P2," which is the Ward County Sheriff's Office beat in the Minot area.

**TABLE 5-3: Calls and Work Hours by Beat, per Day**

| Beat | Per Day | |
|---|---|---|
| | Calls | Work Hours |
| A | 28.3 | 23.6 |
| B | 22.8 | 17.8 |
| C | 26.5 | 23.4 |
| HQ | 4.0 | 2.2 |
| Miscellaneous | 1.7 | 0.9 |
| Unknown | 0.5 | 0.5 |
| **Total** | **83.9** | **68.5** |

## Observations:

- Beat A had the most calls, which accounted for approximately 34 percent of total calls.

- Beat A and C had larger workloads than beat B, with each accounting for approximately 34 percent of the total workload.

**FIGURE 5-12: MPD Beats**
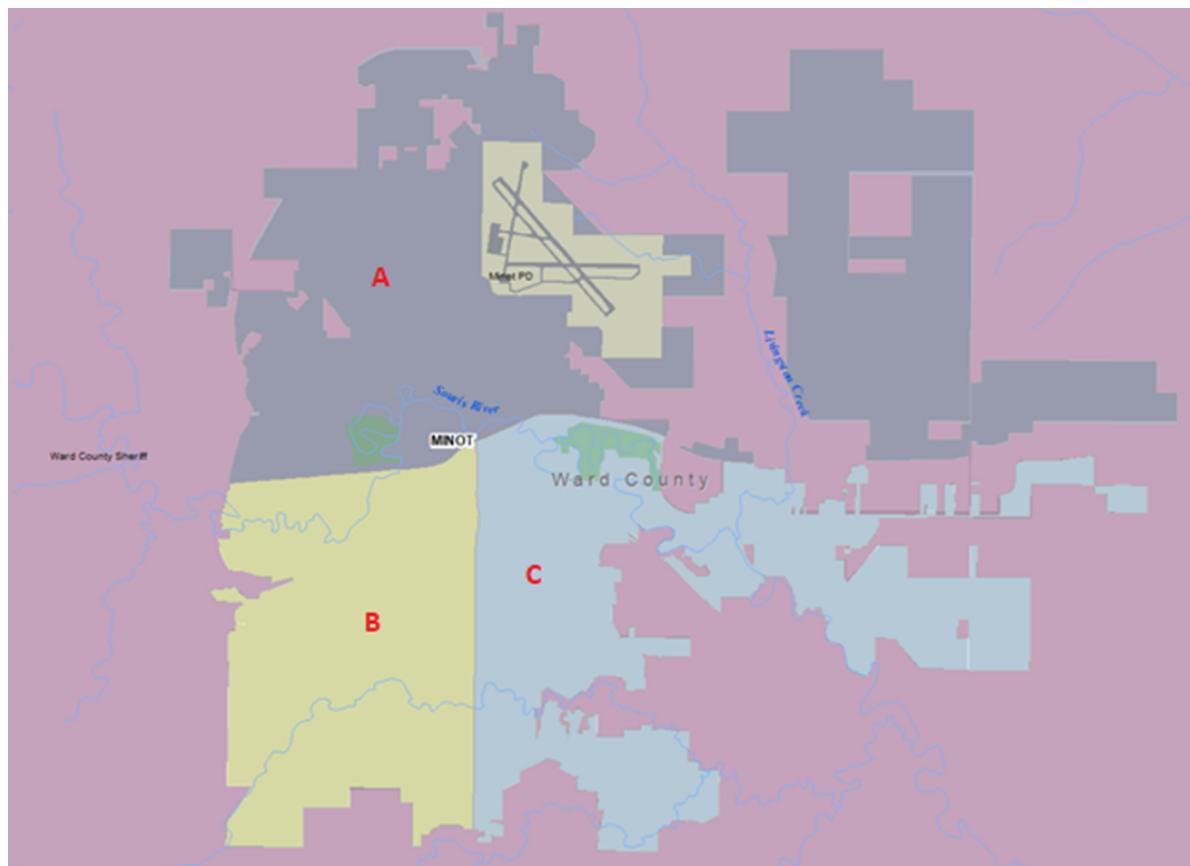


We believe that MPD should restructure its beat boundaries and increase the number of beats to make them smaller and more manageable. We also suggest that within those beats, smaller areas be broken down into separate reporting districts. Considering the area that Minot

encompasses and the call volume, Minot could easily be broken down into six to eight beats, with multiple reporting districts within those beats.

It is important to point out that a "beat" does not imply that a single officer must always be assigned that beat 24-7. A beat should be thought of as a geographic area that is manageable in size and that allows for patrol resources to be optimally deployed throughout a wider jurisdiction. Beat integrity becomes a cultural and policy expectation that officers remain in their geographic area unless priority service needs arise to have them leave that area. Ideally, beats would be designed to have reasonably similar workload and calls.

The existing three-beat configuration does not allow the department to strategically assign officers to specific areas where crime or public safety issues are prevalent. Smaller beats can also improve response time (see note below about the beats in the Response Times section). The practice of deploying officers using a two-beat, north and south, plan spreads existing on-duty officers throughout the city. This can also increase the likelihood of officers clustering in a small geographic area rather than be spread throughout the community. Officers could still be optimally deployed with existing staffing. When daily staffing exceeds the number of beats due to workload, the department could simply double-up busier beats or create rover units to provide assistance citywide. During times when staffing is not adequate to cover all beats, officers could take more than one beat per shift or have officers share beats with common borders.

Reporting districts (RD) serve an altogether different purpose. RDs should be relatively small and numerous. Breaking down areas into smaller RDs will enable better data analysis in the future. Smaller, defined areas make crime spikes easier to spot and help enable a faster solution to those problems. Smaller reporting districts would allow the department to track the impact of certain types of development and housing more carefully.

## PATROL SCHEDULE

The department's main patrol force consists of patrol officers operating on 10-hour shifts starting at 7:30 a.m., 4:00 p.m., and 10:00 p.m. The police department's main patrol force deployed an average of 6.3 officers per hour during the 24-hour day in winter 2023 and an average of 7.0 officers per hour in summer 2023. When patrol sergeants are included, the department averaged 7.9 units per hour during the 24-hour day in winter 2023 and 8.6 units in summer 2023.

MPD advised team members it has a minimum staffing requirement of six units (officers) per shift. Patrol sergeants are often used to attain the minimum staffing of six. We were informed sergeants do not routinely take reports or dispatch as primary units on CFS, even when used to achieve the minimum staffing level for patrol.

The 10-hour shifts are very popular with patrol personnel. We do believe MPD's 10-hour shifts limits the number of officers available for shift coverage. A 10-hour schedule does typically require more resources than a traditional 8- or 12-hour schedule. The 10-hour shifts are popular with officers and the overlapping evening (mid) shift bolsters resources. We recommend MPD adjust the schedule of at least two officers per day on the evening (mid) shift from reporting for duty from 4:00 p.m. to 2:00 a.m. to reporting for duty from 2:00 p.m. until midnight. This will increase the number of available officers during peak call volumes.

# OUT-OF-SERVICE ACTIVITIES

Workload activity is divided into three distinct categories. Community-initiated work involves calls for service that officers are dispatched to handle. For instance, when someone calls 911 to report a crime and an officer is sent to investigate, then it will be classified as a community-initiated call. Self-initiated or self-directed work is also self-explanatory. An officer who makes a traffic stop and takes whatever appropriate action deemed necessary will have that call classified as self-initiated. About 38 percent of all other work recorded in a department CAD system gets classified as being administrative in nature or as this category implies, "out-of-service" activity.

The following table is a breakdown of all out-of-service activity which CPSM extracted from MPD's CAD data.

## TABLE 5-4: Activities and Occupied Times by Description

| Description | Occupied Time | Count |
|---|---|---|
| Out of Service | 33.3 | 2,563 |
| Repairs | 5.1 | 4 |
| Reports | 24.6 | 44 |
| Training | 100.6 | 204 |
| **Administrative - Weighted Average/Total Activities** | **38.0** | **2,815** |
| Personal - Lunch | 28.1 | 2,663 |
| **Weighted Average/Total Calls** | **33.2** | **5,478** |

When looking at the overall activity level of MPD officers, the most common administrative description was "out of service." There are no indications that out-of-service activity is being misrepresented or misused. However, unless properly monitored by field supervisors to ensure accountability, the use of this time categorization can become problematic.

There are some areas of this data that were further explored:

- "Out of Service" was further explored to determine if the activities being undertaken in this description are better suited in one of the other administrative descriptions. MPD staff advised CPSM team members "out of service" is most often used for officers calling out "10-6" (busy) on the radio which is keyed in CAD as "out of service" They go "10-6" for some training tasks, court appearance, restroom breaks, and some administrative tasks.

- Lunch and short breaks are noted at the bottom of the table. Typically, department policy gives an allowable lunch break period (often 30 minutes) and policy also allows for a limited number of shorter breaks, such as two 15-minute breaks during an officer's shift. Patrol SOP 1011 (Meal Periods and Breaks) outlines what is allowable. This policy establishes that meal breaks are cleared through dispatch and officers are on call while on a break.

- The fact that report writing is present and is being used at some level is encouraging; it demonstrates that officers are to some extent recording this very important administrative activity. We would suggest that to the extent possible, report writing time be captured within the originating call to be able to measure the true workload of those call categories. This may actually be occurring due to the lower count under report writing.

- The other administrative activity of note was the longest average timed activity was described as "training." It is common to have training time lasting more than one hour.

The importance of accurately capturing the use of administrative time is important. There should be a management expectation that field supervisors are actively managing the shift to ensure officers are being judicious with their time and to the greatest extent possible in their assigned beats handing community concerns. This can only be done when supervision has an accurate picture of what every officer is doing.

## WORKLOAD MITIGATION STRATEGIES

Whenever evaluating the workload within any patrol force there should always be the question of what workload could be mitigated or achieved more efficiently. Minot's existing workload is manageable with current staffing. However, there are peak times during which workload demands are high. There are opportunities for some alternative ways of handling service demand that could be used for efficiency and for dealing with peak demands. Additionally, the following strategies can help ensure that on-duty capacity can be in place to handle larger incidents or at least two to three labor-intensive (two or more officers) calls for service at the same time.

By the very nature of what police officers do and the potential danger and liability associated with their actions and responsibilities, the sworn officers within any agency will be the among the most expensive labor a city will invest in. There comes a point in every organization where the use of technology and less expensive labor becomes a commonsense necessity.

### Response to Traffic Collisions

Investigating traffic collisions represents a significant workload for any police department. In MPD's case it accounts for 4.4 calls per day or 1,596 calls annually (calls labeled "Accident" and "Accident–Criminal"). In most cases, collisions require multiple units and can be time-consuming at nearly 45 minutes of labor per incident in these cases.

Serious crashes involving injuries or criminal conduct (DUI, etc.) certainly require a police response. However, most crashes are minor in nature and do not involve injuries or criminal prosecution. In many of those cases, departments can either seek an alternate response or elect not to respond at all since these incidents are often deemed to be civil in nature. Non-injury crashes can be handled by the involved parties exchanging information and managing the process through their auto insurance companies.

This is a difficult decision for many organizations because it is deemed a reduction in customer service and there will likely be community push back. But if the department modifies its response now it may pay dividends in the future as this workload increases. We often recommend that departments modify their response to these types of service demands. Please see note below for use of civilian, non-sworn personnel as a method to handle information exchange on minor traffic collisions.

### Use of Civilian Employees

Use of civilian, non-sworn employees in patrol work is found in departments across the nation and is deemed a best practice for departments seeking to deliver service in the most efficient manner. When deployed effectively these resources can be a force multiplier by handling nonhazardous, time-consuming patrol duties, thereby freeing up sworn officers to handle more critical functions as well as direct their efforts to community problem solving. Another benefit of utilizing civilians in the patrol workforce is the lower training threshold in comparison to sworn officers. The level of training for civilian employees is much less than that of a sworn police

officer. They do not need to attend an academy; however, we encourage that all employees receive proper training for the jobs they are tasked with performing. Extensive training should be provided to civilian employees working in the patrol function. Civilian employees can typically be hired and trained internally at a much faster rate that a regular police officer. This can be a benefit when a department is struggling to fill existing vacancies.

We do believe the addition of civilian employees into the patrol workforce would be beneficial for MPD. The re-classification of the Parking Control Officer (PCO) to a Community Service Officer (CSO) and one additional FTE civilian CSO is recommended (see note below about the part-time Fleet Manager position). The CSOs can be cross-trained for parking enforcement, traffic control, vehicle impounds, driver information exchange on non-reportable, minor vehicle accidents, handling report only lower level criminal offenses that are not in progress, and a variety of other administrative tasks currently handled by patrol officers. The CSO positions can also assist the Community Outreach sergeant with community events. The CSOs should work staggered schedules to make their impact effective during the early evening hours in addition to daytime hours when patrol-related administrative tasks are the highest. Due to the relatively low volume of animal control calls per day (1.7), the ACOs could be cross-trained as CSOs.

## Alternative Reporting Options

Responding to service calls for very basic police reports is not an efficient use of sworn officers' time. Aside from using civilian employees for basic service calls, many agencies have turned to technology to offset the workload. There are off-the-shelf software solutions that provide the ability for citizens to create their own police reports through online portals or mobile applications. Many of these platforms integrate into a department CAD / RMS system for streamlined workflow. Additionally, some CAD / RMS vendors offer these solutions as well when paired to their existing systems.

MPD allows for some reports to be taken over the phone; however, this is done by a patrol officer on the street. Many of these phone reports could be handled by a civilian CSO employee mentioned above or through an online portal when for crimes or issues not in progress. We recommend MPD pursue an online reporting option through its current RMS vendor or another software vendor that specializes in online reporting. Many vendors offer kiosk-type solutions for police station lobbies in addition to reporting options on the department's website. Typically, lower-level, not in progress, property crimes and some issues needing a police case number (e.g., lost property) are the only police reports permitted to be done online.

## False Alarm Mitigation

Mitigating false alarm calls is another area where agencies could be more efficient with a streamlined response and internal control mechanisms to mitigate unnecessary calls. We made inquiries to the MPD process and found it is are adhering to best practices. Minot has an industry best practice municipal code that requires all alarms in the city to be registered. The city has a model false alarm ordinance in place requiring a permit for alarm systems, and a mechanism to levy a fine for a certain number of false alarm responses by MPD.

During the evaluation period of this report MPD responded to 807 alarms, about 2.2 events per day. A majority were undoubtedly false. Although that number does not seem high it is important to point out the number will increase over time and for every alarm call there is typically a two-officer response for safety reasons. Officers responding to a call that is likely false means they are unavailable to respond to or manage a more serious community concern.

## Patrol Recommendations:

- CPSM recommends that MPD establish a training matrix for patrol officers and sergeants that includes the benefits of patrol officers being proactively engaged with the community and other modern policing strategies. (Recommendation No. 37.)

- CPSM recommends that Minot PD divide up its geographic beat structure into a greater number of beats smaller in size than its existing beats. (Recommendation No. 38.)

- We also recommend the department establish smaller reporting districts for the purpose of future crime analysis work. (Recommendation No. 39.)

- We recommend MPD adjust the schedule for some officers on the evening (mid) shift from reporting for duty from 4:00 p.m. to 2:00 a.m. to reporting for duty from 2:00 p.m. until midnight in order to increase the number of available officers during peak call volume times. (Recommendation No. 40.)

- CPSM recommends that MPD explore the expansion of the use of civilian, non-sworn employees to assist the patrol division. This includes the re-classifications of the Parking Control Officer (PCO) to a Community Service Officer (CSO) and adding one FTE civilian CSO (see note below about the part-time Fleet Manager position). (Recommendation No. 41.)

- We recommend MPD pursue an online reporting option. (Recommendation No. 42.)

## RESPONSE TIMES

The Minot Police Department is served by Minot Central Dispatch, which is the public safety answering point (PSAP) and dispatch center for all public safety agencies in Ward County.

We analyzed the response times to various types of calls, separating the duration into dispatch processing and travel time, to determine whether response times varied by call type. Response time is measured as the difference between when a call is received and when the first unit arrives on scene. This is further divided into dispatch processing and travel time. Dispatch processing is the time between when a call is received and when the first unit is dispatched. Travel time is the remaining time until the first unit arrives on scene.

We begin the discussion with statistics that include all calls combined. We started with 3,962 calls in winter and 5,745 calls in summer. We limited our analysis to community-initiated calls, which amounted to 2,788 calls in winter and 4,045 calls in summer. In addition, we removed the calls lacking a recorded arriving unit, a few calls located at headquarters, as well as calls not in Minot PD beats. We were left with 2,182 calls in winter and 2,977 calls in summer for our analysis. For the entire year, we began with 30,615 calls and limited our analysis to 22,179 community-initiated calls. With similar exclusions, we were left with 17,005 calls.

Our initial analysis does not distinguish calls based on priority; instead, it examines the difference in response to all calls by time of day and compares summer and winter periods. We then present a brief analysis of response time for high-priority calls alone.

## All Calls

This section looks at all calls without considering their priorities. In addition to examining the differences in response times by both time of day and season (winter vs. summer), we show differences in response times by category.

**FIGURE 5-13: Average Response Time and Dispatch Processing, by Hour of Day, Winter and Summer, 2023**
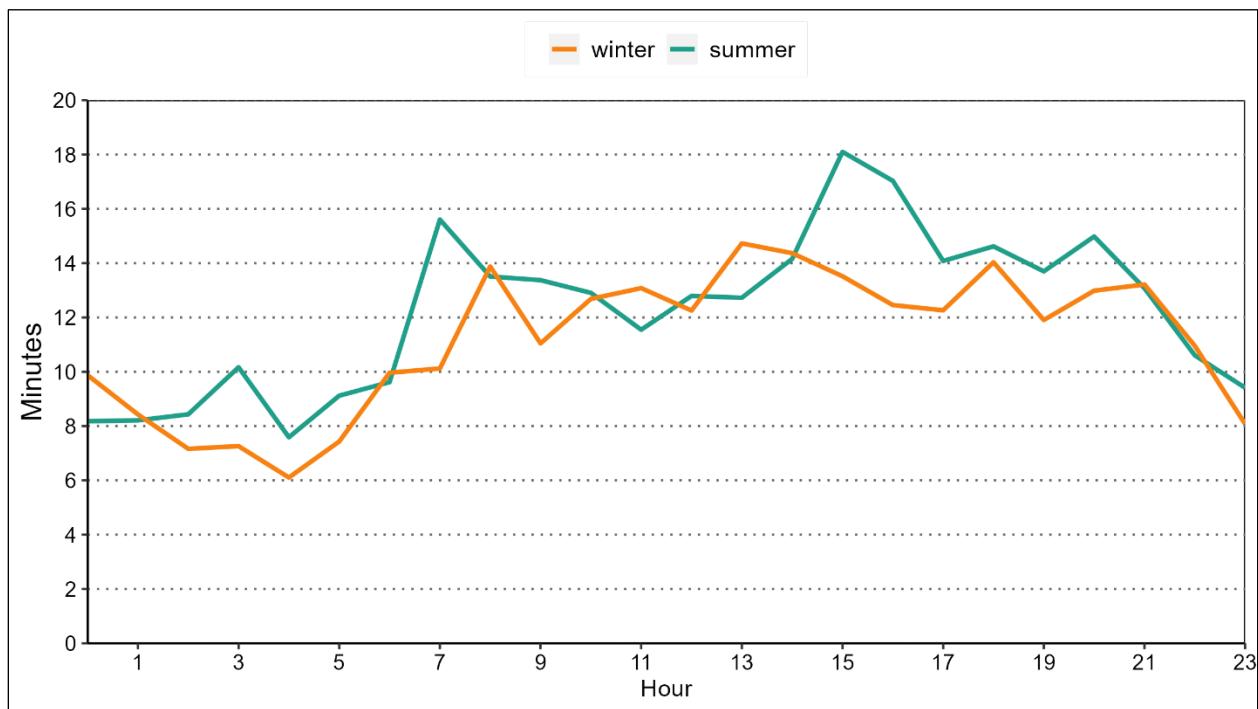


The above figure shows the consistency in department response times at different times of the year (winter and summer). Many agencies we analyze show lower response time during the early morning hours with times steadily increasing as it gets later in the day and calls get heavier. This pattern shows the MPD response times also vary significantly by the hour of the day. In the winter, the longest response times were between 1:00 p.m. and 2:00 p.m. with an average of 14.7 minutes. The shortest response times in the winter were between 4:00 a.m. and 5:00 a.m., with an average of 6.1 minutes. The longest response times in the summer were 18.1 minutes between 3:00 p.m. and 4:00 p.m., with the shortest response times being 7.6 minutes again between 4:00 a.m. and 5:00 a.m. The longest and shortest response times of the day in the winter and summer correlate to the call volumes during those same times.

The following table shows response times by season to the various types of calls received.

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## TABLE 5-5: Average Response Time Components, by Category

| Category | Winter | | | | Summer | | | |
| | Minutes | | | Count | Minutes | | | Count |
| | Dispatch | Travel | Response | | Dispatch | Travel | Response | |
|---|---|---|---|---|---|---|---|---|
| Accident | 6.7 | 6.1 | 12.9 | 150 | 6.4 | 6.0 | 12.4 | 147 |
| Accident–criminal | 9.6 | 7.7 | 17.3 | 33 | 10.0 | 7.6 | 17.6 | 47 |
| Alarm | 1.7 | 4.1 | 5.8 | 109 | 1.3 | 3.5 | 4.9 | 134 |
| Animal call | 11.7 | 6.7 | 18.4 | 35 | 13.6 | 7.5 | 21.1 | 63 |
| Assist other agency | 3.5 | 4.1 | 7.7 | 165 | 3.6 | 4.1 | 7.6 | 268 |
| Assist public | 9.0 | 6.1 | 15.1 | 117 | 11.7 | 6.8 | 18.5 | 215 |
| Crime against persons | 6.5 | 6.3 | 12.8 | 69 | 10.5 | 7.9 | 18.4 | 115 |
| Crime against property | 10.0 | 7.2 | 17.2 | 162 | 9.3 | 6.9 | 16.2 | 211 |
| Crime against society | 4.3 | 4.8 | 9.1 | 182 | 5.6 | 5.5 | 11.0 | 283 |
| Disturbance | 4.1 | 5.2 | 9.3 | 234 | 5.5 | 5.5 | 11.0 | 282 |
| Investigation | 5.3 | 5.2 | 10.6 | 209 | 7.6 | 6.5 | 14.0 | 282 |
| Juvenile | 10.3 | 6.7 | 16.9 | 92 | 10.6 | 6.2 | 16.9 | 76 |
| Mental health | 2.9 | 5.4 | 8.3 | 25 | 1.9 | 4.9 | 6.8 | 16 |
| Miscellaneous | 2.9 | 6.9 | 9.8 | 10 | 8.2 | 4.3 | 12.5 | 22 |
| Special check | 0.4 | 4.1 | 4.5 | 8 | 0.7 | 5.7 | 6.5 | 14 |
| Suspicious incident | 6.0 | 4.4 | 10.4 | 153 | 5.9 | 5.0 | 10.9 | 277 |
| Traffic enforcement | 9.3 | 5.7 | 15.0 | 111 | 8.7 | 5.9 | 14.6 | 145 |
| Traffic enforcement–criminal | 1.8 | 3.9 | 5.6 | 15 | 8.7 | 5.3 | 13.9 | 11 |
| Warrant/prisoner/vehicle | 7.5 | 5.8 | 13.3 | 85 | 6.3 | 6.1 | 12.4 | 97 |
| Welfare check | 8.1 | 5.5 | 13.6 | 218 | 8.2 | 5.4 | 13.7 | 272 |
| **Total Average** | **6.4** | **5.5** | **11.9** | **2,182** | **7.1** | **5.7** | **12.9** | **2,977** |

**Note:** The total average is weighted according to the number of calls per category.

MPD's fastest overall response time is associated with alarm calls. The longest response times for both winter and summer were to general noncriminal calls.

Next we will examine the response to calls based on priority. Police departments will divide call types by priority as a means to ensure more pressing calls receive a faster response than more routine calls. MPD divides calls into four priority levels; "high" for the highest-priority calls, "medium" for the next priority, "low" for the lowest-priority calls, and "follow-up" for calls not requiring a quick response. Also, we studied injury traffic accident responses. One reason we look at injury collision calls is because agencies typically consider that call some level of an emergency response and they will be among the faster response times in these categories.

Note the 90th percentile category simply shows the response time 90 percent of the time versus the average noted in the first columns.

## TABLE 5-6: Average and 90th Percentile Response Times, by Priority

| Priority | Minutes | | | Calls | 90th Percentile Response Time, Minutes |
|---|---|---|---|---|---|
| | Dispatch | Travel | Response | | |
| High | 2.8 | 4.6 | 7.4 | 4,418 | 12.4 |
| Medium | 7.6 | 6.1 | 13.8 | 6,169 | 31.2 |
| Low | 8.9 | 6.2 | 15.1 | 3,496 | 34.0 |
| Follow-up | 7.9 | 6.2 | 14.1 | 2,922 | 32.4 |
| **Total** | **6.7** | **5.7** | **12.4** | **17,005** | **27.1** |
| Injury Accident | 1.8 | 3.2 | 5.0 | 121 | 7.6 |

**Note**: The total average is weighted according to the number of calls within each priority level.

The dispatch time noted is the total time from the moment a 911 call is received, entered into the CAD system, and sent to a patrol unit for a response. The travel time is self-explanatory; it begins the moment a call is received by the officer and continues through the time it takes to drive to the location of the call.

Ideally, departments strive to have a response time of five minutes or less to critical, in-progress calls that may pose a threat to life. In the case of MPD, the highest category of calls is "High" and the average response time to those calls is well over the five-minute target.

Agencies often have multiple call types included in the highest priority responses and which may not be as serious as many true emergencies are; therefore, the totals in this call category can be misleading. However, injury collisions are serious and almost always garner a fast response. MPD's response in this area is right at the industry standard goal of five minutes.

The highest priority calls had an average response time of 7.4 minutes, which was lower than the overall average of 12.4 minutes for all calls. For high-priority calls, the longest response time occurred between 3:00 p.m. and 4:00 p.m., with an average of 9.6 minutes. The shortest response times for high-priority calls were between 1:00 a.m. and 2:00 a.m. and 5:00 a.m. and 7:00 a.m. with an average of 5.7 minutes.

We believe one of the reasons MPD does not meet a standard of close to five minutes is primarily due to the current officer deployment strategies into two large beats (A and B/C). Dividing the city into more beats that are geographically smaller and assigning an officer to each should reduce response times by having officers closer to calls occurring in their assigned smaller area of responsibility.

## SPECIAL WEAPONS AND TACTICS (SWAT)

The Minot Police Department has a tactical team operated as a regional Special Weapons and Tactics (SWAT) team. The team is made up of officers from MPD, deputies from the Ward County Sheriff's Office, and tactical medics from the Minot Fire Department. The team is comprised of 15 tactical operators, 4 snipers, 7 tactical medics, and a physician serving as a tactical doctor. The team is under the command of a patrol sergeant who reports to the Operations Division Captain.

Due to MPD being one of the larger law enforcement agencies in North Dakota and the largest agency in the region, it provides SWAT resources for a large section of northwestern North Dakota. North Dakota has just six SWAT teams in the state. If MPD needs additional tactical

resources, one or more of the other five tactical teams would respond in a mutual aid capacity. MPD receives grant funding from the State of North Dakota to support its regional response as a tactical team.

CPSM team members were very impressed with the quality of equipment and resources the MPD SWAT has. It is equipped at a level that matches many larger metropolitan police departments. All of the equipment for SWAT team members including their vests, helmets, and rifles are kept in the SWAT storage room or on the SWAT bus. This is a great strategy for a full team deployment outside of Minot. However, in a critical incident, a patrol officer who is also a SWAT team member does not have any tactical equipment with them while on duty. If SWAT resources or less-lethal munitions (bean bag shotgun, 40mm rounds, Pepperball) are needed, a SWAT officer would need to return to the police station and enter a code in at least three door or lockers to access the equipment.

MPD should consider purchasing "go bags" for SWAT team members assigned to patrol. This would allow them to carry their helmet, vest, and other personal tactical equipment with them while on duty to provide an immediate tactical resource in an emergency. Additionally, we recommend SWAT officers be permitted to carry their department-issued rifle while on-duty for patrol rather than relying on a shared rifle assigned to each patrol vehicle. As mentioned in the Fleet section of this report, the shared rifles have limitations. Trained tactical officers properly equipped on police patrol can contain an emergency situation and provide responding SWAT command with important on-scene intelligence while awaiting a full SWAT team deployment.

CPSM was advised that SWAT maintains all less-lethal force options. Less-lethal force options often include, but are not limited to, bean bag shotguns, 40mm launcher, and Pepperball launchers. Less-lethal force options can be an effective response to persons armed with weapons other than firearms. For MPD to deploy less-lethal in an emergency, an officer trained in less-lethal would need to go to the police station and obtain the less-lethal tools from the SWAT vehicle. We recommend MPD train sergeants in the use of less-lethal munitions and equip the supervisor vehicles with less-lethal options. This will allow for a faster response to a critical incident where a less-lethal option may prevent the need to utilize deadly force.

The current SWAT team policy (403) is a model tactical team policy and covers the basic elements of tactical team operations, selection, and training. While MPD SWAT is training an average of 12 hours per month, this does not meet the National Tactical Officers Association (NTOA) standards for a SWAT team. Because of the highly technical and complex nature of SWAT team operations, the training required is extensive. The danger, stress, and liability associated with SWAT or SRT teams also demand rigorous training standards. According to the NTOA, teams should train at least 16 hours per month. We recommend MPD increases its tactical team training by 4 hours a month for a total of 16 hours per month to meet NTOA standards.

In 2020, the SWAT team was utilized 4 times and two times in 2021 and 2022. There has been one callout of the team in 2023. We were advised MPD has reduced the use of SWAT for narcotics search warrants, which is a national trend and best practice. This explains the reduction in the number of callouts. Many law enforcement agencies are moving away from dynamic entries for narcotics search warrants due to the high risk of this type of use of SWAT.

## TABLE 5-7: SWAT Team Callouts / Use

|          | 2020 | 2021 | 2022 | 2023 |
|----------|------|------|------|------|
| Callouts | 4    | 2    | 0    | 1    |

MPD does have a Crisis Negotiation Team (CNT) made up of eight trained negotiators. This is a regional team with members also from the Ward County Sheriff's Office. All of the negotiators have at least level two training in crisis negotiations, and some have achieved level three training. CNT deploys with the SWAT team on callouts. They also train with the SWAT team.

