

MILES CITY LONG-RANGE TRANSPORTATION PLAN 2017



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CHAPTER 1 | PROJECT OVERVIEW



INTRODUCTION

The Miles City Long-Range Transportation Plan (LRTP) is intended to guide the development and implementation of multi-modal transportation systems in the planning area. With strong medical, commodity, and retail sectors, Miles City is an eastern Montana economic center. As a result, Miles City has encountered recent residential and business growth. Growth and development pressures has prompted the City to prepare its first LRTP. This plan will guide the orderly growth of the transportation network for the safe movement of people and goods now and into the future.

The Miles City LRTP is intended to facilitate achieving the community's goals and improve the City's transportation infrastructure by:

- Coordinating transportation planning with existing and future land use and community growth policies;
- Improving mobility and the impact of current and future travel demands;
- Promoting a safe, reliable transportation network for all users;
- Identifying improvement priorities, strategies, and policies; and
- Identifying potential funding sources and implementation processes.

Transportation planning typically includes the following elements:

- Engaging the public and stakeholders to establish shared goals and visions for the community.
- Analyzing existing conditions and comparing them against transportation performance forecasts.
- Forecasting future population and employment growth, including assessing projected land uses in the region and identifying major corridors of growth or redevelopment.
- Evaluating current and projected transportation system performance by developing performance measures and targets.
- Analyzing various transportation improvement strategies and their related tradeoffs using detailed planning studies.
- Developing long-range plans and short-range programs of alternative capital improvement, management, and operational strategies for moving people and goods.
- Estimating how improvements to the transportation system may impact achievement of performance goals, as well as the impacts on the economy and environmental quality, including air quality.
- Developing a financial plan to cover the costs of implementing strategies and ensuring maintenance and operations.

The plan includes the following:

- Community & Stakeholder Engagement
- Supporting Studies & Reports
- Current & Future Transportation Demand
- Airport Facilities
- Bicycle & Pedestrian Facilities
- Freight and Rail Facilities
- Roadways
- Transit & Ride Sharing
- Safety & Security
- Financial Analysis



STUDY AREA

The study area includes more than 19 square miles of lands in the City of Miles City and surrounding area. Physical features have, and will to continue to, influence growth and development of the planning area.

- The confluence of the Yellowstone and Tongue Rivers puts a significant portion of land in the floodplain which limits the ability to build or even infill within the community.
- North of the Yellowstone River, a large bluff separates the airport from the rest of the community.
- To the west of the city, large tracts of government-owned land are unlikely to be released to the private sector for development.

These constraints demonstrate that readily available growth areas are to the south and east of the present city limits. The study area location is provided in Figure 1-1.