MPD does have a formal after-action review (AAR) process for critical or major incidents. The AAR process allows for a major incident or event to be debriefed where lessons learned can be implemented. This fosters discussion that improves response to future events and addresses safety concerns and other lessons learned. We applaud MPD for utilizing a formal AAR process.

## Tactical Team (SWAT) Recommendations:

- CPSM recommends Minot increases its SWAT team training to 16 hours per month in compliance with NTOA. (Recommendation No. 43.)

- MPD should consider equipping patrol officers who are SWAT team members with SWAT resources in order to have trained tactical officers available to immediately respond to a critical incident. Additionally, we recommend allowing SWAT officers to check out their assigned department-issued SWAT rifle daily to be secured in their assigned patrol vehicle rather than the shared patrol rifle. (recommendation No. 44.)

- We recommend MPD train sergeants in the use of less-lethal munitions and equip the supervisor vehicles with less-lethal force options. (Recommendation No. 45.)

# K-9 OPERATIONS AND BOMB TEAM

MPD has utilized police service dogs for more than two decades. It currently has three dogs assigned to patrol with their trained police officer handler. The police dog and their handler comprise a K-9 team. One dog is trained in explosive detection as a "bomb dog" and tracking. The other two dogs are trained in narcotics detection and tracking. All dogs are trained for suspect apprehension and handler protection. MPD utilizes recognized K-9 trainers to acquire their police dogs.

The K-9 Unit policy (309) is a model K-9 operations policy that covers training, when the use of a police dog is authorized, and handler responsibilities. The K-9 Unit trains together 16 hours a month. They often train with other K-9 teams in the region. There have been no bites by the police dogs since 2016. MPD does an excellent job of recordkeeping of K-9 deployments and training. The K-9 teams were utilized 233 times in 2023, with a nearly equal distribution of tracking uses and narcotics detection. K-9 teams are assigned a marked, take-home police vehicle. The One K-9 team is currently assigned to each of the three patrol shifts. We recommend at least one narcotic detections K-9 team be assigned to the Focused Enforcement Unit.

MPD receives federal funds to maintain a Bomb Team. MPD's explosive detection K-9 team is assigned to the Bomb Team. The bomb team is made up of MPD officers, a Ward County Sheriff's deputy, and a member of the Minot Fire Department. The team averages 10 to 15 deployments a year across a large response region of the state. Bomb sweeps by the K-9 team are a majority of the deployments.

## K-9 Operations and Bomb Team Recommendation:

- CPSM recommends MPD assign one of the K-9 teams to the Focused Enforcement Unit. (Recommendation No. 46.)

## FOCUSED ENFORCEMENT UNIT

MPD recently created a street crimes-style team to proactively address crime trends. It refers to the team as the "Focused Enforcement Unit." Special units such as this can be effective to augment patrol, as a force multiplier, and to address specific crime trends. However, these units are only effective when their activities are led by effective intelligence. Deployment should be based on analysis of crime data and trends. The unit needs to be given specific goals and a detailed mission for maximum effectiveness.

The Focused Enforcement Unit is currently staffed with one police sergeant. Other officers are assigned to the unit when staffing permits. For the unit to be most effective, it needs to have dedicated personnel. Additionally, an MPD crime analyst should play a role in providing the crime data and hot-spot locations for the unit to address. As noted above in the K-9 section, we recommend one K-9 team (handler and dog) trained in narcotics detection be assigned full-time to the Focused Enforcement Unit. An additional police officer should be assigned full-time to the unit. Additional resources can be added to the team for mission-specific purposes on a temporary basis.

We recommend MPD develop a policy for the Focused Enforcement Unit outlining the mission of the unit, specific goals, and procedures for deployment and use. This policy should clearly specify that intelligence-led policing initiatives will be used to make the Focused Enforcement Unit effective.

### Focused Enforcement Unit Recommendations:

- CPSM recommends MPD assign one of the K-9 teams to the Focused Enforcement Unit. (Recommendation No. 47.)

- CPSM recommends at least one police officer be assigned full-time to the Focused Enforcement Unit. (Recommendation No. 48.)

- We recommend MPD develop a policy for the Focused Enforcement Unit outlining the mission of the unit, specific goals, and procedures for deployment and use. This policy should clearly specify intelligence-led policing initiatives that will be used to make the Focused Enforcement Unit effective. (Recommendation No. 49.)


## POLICE PATROL FLEET

Minot PD has approximately 25 marked police vehicles in its fleet. The fleet is predominately Ford Explorer SUVs. Other than K-9 team members, vehicles are not assigned to specific officers, groups of officers, or shifts. Marked police vehicles are checked out daily by officers at the beginning of their tour of duty. Since all marked vehicles are in the fleet pool for patrol, an officer may have a different vehicle assigned to them each workday. The marked police fleet appears to be well-equipped with modern police equipment.

"Hot seating" cars (that is, 24-hour continuous use) in a fleet pool structure such as MPD uses causes cars to not be as well cared for, equipment in the car to not be as well maintained, and officers to not take a sense of ownership in something they are not assigned to for a longer term. Additionally, the cars have little down time between shifts, making their lifespan shorter. We recommend MPD permanently assign no more than two officers to each marked police vehicle. This may require the purchase of some additional marked police vehicles in order to maintain

several pool cars that can be utilized when an officer's assigned car is down or in for scheduled maintenance. Assigned vehicles will be better cared for, last longer, create a sense of ownership by officer in the vehicle assigned to them, and add a level of accountability for the condition of the vehicle and the equipment assigned to it.

A patrol rifle is assigned to each marked patrol unit. The rifle is secured in a locked mount between the front seats and the in-car camera system is activated anytime the rifle is removed from the secure mounting system. The patrol rifles are equipped with rail mounted electronic optics. Team members were advised that the patrol rifles are inspected monthly and seldom are they fired at the range or the optics zeroed in. At least one of the patrol rifles mounted in a marked police vehicle was observed to be covered in a layer of dust. Monthly inspection of this important piece of equipment is not a best practice.

We recommend officers check-out a patrol rifle daily and it be inspected at the beginning and end of each shift. The rifles should be zeroed in on the range regularly. If the above recommendation of assigning no more than two officers to each marked patrol vehicle is implemented, then the rifle could be assigned to that specific vehicle and still be inspected daily by each of the assigned officers when they begin their tour of duty. These same assigned officers could also be responsible for zeroing in the rifle assigned to their car and for making sure the rifle is always in a state of readiness.

MPD maintains police patrol bicycles for use during warmer weather months. Bike Patrol is utilized for special events or specific missions seasonally. Officers are permitted to take a police bike with them on patrol utilizing a bicycle rack on the back of their patrol vehicle. This gives them the flexibility to park their police vehicle and switch to bike patrol in a specific area of the community.

A part-time fleet manager is employed by MPD to coordinate fleet related activity. This includes scheduling or regular maintenance on police vehicles and arranging for the vehicles to be dropped off at a repair facility.

## Police Patrol Fleet Recommendations:

- CPSM recommends MPD assign no more than two officers to each marked police vehicle and purchase additional marked police vehicles if needed to allow for this. (Recommendation No. 50.)

- We recommend officers check-out a patrol rifle daily and it be inspected at the beginning and end of each shift. The rifles should be zeroed in on the range regularly. (Recommendation No. 51.)

## ANIMAL CONTROL OFFICERS AND PARKING CONTROL OFFICER

Animal control services for the City of Minot are handled by two Animal Control Officers (ACO) who work in the Minot Police Department under the Operations Division captain. Animal control handled 632 animal-related calls in the year studied, or 1.7 calls per day. Minot does not have its own animal shelter but rather contracts with the Minot Veterinary Clinic. The Minot Veterinary Clinic handles animal sheltering and impounds of dogs and cats, pet adoptions, and euthanasia. When team members were onsite, one ACO position was vacant.

MPD has one Parking Control Officer (PCO) position. The PCO handles the enforcement of parking time limits in the downtown area and other parking complaints in Minot. The PCO and ACOs also assist patrol officers with vehicle impounds, traffic control, and other administrative

tasks not requiring a sworn police officer response. The use of the PCO and ACO positions to assist patrol is a force multiplier and best practice.

As previously mentioned in the section on patrol, we do believe the addition of civilian employees into the patrol workforce would be beneficial for MPD. The reclassification of the Parking Control Officer (PCO) to Community Service Officer (CSO) would be a step in that direction. The CSOs can be cross-trained for parking enforcement, traffic control, vehicle impounds, driver information exchange on non-reportable, minor vehicle accidents, handling report-only, low-level criminal offenses that are not in progress, assisting ACOs, and a variety of other administrative tasks currently handled by patrol officers. The CSO positions can also assist the Community Outreach sergeant with community events. One additional civilian CSO is recommended in FY 2025. This could be accomplished by converting the part-time fleet manager position to a full-time CSO. Additionally, MPD should consider converting the ACOs to CSOs and cross-training them to assist in CSO duties during peak times.

## Animal Control and Parking Control Recommendations:

■ CPSM recommends MPD reclassify the Parking Control Officer position to Community Service Officer (CSO). The CSOs can be cross-trained for animal control, parking enforcement, traffic control, vehicle impounds, driver information exchange on non-reportable, minor vehicle accidents, handling report-only, lower-level criminal offenses that are not in progress, and a variety of other administrative tasks currently handled by patrol officers. The CSO positions can also assist the Community Outreach sergeant with community events. (Recommendation No. 52.)

■ One additional CSO position is recommended in FY 25 by converting the fleet manager position from part-time to full-time and reclassifying it as a CSO. (Recommendation No. 53.)

■ We recommend cross-training the Animal Control Officers (ACO) as Community Services Officers (CSOs) in addition to their ACO duties for use during peak times on patrol and as a force multiplier. (Recommendation No. 54.)

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# SECTION 6. INVESTIGATIONS

This segment of the report reviews the operations of the Minot Police Department Criminal Investigations Division (CID) and the various units as well as the functions related to investigation efforts. The Criminal Investigations Division includes the following workgroups:

- Detective Unit.

- Intel Analyst.

- Bomb Unit (Collateral Assignment).

- Crime Scene Response Unit (Collateral Assignment).

- Regional Task Force Teams.

Other collateral work units that include CID investigators include two investigators assigned to the Crisis Negotiation Team and four with the department's Peer Support Team. MPD investigators can also participate in the CSRU, SWAT, and the Bomb Unit.

In many fundamental respects, the investigation process has changed significantly over the past decade because of technological advances, the emergence of cybercrimes, drug epidemics such as the fentanyl crisis, and the increasing gun violence plaguing American communities. Equally, the complexity and length of police investigations have an impact on resources. Investigations are compounded by the public expectations for investigative accountability, the application of software systems, and the prolonged time needed to upload and review various types of video recordings. Law enforcement agencies must also conduct fair and equitable investigations leading to the arrest and subsequent conviction of criminal offenders while increasing public trust in the process.

The Criminal Investigations Division (CID) is led by a captain. The CID lieutenant reports to the captain and utilizes two police sergeants to supervise CID operations. CID utilizes the title of police investigator to define the role of an officer assigned to CID. While the position is not a promotion or civil service position, all candidates are interviewed and approved by the Chief of Police for the position of Investigator.

In this review, CPSM is committed to offering best practice recommendations through examinations of overall detective performance, operations, advanced management concepts, and collaboration with nonprofits and the community at large. This review will assess the following areas of MPD's Criminal Investigations Division to include the various investigative workgroups and the Bomb Unit:

- Crime reduction strategies and various statistics.

- Staffing levels, training plans, and administrative processes.

- Case assignment, case intake, and closure rates.

- Policy analysis and structure of the bureau.

- Detective functions.

## STAFFING

CID is appropriated 17 full-time personnel including two professional (civilian) specialists and 15 sworn police officers, led by a police captain, managed by a police lieutenant, and supervised by two sergeants. The staffing shortage during the CPSM assessment includes two investigators and two TFOs. The shortage of two personnel is related to retention and recruitment challenges facing most American law enforcement organizations. The challenge of replacing vacant investigator positions becomes more difficult as senior personnel cannot transfer until new officers are hired, attend an academy, and complete the Field Training Officer Program.

### TABLE 6-1: CID Staffing

| 2023 Position | Budgeted | Actual | Vacant |
|---|---|---|---|
| Commander | 1 | 1 | 0 |
| Lieutenant | 1 | 1 | 0 |
| Sergeant | 2 | 2 | 0 |
| Investigators | 7 | 5 | 2 |
| Task Force Officers (TFOs) | 4 | 2 | 2 |
| Civilian Intelligence Analyst | 1 | 1 | 0 |
| Civilian Forensic Analyst | 1 | 1 | 0 |
| **Total Authorized Personnel** | **17** | **13** | **4** |

**Source**: Minot Police Department's Criminal Investigations Division

The Minot Police Department participates in the two regional task forces, namely the Ward County Narcotics Taskforce with two of four officers currently deployed with the unit, and one collateral officer with the Bureau of Alcohol, Tobacco, and Firearms (ATF). The MPD also assigns four investigators to the regional Internet Crimes Against Children Task Force (ICAC) on a collateral (as needed) basis.

To fill vacant CID positions, the department announces investigative openings to all members. MPD officers can submit emails of intent and interviews are conducted with all candidates before CID positions are chosen. The CID investigator candidates are based on achieving senior/master officer levels through performance and years of service merits. MPD has seven available slots with five slots currently filled with limitations due to vacancies. All officers chosen for investigator positions are not provided compensation for the assignment; however, take-home vehicles are provided for all investigators. CPSM staff reviewed the structure and operating procedures and concluded the protocols set in place are antiquated in areas such as the lack of civilian opportunities and the generalization of detective workgroups. CPSM recommends the MPD expand its current investigator (600) policy to include specific assignments within CID and define the position of senior/master officer positions.

Per operational protocol, investigators are chosen for CID positions with no written procedures for a rotational schedule; however, in 2022 the MPD Chief of Police authorized all sworn officers to rotate every five years to improve proficiency and skills while preventing stagnancy. The CID investigators rotate every five years; however, two of the seven positions are classified as "long-term" assignments within CID. CPSM recommends MPD expand Policy 600 and provide a written matrix of detective rotation assignments and the process of how investigators are selected. An expanded investigative policy to include rotation schedules and a selection process is recommended by the International Association of Police Chiefs (IACP) and the Police Executive Research Forum (PERF).

As a more contemporary approach to detective assignments, the IACP recommends a detective rotational schedule to expand the breadth of knowledge throughout an organization. This approach moves the experience throughout an organization and maintains a positive work culture as others can be assigned to detective positions. CPSM recommends CID consider a detective rotation schedule of three to five years, with the ability to extend individual rotations based on investigative needs. A defined MPD policy defining the rotation process and assignment will reduce misperception of how the rotation process functions.

Based on the number of sworn personnel and the various working groups within the division, CPSM evaluated the span of control, which is defined as the number of personnel a supervisor is responsible for directing, guiding, and communicating with daily. CPSM found the current supervisor-to-officer ratio to be sufficient and to meet national expectations and best practices. Assigning the appropriate number of supervisors for personnel benefits the quality of work while reducing the risk of liability exposure for the Criminal Investigations Division. This recommendation is based on best practices by the Internal Association of the Chiefs of Police as well as the U.S. Department of Justice, Office of Justice Programs. Research literature recommends one supervisor for every six police officers and many versions and research models are recommending up to eight police officers for one police supervisor to manage. The actual number depends on several factors that each organization must consider.

For this assessment, CPSM recommends MPD redefine the responsibility of each Investigative sergeant to better equip the unit with well-trained, experienced supervisors. As an example, MPD would benefit from assigning one sergeant to one group of investigators and another sergeant to a second workgroup. The current detective structure includes various responsibilities from reviewing non-fatal overdoses to conducting investigations regarding gangs, organized crime, and narcotic dealers with the likelihood of seizing narcotics and money. A direct narcotics supervisor would minimize the liability exposures related to narcotics investigations and tactical operations.

## CID Work Schedule

The 2023 work schedule for the detective staff is designed in the following format: Administrative Schedule, Monday through Friday, 7:30 a.m. to 4:00 p.m.

Based on a review of the detective work schedule and responsibilities, CPSM acknowledged the need for various functional shifts as well as the collateral assignments of selected detective personnel.

## Policy

The Criminal Investigations Division is guided by policy 600 (Investigation and Prosecution) and procedure that is managed through the Lexipol service.

It is a law enforcement officer's commitment to the community they serve to uphold their responsibility to incorporate the most contemporary policies regarding traditional and emerging issues. Policies that serve as operational guidelines are critical to the effective and efficient management of any organization. Given the mission of law enforcement and ever-changing laws that regulate the performance of such, a comprehensive and current policy manual is vital. Few law enforcement agencies, including the Minot Police Department, have resources available to maintain a comprehensive, up-to-date policy manual.

The most useful policies are developed with clear and firm guidance for preferred operational outcomes. Yet, no model policy meets all the needs of any police agency nor fits every incident

imaginable. Instead, the development and assessment of policies is an ongoing process that requires adherence to U.S. Supreme Court rulings, federal/state statutes, local ordinances, regulations, and judicial and administrative decisions. Policies must also include guidelines and procedures for an array of operational challenges while considering an understanding of political and community perspectives and customs, as well as aligning with provisions of collective bargaining agreements. Policy development must also include consultation from an agency's legal advisors before implementation. Therefore, agencies must decide how to maintain up-to-date policies that incorporate national standards and model policies with general order manuals.

Through MPD's annual subscription with Lexipol, the department has access to a full library of customized, state-specific law enforcement policies that are automatically updated in response to new state and federal laws to include court decisions. Lexipol also offers online training bulletins, videos, and other platforms to meet police training mandates. A police department is offered various levels of services based on pricing and annual contracting agreements that MPD should continue with. MPD's policy development and analysis are provided by Lexipol and approved by the Chief of Police and the command staff along with legal consultation from the city's legal advisors. This approach is a best practice for police organizations.

The Minot Police Department incorporates a national best standard in its use of the Lexipol Enforcement Policies and Procedures and has contracted to use Lexipol's Knowledge Management System (KMS).   KMS provides electronic policy acknowledgment by all MPD employees, tracking automatic archiving of prior policies, and training for all department personnel. MPD has yet to use the full services of Lexipol in its policy development and training bulletins, which would reduce the department's workload while ensuring all members of the department receive training bulletins as well as acknowledge policy changes.

Eight MPD policies were reviewed as part of our assessment of the CID and which have a direct nexus to the efforts of training, documenting, and reviewing cases within the department. CID policies  that were reviewed are:

- 600 - Investigation and Prosecution.

- 603 - Asset Forfeiture.

- 602 - Informant Management.

- 603 - Eyewitness Identification.

- 604 - Brady Information.

- 605 - Sexual Assault Investigations.

- 606 - Warrant Service.

- 607 - Operations and Deconfliction.

- 609 – Crime Scene Response Unit.

The policies and written procedures reviewed by CPSM meet basic industry standards; however, MPD would benefit from seeking resources from IACP and expanding its current policies to include detective responsibilities and accountabilities in tracking supplemental reports and the timeline for submitting investigative updates regarding active cases. Case reviews and tracking are undertaken by MPD but are not included in the policies CPSM reviewed.

Policy 600 guides detectives in evaluating criteria for determining whether to conduct follow-up investigations and when to deactivate investigative efforts. The investigations policy should mandate case progress reporting and the need for detectives to provide updated reports at least once a week or more frequently if needed as well as case file management instructions. These recommended aspects of the policy provide performance expectations for detective personnel to follow.

## CID Body-Worn Video Program

The MPD utilizes a Body-Worn Video program. There are many public and organizational benefits of a BWV program such as resolving what would otherwise be unprovable allegations while providing clarity in many encounters involving the police and the public including CID special operations and critical events such as officer-involved shootings. BWV enhances community trust and credibility through accountability and a commitment to transparency. MPD utilizes a Records Unit digital evidence technician to assist with maintaining digital evidence to include BWV footage. The use of the evidence technician position provides a best-practice approach to managing a BWV program.

An interview with the evidence technician provided quality insight and the exceptional work being performed in this position. With the constant changes in BWV laws, redacting software, and new technologies by Axon, MPD will need to invest and possibly expand this position. CPMS recommends MPD increase the training level of the evidence technician and provide ongoing professional development. MPD is commended for using a non-sworn professional staff position as an evidence technician.

MPD requires all CID personnel to wear their BWC devices when conducting field investigations and the performance of special operations, search warrants, and high-risk situations. Investigators are also required to wear BWC devices when wearing a police uniform and donning body armor vests.

## Training & Section Manual

In our policy review, CPSM compares a section's "how-to" manuals with department policies to ensure there is a more specific procedure manual that establishes better practices for all personnel. CPSM found that CID does not have a division or unit manual specific to the Criminal Investigations Division.

MPD does not have a specific operational CID section manual to further professional development through resources, templates, or written procedures on detective operations. However, MPD has adopted operational procedures that provide some of the guidance of an operational manual with search warrant templates. Examples of these procedures are included in policies 606 (Warrants) and 607 (Operations Planning and Deconfliction). These policies offer safety measures, review processes, debriefs, and training requirements. To further this effort, it would benefit CID to develop a section manual that includes resources and templates for personnel. CPSM recommends CID establish an SOP, inclusive of templates and resources, to further the professional development of all personnel. This section manual should also include a list of required training courses and those that are preferred for each detective assignment. The manual should include common forms, search warrant samples, tactical planning for detectives, and operational guidelines. These operational manuals benefit new detective staff and supervisors and can ease the transition into Investigations. It should also include an expanded list of training courses offered by the state, regional association courses, as well as internal courses developed for detectives.

The MPD should include written guidance for the CID detective training plan, which is comprised of mandatory and encouraged courses for professional development. There are no state mandates for training and legal updates; however, CID requires all investigators to attend the Advanced Investigations Techniques courses provided by the State's CIB. CID ensures each detective receives internal training for detective orientation.

Training is a key component to ensure that personnel are qualified to perform the duties and responsibilities of a detective/investigator and those training and performance expectations are listed in the policy and procedures order. MPD ensures all new detectives are assigned to seasoned detectives to advance their professional development and also provides training topics, equipment, and other needs. CPSM recommends MPD's CID develop a more comprehensive list of professional training through a training matrix and evaluate the need for additional courses as CID develops new specialized assignments in the future. It is suggested that MPD search for statewide and national courses focused on self-leadership, and resilience in improving the understanding of today's policing challenges. This will assist MPD in preparing for future challenges while continuing to manage the present issues that developed from the national pandemic and social change movement that altered aspects of American policing.

In our review of CID special operations and the managing of critical events, CPSM found that the MPD provides proper deconfliction with operational briefings, use of risk assessment protocols, and pre-operations planning documents to assist in assuring the safety of all personnel and the community. CPSM recommends that CID develop an Excel spreadsheet or other document to track special operations and search warrants involving CID personnel. This process will allow CID to track all events, dates, and outcomes while also providing the ability to assess trends or any issues involving critical events.

## DETECTIVE FUNCTIONS

The Investigations Division serves as the core (traditional) investigative body of the department. Its purpose is to investigate the most serious and significant of crimes, regardless of the category, At times, Patrol officers will respond and handle initial report complaints and the shift patrol lieutenant is responsible for reviewing cases.  The Patrol lieutenant will then decide to allow patrol officers to continue with the field-level investigation if it does not substantially burden the patrol officers and interfere with their primary function.  This is an important distinction in that the patrol division decides at the initial first level the type of cases the patrol officer will investigate at the field level.

CPSM reviewed the case intake, assignments, and function of the detective ranks for all units of work for the Criminal Investigations Division. All CID personnel are expected to be well-trained detectives with specialized expertise in various areas to conduct effective investigations in the following areas.

- Interviewing skills (for interviewing victims, witnesses, and offenders).

- Developing and managing informants.

- Conducting covert surveillance, including the use of advanced surveillance technologies.

- Identifying and locating potential witnesses and sources of intelligence.

- Preserving and developing evidence.

- Preparing cases for prosecution and liaising with prosecutors in the lead-up to, and management of, a trial.

- Protecting, managing, and preparing witnesses for trial.

- Sequencing of investigative steps in an inquiry to optimize chances of success.

- Maintaining knowledge of, and in some cases relationships with, criminals and criminal groups.

One of the challenges facing the Minot Police Department is the growing need for additional resources as the population continues to expand and this would require redistributing workloads for each working detective. CPSM recommends the MPD consider the reassignment of personnel to structured areas of investigations such as violent and property crimes as well as into smaller workgroups such as burglaries, robberies, sex crimes, thefts, and homicides.

## Case Management & Clearance Rate

Clearance rates are an important measure of an individual detective's performance and can lead to the identification of training needs, additional supervisory oversight, and in some cases reassignment from the unit. CPSM found that CID is responsible for maintaining information on clearance rates, managed by the records administrators. CPSM maintains that while preventing a crime is of utmost importance to any law enforcement agency, solving crime should have parity. The solving of crimes which results in the prosecution of offenders not only prevents future crime; it provides much-needed closure to crime victims. The crime rates in the City of Minot are slightly increasing as the population begins to reach 50,000 residents. The overall crime rate (indexed per 100,000) crime rate is consistent with state-wide crime averages and significantly lower than national averages. The City of Minot has benefited from contemporary crime fighting and prevention strategies that have assisted in maintaining and managing crime trends in Minot.

Clearance rates, as defined and measured by the FBI Uniform Crime Report (UCR), are the benchmark for a department's effectiveness in solving crimes; however, the Criminal Justice Information Services (CJIS) developed new standards on crime reporting beginning in 2021.

Some cases are not assigned to a detective and can be closed based upon a lack of solvability factors or closed with an arrest by patrol officers. For most calls, the responding officer will be responsible for conducting the preliminary investigation and completing the report. There are instances when officers may be responsible for follow-up investigations and in these types of investigations, the detective sergeant monitors the case investigation to ensure accountability.

At the MPD, all crime reports are entered into the Records Management System (RMS) for tracking purposes.  The RMS system is used to manage cases and the progress of investigations.   All investigators are required to submit update reports into the RMS system; however, there is no required period for the updates.  The Patrol lieutenants and sergeants monitor follow-up via the records management system. The follow-up may be assigned by the investigations Lieutenant on occasion with notations for the handling detective to complete additional investigative tasks. MPD does not require a timeline for investigators to submit updates; however, the supervision team (Sergeants, Lieutenant, and Captain) meets once a week to discuss case progress.

Of note is the department's robust use of the RMS system to manage all investigative reports assigned to the detectives with supervisor review and approval. The RMS enables supervisors to view and track all open and pending investigative cases assigned to detectives; however, the system is not used to its fullest potential.

Per CID policy and procedures, all actions taken during an investigation are required to be documented in the investigative narrative or supplemental reports, specifically stating why an offense is closed/cleared. The RMS tracks cases assigned, the submission of supplemental

reports, and how and when cases are considered closed. The system provides basic case review and management but lacks some management accountability features.

CPSM found the RMS tracking system does not provide automatic notifications when detectives have not closed or updated cases within a specific time. As an example, more robust systems provide notifications to supervisors and detectives when supplemental reports have not been updated within a set period of time. CPSM recommends MPD use its RMS to develop a 30- or 60-day reporting system to track updates and progress of investigations. Most RMSs allow for this type of reporting and the system usually provides audit reports regarding specific cases that have not received updates for long periods.

Using the U.S. Department of Justice (US DOJ) and the Federal Bureau of Investigation (FBI) standards of how crime reports are classified, CPSM evaluated the process of identifying solvability factors, how cases are closed, and how detectives enter narratives into the RMS. CPSM also assessed how CID reviews case entries with the ability to return supplement reports for corrections or other reasons. National industry standards and U.S. DOJ and FBI require the closure factors listed below; CID investigators regularly consider these factors in all investigations. However, these closure factors are not enumerated in MPD in policy nor written in procedures or protocols. CPSM highly recommends that these factors be written in Policy 600 or that a separate policy be developed for CID investigators to follow.

- The suspect is named.

- The suspect can be identified.

- The address of the suspect is known.

- The suspect can be located.

- The license plate number of the vehicle used in the crime is known.

- The vehicle can be identified.

- There was traceable stolen property.

- There were identifiable latent fingerprints lifted from the scene.

- There was potentially identifiable forensic/biological evidence collected.

- A significant modus operandi has been recognized in the case.

- It is reasonably suspected that there was a limited opportunity to commit the crime.

- There is reason to believe that further investigative efforts will lead to the solving of the crime.

The Criminal Investigation Division's investigative cases are considered closed under the following classifications and these classifications written in Policy 600.5. These standards meet the requirements of the Uniform Crime Reporting (UCR) system established by the FBI.

- All reasonable investigative efforts have been exhausted, no reasonable belief that the person who committed the crime can be identified, and the incident has been documented appropriately.

- The perpetrator of a misdemeanor has been identified and a warning is the most appropriate disposition.

  - In these cases, the investigator shall document that the person was warned and why prosecution was not sought.

□ Warnings shall not be given for felony offenses or other offenses identified in this policy or by law that require an arrest or submission of a case to a prosecutor.

■ The case has been submitted to the appropriate prosecutor, but no charges have been filed and further investigation is not reasonable and/or has not been requested by the prosecutor.

■ The case has been submitted to the appropriate prosecutor, charges have been filed, and further investigation is not reasonable, warranted, or requested.

■ Suspects have been arrested, there are no other suspects, and further investigation is either not warranted or requested.

■ The investigation has proved that a crime was not committed (see the Sexual Assault Investigations Policy for special considerations in these cases).

■ The Domestic Violence, Child Abuse, Sexual Assault Investigations, and Adult Abuse policies may also require an arrest or submittal of a case to a prosecutor.

## Review of Clearance Rates

CPSM reviewed the MPD's solvability factors and concluded these are consistent with industry practices among contemporary law enforcement agencies. While these fall within generally accepted elements of case management, other important elements of an effective case management system are not included. These include automated notification to supervisors of investigations exceeding normal completion periods and/or case updates, and clearance rate percentages by individual detectives.

The following tables show the overall 2021 and 2022 clearance rates of the MPD. It is worth noting that MPD maintained clearance rates on average with state levels and well above the national averages for each year. MPD's clearance rates of 72 percent in 2021 and 64 percent in 2022 for aggravated assaults are valuable statistics for the City of Minot, as many assaults reflect ongoing alcohol, drug, gang, and youth crimes that routinely occur and commonly begin with aggravated assaults. MPD has one of the highest clearance rates for this crime across the country and serves as a national model.

### TABLE 6-2: Reported Minot, State of North Dakota, and National Crime Clearance Rates, 2021

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 3 | 100% | 17 | 16 | 94% | 22,900 | 11,500 | 50% |
| Rape | 41 | 7 | 17% | 340 | 66 | 19% | 144,300 | 16,500 | 11% |
| Robbery | 4 | 1 | 25% | 186 | 65 | 35% | 202,200 | 48,800 | 24% |
| Aggravated Assault | 72 | 52 | 72% | 1,321 | 796 | 60% | 943,800 | 297,500 | 32% |
| Burglary | 115 | 14 | 12% | 2,899 | 358 | 12% | 899,700 | 107,200 | 12% |
| Larceny | 143 | 23 | 16% | 5,958 | 751 | 13% | 4,627,000 | 508,900 | 11% |
| Vehicle Theft | 137 | 25 | 18% | 1,979 | 406 | 21% | 890,200 | 68,500 | 8% |

**Note**: *We used national crime and clearance rates estimated in the FBI's report *The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates*

**TABLE 6-3: Reported Minot, State of North Dakota, and National Crime Clearance Rates, 2022**

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 2 | 67% | 30 | 23 | 77% | 21,797 | 10,752 | 49% |
| Rape | 37 | 3 | 8% | 379 | 72 | 19% | 132,997 | 27,856 | 21% |
| Robbery | 8 | 3 | 38% | 216 | 83 | 38% | 215,760 | 51,930 | 24% |
| Aggravated Assault | 85 | 54 | 64% | 1,448 | 853 | 59% | 756,601 | 334,405 | 44% |
| Burglary | 92 | 15 | 16% | 2,585 | 409 | 16% | 916,970 | 125,838 | 14% |
| Larceny | 89 | 17 | 19% | 5,818 | 876 | 15% | 4,947,709 | 633,098 | 13% |
| Vehicle Theft | 132 | 28 | 21% | 1,999 | 428 | 21% | 953,827 | 87,140 | 9% |

According to the Marshall Project, a decrease in historical clearance rate percentages began during the pandemic and has continued as police departments struggle with public trust and confidence, combined with the challenges of police officer recruitment and retention in specialized assignments such as investigations.

A closer examination of the types of crimes being investigated by CID detectives provides an examination of the relative workload and the association with staffing challenges. The following table shows all cases assigned and average workload per detective for 2021 and 2022. The data below was derived from the UCR report; however, these totals also include investigations assigned to patrol officers closed by an arrest. Considering this challenge, it was difficult for CPSM to define the actual number of cases assigned to detectives, and does not represent the actual number. CPSM believes the actual number of cases to be lower than the data in the table.

**TABLE 6-5: Cases per Detective, 2021 and 2022**

| | 2022 Total | 2022 Cases per Detective | 2021 Total | 2021 Cases per Detective |
|---|---|---|---|---|
| **Total** | 1040 | 148 | 1441 | 205 |

**Source**: Plymouth Police Department

There are no absolute standards to determine an appropriate caseload for a police detective; however, the International Association of Chiefs of Police (IACP) suggests a detective caseload between 120 and 180 cases per year (10 to 15 per month) is manageable. The average number of cases per detective can be less or more depending on their area of expertise. Compounding the challenge is the increased complexity of investigative work and the need for technology systems to assist in clearing cases. As an illustration, CID had one sexual crime investigator responsible for investigating all rape investigations and other sexual crimes in 2021 and 2022 but does not include the part-time assignment or caseloads with the Human Trafficking taskforce.

In review, CPSM estimated the total number of cases per detective was lower in 2022 than in 2021; as the approximate number of detectives was seven. As stated, at the time of this assessment, the number of detectives had decreased to five detectives based on current vacancies.

It is also a national policing challenge to confront the increasing time required to investigate cases with pursuable leads. The use of technology, changes in new laws, and the need to view hours of video footage have added to the average investigative time for detectives.

Considering these challenges CPSM reviewed the case management aspect with the following observations:

- From 2020 to 2023, CID has staffed 13 investigators in various assignments with five to seven detectives assigned as core CID detective functions, not to include the narcotics workgroup or others.

- In 2021 and 2022, the detective workloads were higher than national averages but had decreased in 2021, demonstrating MPD's challenges to maintaining appropriate staffing levels in CID

- The detective unit uses a records management system that provides a usable report as to the number of cases assigned to each detective.

- CID maintains an active database to track the number of cases assigned per detective with minimal research effort to produce the data. This is not often the case in police organizations throughout the Nation.

- CPSM noted a challenge for MPD and the Criminal Investigations Division to properly track and clear the number of arrests made by warrant service. The current county-wide system does not allow the MPD to reconcile warrant arrests with the county-wide system, causing inaccuracy in reporting overall data. MPD will need to research further efforts to resolve this issue.

These observations reflect national best practices and measurements that demonstrate the accomplishment by MPD in ensuring the investigative efforts are supported by the RMS. The observations also highlight the challenges facing MPD in ensuring the proper clearance data is tracked and reported. MPD should pursue solutions to the challenges identified by CPSM and these include:

- MPD will need to develop a tracking mechanism either through the RMS or a "log" to track patrol cases assigned to officers. The number of cases cleared by patrol arrests is not regularly tracked by the RMS and doing so would assist in defining end-of-year clearance rates.

- CPSM also recommends that MPD seek out a solution to ensure that the arrests made by warrant service are entered into the RMS and updated in the county system to better track clearance rates related to warrant arrest. This may be a feature best accomplished by a full-time crime analyst position as recommended in this report.

Overall, the Criminal Investigations Division's Detective Unit provides a supervisor and management review of investigative cases as well as mechanisms for assuring case clearance accountability. In addition, CID management and supervisors properly utilize the RMS to track and monitor case investigations. CPSM recommends the Minot Police Department develop a database (preferably within the RMS) to track and report on the number of cases assigned to each detective and the number of investigations closed by patrol officers.

# BOMB UNIT

CPSM recognizes that the MPD operates the Bomb Unit in cooperation with the Federal Bureau of Investigations (FBI), with a joint Memorandum of Understanding (MOU). MPD currently has four sworn personnel including one police K-9 sergeant assigned to the Bomb Unit as auxiliary positions. The Minot Police Department's participation in the North Dakota Bomb Squad Association requires an approved Memorandum of Understanding with the Federal Bureau of Investigations, other regional police agencies, and the United States Air Force (Minot Air Force Base). The guiding documents that allow MPD to participate in this unique initiative are the North Dakota Bomb Squad Association's Standard Operating Procedure and the FBI's MOU regarding the regional bomb unit initiative.

CPSM reviewed both documents and found the MOU was renewed in July 2023 and the Bomb Unit's SOPs remain relevant with current information. However, in our review, CPSM found that MPD does not have a current Lexipol policy regarding the Bomb Unit's purpose, structure, and internal guidelines for operations. As such, CPSM recommends MPD develop an internal Lexipol Policy regarding the operations and guidelines for the Bomb Unit. This should include an on-call process, take-home vehicles, equipment, an activation process, and a notification protocol as well as other unique features of this regional agreement with local police agencies and the FBI.

One of the primary goals of the FBI MOU is to ensure that jurisdictions that do not maintain their own Bomb Squads could have access to a Bomb Squad in their area to assist them if needed. As a result, the State of North Dakota has been divided into four separate geographical areas of responsibility, with each Bomb Squad responding to assist municipal, county, state, and federal jurisdictions within their area. This includes the Minot Response District.

The Minot Response District is the responsibility of the Minot Police Department Bomb Squad and consists of 15 counties and approximately 45 local jurisdictions located in the north-central area of North Dakota. The Minot Response District includes the Minot Air Force Base, which as an ordnance disposal team and operates with the Minot (PD) Bomb Unit.

In establishing a uniform criterion for individual bomb squads to meet to be recognized by the North Dakota Bomb Squad Association and the North Dakota Peace Officers Association Special Operations Committee, the North Dakota Bomb Squad Association maintains a commitment to follow the recommended guidelines for bomb squad certification as established by the FBI Explosives Unit-Bomb Data Center and the National Guidelines for Bomb Technicians. These guidelines set forth requirements in the areas of bomb squad personnel, training, and equipment.

CPSM also recognizes that MPD is currently researching and writing a policy for the Bomb Unit operations and currently the FBI MOU serves as the primary document structuring the purpose, operational guidelines, and technical aspects of the unit. The Bomb Unit is a specific agreement with the Minneapolis FBI field office as well as other police entities in Minnesota and North Dakota. The MOU covers the following points and authorities:

- Legal Authorities.
- Specific Responsibilities.
- Personnel & Equipment.
- Operations & Equipment.
- Joint Investigations.
- Federal Deputations & Cross Deputations.

- Liabilities.

- Press Releases.

- Training.

All police agencies in the MOU agree to share available personnel, equipment, resources, and expertise in the State of North Dakota, regarding Render Safe Procedures (RSPs) (including weapons of mass destruction and explosives and the disposal of or disassembly), and investigation of explosive-related incidents as necessary. Each agency agrees to designate and train one alternate certified bomb technician in addition to its Department Coordinator and is required to maintain this minimum level of support as staffing and personnel assignments permit. The MOU provides the training guidelines to ensure joint training ventures and provide a collective effort of resources involving any relevant threats in the region.

CPSM conducted an onsite visit of the Bomb Unit equipment and vehicles including a quick response truck and a larger bomb technician vehicle. All equipment, storage, and accountabilities exceeded industry standards. In addition, CPSM found the documentation of training days, training curriculums, and actual callouts/deployments exceed industry standards. CPSM recommends MPD develop a policy with the assistance of Lexipol to guide the Bomb Unit and define operational standards and protocols that meet and exceed industry standards.

## UNSOLVED (COLD CASE) MURDERS

The use of the term unsolved murder cases, also known as "cold cases," continues to be part of CPSM's review of investigative practices. The purpose of this effort is to assure communities that justice will be served for those who have lost loved ones to violent crimes or continue to be classified as missing persons. The Minot Police Department is committed to this national priority and as an example recently made an arrest in the only unsolved murder in the City of Minot. In addition, the North Dakota Bureau of Criminal Investigation is also committed and works with law enforcement agencies across the state on unsolved missing persons and homicide cases. These cases are referred to the Cold Case unit by the law enforcement agency and Minot PD has an excellent reputation with this state-level unit.

CPSM recommends that MPD include the priority of unsolved murders and missing persons in policy. Examples of a policy would include the definition of a "cold case" and its nexus to the state's effort on unsolved investigations. The policy can also include how a case becomes an unsolved investigation that has been suspended, usually due to the exhaustion of investigative leads or evidence and an organizational procedure for managing these critical investigations. Other elements included in a policy triggering a cold case investigation would be:

- New evidence in the case has been discovered.

- New technology is available which may provide new leads in the case.

- A witness in the case has come forward.

- A victim's body has been found.

The Chief of Police may also determine that a case should be reopened based on any of the following criteria:

- The nature of the crime.

- The nature and weight of the new evidence.

- The age of the case.

- The availability of witnesses.

- The likelihood of a successful prosecution.

In each case where a cold case is reviewed and a determination is made to reopen the case, a supplement shall be made to the report of the fact that the case has been reopened as well as any investigative activities. Many of the unsolved murder investigations will generally be tracked and investigated with the assistance of the State's BCI Division. The department has committed to investigating unsolved homicides on an as-needed basis and is to be commended for its efforts in making an arrest in a Minot unsolved murder case.

It is recommended that MPD utilize one to two former (retired) police officers with investigative experience to assist in evaluating and reviewing unsolved homicides and missing persons cases on an annual or as-needed. CPSM understands that the Minot Police Department would need to coordinate efforts with the State Police to investigate unsolved murders.

## VIOLENT CRIME & COMPSTAT

Many American communities are struggling with gun and youth violence (14 to 24 years of age), and while poverty is usually a large factor in youth crime, there are other ailments and socioeconomic issues at the core of violent crime. The CompStat model is a process used to identify and develop public safety priorities and communicate the priorities to all frontline personnel. The CompStat concept is a crime analysis approach that seeks to reduce crime through accountability discussions and deploying resources where needed. It was created in the early 1990s by the New York City Police Department and has evolved into many national variations. MPD does not specifically use a CompStat model but does integrate elements of the model with regular staff and frontline discussions about crime trends and violent incidents that occur in Minot and the region.

The reality is that the CompStat process is not a single state-of-the-art computer equipped with a special software program. In general terms, the CompStat process is a method of management accountability and a philosophy of crime control. It is less about procuring state-of-the-art equipment and more about adopting a state of mind that police do count in reducing crime. The MPD delivers crime stats and critical conversations through weekly engagements with the Chief of Police and the Command staff but does not include frontline personnel or operational sergeants. The information is later transferred to patrol and detective personnel via roll call and other briefings. CPMS recommends that MPD embrace CompStat principles and establish a monthly meeting with frontline investigators, operational sergeants, support staff, and lieutenants. This engagement forum allows open discussion regarding crime trends and allows the crime analysis process to be led by a review of data. This decentralized approach allows for robust interactions with frontline personnel as command staff attends and listens to real-time crime issues and recommendations for their consideration and approval.

The MPD's strategic crime meeting is valuable to the organization and vital to the overall safety of the community. CPSM reviewed the homicide and gun violence statistics for 2021, 2022, and 2023 YTD, and that data follows. It should be noted that MPD does not readily track the number of gunshot victims due to the low number of critical events, but steps should be taken to track annual violent crime and shootings on a dashboard for the monthly crime stat review.

### *Homicide Totals (source: Minot Police Department):*

- 2020: 9 (7 murders, 1 fatal hit and run, 1 Justifiable homicide).

- 2021: 3 (3 murders).

- 2022: 3 (3 murders).

- 2023 YTD: 5 (4 murders, 1 undetermined).

- Total of Unsolved (Cold Cases) Murders: 0.

Again, the Minot Police Department is to be commended for outstanding investigative work in arresting those responsible for murder and other violent crimes in the community. The violent crime in Minot is significantly less than in most cities in the region; however, violent crime does occur, requiring policing strategies to mitigate crime. The increase in murders in 2023 is an example of the national trends and challenges most American communities are grappling with and the Minot Police Department is confronting those challenges. The Minot Police Department has provided outstanding policing service to reduce potential violent crime, and this can be measured in the low violent crime activity as well as the arrest of those committing violent crimes.

## INTELLIGENCE ANALYST & EVIDENCE TECHNICIAN

Currently, MPD utilizes one CID professional (civilian) position who also performs crime analysis to assist with research on specific cases as needed as well as an evidence technician to conduct forensic investigations. The crime intelligence analyst supports tracking elements of an investigation to include suspect information for investigators and provides intelligence to patrol and investigators on an as-needed basis. Additionally, the position provides a direct link between CID investigators and patrol officers regarding crime trends and linking information with department personnel. MPD's approach to crime intelligence is an excellent platform to advance its effort to establish a standalone Crime Analyst Unit. In combination with the evidence technician, MPD has positioned itself for the future and established a platform for a national policing model, that few agencies of equal size can establish.

CPSM recommends the Minot Police Department develop wider crime strategies and adopt a regional approach to crime reduction in Minot. The use of full-time crime analysts is a national model that produces positive outcomes. IACP and the International Association of Crime Analysts (IACA) recommend that all police agencies develop a crime analyst program as a standalone unit or at least in conjunction with local or regional agencies. IACA recommends that law enforcement agencies have one analyst for 1,500 Part I crimes or one per 1,800 NIBRS group A crimes. In addition to this metric, IACA also recommends one analyst per every 70 police officers or one for every 30,000 calls for service (CFS). Based on the number of Part I crimes and the number of police officers, CPSM recommends that MPD consider the addition of one full-time or part-time civilian analyst. CPMS recommends that the crime analyst receive ongoing professional training from the IACA and other entities. This approach will help develop an improved CompStat model for the Minot Police Department and free up sworn personnel to focus on case investigations.

CPSM also recommends that MPD continue to develop and advance the role of the evidence technician position by advancing their annual training to include national conferences and out-of-state training with entities such as the Secret Service in order to advance MPD's capabilities. The mandated training for the evidence technician and the crime analyst should be included in the recommendation to establish a CID training matrix for all positions.

# TASK FORCE INVESTIGATIONS

It is a difficult commitment for Chiefs of Police to commit local resources to a countywide or regional task force, but it is a critical initiative to ensure community safety to reduce cyber fraud and stop human trafficking as well as other organized crime. Task force participation also encourages regional and state communication and helps to maintain professional relationships with all local, state, and federal law enforcement agencies. The Minot Police Department is committed to this national priority and ensuring homeland security for its community.

The Minot Police Department participates in two regional task forces including the Ward County Narcotics Taskforce, currently with two CID Task Force Officers (TFO) assigned to the task force. The MPD has four authorized positions for the task force; however, due to vacancies it currently assigns only two personnel. In addition, the MPD allows officers to participate in regional mutual aid working groups such as SWAT and motorcycle deployments and this effort should continue in order to support local events and emergencies. MPD is to be commended for its commitment to the local task forces and CPSM recommends that participating in the task forces should continue.

All narcotics detectives are trained in the following areas but there is no state POST mandate to require this training:

- Drug Law Enforcement Training Program – Homeland Security.

- Undercover Operations.

- Informants Management.

- Search Warrant Management.

- Latest Legal Development in Drug Enforcement.

- Basic Narcotics School.

The primary challenges facing the narcotics unit involve the national epidemic of fentanyl overdoses and the criminal enterprises using press pill machines to produce illegal tablets. The MPD narcotics investigators are trained to conduct reviews of overdose investigations that are mostly handled by patrol officers. The level of work required for non-fatal overdose investigations can be staggering and requires ongoing professional training to ensure detailed investigations. This requires MPD investigators to maintain a strong relationship with regional narcotic task forces and ensure participation in the task force efforts.

The challenge for the Minot Police Department is balancing the need to conduct overdose investigations and allowing the investigators to pursue drug organizations and other types of narcotic-related crimes through the regional task forces. This can only be achieved by the MPD by participating in the regional task force efforts.

MPD also assigns collateral personnel (investigators) to the Alcohol, Tobacco, & Firearms (ATF) Violent Crimes Task Force and four investigators to the Internet Crimes Against Children (ICAC) Task Force. These task forces have the mission to seek out local criminal enterprises and dismantle these organizations, which have ties to both domestic and international groups. These task forces have been recommended at the Presidential level of the United States and continually offer local agency training, resources, and higher-level networks to focus on these criminal enterprises. CPSM recommends that MPD continue to assign personnel to regional, state, and federal task forces and attempt to ensure full-time commitment when resources are available.

Specific to ICAC, the pressing national issue of internet-related sex crimes involving children and the growing number of incidents reported to local police is rising. The U.S. DOJ's annual report to the U.S. Congress in 2023 cited a substantial increase between 2019 and 2021. DOJ anticipates the crimes to also increase in 2022 and 2023. The following table shows the scope of these increases across the United States.

**TABLE 6-6: 2023 U.S. DOJ Report to Congress on the National Strategy for Child Exploitation & Prevention**

| Reporting Category | 2019 Reports | 2020 Reports | 2021 Reports |
|---|---|---|---|
| Extraterritorial Child Sexual Abuse | 683 | 955 | 1,624 |
| Child Sex Trafficking | 11,798 | 15,879 | 16,032 |
| Child Sexual Molestation | 4,747 | 11,770 | 12,458 |
| Online Enticement of Children for Sexual Acts | 19,174 | 37,872 | 44,155 |

**Source**: United States Department of Justice

In Minot, the number of sex crime cases requiring ICAC support or investigation is growing; however, MPD's work with ICAC is currently on an as-needed basis. Based on the activity in the region, CPSM recommends MPD assign one full-time investigator to the ICAC task force to fulfill its task force obligation while promoting the ICAC initiative throughout the region.

# CRIME SCENE RESPONSE UNIT

Recent Supreme Court decisions have resulted in placing tremendous value on physical and corroborative evidence. These court decisions have created a demand for a higher degree of technology on the part of the police laboratory. Therefore, the development of new physical aids, techniques, and methods of analysis has resulted in meeting this need. A laboratory unit is a crucial link in the processing of physical evidence for presentation in the courts since much of the evidence collected in a criminal investigation is sent to the laboratory for analysis and evaluation. However, it is a frequent occurrence that material analysis, or improper packaging methods, destroy valuable evidence.

The two most basic police functions are the protection of lives and property and the maintenance of peace. The third basic job is the investigation aimed at bringing the violator before a court of law with sufficient evidence to convict. The content of this procedural instruction represents the department's efforts to provide guidelines and procedures to facilitate the recognition, collection, and preservation of physical evidence until properly submitted to the proper department unit for analysis and evaluation; thereby assisting in the prosecution of the violator. The following information serves as guidelines to overcome any inadequacies that may be present in the recognition, collection, and preservation of physical evidence.

The Crime Scene Response Unit (CSRU) has been established to provide specialized support to the Investigations Division. The CSRU's function is the documentation, collection, and processing of evidence at the scene of major incidents. MPD utilizes investigators in a collateral capacity utilizing the proper equipment and industry-standard practices to process crime scenes thoroughly and consistently.

MPD's use of the CSRU is initiated by the watch commander and approved by the Investigations Division Commander.  In turn, the Investigation's Division Commander will notify and confer with

the CSRU Commander for coordination and response (as per Policy 609.2.2). Personnel chosen for this position are based on job knowledge, and skill sets during an interview process by the CSRU commander. All unit members are required to attend ongoing training related to crime scene investigations; however, there is no documented training matrix nor a state mandate to do so. CPSM recommends that CSRU develop an ongoing training matrix to ensure ongoing professional development. MPD can request additional assistance at major crime scene investigations from the McHenry County Sheriff's Office and the State Attorney General's Bureau of Criminal Investigations (BCI) also offers investigative resources related to Officer Involved Shootings, Force Encounter events, and crime scene investigations with additional resources and specialized equipment.

In a review of the CSRU policy 609.6, we found policy contained the operational essentials for ensuring unit structure, selection, and retention of personnel, as well as activation procedures for on-call personnel. The unit maintains equipment essential for crime scene management and it is overseen and managed by the CID's CSRU sergeant.

The CID lieutenant manages MPD's crime scene duties and is collateral responsibility for CID investigators and other MPD personnel assigned to this unique and specialized team. The CSRU is comprised of officers and detectives from the Minot Police Department. CSRU is capable and equipped to respond to and manage all major crimes, including homicides. CSRU has the authority to request assistance from the State's BCI Unit as an addition to CSRU crime scene investigation resources. These requests are usually limited to supplementing crime scene-related equipment. The North Dakota State Lab is the sole crime lab in North Dakota and every state agency must utilize this for lab services and all crime scene processing is completed by the Minot Police Department's CSRU team.

The responsibilities handled by the county and state resources include:

- Crime scene documentation.
- Collection and processing of evidence at major crime scenes.
- Crime scene photography and evidence processing.
- Recovery of latent fingerprint, footwear, and tire track evidence.
- Homicides.
- Armed robberies.
- Sexual assaults.
- Suspicious deaths.
- Motor vehicle accidents.
- Burglary (breaking & entering).

MPD investigators receive training in the following areas from the Ward County Sheriff and the State's Bureau of Criminal Investigations (BCI):

- Crime Scene Investigations and Evidence Collection.
- Sexual Assault Investigations and Evidence Collection.
- Digital Photography.
- DNA Swabs.

- Fingerprint collection.

CPSM found that CID does not track the number of crime scene responsibilities nor maintain a database of evidence collected; however, these aspects of crime scene investigations are documented in the investigative and supplemental reports.

There are several national associations of crime scene investigations including the Crime Investigation and Forensic Science, Association for Crime Scene Reconstruction, and Forensic Science Association, all of which provide national industry standards in crime scene investigations. These associations highly suggest developing professionally trained personnel (civilian-based) who can respond, collect, and process evidence while working with both the state and county evidence labs. These associations have supported the contemporary approach of developing crime investigators and evidence technicians as standalone units of operations.

Based on current national trends and requirements, CPSM recommends that MPD consider developing a standalone crime scene (civilian) technician unit in support of the continued use of the CSRU component. CPSM found that the CSRU is an industry best practice that advances the professional development of personnel and establishes a skilled workforce capable of managing advanced crime scenes. This recommendation is based on the continually changing legislation, increasing industry standards, and the ongoing impact of new case law involving crime scene investigations combined with the innovations at MPD with the CSRU.

It should be noted that CPSM's review of the CID crime scene investigations, supplemental reports, and activity of work did not produce any negative outcomes or system failures. The recommendations offered in this segment are based on the development of contemporary investigatory services and best practice recommendations by the International Association of Chiefs of Police as well as the growing importance of crime scene investigator certifications and advanced college degrees in this specific and growing field of professionals.

## COMMUNITY OUTREACH AND VICTIM ASSISTANCE

Community outreach and victim assistance can often be overlooked, but it is an important part of police work. The relationship between police and their special community organizations is a vital priority in ensuring victims are protected and can be rehabilitated from the harm done to them. Across the United States, individual officers engage in outreach, and many police departments also employ specific programs dedicated to outreach. The importance of community outreach leads to many positive outcomes such as:

- Building trust.
- Decreasing overall crime.
- Combating domestic violence & child abuse.
- Reducing sexual crimes.
- Addressing substance abuse.
- Stopping human trafficking.

The positive impact of community outreach cannot be overstated and should be a top priority for all police organizations. As part of this review, CPSM assessed MPD's use of outreach and

counseling services for victims of crimes who oftentimes are unequipped to search for special services on their own.

CPSM found that the Minot Police Department works closely with several community-based organizations and often MPD personnel serve on the boards of these community organizations. CPSM spoke with two organizations and their response was very positive about the Minot Police Department and its officers and investigators. Examples of the organizations are the Minot Domestic Violence Crisis Center and the Northern Plains Children's Advocacy Center. These organizations provide specialized outreach, trauma support, and counseling for victims of domestic violence, sexual assault, child abuse, and human trafficking. The Minot Police Department must continue to develop partnerships with local community organizations that provide outreach, support, and counseling to the special victims in the region. The MPD should be very proud of its outreach efforts and the ongoing efforts to maintain positive and professional relationships with outreach organizations.

## CID CONCLUSION

In the final analysis, CPSM suggests the Minot Police Department undertake a restructure of CID investigator assignments to become more consistent with 21st-century policing strategies to improve public safety practices, reduce crime, and enhance crime prevention strategies. It is recommended that investigators be assigned as specialists to violent and major crimes as well as specialized teams of officers to confront unique crimes and utilize modern intelligence-led strategies.

CPSM recommends the MPD restructure CID in pursuing an intelligence-led policing model suggested by IACP and PERF to pursue career criminals and known suspects to reduce crime. This includes using advanced technology, surveillance techniques, and regional partnerships to leverage resources to reduce violence and stop crime. Finally, MPD should seek out national leadership training courses for frontline personnel, with these courses focused on self-leadership, fortitude, and providing an understanding of today's policing challenges. This will assist in establishing a durable and resilient workforce for the future.

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## Criminal Investigations Division Recommendations:

■ CPMS recommends the MPD expand its current investigator (600) policy to include specific assignments within CID and define the position of senior/master officer positions. (Recommendation No. 55.)

■ CPSM recommends MPD expand Policy 600 and provide a written matrix of detective rotation assignments and the process of how investigators are selected. (Recommendation No. 56.)

■ CPSM recommends CID consider a detective rotation schedule of three to five years, with the ability to extend individual rotations based on investigative needs. (Recommendation No. 57.)

■ With the constant changes in BWV laws, redacting software, and new technologies by Axon, MPD will need to invest and possibly expand the evidence technician position. CPSM recommends MPD increase the training level of the evidence technician and provide ongoing professional development. (Recommendation No. 58.)

■ CPSM recommends CID establish an SOP, inclusive of templates and resources, to further the professional development of all personnel. (Recommendation No. 59.)

- CPSM recommends MPD's CID develop a more comprehensive list of professional training through a training matrix and evaluate the need for additional courses as CID develops new specialized assignments in the future. (Recommendation No. 60.)

- CPSM recommends that CID develop an Excel spreadsheet or other document to track special operations and search warrants involving CID personnel. (Recommendation No. 61.)

- CPSM recommends that as the workspace project is completed MPD should seek out the ability to provide private workspace for sexual assaults and domestic violence detectives with consideration for the sensitive nature of their victim relationships and types of investigations. (Recommendation No. 62.)

- CPSM recommends the MPD consider the reassignment of personnel to structured areas of investigations such as violent and property crimes as well as into smaller workgroups such as burglaries, robberies, sex crimes, thefts, and homicides. (Recommendation No. 63.)

- CPSM recommends MPD to use its RMS to develop a 30- or 60-day reporting system to track updates and progress of investigations. (Recommendation No. 64.)

- CPSM recommends the Minot Police Department develop a database (preferably with the RMS) to track and report on the number of cases assigned to each detective and the number of investigations closed by patrol officers. (Recommendation No. 65.)

- CPSM also recommends that MPD seek out a solution to ensure that the arrests made by warrant service are entered into the RMS system and updated in the county system to better track clearance rates related to warrant arrest. This may be a feature best accomplished by a full-time crime analyst position as recommended in this report. (Recommendation No. 66.)

- CPSM recommends MPD develop a policy with the assistance of Lexipol to guide the Bomb Unit and define operational standards and protocols that meet and exceed industry standards. (Recommendation No. 67.)

- It is recommended that CID assign the narcotics unit to an intelligence-led unit of detectives trained to use 21st-century policing strategies to focus on career criminals, crime trends, and violent crimes. (Recommendation No. 68.)

- It is recommended that MPD utilize one to two former (retired) police officers with investigative experience to assist in evaluating and reviewing unsolved homicides and missing persons cases on an annual and as-needed basis. (Recommendation No. 69.)

- Based on the number of Part I crimes and the number of police officers, CPSM recommends that MPD consider the addition of one full-time or part-time civilian analyst. (Recommendation No. 70.)

- CPMS recommends that the crime analyst receive ongoing professional training from the IACA and other entities. (Recommendation No. 71.)

- CPSM also recommends that MPD continue to develop and advance the role of the evidence technician position by advancing their annual training to include national conferences and out-of-state training with entities such as the Secret Service in order to advance MPD's capabilities. (Recommendation No. 72.)

- CPSM recommends that MPD continue to assign personnel to regional, state, and federal task forces and attempt to ensure full-time commitment when resources are available. (Recommendation No. 73.)

- CPSM recommends MPD assign one full-time investigator to the ICAC task force to fulfill its task force obligation while promoting the ICAC initiative throughout the region. (Recommendation No. 74.)

- CPSM recommends that CSRU develop an ongoing training matrix to ensure ongoing professional development. (Recommendation No. 75.)

- CPSM recommends that MPD consider developing a standalone crime scene (civilian) technician unit in support of the continued use of the CSRU component. (Recommendation No. 76.)

- CPSM recommends the MPD restructure CID in striving for an intelligence-led policing model suggested by IACP and PERF to pursue career criminals and known suspects through intelligence-led strategies. (Recommendation No. 77.)