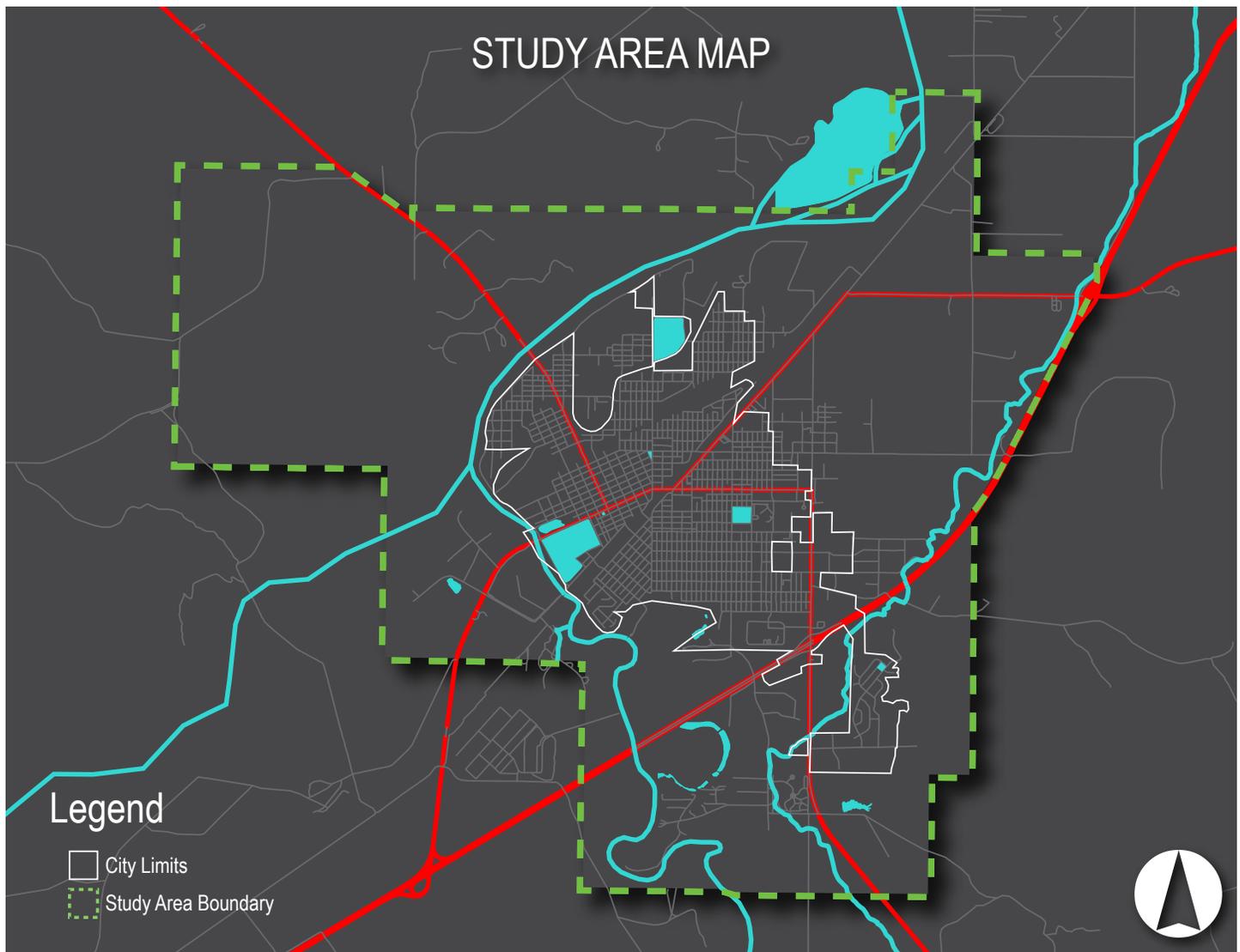


Figure1-1: Study Area

PLAN PURPOSE AND CONTENT

The Long Range Transportation Plan is separated by chapters that reflect the step-by-step tasks that are completed in a process similar to that used in the development of other transportation plans. The study began in September 2015 and was completed in October 2016. The plan outlines a 20-year planning horizon, with a base year of 2010, coinciding with the decennial census. Updates to a Long Range Transportation Plan for larger communities are typically completed every five years to reflect current growth trends and community needs. Updates to this plan should be undertaken when the community/local government feels necessary.

The purposes of this plan:

- Coordinate transportation planning with existing and future land use and community comprehensive plans;
- Improvement of regional transportation circulation and identify primary travel demands;
- Promote a safe, reliable transportation network;
- Identify improvement priorities, strategies, and policies; and
- Identify funding sources and implementation process.

The Transportation Plan is intended to be a general guide for the expansion and improvement of the existing system to meet future needs. It is essential to establish sound principles and policies to be used as guides for formulation of transportation plans. Although general in nature, planning principles and community goals are essential tools for evaluating existing transportation patterns, identifying existing and projected deficiencies of the transportation system, and governing design guidelines for various types of streets and highways serving the planning area. This Transportation Plan will be based on community vision and the identification of improvement options.

The level of detail developed for each of the plan elements is sufficient for this intended purpose. To further implement specific recommendations, specific problems will require detailed study and additional design beyond the scope of this plan. The intent of the Transportation Plan is to present a program of improvements that will successfully meet the needs of Miles City for the next twenty years. This plan should be updated periodically (e.g. every 5-10 years) to ensure continued applicability of plan recommendations and to respond to unanticipated changes within the community or the transportation system.

This transportation planning process includes the following elements:

- Engage the public and stakeholders to establish shared goals and visions for the community;
- Identify existing and projected conditions;
- Forecast future population and employment growth, and project where it is likely to occur;
- Identify current and projected transportation needs;
- Analyze various transportation improvement strategies and related trade-offs;
- Develop long-range plans and short-range programs of alternative capital improvement, management, and operational strategies for moving people and goods; and
- Developing a financial plan to identify the costs of implementing improvement strategies and potential revenue sources.

The FAST Act legislation identifies eight planning factors for the development of projects and strategies in the transportation planning process which include:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility options available to people and for freight;
- Protect and enhance the environment, promote energy conservation, and improve quality of life; promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

CHAPTER 2 | COMMUNITY & STAKEHOLDER ENGAGEMENT



The purpose of community and stakeholder engagement is to identify a shared vision from people with diverse interests and provide an opportunity for citizens to participate in the process. The framework for the public involvement process was based on the premise of three objectives:

1. To encourage openness and transparency throughout the planning process.
2. To provide opportunity for the community to identify concerns, share potential solutions and to validate or dispute decisions.
3. To facilitate widespread understanding of potential constraints, findings and solutions.

An advisory committee was formed from city, county and state agency representatives, and emergency service providers that have a stake in the outcomes of the plan and/or manage the transportation system. The committee met several times throughout the process to review information and provide input. The advisory committee is listed in Appendix A.

Two focus groups were convened to collect stakeholder feedback relating to the LRTP. The first group included people who were civic and business leaders, health care representatives (including the mobility impaired), school district representatives and law enforcement. The second group included representatives from the freight and trucking industries.

Seven topic areas were discussed, with similar questions presented to each group. The items of common interest, which may be an indication of priorities, are listed in the “Key Themes” report in Appendix A.



A website (www.milescity-lrtp.info) was developed to make available information to the public related to the LRTP process. The plan schedule, maps, results of public engagement and other deliverables were posted to the site. A feedback form allowed for citizens to provide comments throughout the entire planning process.

Two informational public meetings were held in Miles City. The first was to provide information about the plan and collect feedback on existing conditions. The second meeting reviewed the inventory and analysis and presented a list of projects for consideration. People were asked to rank the projects to help provide a priority list. The outcomes of both meetings are provided in Appendix A.

Citizens were provided the opportunity to comment on the plan during a series of public hearings held during regularly scheduled City and County meetings. Updates to the plan as a result of those comments are incorporated into the plan prior to the final plan adoption.



CHAPTER 3 | SUPPORTING STUDIES & REPORTS



The Montana Department of Transportation has completed four transportation-related studies within the study area recently at the request of City of Miles City and Custer County officials. While some may not be relevant to this plan, they are all listed for completeness. Those studies are summarized below:

MT 59 South Speed Study (2012)

This request was prompted by development on Horizon Parkway which has increased traffic volumes in the area which in turn has increased safety concerns about the Horizon Parkway and MT 59 South intersection.

- The final report recommended extending the existing 45 mph speed limit zone south of the Horizon Parkway intersection with MT 59 South.

US 12 Speed Study (2015)

This request was prompted by a concerned business owner noting that the existing 55 mph speed limit creates a potential hazard for RV's accessing the campground on US 12.

- The final report did not recommend any changes to the speed limit on US 12 at this location.

School Safety Study (2015)

This request was prompted by the City of Miles City regarding the perception of speeding on urban streets within school areas and requested the reduction of the speed limit from 25 mph to 15 mph.

- The final report offered the following conclusions and recommendations:
 - ◇ The observed travel speed consistently followed the posted 25 mph speed limit and did not create a safety hazard
 - ◇ Local officials do have the authority to reduce speed limit around schools if deemed necessary
 - ◇ The report recommended changes to striping of crosswalks to the ladder style pattern with standardized school crossing signs as defined in the Manual on Uniform Traffic Control Devices (MUTCD)

Comstock and Haynes Signal Study (2013)

This request was prompted by the City of Miles City requesting that a traffic signal be installed at the Comstock Street and South Haynes Ave intersection which is currently two-way stop controlled with stop control on Comstock Street.