- MPD should seek out national leadership training courses for frontline personnel, and which are focused on self-leadership, fortitude, and providing an understanding of today's policing challenges. (Recommendation No. 78.)

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# SECTION 7. SUMMARY

Overall, our assessment team had a very favorable opinion of the Minot Police Department. We believe it is a department striving to be contemporary and to provide service in a professional manner that suits the needs of the community it serves.

We have made a number of recommendations in this report that we believe will enhance the operational effectiveness of the MPD. Some recommendations can be implemented with minimal effort, while others may require significant effort and investment. The fact that there are a large number of recommendations is in no way an indictment of the department. As noted, we have a high opinion of MPD; we simply make recommendations that we believe will improve the department overall.

These reports are always intended to identify proper staffing. Although this report makes a few recommendations regarding staffing and positions, in general we believe the department is appropriately staffed; at minimum, the workload and policing dynamics are manageable with the current staffing figures. As always, we encourage the department to work to fill its vacancies and thereby increase the level of service it can provide.

We further recognize that implementing many of the recommendations in this report, should the Minot Police Department choose to do so, will take weeks, months, and in some cases years. We would encourage the city and department leadership to work together on identifying those recommendations that are most critical. Also, we would make ourselves available to consult as necessary and appropriate.

Additionally, a comprehensive data analysis report follows. While the more pertinent aspects of that analysis are embedded in the preceding Operational Assessment, readers are encouraged to review the data analysis report in its entirety.

§ § §

# SECTION 8. DATA ANALYSIS REPORT

This data analysis on police patrol operations for the Minot Police Department focuses on three main areas: workload, deployment, and response times. These three areas are related almost exclusively to patrol operations, which constitute a significant portion of the police department's personnel and financial commitment.

All information in this analysis was developed using data from the police department's computer-aided dispatch (CAD) system.

CPSM collected data for one year from October 1, 2022, through September 30, 2023. The majority of the first section of the report, concluding with Table 8-9, uses call data for one year. For the detailed workload analysis, we used two eight-week sample periods. The first period is from January 4 through February 28, 2023, or winter, and the second period is from July 7 through August 31, 2023, or summer.

## WORKLOAD ANALYSIS

When CPSM analyzes a set of dispatch records, we go through a series of steps:

- We first process the data to improve accuracy. For example, we remove duplicate patrol units recorded on a single event as well as records that do not indicate an actual activity. We also remove incomplete data, as found in situations where there is not enough time information to evaluate the record.

- At this point, we have a series of records that we call "events." We identify these events in three ways:

  - We distinguish between patrol and nonpatrol units.

  - We assign a category to each event based on its description.

  - We indicate whether the call is "zero time on scene" (i.e., patrol units spent less than 30 seconds on scene), "police-initiated," or "community-initiated."

- We then remove all records that do not involve a patrol unit to get a total number of patrol-related events.

- At important points during our analysis, we focus on a smaller group of events designed to represent actual calls for service. This excludes events with no officer time spent on scene and directed patrol activities.

In this way, we first identify a total number of records, then limit ourselves to patrol events, and finally focus on calls for service.

As with similar cases around the country, we encountered several issues when analyzing Minot's dispatch data. We made assumptions and decisions to address these issues.

- 596 events (about 2 percent) involved patrol units spending zero time on scene.

- The computer-aided dispatch (CAD) system used approximately 106 different event descriptions, which we condensed into 22 categories for our tables and 11 categories for our figures (shown in Chart 8-1). Table 8-20 in the appendix shows how each call description was categorized.

Between October 1, 2022, and September 30, 2023, the communications center recorded approximately 32,206 events that were assigned call numbers, which included an adequate record of a responding patrol unit as either the primary or secondary unit. When measured daily, the department reported an average of 88.2 patrol-related events per day, approximately 2 percent of which (1.6 per day) had fewer than 30 seconds spent on the call.

In the following pages, we show two types of data: activity and workload. The activity levels are measured by the average number of calls per day, broken down by the type and origin of the calls, and categorized by the nature of the calls (crime, traffic, etc.). Workloads are measured in average work hours per day.

## CHART 8-1: Event Descriptions for Tables and Figures

| Table Category | Figure Category |
|---|---|
| Alarm | Alarm |
| Assist other agency | Assist |
| Assist public | |
| Special check | Check |
| Welfare check | |
| Accident–criminal | Crime |
| Crime against persons | |
| Crime against property | |
| Crime against society | |
| Traffic enforcement-criminal | |
| Directed patrol | Directed patrol |
| Disturbance | Disturbance |
| Animal call | General noncriminal |
| Juvenile | |
| Mental health | |
| Miscellaneous | |
| Investigation | Investigation |
| Suspicious incident | Suspicious incident |
| Accident | Traffic |
| Traffic enforcement | |
| Traffic stop | |
| Warrant/prisoner/vehicle | Warrant/prisoner/vehicle |

## FIGURE 8-1: Percentage Events per Day, by Initiator
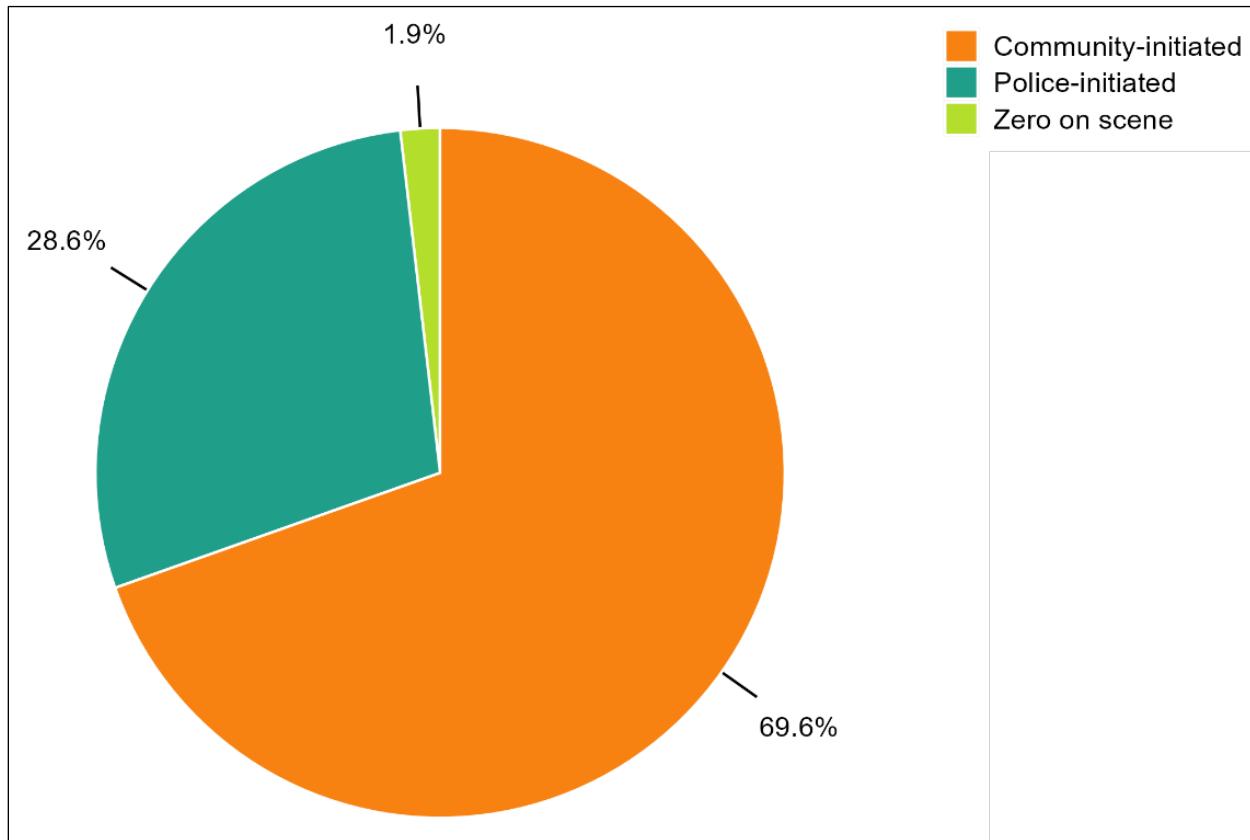


**Note:** Percentages are based on a total of 32,206 events.

## TABLE 8-1: Events per Day, by Initiator

| Initiator | No. of Events | Events per Day |
|---|---|---|
| Community-initiated | 22,413 | 61.4 |
| Police-initiated | 9,197 | 25.2 |
| Zero on scene | 596 | 1.6 |
| **Total** | **32,206** | **88.2** |

## Observations:

- 2 percent of the events had zero time on scene.

- 29 percent of all events were police-initiated.

- 70 percent of all events were community-initiated.

- There was an average of 88 events per day or 3.7 per hour.

## FIGURE 8-2: Percentage Events per Day, by Category
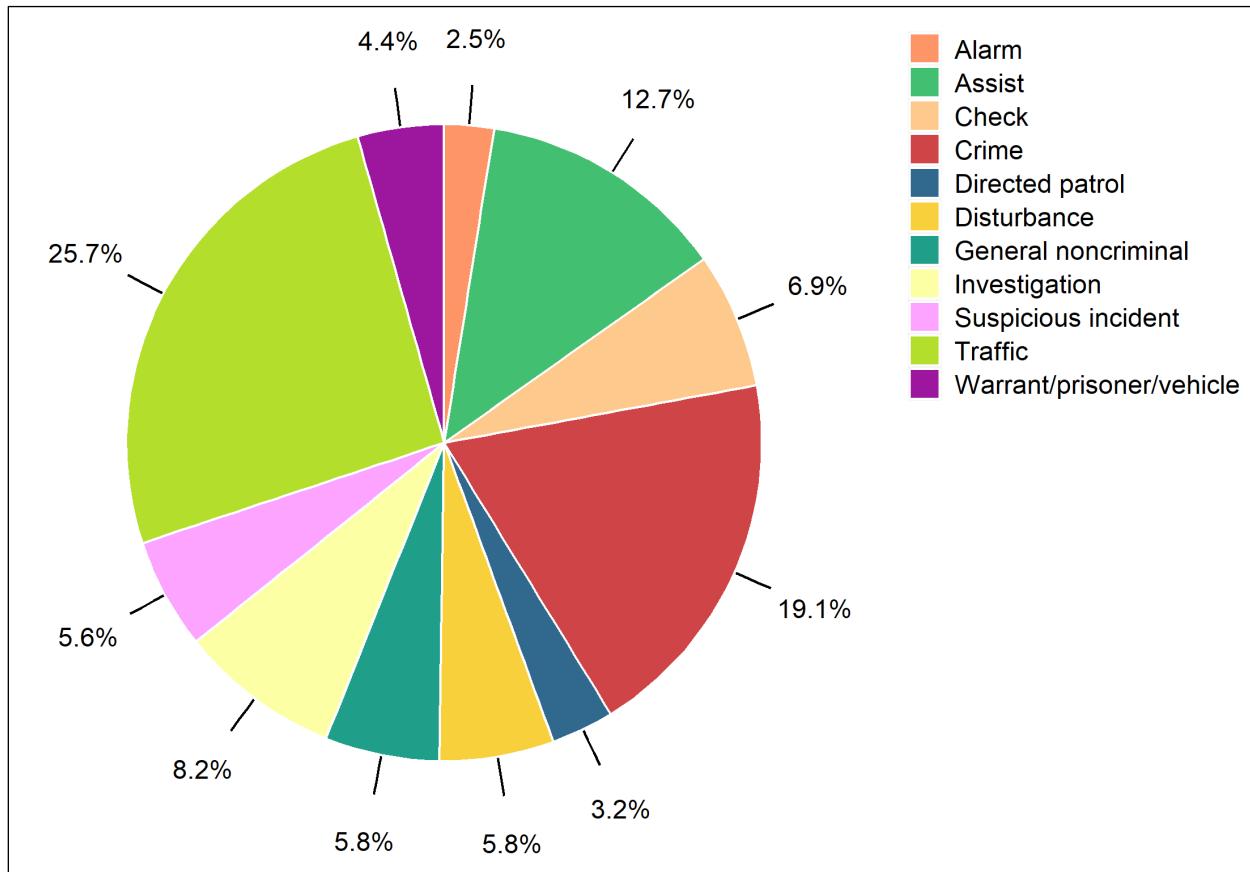


Figure 8-2 pie chart showing percentage of events per day by category:
- Alarm: 2.5%
- Assist: 12.7%
- Check: 6.9%
- Crime: 19.1%
- Directed patrol: 3.2%
- Disturbance: 5.8%
- General noncriminal: 5.8%
- Investigation: 8.2%
- Suspicious incident: 5.6%
- Traffic: 25.7%
- Warrant/prisoner/vehicle: 4.4%

**Note:** The figure combines categories in the following table according to the description in Chart 8-1.

## TABLE 8-2: Events per Day, by Category

| Category | No. of Events | Events per Day |
|---|---|---|
| Accident | 1,234 | 3.4 |
| Accident–criminal | 372 | 1.0 |
| Alarm | 810 | 2.2 |
| Animal call | 632 | 1.7 |
| Assist other agency | 1,769 | 4.8 |
| Assist public | 2,322 | 6.4 |
| Crime against persons | 1,186 | 3.2 |
| Crime against property | 1,742 | 4.8 |
| Crime against society | 2,057 | 5.6 |
| Directed patrol | 1,029 | 2.8 |
| Disturbance | 1,875 | 5.1 |
| Investigation | 2,637 | 7.2 |
| Juvenile | 780 | 2.1 |
| Mental health | 131 | 0.4 |
| Miscellaneous | 335 | 0.9 |
| Special check | 314 | 0.9 |
| Suspicious incident | 1,817 | 5.0 |
| Traffic enforcement | 1,674 | 4.6 |
| Traffic enforcement–criminal | 799 | 2.2 |
| Traffic stop | 5,369 | 14.7 |
| Warrant/prisoner/vehicle | 1,417 | 3.9 |
| Welfare check | 1,905 | 5.2 |
| **Total** | **32,206** | **88.2** |

**Note:** Observations below refer to events shown within the figure rather than the table.

## Observations:

- The top three categories accounted for 58 percent of events:
  - □ 26 percent of events were traffic-related.
  - □ 19 percent of events were crimes.
  - □ 13 percent of events were assists.

## FIGURE 8-3: Percentage Calls per Day, by Category
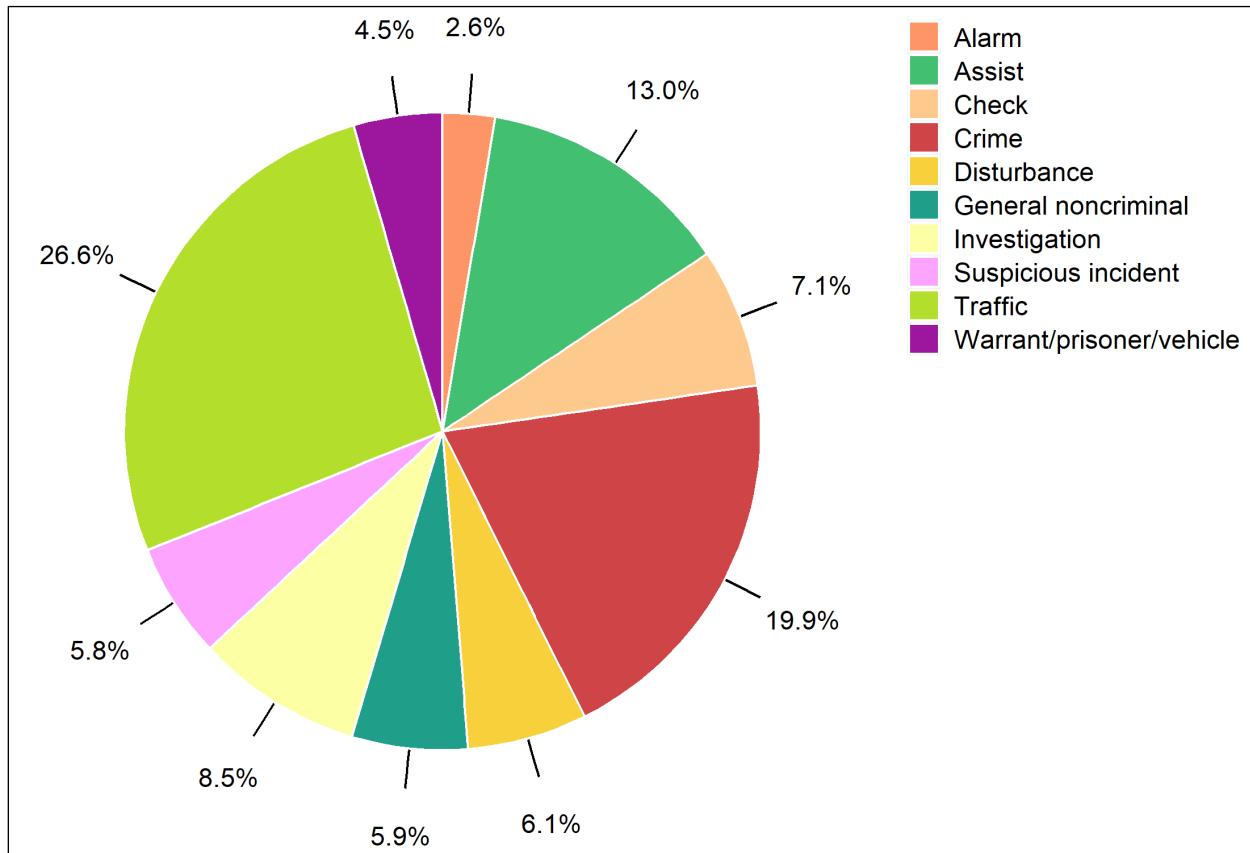


Legend:
- Alarm
- Assist
- Check
- Crime
- Disturbance
- General noncriminal
- Investigation
- Suspicious incident
- Traffic
- Warrant/prisoner/vehicle

Values: 2.6%, 13.0%, 7.1%, 19.9%, 6.1%, 5.9%, 8.5%, 5.8%, 26.6%, 4.5%

**Note:** The figure combines categories in the following table according to the description in Chart 8-1.

## TABLE 8-3: Calls per Day, by Category

| Category | No. of Calls | Calls per Day |
|---|---|---|
| Accident | 1,225 | 3.4 |
| Accident–criminal | 371 | 1.0 |
| Alarm | 807 | 2.2 |
| Animal call | 610 | 1.7 |
| Assist other agency | 1,695 | 4.6 |
| Assist public | 2,270 | 6.2 |
| Crime against persons | 1,171 | 3.2 |
| Crime against property | 1,731 | 4.7 |
| Crime against society | 2,042 | 5.6 |
| Disturbance | 1,861 | 5.1 |
| Investigation | 2,588 | 7.1 |
| Juvenile | 778 | 2.1 |
| Mental health | 130 | 0.4 |
| Miscellaneous | 286 | 0.8 |
| Special check | 298 | 0.8 |
| Suspicious incident | 1,788 | 4.9 |
| Traffic enforcement | 1,566 | 4.3 |
| Traffic enforcement–criminal | 790 | 2.2 |
| Traffic stop | 5,343 | 14.6 |
| Warrant/prisoner/vehicle | 1,386 | 3.8 |
| Welfare check | 1,879 | 5.1 |
| **Total** | **30,615** | **83.9** |

**Note:** The focus here is on recorded calls rather than recorded events. We removed 596 events with zero time on scene and another 995 directed patrol activities.

## Observations:

- On average, there were 83.9 calls per day, or 3.5 per hour.

- The top four categories accounted for 59 percent of calls:

  - 27 percent of calls were traffic-related.

  - 20 percent of calls were crimes.

  - 13 percent of calls were assists.

**FIGURE 8-4: Calls per Day, by Initiator and Month**
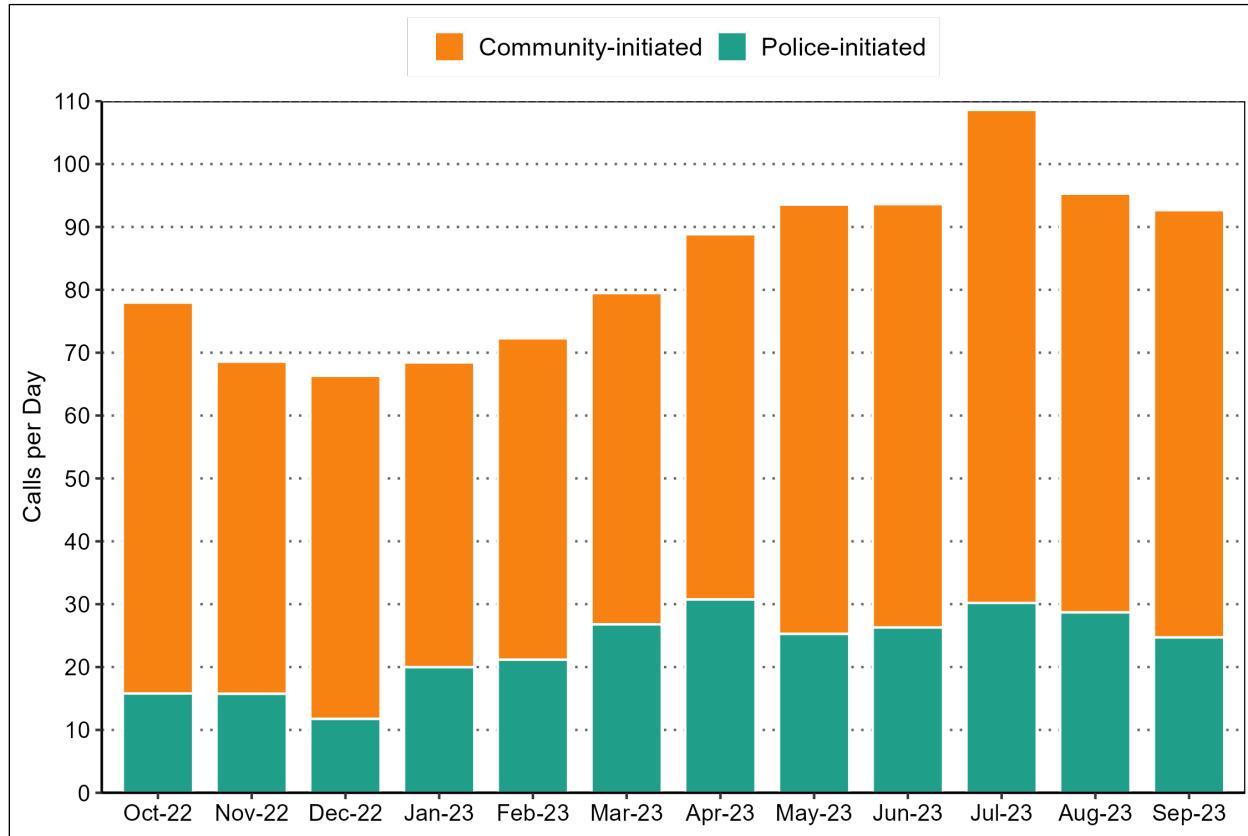


**TABLE 8-4: Calls per Day, by Initiator and Month**

| Initiator | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | 62.2 | 52.8 | 54.5 | 48.5 | 51.1 | 52.7 | 58.1 | 68.3 | 67.3 | 78.4 | 66.6 | 67.9 |
| Police | 15.8 | 15.8 | 11.8 | 20.0 | 21.2 | 26.8 | 30.8 | 25.3 | 26.3 | 30.2 | 28.7 | 24.7 |
| **Total** | **78.0** | **68.6** | **66.3** | **68.5** | **72.3** | **79.5** | **88.8** | **93.5** | **93.6** | **108.6** | **95.3** | **92.7** |

## Observations:

- The number of calls per day was lowest in December.

- The number of calls per day was highest in July.

- The months with the most calls had 64 percent more calls than the months with the fewest calls.

- April had the most police-initiated calls with 161 percent more than December, which had the fewest.

- July had the most community-initiated calls with 62 percent more than January, which had the fewest.

## FIGURE 8-5: Calls per Day, by Category and Month
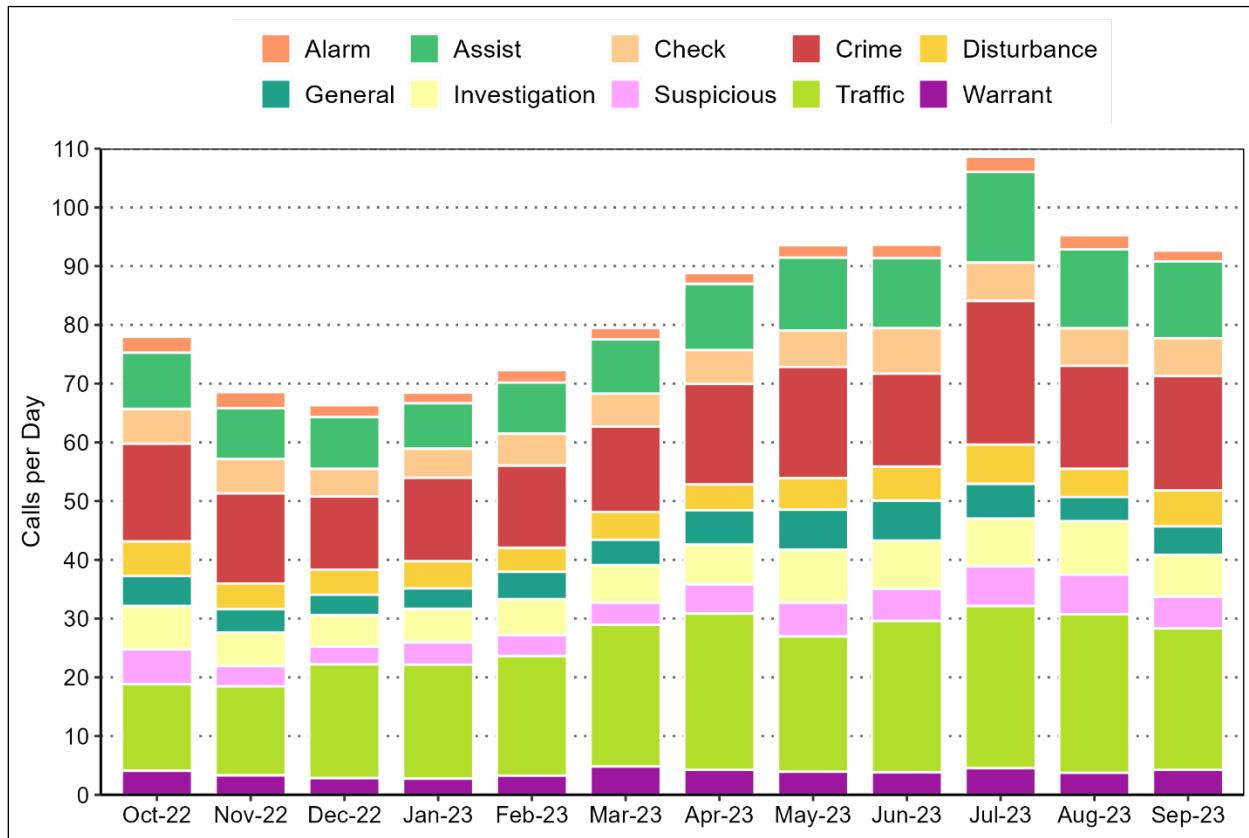


**Note:** The figure combines categories in the following table according to the description in Chart 8-1.

## TABLE 8-5: Calls per Day, by Category and Month

| Category | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Accident | 2.9 | 3.7 | 5.9 | 3.0 | 3.5 | 3.0 | 2.5 | 3.3 | 2.9 | 2.9 | 3.2 | 3.4 |
| Accident–criminal | 0.9 | 1.2 | 1.2 | 0.8 | 0.9 | 1.1 | 1.3 | 0.7 | 0.9 | 1.2 | 1.0 | 1.2 |
| Alarm | 2.7 | 2.8 | 2.0 | 1.8 | 2.1 | 2.0 | 1.9 | 2.1 | 2.3 | 2.6 | 2.5 | 1.9 |
| Animal call | 2.0 | 1.2 | 1.4 | 0.8 | 1.1 | 1.2 | 2.0 | 2.0 | 3.1 | 2.2 | 1.4 | 1.6 |
| Assist other agency | 3.5 | 3.6 | 4.8 | 3.7 | 3.8 | 4.0 | 4.9 | 6.0 | 4.2 | 6.2 | 5.6 | 5.2 |
| Assist public | 6.0 | 5.0 | 4.0 | 4.0 | 5.0 | 5.3 | 6.3 | 6.4 | 7.8 | 9.2 | 7.8 | 7.8 |
| Crime against persons | 3.7 | 2.8 | 2.1 | 3.0 | 2.4 | 3.1 | 3.1 | 3.9 | 2.8 | 4.2 | 3.5 | 3.8 |
| Crime against property | 4.8 | 5.1 | 3.9 | 4.2 | 3.6 | 3.5 | 4.5 | 6.3 | 4.4 | 5.3 | 5.1 | 6.1 |
| Crime against society | 5.7 | 4.8 | 4.2 | 4.2 | 4.5 | 3.7 | 5.0 | 5.7 | 5.9 | 11.1 | 5.7 | 6.5 |
| Disturbance | 5.9 | 4.4 | 4.3 | 4.6 | 4.1 | 4.7 | 4.4 | 5.4 | 5.8 | 6.7 | 4.8 | 6.1 |
| Investigation | 7.4 | 5.7 | 5.4 | 5.7 | 6.1 | 6.4 | 6.8 | 9.0 | 8.2 | 8.1 | 9.1 | 7.1 |
| Juvenile | 2.2 | 1.9 | 1.3 | 1.5 | 2.5 | 2.1 | 2.6 | 3.1 | 2.6 | 2.5 | 1.5 | 1.6 |
| Mental health | 0.3 | 0.2 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 |
| Miscellaneous | 0.6 | 0.7 | 0.5 | 0.6 | 0.5 | 0.7 | 0.8 | 1.3 | 0.8 | 0.9 | 0.9 | 1.2 |
| Special check | 0.7 | 1.5 | 0.4 | 1.0 | 0.8 | 0.8 | 1.1 | 0.5 | 0.9 | 0.8 | 0.9 | 0.4 |
| Suspicious incident | 5.9 | 3.4 | 3.0 | 3.8 | 3.6 | 3.8 | 5.0 | 5.7 | 5.5 | 6.8 | 6.7 | 5.4 |
| Traffic enforcement | 2.5 | 3.6 | 8.0 | 4.0 | 3.9 | 4.0 | 3.8 | 4.0 | 4.9 | 4.9 | 3.8 | 4.0 |
| Traffic enforcement–criminal | 1.5 | 1.5 | 1.0 | 2.0 | 2.6 | 3.1 | 3.2 | 2.4 | 1.9 | 2.7 | 2.2 | 2.0 |
| Traffic stop | 9.4 | 7.9 | 5.5 | 12.4 | 13.0 | 17.1 | 20.3 | 15.8 | 17.9 | 19.8 | 20.0 | 16.6 |
| Warrant/prisoner/vehicle | 4.1 | 3.3 | 2.8 | 2.7 | 3.2 | 4.8 | 4.2 | 3.9 | 3.8 | 4.5 | 3.7 | 4.2 |
| Welfare check | 5.2 | 4.4 | 4.3 | 3.9 | 4.6 | 4.8 | 4.7 | 5.7 | 6.8 | 5.7 | 5.5 | 6.1 |
| **Total** | **78.0** | **68.6** | **66.3** | **68.5** | **72.3** | **79.5** | **88.8** | **93.5** | **93.6** | **108.6** | **95.3** | **92.7** |

**Note:** Calculations were limited to calls rather than events.

## Observations:

- The top three categories averaged between 53 and 62 percent of calls throughout the year.
  - Traffic calls averaged between 14.7 and 27.6 calls per day throughout the year.
  - Crime calls averaged between 12.5 and 24.5 calls per day throughout the year.
  - Assist calls averaged between 7.7 and 15.4 calls per day throughout the year.
- Crime calls accounted for 17 to 23 percent of total calls.