- The final reported concluded that a traffic signal is not currently warranted at this intersection based on observed traffic volumes and crash history.

I-94 Broadus Interchange Study

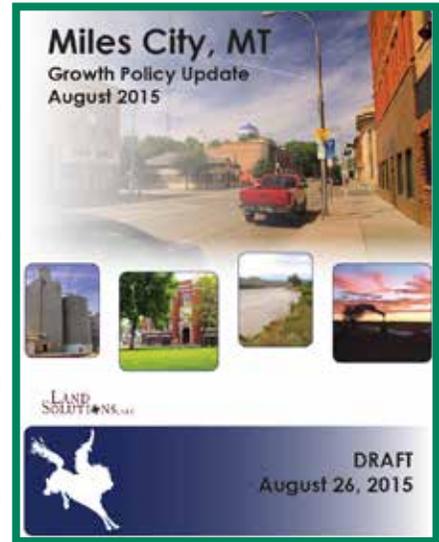
Due primarily to the lack of vertical clearance between I-94 and the bridge for both the east bound and west bound lanes, the Broadus Interchange is scheduled for reconstruction. The previous report, completed in 2012, suggested that either traffic signals or roundabouts be constructed at the intersections of the interstate ramps with MT 59 and South Haynes Avenue.

Miles City Growth Policy (2015)

The City's Growth Policy briefly discusses transportation regarding streets, maintenance, non-motorized transportation, airport, and rail. A chapter in the Policy titled "Public Facilities and Local Services" outlines the goals and objectives related to transportation.

Objective 2.3: Extend streets to new residential development in a grid to maintain connectivity to Miles City's existing street network.

- Objective 3.1: Develop a bicycle network connecting residential neighborhoods and retail centers.
- Objective 3.2: Work with human services agencies on increasing availability of ADA para-transit service.
- Objective 3.3: Extend sidewalk network to residential neighborhoods currently lacking sidewalks.
- Objective 3.4: Discourage Haynes Avenue traffic from diverting through residential neighborhoods.
- Objective 3.5: Work with MDT to address congestion on Haynes Avenue through transportation management and operational strategies.
- Objective 3.6: Realign the existing truck route so as to provide a direct route that does not travel through residential neighborhoods.



Miles City Downtown Urban Renewal Plan (2014)

The Downtown Urban Renewal Plan briefly discusses non-motorized transportation (specifically Goal Six: Provide a safe and secure transportation network to include adequate parking). Objectives of this goal include:

- Utilize available resources to leverage all funding sources to improve the pedestrian connectivity of the downtown and the surrounding residential development. Capitalizing on the adjacent residential properties as customers for the downtown area is a natural fit.
- Provide a safe and secure inter-modal transportation network to include bicycles, wheelchair access, automobile, and truck traffic to provide each their own place in the same network to ensure safety.
- Conduct a parking study to determine the adequacy of the current parking facilities and if and how it can be improved.

CHAPTER 4 | CURRENT & FUTURE TRANSPORTATION DEMAND

TRAVEL DEMAND MODELING

A travel demand model is a planning tool that provides a regional overview of the transportation network and is able to illustrate system-wide impacts of network or land use changes. Knowledge of how transportation systems perform and the magnitude of their impacts provide local decision-makers with valuable information needed to evaluate various transportation improvements. A travel demand model is used to simulate existing travel patterns, forecast future travel patterns and conditions, and provide analysis of alternative transportation improvements.

MDT developed a travel demand model for the greater Miles City area. The primary factors that determine transportation demand and travel patterns are the relative locations of population (households) and employment. To reflect existing condition for the 2010 base year, the model used 2010 population census information, 2010 employment information from GeoResults, and Geographic Information System (GIS) for the 2010 roadway network. Traffic volumes generated by the existing conditions model are compared to existing physical traffic counts and adjustments are made to calibrate the model to ensure accuracy.

Modeling of future travel patterns out to the year 2035 planning horizon using MDT's traffic model required identification of future socioeconomic characteristics within each census block. County population and employment projections were translated into predictions of increases in housing and employment within the greater Miles City LRTP Study area. Growth assignment was based on local government staff knowledge of recent land use trends, land availability and development limitations, land use regulations, planned public improvements, and known development proposals.

Projected traffic volumes were estimated using the travel demand model. A comparison of the existing conditions and projected conditions models was made to determine the percent change in traffic volume.

An important step in the travel demand modeling process is the creation of traffic analysis zones (TAZ's) within the study area. TAZ's aggregate areas of similar development characteristics into zones from which vehicle trips are produced or attracted. Population, household, and employment demographic data is entered into these zones. The Miles City Travel Demand Model, maintained by the MDT, includes 961 TAZ's based on census blocks. Most information is taken from the 2010 census, with confidential employment information taken directly from employers.

To streamline the travel demand modeling process, the TAZ's were aggregated into 45, and then 13, "neighborhoods" attempting to further group similar geographic locations, land uses, development patterns, zoning, etc. Figures 4-1 and 4-2 show the neighborhood boundaries used for the Miles City travel demand model.

POPULATION

The estimated population of Miles City in 2013 was approximately 11,951. This is a slight decrease based on historical data as the 1970 population was approximately 12,136 (resulting in an average decrease of 0.04 percent per year over this 43-year period). However, during the period between 2000 and 2013, the population has increased by an average of 0.18 percent per year.

The Miles City Growth Policy provides a wide range of estimates for future population growth varying from 22 percent (about 1 percent per year) to 46 percent (about 2 percent per year) over a 20-year period. Without any additional information, the Project Advisory Committee agreed that a constant 2 percent per year growth would be assumed for population, housing, and employment. Assuming this growth, the future population for a 20-year planning horizon is estimated to be approximately 16,200. Figure 4-3, Population Statistics, charts historic and future projected growth. The distribution of 2010 population is provided in Figure 4-4. Traffic Analysis Zones (TAZ's), are a geographic area that coincides with census blocks. Population growth was distributed based on future land use projections, vacant land and potential utility availability. This distribution is presented graphically in Figure 4-5.