## FIGURE 8-6: Primary Unit's Average Occupied Times, by Category and Initiator
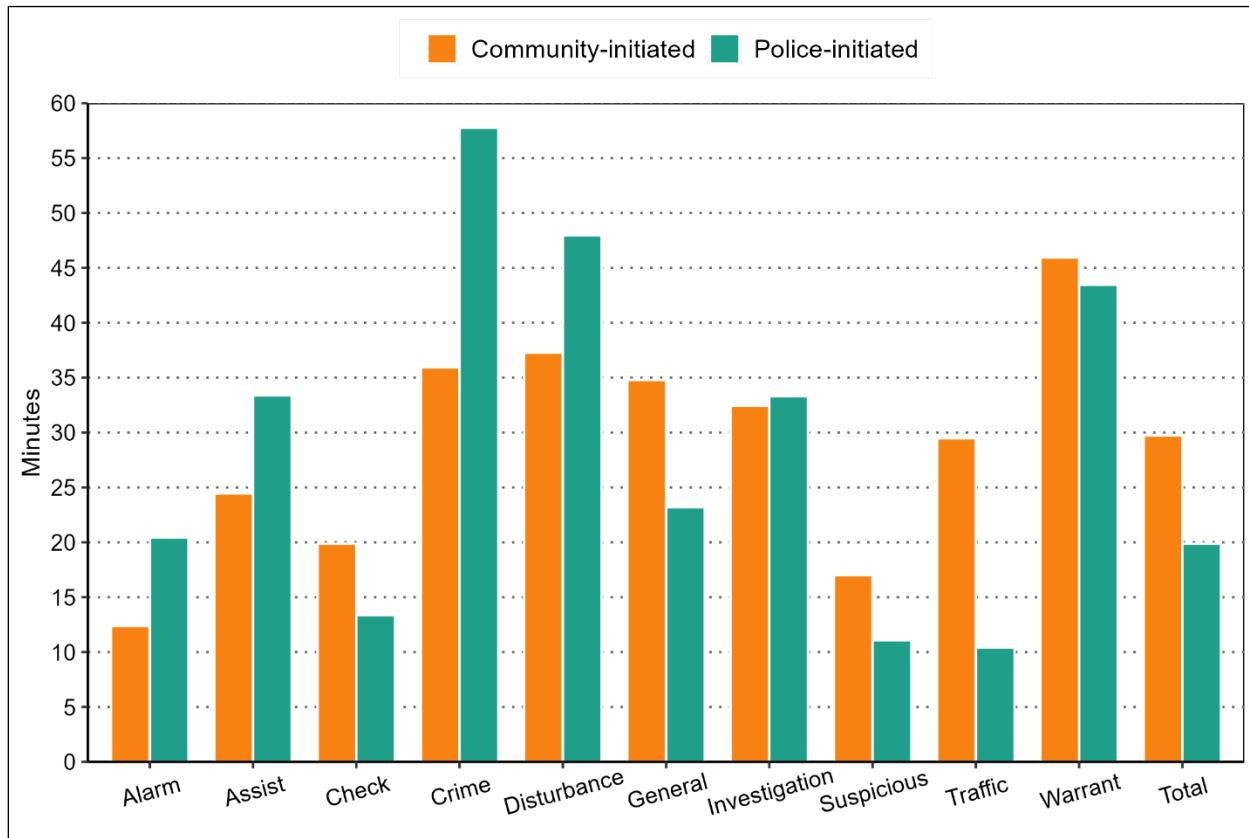


**Note:** The figure combines categories using weighted averages from the following table according to the description in Chart 8-1.

## TABLE 8-6: Primary Unit's Average Occupied Times, by Category and Initiator

| Category | Community-Initiated | | Police-Initiated | |
|---|---|---|---|---|
| | Minutes | Calls | Minutes | Calls |
| Accident | 42.8 | 1,185 | 40.4 | 40 |
| Accident–criminal | 40.3 | 363 | 47.1 | 8 |
| Alarm | 12.4 | 806 | 20.4 | 1 |
| Animal call | 20.1 | 588 | 10.9 | 22 |
| Assist other agency | 25.3 | 1,626 | 59.9 | 69 |
| Assist public | 23.8 | 2,154 | 17.6 | 116 |
| Crime against persons | 40.7 | 1,152 | 136.1 | 19 |
| Crime against property | 35.3 | 1,708 | 41.4 | 23 |
| Crime against society | 29.4 | 1,868 | 45.2 | 174 |
| Disturbance | 37.3 | 1,840 | 48.0 | 21 |
| Investigation | 32.4 | 2,151 | 33.3 | 437 |
| Juvenile | 35.0 | 764 | 46.9 | 14 |
| Mental health | 122.3 | 123 | 83.2 | 7 |
| Miscellaneous | 24.4 | 224 | 15.5 | 62 |
| Special check | 14.2 | 102 | 11.6 | 196 |
| Suspicious incident | 17.0 | 1,548 | 11.1 | 240 |
| Traffic enforcement | 16.9 | 1,252 | 15.3 | 314 |
| Traffic enforcement–criminal | 89.1 | 118 | 59.5 | 672 |
| Traffic stop | NA | 0 | 9.9 | 5,343 |
| Warrant/prisoner/vehicle | 45.9 | 777 | 43.5 | 609 |
| Welfare check | 20.2 | 1,830 | 20.3 | 49 |
| **Weighted Average/Total Calls** | **29.7** | **22,179** | **19.9** | **8,436** |

**Note:** The information in Figure 8-6 and Table 8-6 is limited to calls and excludes all events that show zero time on scene. A unit's occupied time is measured as the time from when the unit was dispatched until the unit becomes available again. The times shown are the average occupied minutes per call for the primary unit, rather than the total occupied minutes for all units assigned to a call. Observations below refer to times shown within the figure rather than the table.

## Observations:

- A unit's average time spent on a call ranged from 10 to 58 minutes overall.

- The longest average times were for police-initiated crime calls.

- The average time spent on crime calls was 36 minutes for community-initiated calls and 58 minutes for police-initiated calls.

## FIGURE 8-7: Number of Responding Units, by Initiator and Category
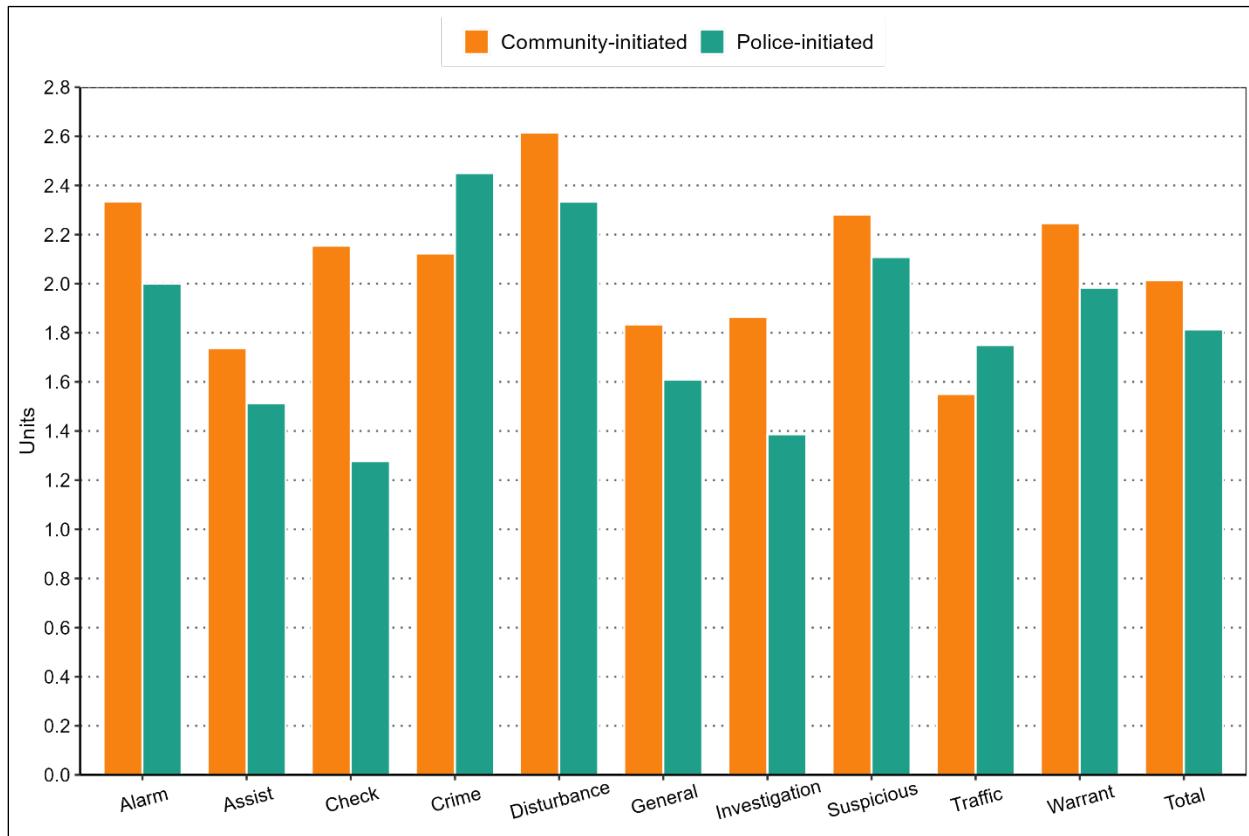


**Note:** The figure combines categories using weighted averages from the following table according to the description in Chart 8-1.

## TABLE 8-7: Average Number of Responding Units, by Initiator and Category

| Category | Community-Initiated | | Police-Initiated | |
|---|---|---|---|---|
| | No. of Units | Calls | No. of Units | Calls |
| Accident | 1.6 | 1,185 | 1.8 | 40 |
| Accident–criminal | 1.6 | 363 | 2.8 | 8 |
| Alarm | 2.3 | 806 | 2.0 | 1 |
| Animal call | 1.4 | 588 | 1.3 | 22 |
| Assist other agency | 1.9 | 1,626 | 1.7 | 69 |
| Assist public | 1.6 | 2,154 | 1.4 | 116 |
| Crime against persons | 1.8 | 1,152 | 1.5 | 19 |
| Crime against property | 1.9 | 1,708 | 1.7 | 23 |
| Crime against society | 2.6 | 1,868 | 2.8 | 174 |
| Disturbance | 2.6 | 1,840 | 2.3 | 21 |
| Investigation | 1.9 | 2,151 | 1.4 | 437 |
| Juvenile | 2.1 | 764 | 1.9 | 14 |
| Mental health | 3.1 | 123 | 3.6 | 7 |
| Miscellaneous | 1.6 | 224 | 1.4 | 62 |
| Special check | 1.2 | 102 | 1.1 | 196 |
| Suspicious incident | 2.3 | 1,548 | 2.1 | 240 |
| Traffic enforcement | 1.5 | 1,252 | 1.5 | 314 |
| Traffic enforcement–criminal | 3.1 | 118 | 2.4 | 672 |
| Traffic stop | NA | 0 | 1.8 | 5,343 |
| Warrant/prisoner/vehicle | 2.2 | 777 | 2.0 | 609 |
| Welfare check | 2.2 | 1,830 | 1.8 | 49 |
| **Weighted Average/Total Calls** | **2.0** | **22,179** | **1.8** | **8,436** |

**Note**: The information in Figure 8-7 and Table 8-7 is limited to calls and excludes all events that show zero time on scene. Observations refer to the number of responding units shown within the figure rather than the table.

**Note:** The figure combines categories using weighted averages from the following table according to the description in Chart 8-1.

## TABLE 8-8: Number of Responding Units, by Category, Community-initiated Calls

| Category | Responding Units | | |
|---|---|---|---|
| | One | Two | Three or More |
| Accident | 736 | 265 | 184 |
| Accident–criminal | 225 | 89 | 49 |
| Alarm | 100 | 442 | 264 |
| Animal call | 408 | 136 | 44 |
| Assist other agency | 665 | 566 | 395 |
| Assist public | 1,269 | 613 | 272 |
| Crime against persons | 693 | 266 | 193 |
| Crime against property | 834 | 511 | 363 |
| Crime against society | 430 | 635 | 803 |
| Disturbance | 229 | 808 | 803 |
| Investigation | 1,025 | 683 | 443 |
| Juvenile | 290 | 281 | 193 |
| Mental health | 9 | 37 | 77 |
| Miscellaneous | 142 | 56 | 26 |
| Special check | 88 | 8 | 6 |
| Suspicious incident | 379 | 642 | 527 |
| Traffic enforcement | 844 | 295 | 113 |
| Traffic enforcement–criminal | 7 | 40 | 71 |
| Warrant/prisoner/vehicle | 253 | 277 | 247 |
| Welfare check | 411 | 855 | 564 |
| **Total** | **9,037** | **7,505** | **5,637** |

## Observations:

- The overall mean number of responding units was 1.8 for police-initiated calls and 2.0 for community-initiated calls.

- The mean number of responding units was as high as 2.6 for disturbance calls that were community-initiated.

- 41 percent of community-initiated calls involved one responding unit.

- 34 percent of community-initiated calls involved two responding units.

- 25 percent of community-initiated calls involved three or more responding units.

- The largest group of calls with three or more responding units involved crimes.

# FIGURE 8-9: Percentage Calls and Work Hours, by Beat
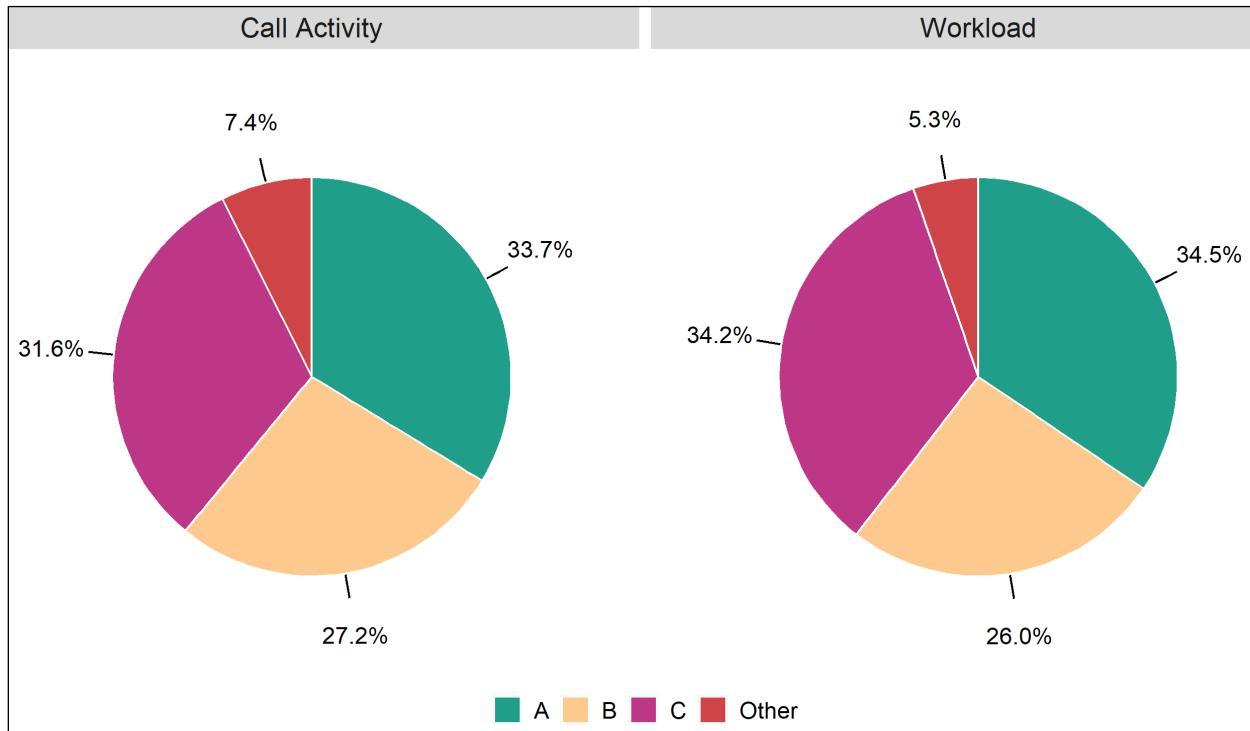


| Call Activity | Workload |
|---|---|
| A 33.7% | A 34.5% |
| B 27.2% | B 26.0% |
| C 31.6% | C 34.2% |
| Other 7.4% | Other 5.3% |

Legend: ■ A  ■ B  ■ C  ■ Other

**Note**: The "other" category includes calls at headquarters, miscellaneous beats, and calls missing beats. About 94 percent of calls in the miscellaneous category were in beat "P2," which is the Ward County Sheriff's Office beat in the Minot area.

## TABLE 8-9: Calls and Work Hours by Beat, per Day

| Beat | Per Day | |
| --- | --- | --- |
| | Calls | Work Hours |
| A | 28.3 | 23.6 |
| B | 22.8 | 17.8 |
| C | 26.5 | 23.4 |
| HQ | 4.0 | 2.2 |
| Miscellaneous | 1.7 | 0.9 |
| Unknown | 0.5 | 0.5 |
| **Total** | **83.9** | **68.5** |

## Observations:

- Beat A had the most calls, which accounted for approximately 34 percent of total calls.

- Beat A and C had larger workloads than beat B, with each accounting for approximately 34 percent of the total workload.

**FIGURE 8-10: Percentage Calls and Work Hours, by Category, Winter 2023**



| Call Activity | Workload |
|---|---|

Legend:
- Alarm
- Assist
- Check
- Crime
- Disturbance
- General
- Investigation
- Suspicious
- Traffic
- Warrant

Call Activity percentages: 2.8%, 11.4%, 7.5%, 20.1%, 6.2%, 5.7%, 8.5%, 5.1%, 28.5%, 4.3%

Workload percentages: 1.7%, 9.6%, 5.7%, 33.0%, 11.1%, 7.6%, 8.4%, 4.0%, 12.4%, 6.5%
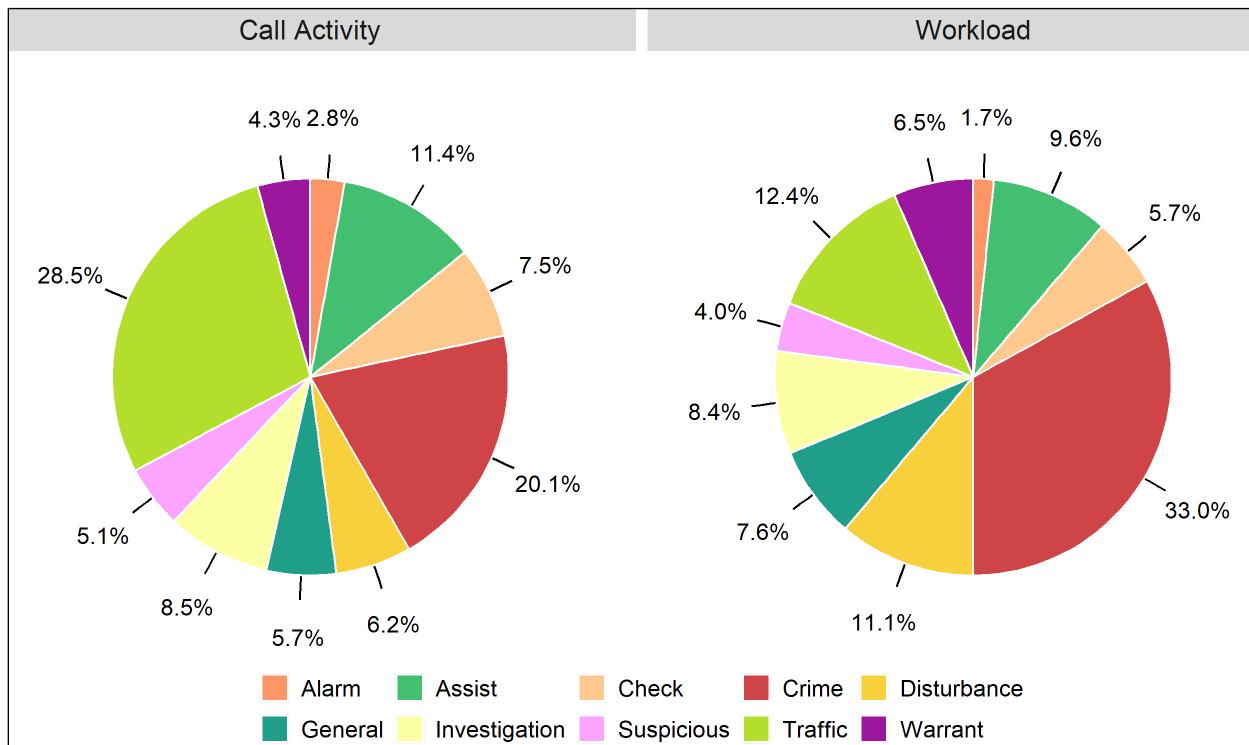
## TABLE 8-10: Calls and Work Hours per Day, by Category, Winter 2023

| Category | Per Day | |
|---|---|---|
| | Calls | Work Hours |
| Accident | 3.2 | 2.8 |
| Accident–criminal | 0.8 | 0.8 |
| Alarm | 2.0 | 1.0 |
| Animal call | 1.0 | 0.3 |
| Assist other agency | 3.6 | 3.1 |
| Assist public | 4.4 | 2.6 |
| Crime against persons | 2.7 | 5.4 |
| Crime against property | 4.0 | 4.0 |
| Crime against society | 4.4 | 5.7 |
| Disturbance | 4.4 | 6.6 |
| Investigation | 6.0 | 5.0 |
| Juvenile | 2.0 | 2.1 |
| Mental health | 0.4 | 1.5 |
| Miscellaneous | 0.6 | 0.6 |
| Special check | 0.9 | 0.3 |
| Suspicious incident | 3.6 | 2.4 |
| Traffic enforcement | 4.0 | 1.4 |
| Traffic enforcement–criminal | 2.3 | 3.8 |
| Traffic stop | 13.0 | 3.2 |
| Warrant/prisoner/vehicle | 3.1 | 3.9 |
| Welfare check | 4.3 | 3.1 |
| **Total** | **70.8** | **59.5** |

**Note:** Workload calculations focused on calls rather than events.

## Observations, Winter:

- Total calls averaged 71 per day or 2.9 per hour.

- The total workload averaged nearly 60 hours per day, meaning that on average 2.5 units per hour were busy responding to calls.

- Traffic calls constituted 28 percent of calls and 12 percent of workload.

- Crime calls constituted 20 percent of calls and 33 percent of workload.

- Assist calls constituted 11 percent of calls and 10 percent of workload.

- These top three categories constituted 60 percent of calls and 55 percent of workload.

**FIGURE 8-11: Percentage Calls and Work Hours, by Category, Summer 2023**



Call Activity

Workload

| Legend | | |
|---|---|---|
| Alarm | Assist | Check |
| Crime | Disturbance | General |
| Investigation | Suspicious | Traffic |
| Warrant | | |

Call Activity values: 4.1%, 2.5%, 14.3%, 6.5%, 19.4%, 5.7%, 4.8%, 8.5%, 6.8%, 27.4%

Workload values: 6.9%, 1.4%, 11.9%, 5.3%, 31.4%, 9.3%, 5.8%, 9.6%, 4.9%, 13.5%
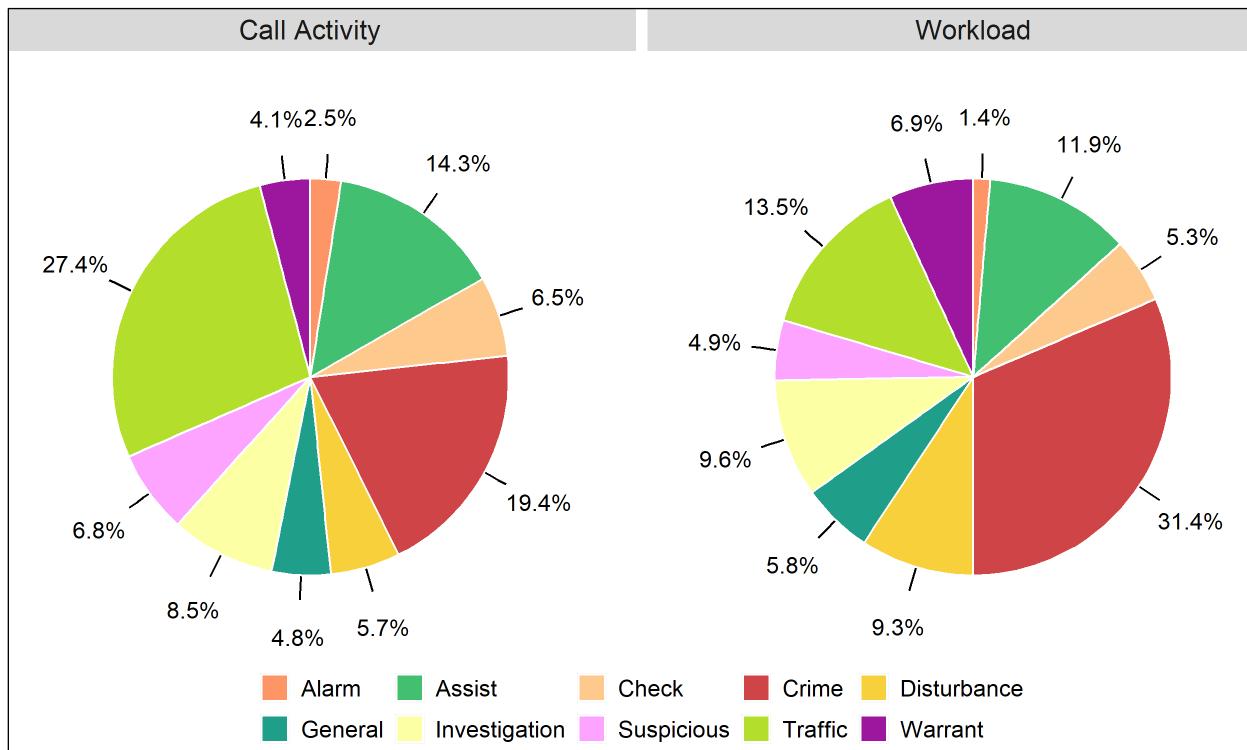
## TABLE 8-11: Calls and Work Hours per Day, by Category, Summer 2023

| Category | Per Day | |
|---|---|---|
| | Calls | Work Hours |
| Accident | 3.1 | 3.8 |
| Accident–criminal | 1.1 | 0.8 |
| Alarm | 2.6 | 1.1 |
| Animal call | 1.7 | 0.8 |
| Assist other agency | 6.1 | 4.7 |
| Assist public | 8.6 | 4.6 |
| Crime against persons | 4.0 | 5.2 |
| Crime against property | 5.3 | 5.7 |
| Crime against society | 7.1 | 8.0 |
| Disturbance | 5.8 | 7.3 |
| Investigation | 8.8 | 7.5 |
| Juvenile | 2.0 | 2.0 |
| Mental health | 0.3 | 1.4 |
| Miscellaneous | 0.9 | 0.4 |
| Special check | 0.9 | 0.2 |
| Suspicious incident | 6.9 | 3.8 |
| Traffic enforcement | 4.5 | 1.8 |
| Traffic enforcement–criminal | 2.4 | 4.8 |
| Traffic stop | 20.6 | 5.0 |
| Warrant/prisoner/vehicle | 4.2 | 5.4 |
| Welfare check | 5.8 | 4.0 |
| **Total** | **102.6** | **78.4** |

**Note:** Workload calculations focused on calls rather than events.

## Observations, Summer:

- The average number of calls per day and the average daily workload were higher in summer than in winter.

- Total calls averaged 103 per day or 4.3 per hour.

- The total workload averaged 78 hours per day, meaning that on average 3.3 units per hour were busy responding to calls.

- Traffic calls constituted 27 percent of calls and 14 percent of workload.

- Crime calls constituted 19 percent of calls and 31 percent of workload.

- Assist calls constituted 14 percent of calls and 12 percent of workload.

- These top three categories constituted 61 percent of calls and 57 percent of workload.

# NONCALL ACTIVITIES

In the period from October 1, 2022, through September 30, 2023, the dispatch center also recorded activities that were not assigned incident numbers. We focused on those activities that involved a patrol unit. We also limited our analysis to activities that occurred during shifts where the same patrol unit was also responding to calls for service. There were a few problems with the data provided and we made assumptions and decisions to address these issues:

- We excluded activities that lasted less than 30 seconds. These are irrelevant and contribute little to the overall workload.

- After these exclusions, 5,478 activities remained. These activities had an average duration of 33.2 minutes.

In this section, we report activities and workload by descriptions. In the next section, we include these activities in the overall workload when comparing the total workload against available personnel in winter and summer.

## TABLE 8-12: Activities and Occupied Times by Description

| Description | Occupied Time | Count |
|---|---|---|
| Out of Service | 33.3 | 2,563 |
| Repairs | 5.1 | 4 |
| Reports | 24.6 | 44 |
| Training | 100.6 | 204 |
| **Administrative - Weighted Average/Total Activities** | **38.0** | **2,815** |
| Personal - Lunch | 28.1 | 2,663 |
| **Weighted Average/Total Calls** | **33.2** | **5,478** |

## Observations:

- The most common administrative description was "out of service."

- The activities with the longest average time were described as "training."