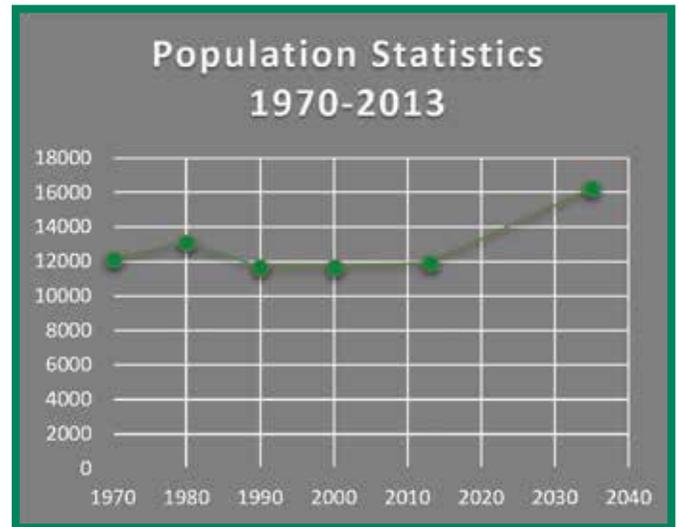
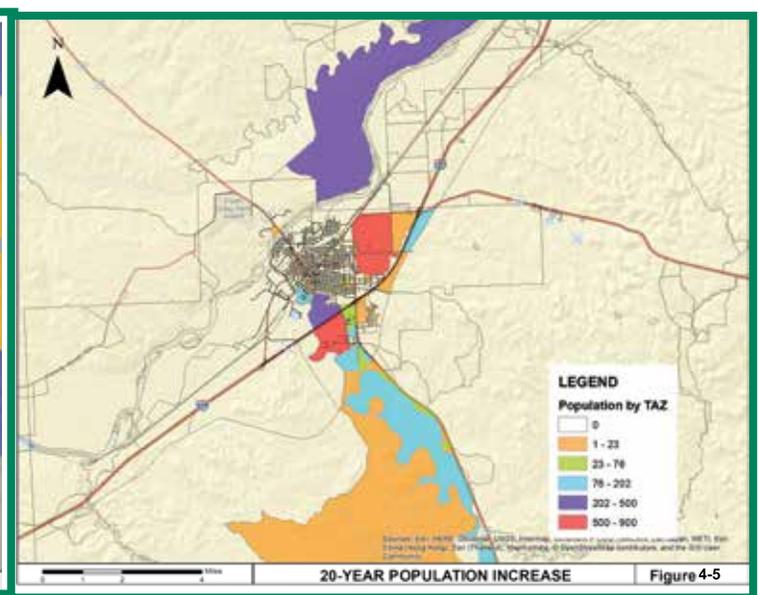
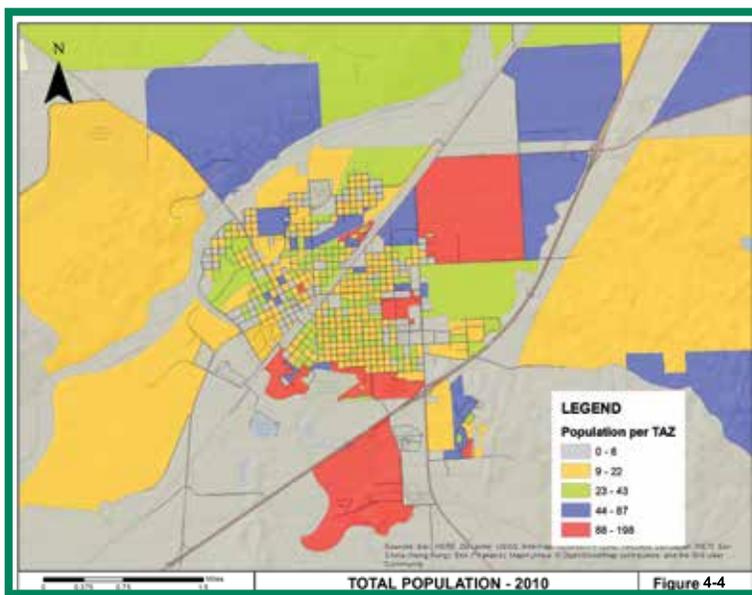


Figure 4-3: Population Statistics: Historical & Projected



EMPLOYMENT

Total employment in Miles City has increased from 5,480 in 1970 to 7,978 in 2013 (an average of 0.9 percent per year). Retail employment has decreased from 1,144 in 1970 to 1,022 in 2013, while non-retail employment has increased from 4,336 in 1970 to 6,956 in 2013. Assuming a constant 2 percent per year growth over 20 years results in a future employment estimate of 11,800 total employees. This information is provided graphically in Figure 4-6. Figures showing the distribution of 2010 retail and non-retail employment are provided in Figure 4-7 and Figure 4-8.