**FIGURE 8-12: Activities per Day, by Month**
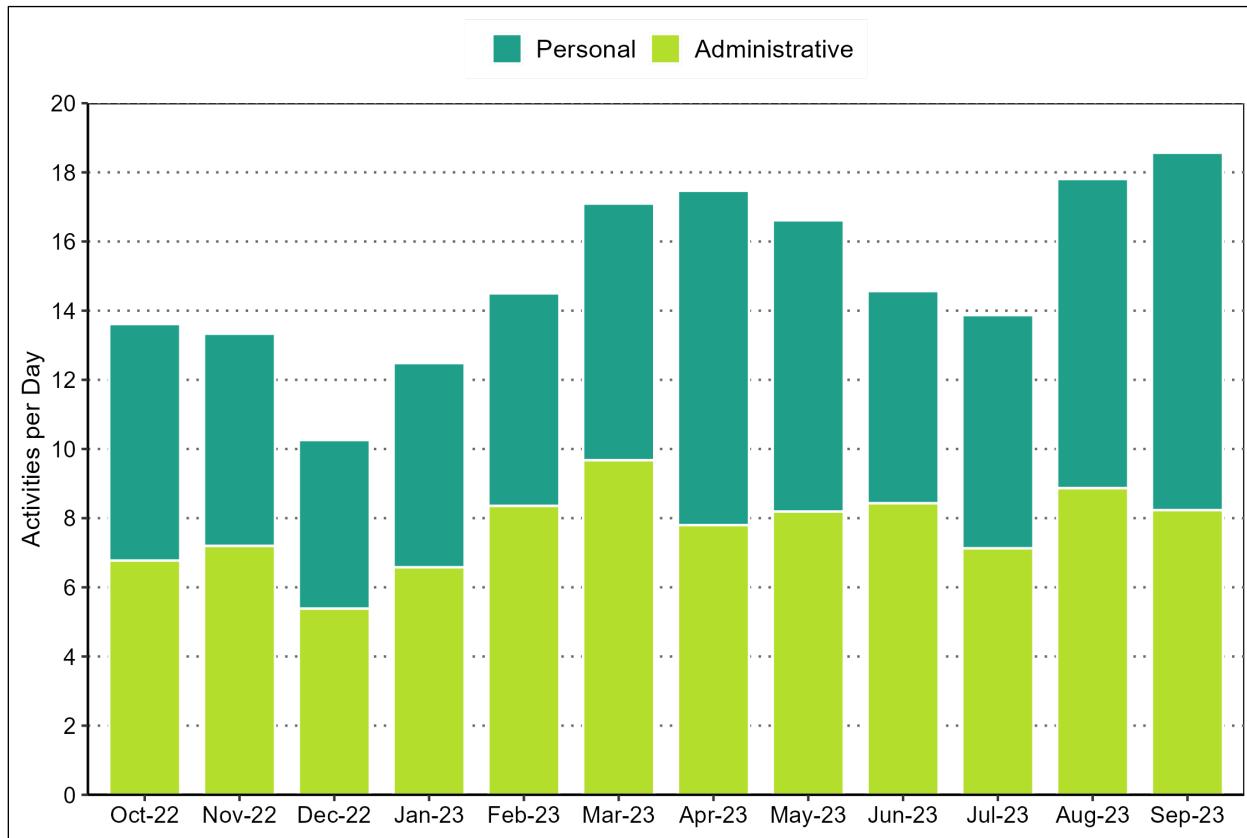


**TABLE 8-13: Activities and Workload per Day, by Month**

| Activities | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Personal | 6.8 | 7.2 | 5.4 | 6.6 | 8.4 | 9.7 | 7.8 | 8.2 | 8.4 | 7.1 | 8.9 | 8.2 |
| Administrative | 6.8 | 6.1 | 4.9 | 5.9 | 6.1 | 7.4 | 9.7 | 8.4 | 6.1 | 6.7 | 8.9 | 10.3 |
| **Total** | **13.6** | **13.3** | **10.3** | **12.5** | **14.5** | **17.1** | **17.5** | **16.6** | **14.6** | **13.9** | **17.8** | **18.6** |

Observations:

- The number of activities per day was the lowest in December.
- The number of activities per day was highest in September.

**FIGURE 8-13: Activities per Day, by Day of Week**
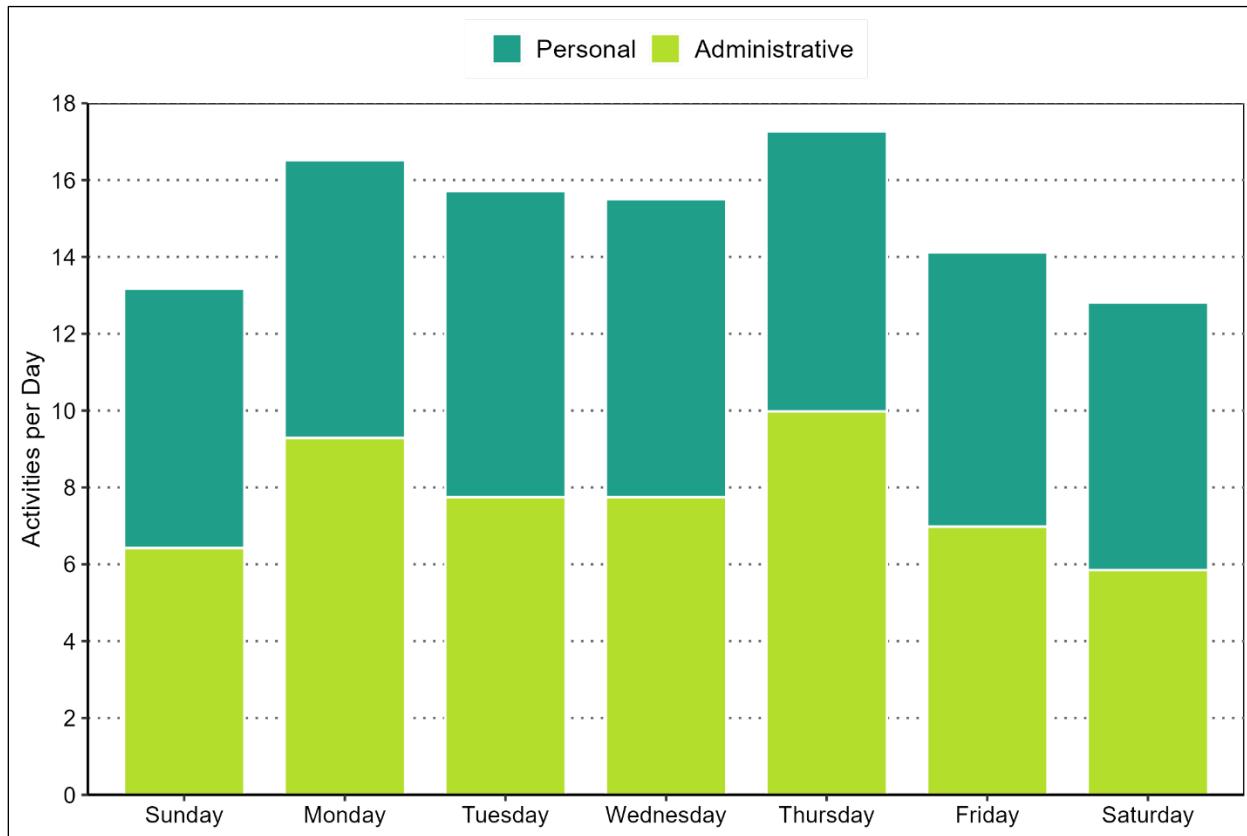


**TABLE 8-14: Activities per Day, by Day of Week**

| Day of Week | Administrative | Personal | Activities per Day |
|---|---|---|---|
| Sunday | 6.4 | 6.8 | 13.2 |
| Monday | 9.3 | 7.2 | 16.5 |
| Tuesday | 7.8 | 8.0 | 15.7 |
| Wednesday | 7.8 | 7.8 | 15.5 |
| Thursday | 10.0 | 7.3 | 17.3 |
| Friday | 7.0 | 7.1 | 14.1 |
| Saturday | 5.8 | 7.0 | 12.8 |
| **Weekly Average** | **7.7** | **7.3** | **15.0** |

Observations:

- The number of out-of-service activities per day was lowest on weekends.
- The number of out-of-service activities per day was highest on Thursdays.

**FIGURE 8-14: Activities per Day, by Hour of Day**
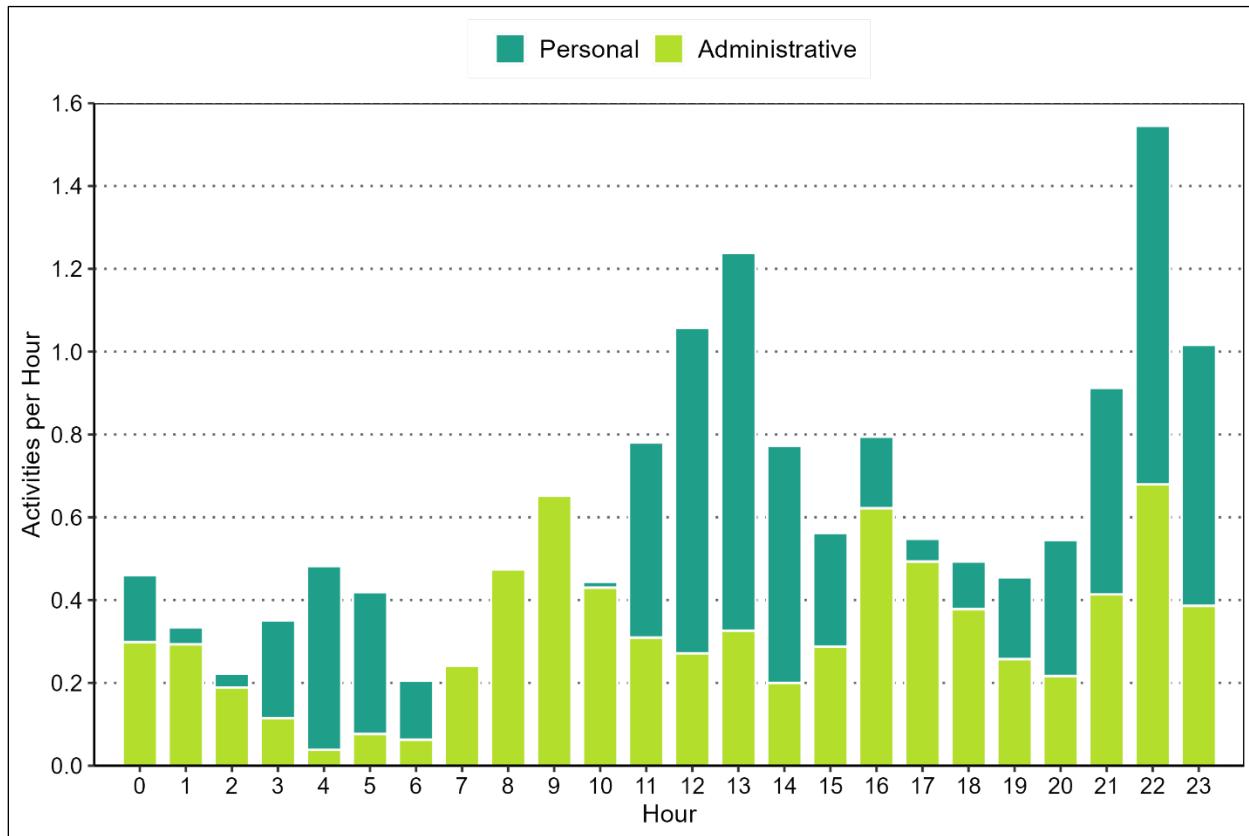
## TABLE 8-15: Activities per Hour, by Hour of Day

| Hour | Personal | Administrative | Total |
|---|---|---|---|
| 0 | 0.16 | 0.30 | 0.46 |
| 1 | 0.04 | 0.29 | 0.33 |
| 2 | 0.03 | 0.19 | 0.22 |
| 3 | 0.24 | 0.12 | 0.35 |
| 4 | 0.44 | 0.04 | 0.48 |
| 5 | 0.34 | 0.08 | 0.42 |
| 6 | 0.14 | 0.06 | 0.21 |
| 7 | 0.00 | 0.24 | 0.24 |
| 8 | 0.00 | 0.47 | 0.48 |
| 9 | 0.00 | 0.65 | 0.65 |
| 10 | 0.01 | 0.43 | 0.44 |
| 11 | 0.47 | 0.31 | 0.78 |
| 12 | 0.79 | 0.27 | 1.06 |
| 13 | 0.91 | 0.33 | 1.24 |
| 14 | 0.57 | 0.20 | 0.77 |
| 15 | 0.27 | 0.29 | 0.56 |
| 16 | 0.17 | 0.62 | 0.79 |
| 17 | 0.05 | 0.49 | 0.55 |
| 18 | 0.12 | 0.38 | 0.49 |
| 19 | 0.20 | 0.26 | 0.45 |
| 20 | 0.33 | 0.22 | 0.55 |
| 21 | 0.50 | 0.41 | 0.91 |
| 22 | 0.87 | 0.68 | 1.55 |
| 23 | 0.63 | 0.39 | 1.02 |
| **Hourly Average** | **0.30** | **0.32** | **0.63** |

## Observations:

- The number of activities per hour was lowest between 6:00 a.m. and 7:00 a.m.

- The number of activities per hour was highest between 10:00 p.m. and 11:00 p.m.

## DEPLOYMENT

For this study, we examined deployment information for eight weeks in winter (January 4 through February 28, 2023) and eight weeks in summer (July 7 through August 31, 2023). The department's main patrol force consists of patrol officers, operating on 10-hour shifts starting at 7:30 a.m., 4:00 p.m., and 10:00 p.m. The police department's main patrol force deployed an average of 6.3 officers per hour during the 24-hour day in winter 2023 and an average of 7.0 officers per hour in summer 2023. When patrol sergeants were included, the department averaged 7.9 units per hour during the 24-hour day in winter 2023 and 8.6 units in summer 2023.

In this section, we describe the deployment and workload in distinct steps, distinguishing between winter and summer and between weekdays (Monday through Friday) and weekends (Saturday and Sunday):

- First, we focus on patrol deployment alone.

- Next, we compare "all" workload, which includes community-initiated calls, police-initiated calls, directed patrol activities, and out-of-service activities.

- Finally, we compare the workload against deployment by percentage.

Comments follow each set of four figures, with separate discussions for summer and winter.

**FIGURE 8-15: Deployed Officers, Weekdays, Winter 2023**
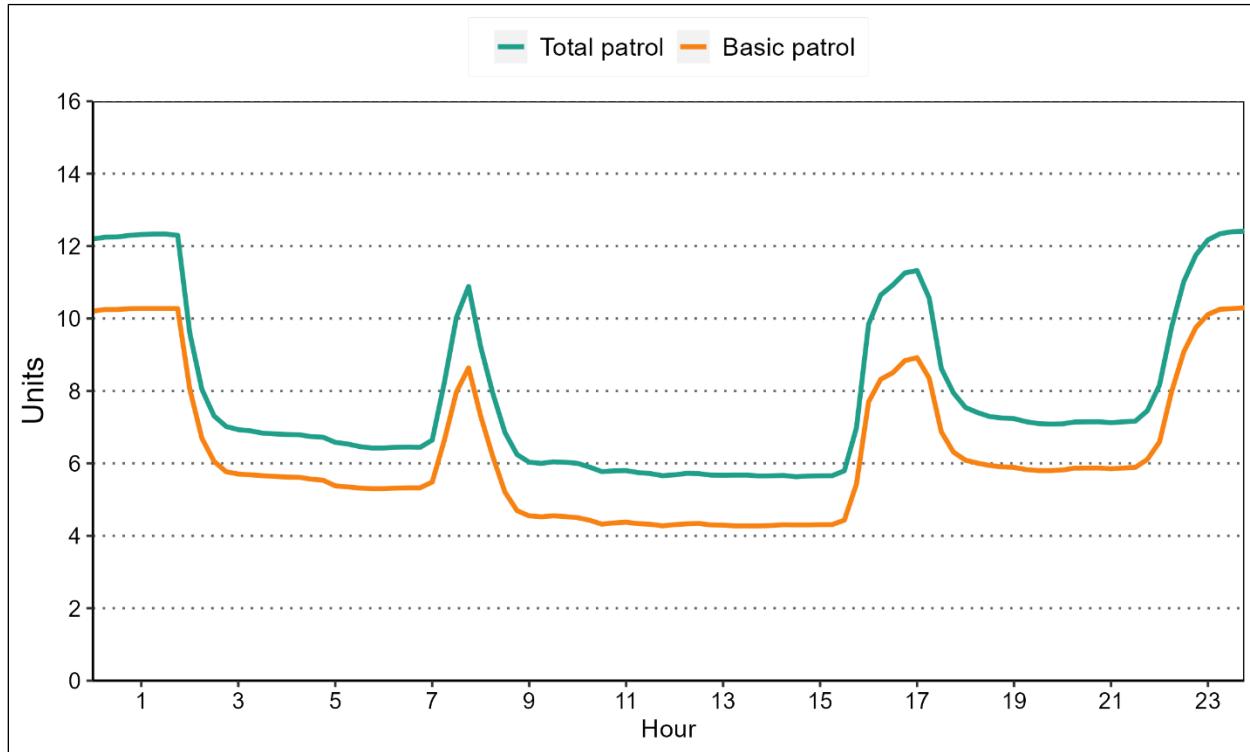


**FIGURE 8-16: Deployed Officers, Weekends, Winter 2023**
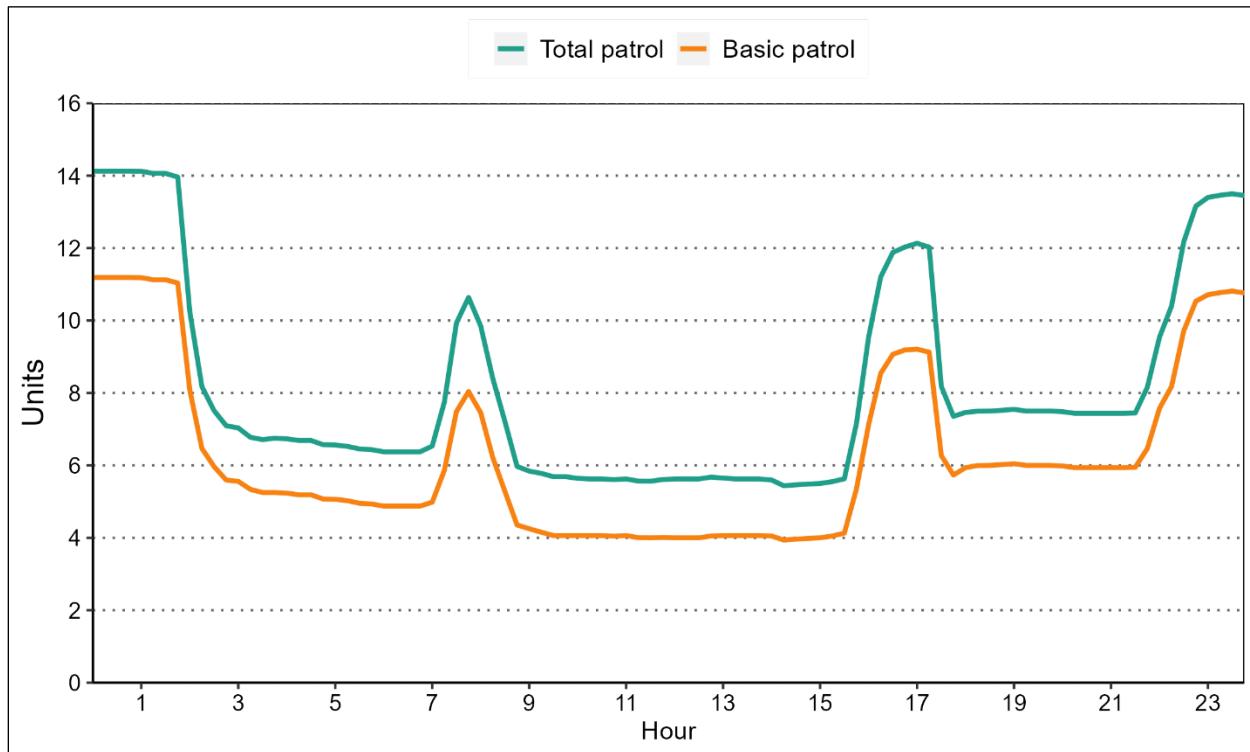
**FIGURE 8-17: Deployed Officers, Weekdays, Summer 2023**
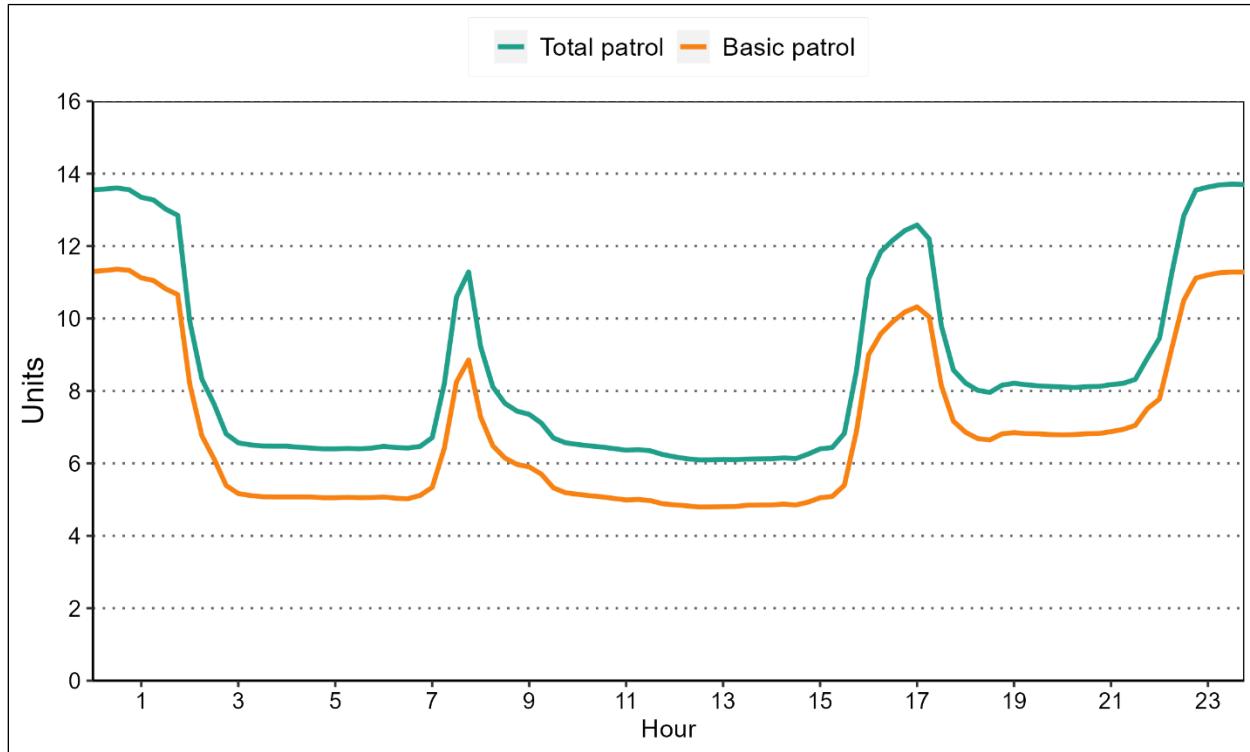


**FIGURE 8-18: Deployed Officers, Weekends, Summer 2023**
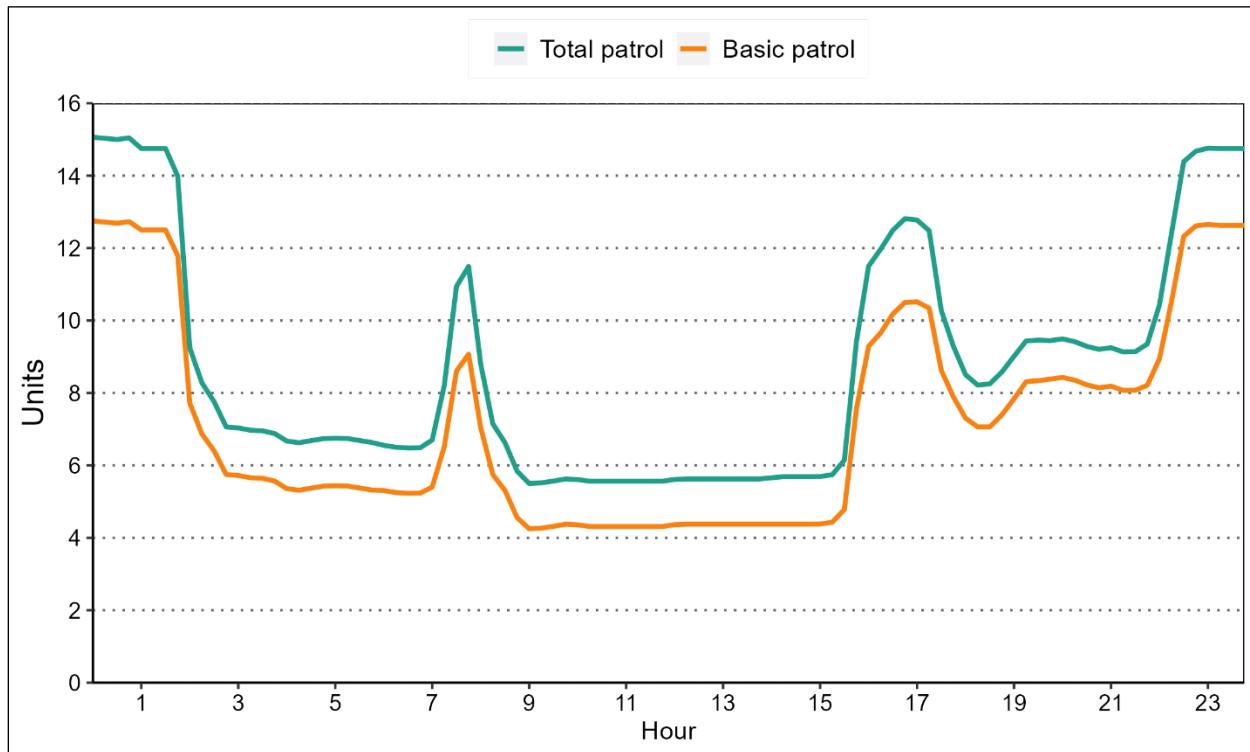
## Observations:

- For Winter (January 4 through February 28, 2023):

  - The average deployment was 7.8 units per hour during the week and 8.1 units per hour on the weekend.

  - Average deployment varied from 5.6 to 12.4 units per hour on weekdays and 5.4 to 14.1 units per hour on weekends.

- For Summer (July 7 through August 31, 2023):

  - The average deployment was 8.5 units per hour during the week and 8.7 units per hour on the weekend.

  - Average deployment varied from 6.1 to 13.7 units per hour on weekdays and 5.5 to 15.1 units per hour on weekends.

**FIGURE 8-19: Deployment and All Workload, Weekdays, Winter 2023**
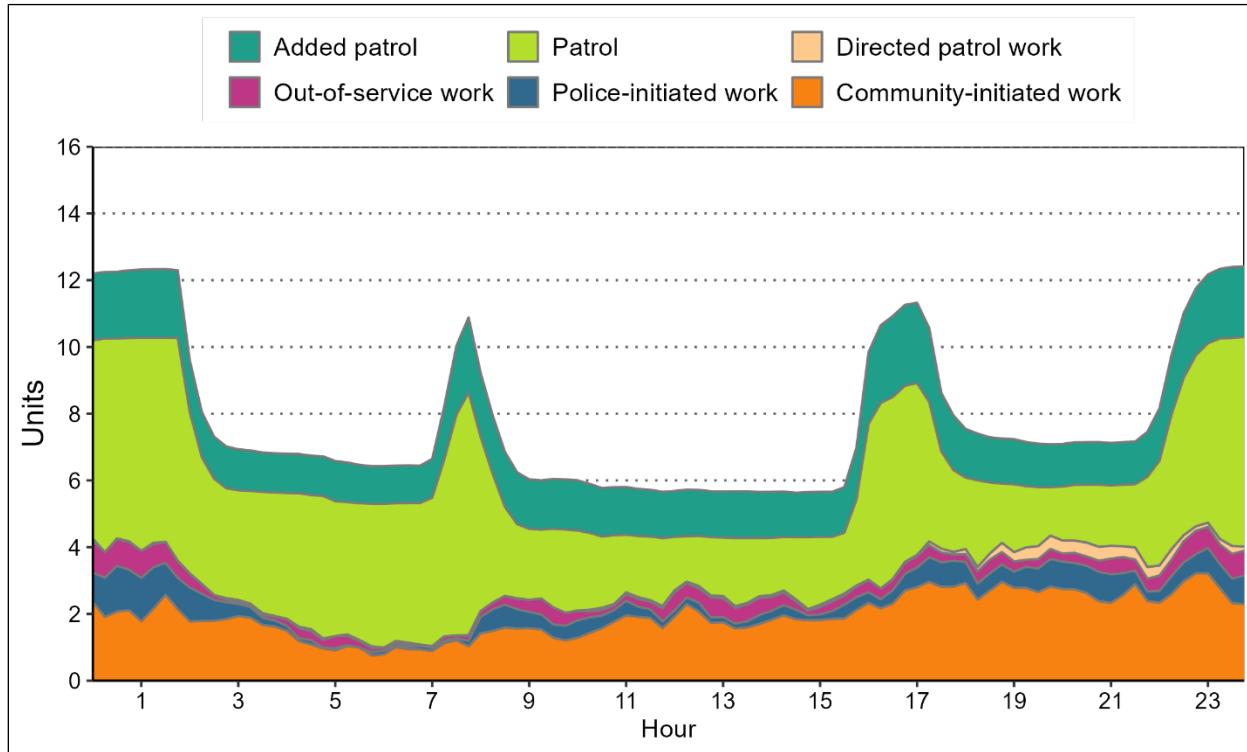


**FIGURE 8-20: Deployment and All Workload, Weekends, Winter 2023**
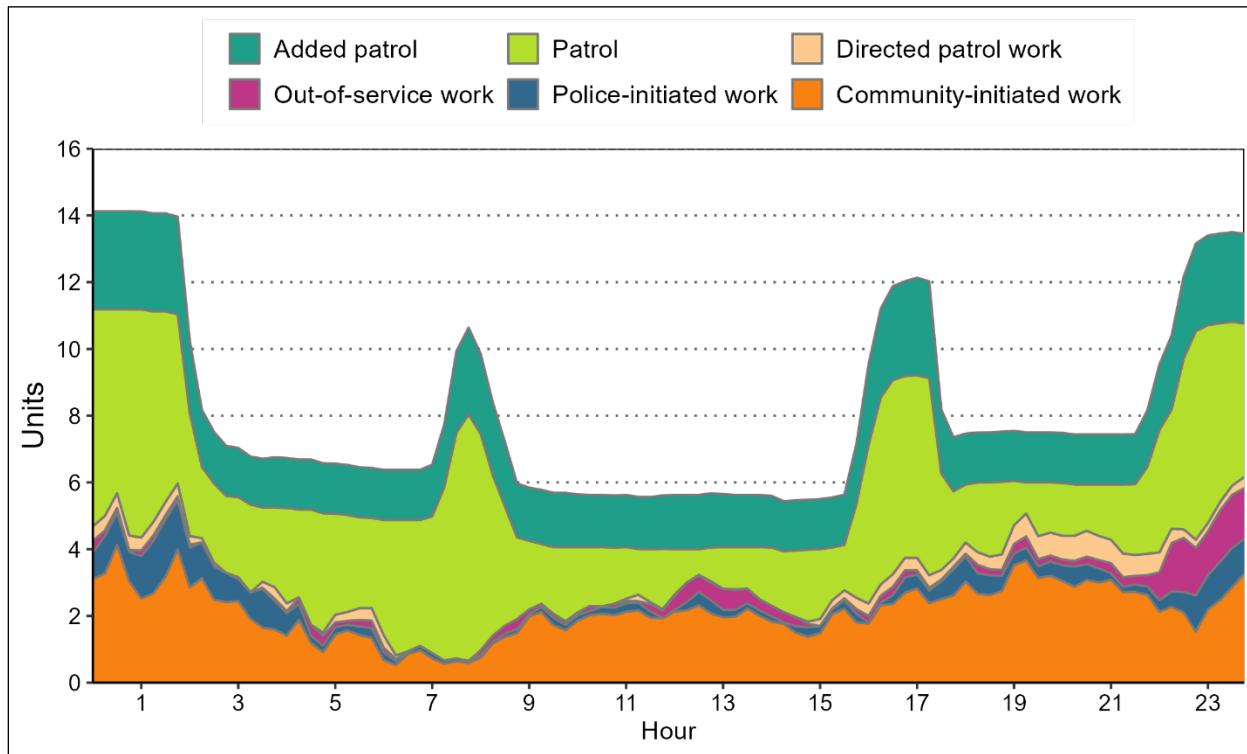
**FIGURE 8-21: Deployment and All Workload, Weekdays, Summer 2023**
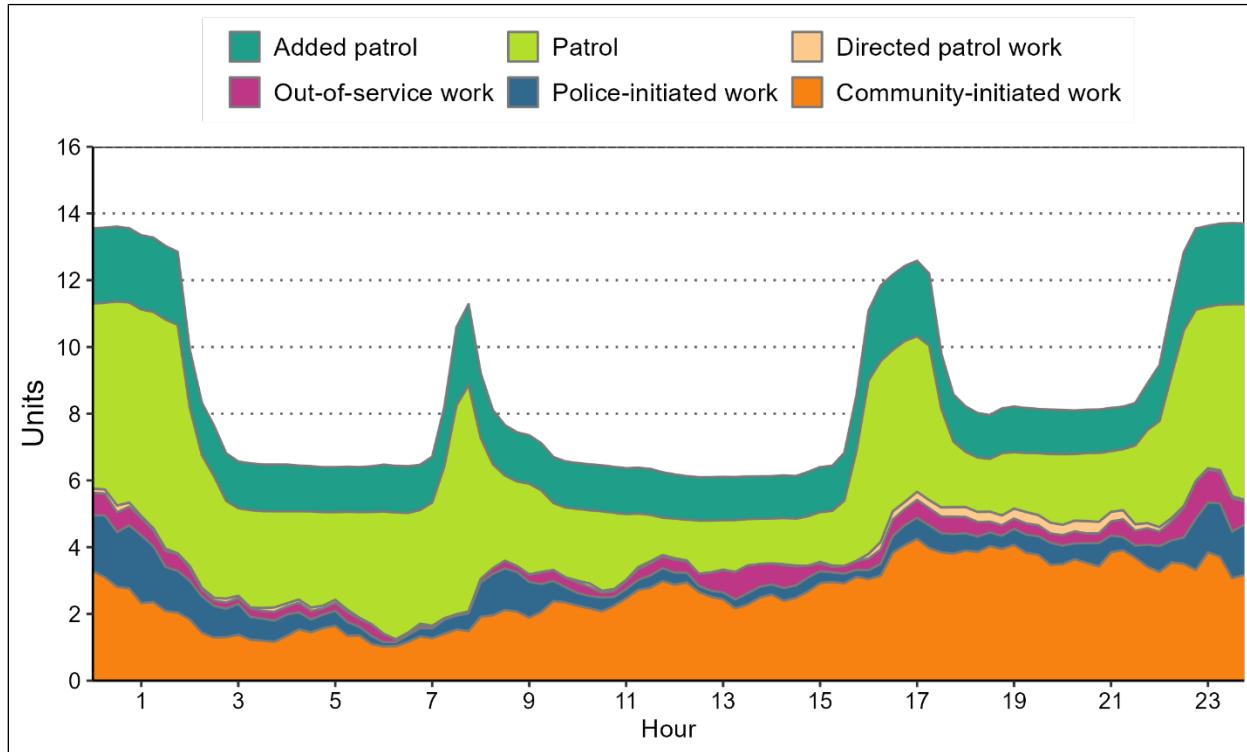


**FIGURE 8-22: Deployment and All Workload, Weekends, Summer 2023**
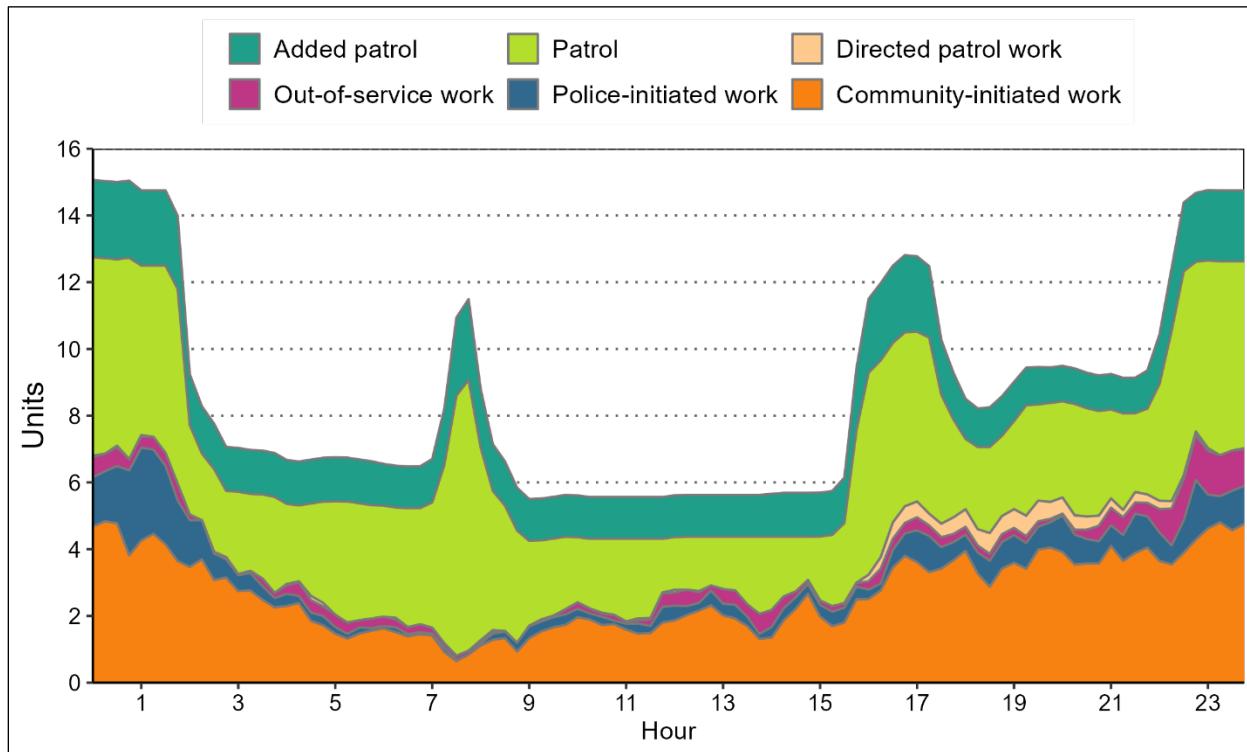


**Note:** Figures 8-19 to 8-22 show deployment along with all workloads from community-initiated calls, police-initiated calls, directed patrol work, and out-of-service work.

## Observations:

### *Winter:*

- Community-initiated work:

  - Average community-initiated workload was 2.0 units per hour during the week and 2.2 units per hour on weekends.

  - This was approximately 25 percent of hourly deployment during the week and 26 percent of hourly deployment on weekends.

- All work:

  - Average workload was 2.9 units per hour during the week and 3.1 units per hour on weekends.

  - This was approximately 37 percent of hourly deployment during the week and 38 percent of hourly deployment on weekends.

### *Summer:*

- Community-initiated work:

  - Average community-initiated workload was 2.6 units per hour during the week and 2.7 units per hour on weekends.

  - This was approximately 31 percent of hourly deployment during the week and 31 percent of hourly deployment on weekends.

- All work:

  - Average workload was 3.7 units per hour during the week and 3.8 units per hour on weekends.

  - This was approximately 44 percent of hourly deployment during the week and 43 percent of hourly deployment on weekends.

**FIGURE 8-23: Percentage of Workload, Weekdays, Winter 2023**
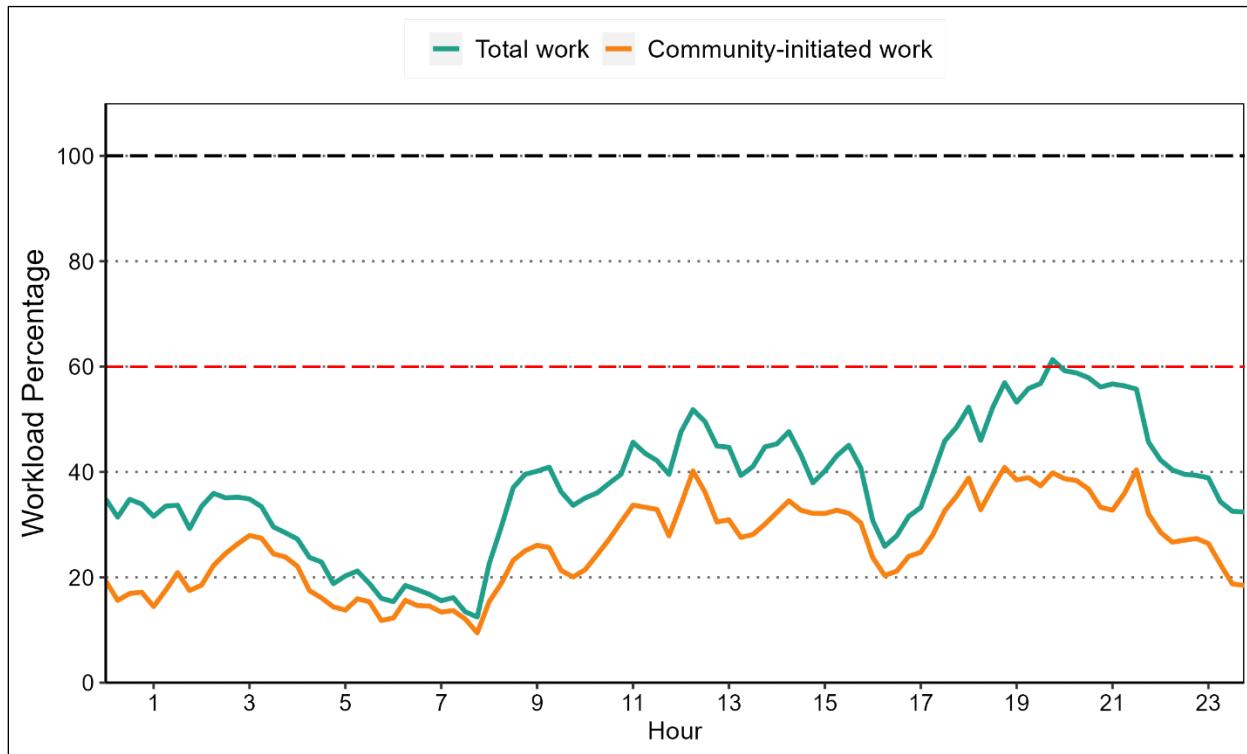


**FIGURE 8-24: Percentage of Workload, Weekends, Winter 2023**
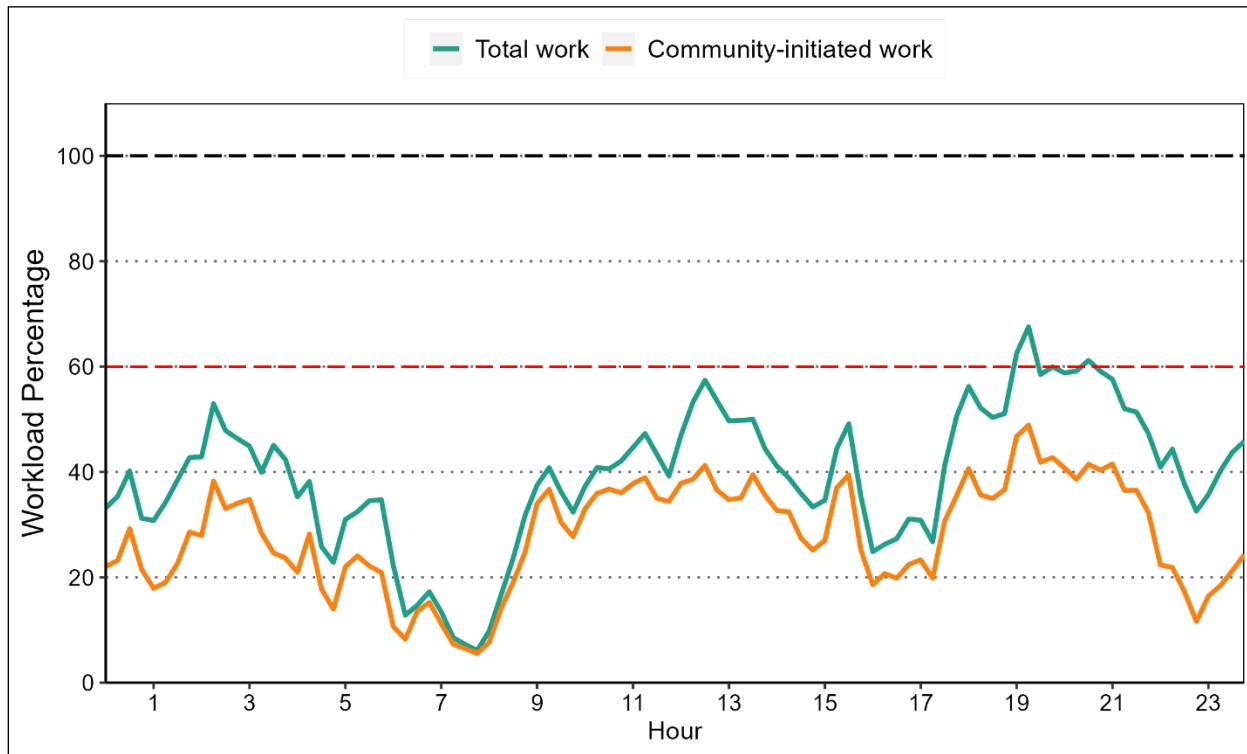
**FIGURE 8-25: Percentage of Workload, Weekdays, Summer 2023**
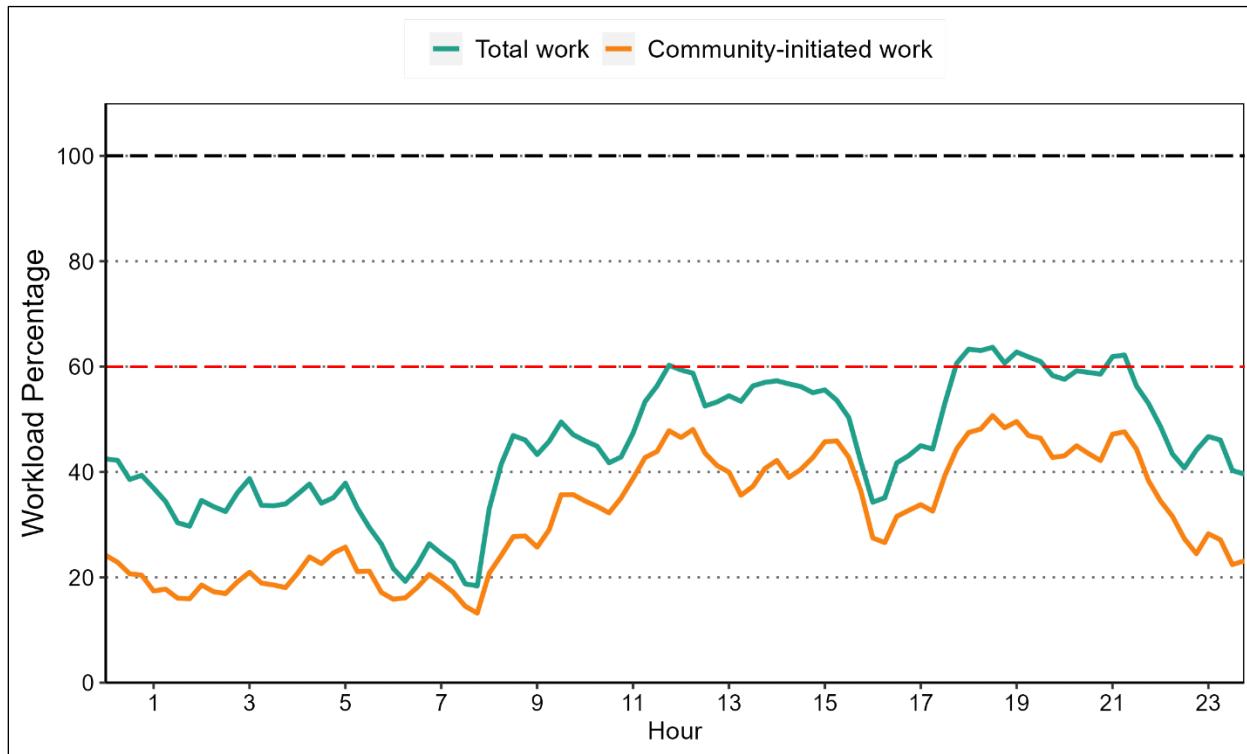


**FIGURE 8-26: Percentage of Workload, Weekends, Summer 2023**

## Observations:

### *Winter:*

- Community-initiated work:

  - During the week, the workload reached a maximum of 41 percent of deployment between 6:45 p.m. and 7:00 p.m. and between 9:30 p.m. and 9:45 p.m.

  - On weekends, the workload reached a maximum of 49 percent of deployment between 7:15 p.m. and 7:30 p.m.

- All work:

  - During the week, the workload reached a maximum of 61 percent of deployment between 7:45 p.m. and 8:00 p.m.

  - On weekends, the workload reached a maximum of 68 percent of deployment between 7:15 p.m. and 7:30 p.m.

### *Summer:*

- Community-initiated work:

  - During the week, the workload reached a maximum of 51 percent of deployment between 6:30 p.m. and 6:45 p.m.

  - On weekends, the workload reached a maximum of 47 percent of deployment between 2:45 p.m. and 3:00 p.m. and between 6:00 p.m. and 6:15 p.m.

- All work:

  - During the week, the workload reached a maximum of 64 percent of deployment between 6:00 p.m. and 6:15 p.m. and between 6:30 p.m. and 6:45 p.m.

  - On weekends, the workload reached a maximum of 63 percent of deployment between 9:30 p.m. and 9:45 p.m.

# RESPONSE TIMES

We analyzed the response times to various types of calls, separating the duration into dispatch processing and travel time, to determine whether response times varied by call type. Response time is measured as the difference between when a call is received and when the first unit arrives on scene. This is further divided into dispatch processing and travel time. Dispatch processing is the time between when a call is received and when the first unit is dispatched. Travel time is the remaining time until the first unit arrives on scene.

We begin the discussion with statistics that include all calls combined. We started with 3,962 calls in winter and 5,745 calls in summer. We limited our analysis to community-initiated calls, which amounted to 2,788 calls in winter and 4,045 calls in summer. In addition, we removed the calls lacking a recorded arriving unit, calls located at headquarters, as well as calls not in Minot PD beats. We were left with 2,182 calls in winter and 2,977 calls in summer for our analysis. For the entire year, we began with 30,615 calls and limited our analysis to 22,179 community-initiated calls. With similar exclusions, we were left with 17,005 calls.

Our initial analysis does not distinguish calls based on priority; instead, it examines the difference in response to all calls by time of day and compares winter and summer periods. We then present a brief analysis of response time for high-priority calls alone.

## All Calls

This section looks at all calls without considering their priorities. In addition to examining the differences in response times by both time of day and season (winter vs. summer), we show differences in response times by category.

**FIGURE 8-27: Average Response Time and Dispatch Processing, by Hour of Day, Winter, and Winter 2023**
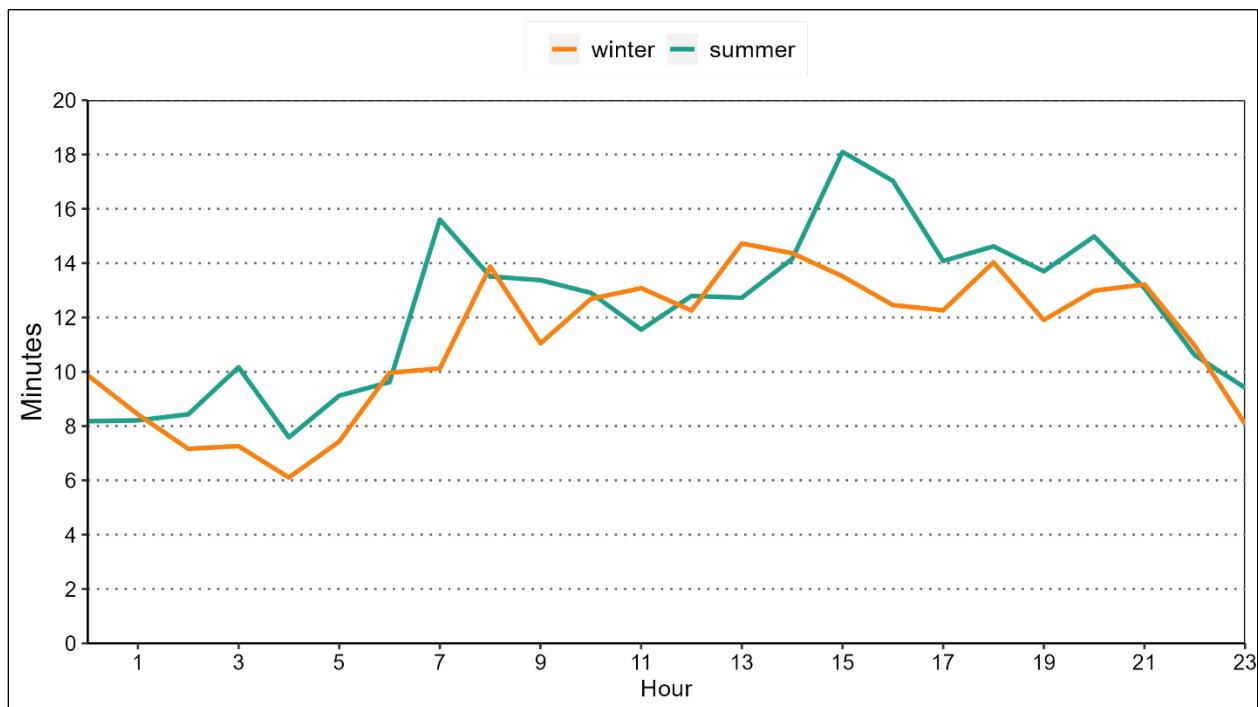


## Observations:

- Average response times varied significantly by the hour of the day.

- In winter, the longest response times were between 1:00 p.m. and 2:00 p.m., with an average of 14.7 minutes.

- In winter, the shortest response times were between 4:00 a.m. and 5:00 a.m., with an average of 6.1 minutes.

- In summer, the longest response times were between 3:00 p.m. and 4:00 p.m., with an average of 18.1 minutes.

- In summer, the shortest response times were between 4:00 a.m. and 5:00 a.m., with an average of 7.6 minutes.

**FIGURE 8-28: Average Response Time by Category, Winter 2023**
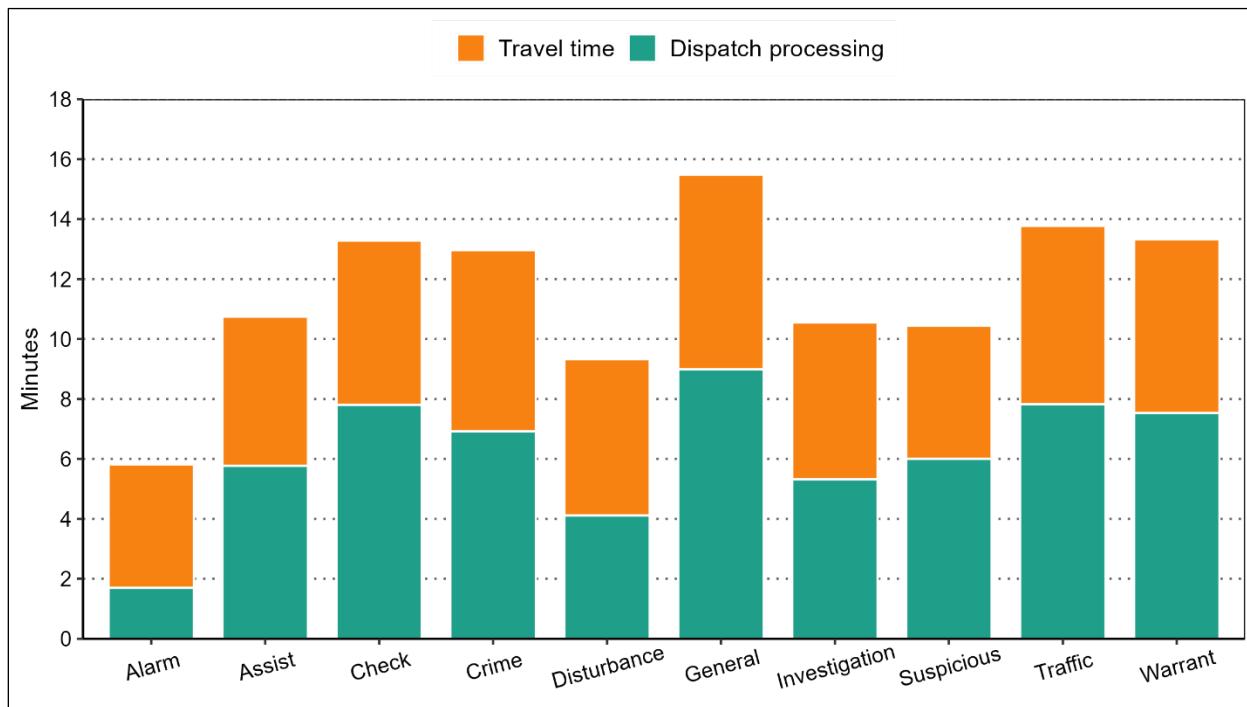


**FIGURE 8-29: Average Response Time by Category, Summer 2023**
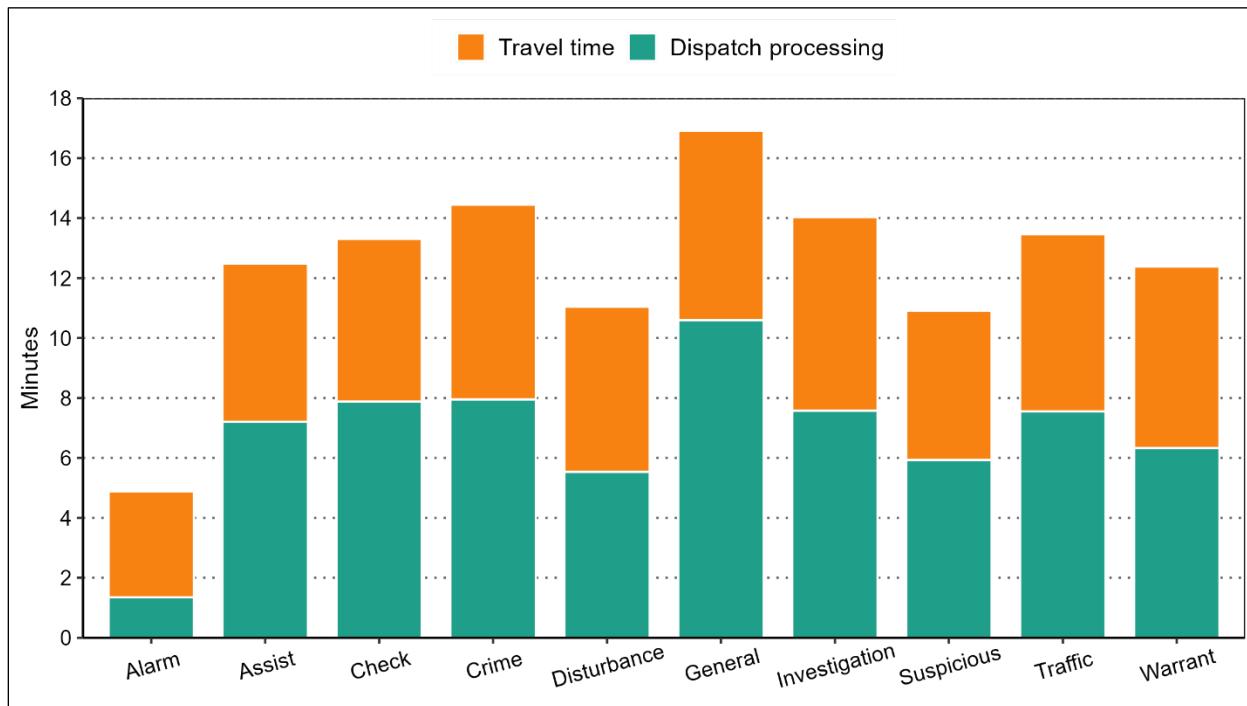
## TABLE 8-16: Average Response Time Components, by Category

| Category | Winter | | | | Summer | | | |
|---|---|---|---|---|---|---|---|---|
| | Minutes | | | Count | Minutes | | | Count |
| | Dispatch | Travel | Response | | Dispatch | Travel | Response | |
| Accident | 6.7 | 6.1 | 12.9 | 150 | 6.4 | 6.0 | 12.4 | 147 |
| Accident–criminal | 9.6 | 7.7 | 17.3 | 33 | 10.0 | 7.6 | 17.6 | 47 |
| Alarm | 1.7 | 4.1 | 5.8 | 109 | 1.3 | 3.5 | 4.9 | 134 |
| Animal call | 11.7 | 6.7 | 18.4 | 35 | 13.6 | 7.5 | 21.1 | 63 |
| Assist other agency | 3.5 | 4.1 | 7.7 | 165 | 3.6 | 4.1 | 7.6 | 268 |
| Assist public | 9.0 | 6.1 | 15.1 | 117 | 11.7 | 6.8 | 18.5 | 215 |
| Crime against persons | 6.5 | 6.3 | 12.8 | 69 | 10.5 | 7.9 | 18.4 | 115 |
| Crime against property | 10.0 | 7.2 | 17.2 | 162 | 9.3 | 6.9 | 16.2 | 211 |
| Crime against society | 4.3 | 4.8 | 9.1 | 182 | 5.6 | 5.5 | 11.0 | 283 |
| Disturbance | 4.1 | 5.2 | 9.3 | 234 | 5.5 | 5.5 | 11.0 | 282 |
| Investigation | 5.3 | 5.2 | 10.6 | 209 | 7.6 | 6.5 | 14.0 | 282 |
| Juvenile | 10.3 | 6.7 | 16.9 | 92 | 10.6 | 6.2 | 16.9 | 76 |
| Mental health | 2.9 | 5.4 | 8.3 | 25 | 1.9 | 4.9 | 6.8 | 16 |
| Miscellaneous | 2.9 | 6.9 | 9.8 | 10 | 8.2 | 4.3 | 12.5 | 22 |
| Special check | 0.4 | 4.1 | 4.5 | 8 | 0.7 | 5.7 | 6.5 | 14 |
| Suspicious incident | 6.0 | 4.4 | 10.4 | 153 | 5.9 | 5.0 | 10.9 | 277 |
| Traffic enforcement | 9.3 | 5.7 | 15.0 | 111 | 8.7 | 5.9 | 14.6 | 145 |
| Traffic enforcement–criminal | 1.8 | 3.9 | 5.6 | 15 | 8.7 | 5.3 | 13.9 | 11 |
| Warrant/prisoner/vehicle | 7.5 | 5.8 | 13.3 | 85 | 6.3 | 6.1 | 12.4 | 97 |
| Welfare check | 8.1 | 5.5 | 13.6 | 218 | 8.2 | 5.4 | 13.7 | 272 |
| **Total Average** | **6.4** | **5.5** | **11.9** | **2,182** | **7.1** | **5.7** | **12.9** | **2,977** |

**Note:** The total average is weighted according to the number of calls per category.

## Observations:

- In winter, the average response time was between 6 minutes and 15 minutes.

- In winter, the average response time was as short as 6 minutes (for alarms) and as long as 15 minutes (for general noncriminal calls).

- In summer, the average response time was between 5 minutes and 17 minutes.

- In summer, the average response time was as short as 5 minutes (for alarms) and as long as 17 minutes (for general noncriminal calls).

## TABLE 8-17: 90th Percentiles for Response Time Components, by Category

| Category | Minutes in Winter | | | Minutes in Summer | | |
|---|---|---|---|---|---|---|
| | Dispatch | Travel | Response | Dispatch | Travel | Response |
| Accident | 16.4 | 12.1 | 26.4 | 17.0 | 11.3 | 24.7 |
| Accident–criminal | 19.1 | 14.2 | 28.9 | 29.5 | 15.5 | 36.5 |
| Alarm | 2.4 | 7.2 | 9.4 | 2.0 | 6.0 | 7.6 |
| Animal call | 33.7 | 11.1 | 42.0 | 47.4 | 12.4 | 53.1 |
| Assist other agency | 4.9 | 7.5 | 11.2 | 4.6 | 7.0 | 12.3 |
| Assist public | 26.5 | 10.7 | 31.8 | 34.5 | 14.2 | 43.0 |
| Crime against persons | 17.1 | 11.5 | 32.3 | 29.8 | 18.1 | 43.1 |
| Crime against property | 29.3 | 12.6 | 37.6 | 28.1 | 13.0 | 38.8 |
| Crime against society | 6.5 | 8.5 | 15.2 | 13.8 | 10.6 | 22.8 |
| Disturbance | 7.7 | 9.3 | 15.3 | 11.6 | 9.3 | 18.1 |
| Investigation | 8.0 | 10.0 | 19.9 | 17.1 | 12.9 | 30.6 |
| Juvenile | 27.6 | 13.2 | 39.4 | 39.3 | 12.1 | 50.8 |
| Mental health | 4.4 | 9.4 | 13.3 | 3.0 | 7.5 | 9.3 |
| Miscellaneous | 5.7 | 14.3 | 19.4 | 22.6 | 8.0 | 30.1 |
| Special check | 0.8 | 7.8 | 8.2 | 1.1 | 10.0 | 10.2 |
| Suspicious incident | 12.3 | 9.4 | 22.8 | 14.8 | 9.2 | 22.2 |
| Traffic enforcement | 23.7 | 10.0 | 30.8 | 25.0 | 12.3 | 31.9 |
| Traffic enforcement–criminal | 3.1 | 8.1 | 10.2 | 16.9 | 11.6 | 28.5 |
| Warrant/prisoner/vehicle | 15.4 | 13.2 | 28.5 | 17.6 | 14.1 | 26.1 |
| Welfare check | 19.7 | 9.8 | 30.8 | 21.6 | 9.7 | 28.5 |
| **Total Average** | **15.0** | **10.2** | **24.3** | **20.1** | **11.0** | **28.7** |

**Note:** A 90th percentile value of 24.3 minutes means that 90 percent of all calls are responded to in fewer than 24.3 minutes. For this reason, the columns for dispatch processing and travel time may not be equal to the total response time.

## Observations:

■ In winter, the 90th percentile value for response time was as short as 9 minutes (for alarms) and as long as 33 minutes (for general noncriminal calls).

■ In summer, the 90th percentile value for response time was as short as 8 minutes (for alarms) and as long as 50 minutes (for general noncriminal calls).

**FIGURE 8-30: Average Response Time Components, by Beat**
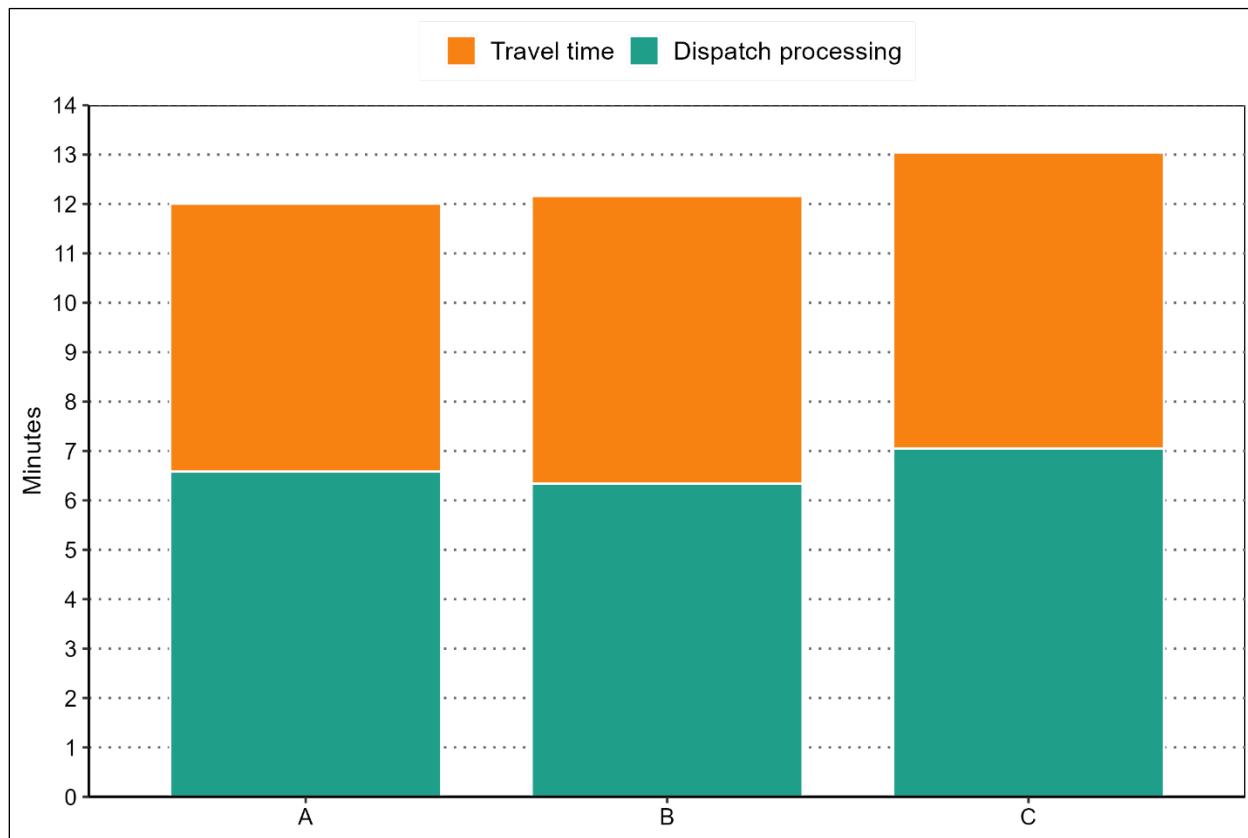


**TABLE 8-18: Average Response Time Components, by Beat**

| Beat | Minutes | | | Calls |
|------|---------|--------|----------|-------|
|      | Dispatch | Travel | Response | |
| A | 6.6 | 5.4 | 12.0 | 5,957 |
| B | 6.3 | 5.8 | 12.2 | 4,690 |
| C | 7.1 | 6.0 | 13.0 | 6,358 |
| **Total** | **6.7** | **5.7** | **12.4** | **17,005** |

Observations:

- All three beats share a similar average dispatch processing time, with beat B having the shortest average dispatch processing time of 6.3 minutes.

- All three beats share a similar average response time, with beat A having the shortest average response time of 12.0 minutes.

## High-Priority Calls

The department assigned priorities to calls with priority "high" as the highest priority. Table 8-19 shows average response times by priority. Also, we studied injury accidents to see if these provided an alternate measure for emergency calls. These calls were identified based on their call descriptions: "accident w/injuries" and "hit and run - injury."

**TABLE 8-19: Average and 90th Percentile Response Times, by Priority**

| Priority | Minutes | | | Calls | 90th Percentile Response Time, Minutes |
|---|---|---|---|---|---|
| | Dispatch | Travel | Response | | |
| High | 2.8 | 4.6 | 7.4 | 4,418 | 12.4 |
| Medium | 7.6 | 6.1 | 13.8 | 6,169 | 31.2 |
| Low | 8.9 | 6.2 | 15.1 | 3,496 | 34.0 |
| Follow-up | 7.9 | 6.2 | 14.1 | 2,922 | 32.4 |
| **Total** | **6.7** | **5.7** | **12.4** | **17,005** | **27.1** |
| Injury Accident | 1.8 | 3.2 | 5.0 | 121 | 7.6 |

**Note**: The total average is weighted according to the number of calls within each priority level.

**FIGURE 8-31: Average Response Times and Dispatch Processing for High-priority Calls, by Hour**
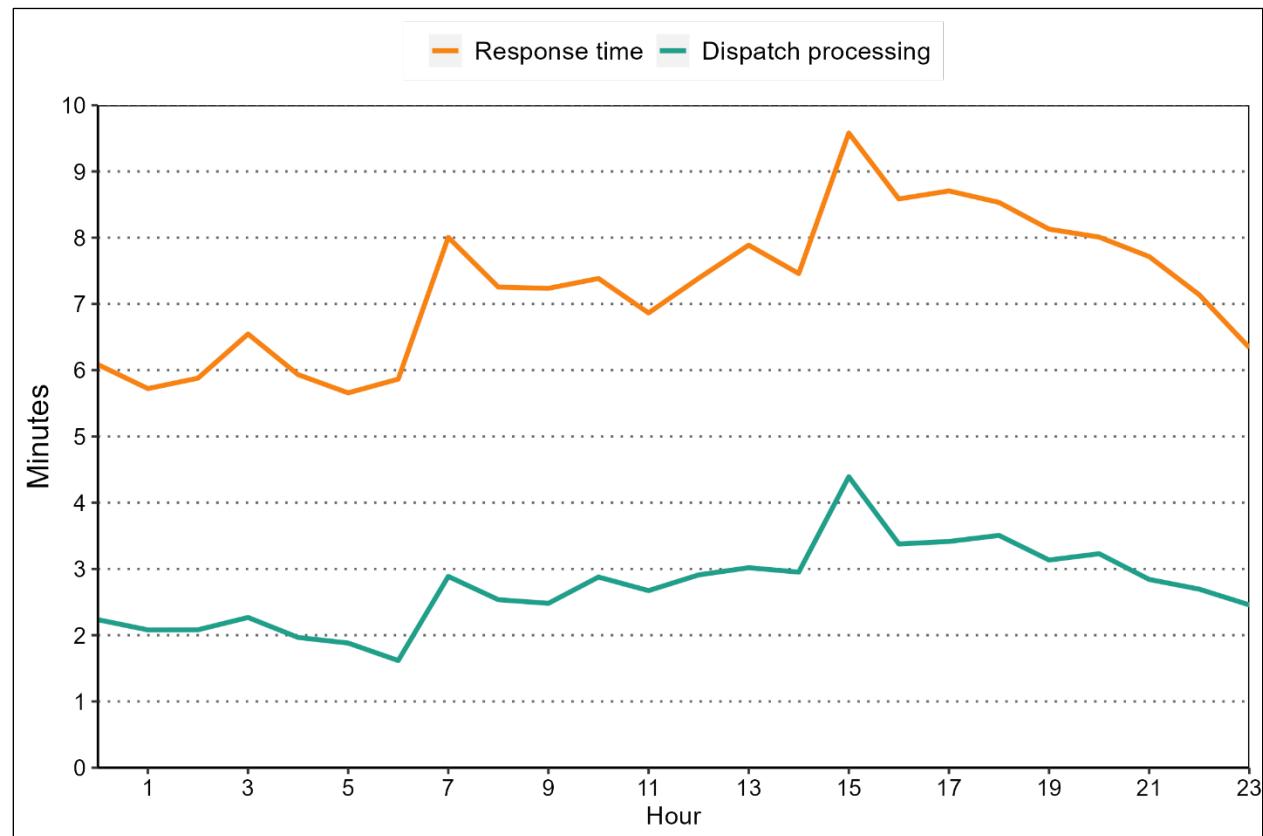
## Observations:

- High-priority calls had an average response time of 7.4 minutes, lower than the overall average of 12.4 minutes for all calls.

- Average dispatch processing was 2.8 minutes for high-priority calls, compared to 6.7 minutes overall.

- For high-priority calls, the longest response times were between 3:00 p.m. and 4:00 p.m., with an average of 9.6 minutes.

- For high-priority calls, the shortest response times were between 1:00 a.m. and 2:00 a.m. and between 5:00 a.m. and 7:00 a.m., with an average of 5.7 minutes.

- Average response time for injury accidents was 5.0 minutes, with a dispatch processing of 1.8 minutes.

# APPENDIX A: CALL TYPE CLASSIFICATION

Call descriptions for the department's calls for service from October 1, 2022, to September 30, 2023, were classified into the following categories.

## TABLE 8-20: Call Type, by Category

| Call Type Description | Table Category | Figure Category |
|---|---|---|
| Alarm burglary | Alarm | Alarm |
| Alarm medical | | |
| Ambulance request | Assist other agency | Assist |
| Assist | | |
| Assist fire | | |
| Assist other agency | | |
| Assist police | | |
| Fire–alarm waterflow | | |
| Fire alarm | | |
| Fire dumpster/outside | | |
| Fire grass/brush | | |
| Fire other structure | | |
| Fire vehicle | | |
| Public works/signal malfunction | | |
| Public works/signals | | |
| Assist public | Assist public | |
| Civil dispute | | |
| Bar check | Special check | Check |
| Offender check | | |
| Premises check | | |
| Welfare check | Welfare check | |
| Hit and run | Accident–criminal | Crime |
| Hit and run–injury | | |
| Hit and run–property | | |
| Assault | Crime against persons | |
| Child abuse/neglect | | |
| Forgery | | |
| Harassment | | |
| Robbery | | |
| Sex offense | | |
| Shooting | | |
| Stabbing | | |
| Terrorizing | | |
| Threats / intimidation | | |
| Auto burglary | Crime against property | |
| Bike theft | | |

| Call Type Description | Table Category | Figure Category |
|---|---|---|
| Burglary | | |
| Criminal mischief | | |
| Littering | | |
| Motor vehicle theft | | |
| Shoplifting | | |
| Stalled vehicle | | |
| Theft | | |
| Trespass | | |
| Alcohol violation | | |
| Bomb incident | | |
| Disorderly conduct | | |
| Indecent exposure | | |
| Judicial violations | | |
| Ordinance violation | Crime against society | |
| Pornography/obscene materials | | |
| Pursuit/flight | | |
| Shots fired | | |
| Tobacco violation | | |
| Weapons violations | | |
| Dui | Traffic enforcement–criminal | |
| Dus/dur | | |
| Extra patrol | Directed patrol | Directed patrol |
| Special detail | | |
| Domestic disturbance | | |
| Intoxicated person | | |
| Loitering | Disturbance | Disturbance |
| Noise complaint | | |
| Animal - lost/found pet | | |
| Animal bite | Animal call | |
| Animal complaint | | |
| Animal complaint domestic | | |
| Found child | | |
| Missing/runaway | | |
| Runaway information | Juvenile | General noncriminal |
| Runaway located | | |
| Unruly juvenile | | |
| Unruly juvenile | | |
| Committal | Mental health | |
| Information | | |
| Messy yard | | |
| New call | Miscellaneous | |
| Repo veh/private property tow | | |

| Call Type Description | Table Category | Figure Category |
|---|---|---|
| Unshoveled sidewalks | | |
| 911 investigation | Investigation | Investigation |
| Attempt to locate | | |
| Bike - found/abandoned | | |
| Criminal investigation | | |
| Death | | |
| Drug investigation | | |
| Follow up | | |
| Lost/found property | | |
| Recovered stolen property | | |
| Recovered stolen vehicle | | |
| Routine investigation | | |
| Smoke investigation | | |
| Suicide investigation | | |
| Open door/window found | Suspicious incident | Suspicious incident |
| Suspicious activity | | |
| Suspicious person/vehicle | | |
| Suspicious vehicle | | |
| Accident property damage | Accident | Traffic |
| Accident w/injuries | | |
| Impound | Traffic enforcement | |
| Parking complaint | | |
| Traffic complaint/investigation | | |
| Traffic obstruction | | |
| Traffic stop | Traffic stop | |
| Escort | Warrant/prisoner/vehicle | Warrant/prisoner/vehicle |
| Judicial service | | |
| Warrant service | | |

# APPENDIX B: UNIFORM CRIME REPORT INFORMATION

This section presents information obtained from Uniform Crime Reports (UCR) collected and reported by the Federal Bureau of Investigation (FBI) or on the North Dakota State Government website. The tables and figures include the most recent information that is publicly available at the national level. This includes crime reports for 2013 through 2022, along with clearance rates for 2021 and 2022. Crime rates are expressed as incidents per 100,000 population.

## TABLE 8-21: Reported Crime Rates in 2021 and 2022, by City

| Municipality | State | 2021 | | | | 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Population | Crime Rates | | | Population | Crime Rates | | |
| | | | Violent | Property | Total | | Violent | Property | Total |
| Bismarck | ND | 75,396 | 281 | 1,576 | 1,857 | 74,604 | 307 | 1,391 | 1,698 |
| Dickinson | ND | 24,179 | 252 | 922 | 1,175 | 24,577 | 236 | 879 | 1,115 |
| Fargo | ND | 127,313 | 500 | 3,194 | 3,694 | 127,649 | 607 | 3,037 | 3,644 |
| Jamestown | ND | 14,879 | 302 | 1,425 | 1,727 | 15,772 | 222 | 1,116 | 1,338 |
| Grand Forks | ND | 56,253 | 299 | 1,547 | 1,845 | 58,620 | 292 | 1,733 | 2,025 |
| Mandan | ND | 23,292 | 365 | 3,332 | 3,697 | 24,666 | 235 | 2,903 | 3,138 |
| West Fargo | ND | 39,704 | 161 | 1,007 | 1,169 | 39,987 | 180 | 913 | 1,093 |
| Williston | ND | 31,680 | 287 | 909 | 1,196 | 25,513 | 494 | 1,634 | 2,128 |
| **Minot** | **ND** | 48,086 | 250 | 821 | 1,071 | 47,278 | 281 | 662 | 943 |
| **North Dakota** | | **774,948** | **241** | **1,398** | **1,639** | **779,261** | **266** | **1,335** | **1,601** |
| **National** | | **\*332,031,554** | **396** | **1,933** | **2,329** | **332,403,650** | **380** | **1,954** | **2,334** |

**Note**: *We used national crime and clearance rates estimated in the FBI's report *The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates.*

**FIGURE 8-32: Reported Minot Violent and Property Crime Rates, by Year**
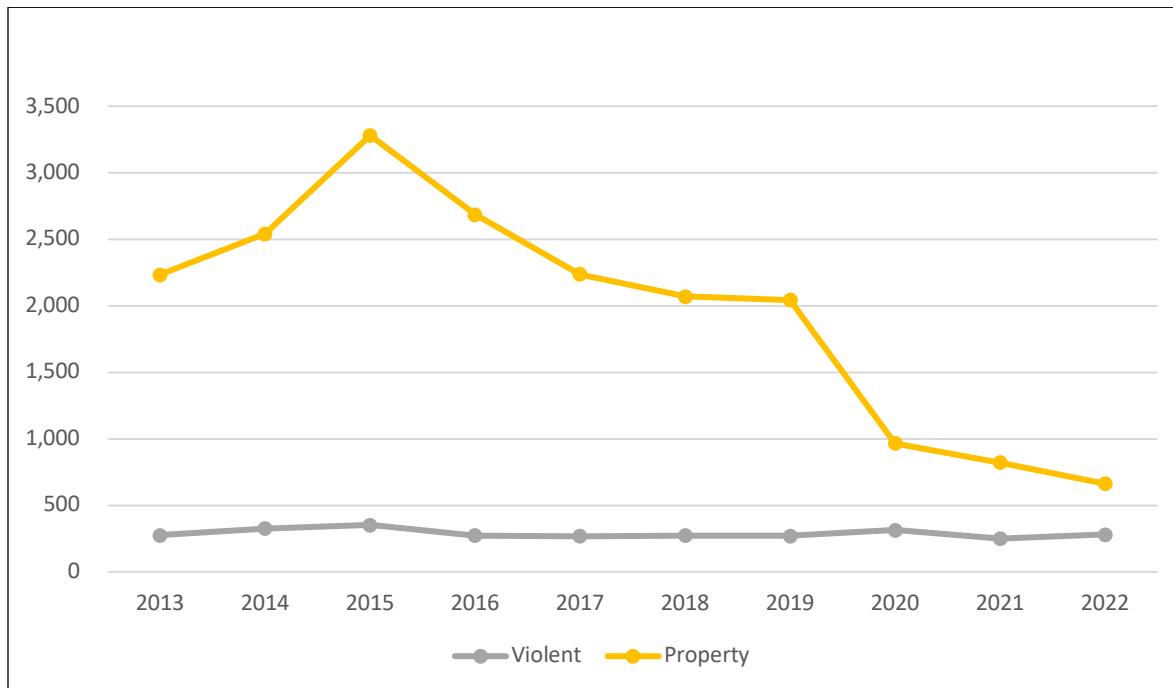


**FIGURE 8-33: Reported City and State Crime Rates, by Year**
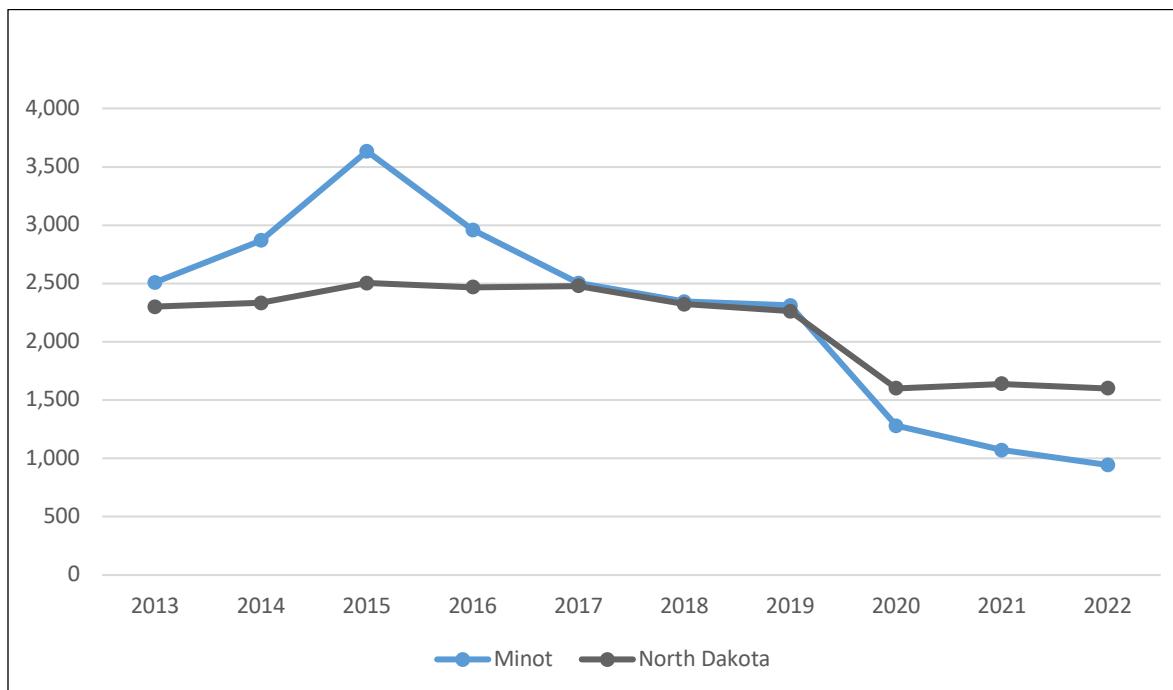
## TABLE 8-22: Reported Minot, North Dakota, and National Crime Rates, by Year

| Year | Minot | | | | North Dakota | | | | National | | | |
|------|------------|---------|----------|-------|------------|---------|----------|-------|-------------|---------|----------|-------|
| | Population | Violent | Property | Total | Population | Violent | Property | Total | Population | Violent | Property | Total |
| 2013 | 44,635 | 276 | 2,234 | 2,509 | 747,626 | 261 | 2,040 | 2,301 | 321,947,240 | 362 | 2,627 | 2,989 |
| 2014 | 47,682 | 325 | 2,542 | 2,867 | 764,102 | 261 | 2,072 | 2,333 | 324,699,246 | 357 | 2,464 | 2,821 |
| 2015 | 49,842 | 353 | 3,280 | 3,633 | 781,773 | 247 | 2,257 | 2,504 | 327,455,769 | 368 | 2,376 | 2,744 |
| 2016 | 51,265 | 273 | 2,686 | 2,959 | 783,900 | 244 | 2,224 | 2,468 | 329,308,297 | 383 | 2,353 | 2,736 |
| 2017 | 50,118 | 267 | 2,235 | 2,502 | 755,393 | 281 | 2198 | 2,479 | 325,719,178 | 383 | 2,362 | 2,745 |
| 2018 | 48,829 | 274 | 2,070 | 2,344 | 760,077 | 281 | 2040 | 2,321 | 327,167,434 | 369 | 2,200 | 2,568 |
| 2019 | 48,185 | 270 | 2,042 | 2,312 | 762,062 | 285 | 1977 | 2,262 | 328,239,523 | 379 | 2,010 | 2,489 |
| 2020 | 48,108 | 314 | 967 | 1,280 | 765,309 | 244 | 1356 | 1,600 | 331,449,281 | 399 | 1,958 | 2,357 |
| 2021 | 48,086 | 250 | 821 | 1,071 | 774,948 | 241 | 1398 | 1,639 | 332,031,554 | 396 | 1,933 | 2,329 |
| 2022 | 47,278 | 281 | 662 | 943 | 779,261 | 266 | 1335 | 1,601 | 332,403,650 | 380 | 1,954 | 2,334 |

## TABLE 8-23: Reported Minot, North Dakota, and National Crime Clearance Rates, 2021

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 3 | 0 | 17 | 16 | 94% | 22,900 | 11,500 | 50% |
| Rape | 41 | 7 | 17% | 340 | 66 | 19% | 144,300 | 16,500 | 11% |
| Robbery | 4 | 1 | 25% | 186 | 65 | 35% | 202,200 | 48,800 | 24% |
| Aggravated Assault | 72 | 52 | 72% | 1,321 | 796 | 60% | 943,800 | 297,500 | 32% |
| Burglary | 115 | 14 | 12% | 2,899 | 358 | 12% | 899,700 | 107,200 | 12% |
| Larceny | 143 | 23 | 16% | 5,958 | 751 | 13% | 4,627,000 | 508,900 | 11% |
| Vehicle Theft | 137 | 25 | 18% | 1,979 | 406 | 21% | 890,200 | 68,500 | 8% |

**Note**: *We used national crime and clearance rates estimated in the FBI's report *The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates*

## TABLE 8-24: Reported Minot, North Dakota, and National Crime Clearance Rates, 2022

| Crime | Minot | | | North Dakota | | | National | | |
|---|---|---|---|---|---|---|---|---|---|
| | Crimes | Clearances | Rate | Crimes | Clearances | Rate | Crimes | Clearances | Rate |
| Murder Manslaughter | 3 | 2 | 67% | 30 | 23 | 77% | 21,797 | 10,752 | 49% |
| Rape | 37 | 3 | 8% | 379 | 72 | 19% | 132,997 | 27,856 | 21% |
| Robbery | 8 | 3 | 38% | 216 | 83 | 38% | 215,760 | 51,930 | 24% |
| Aggravated Assault | 85 | 54 | 64% | 1,448 | 853 | 59% | 756,601 | 334,405 | 44% |
| Burglary | 92 | 15 | 16% | 2,585 | 409 | 16% | 916,970 | 125,838 | 14% |
| Larceny | 89 | 17 | 19% | 5,818 | 876 | 15% | 4,947,709 | 633,098 | 13% |
| Vehicle Theft | 132 | 28 | 21% | 1,999 | 428 | 21% | 953,827 | 87,140 | 9% |

*E N D*