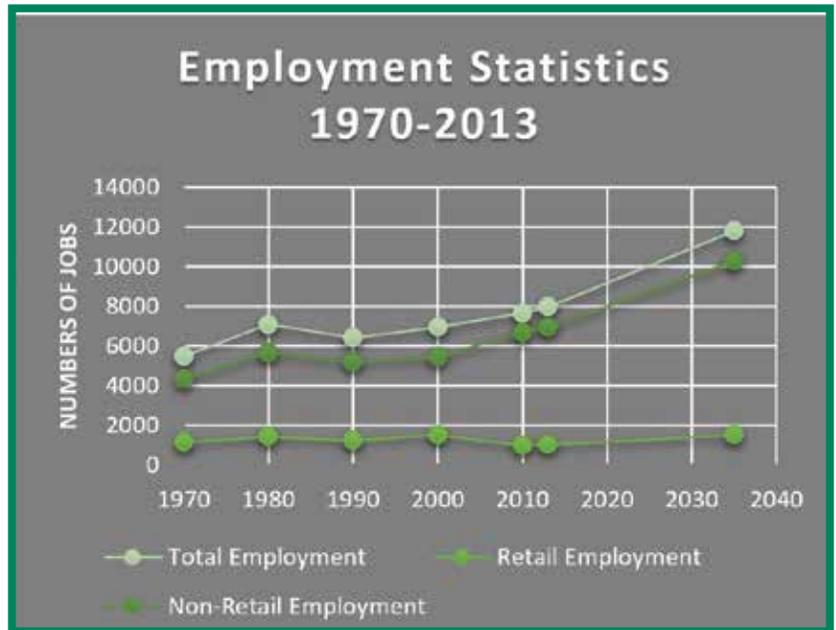
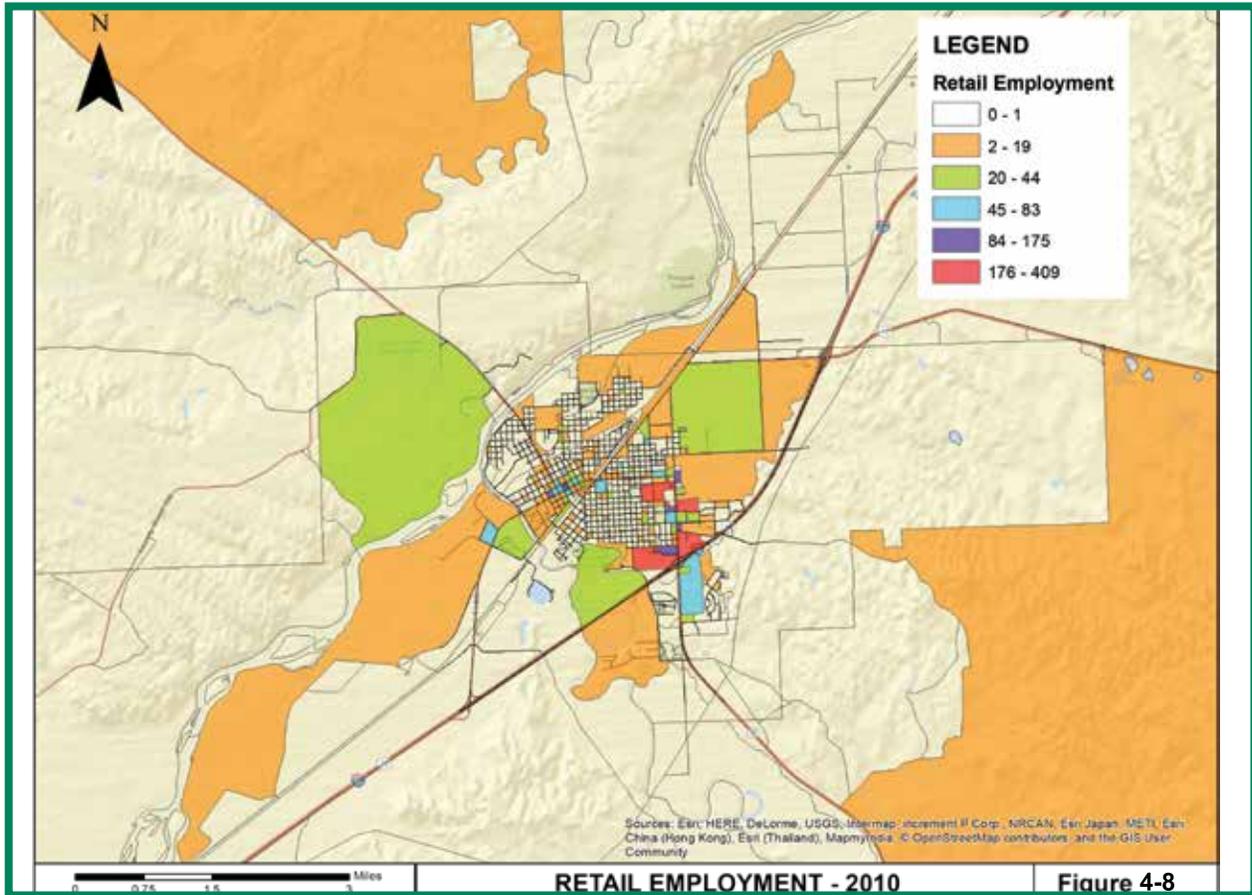
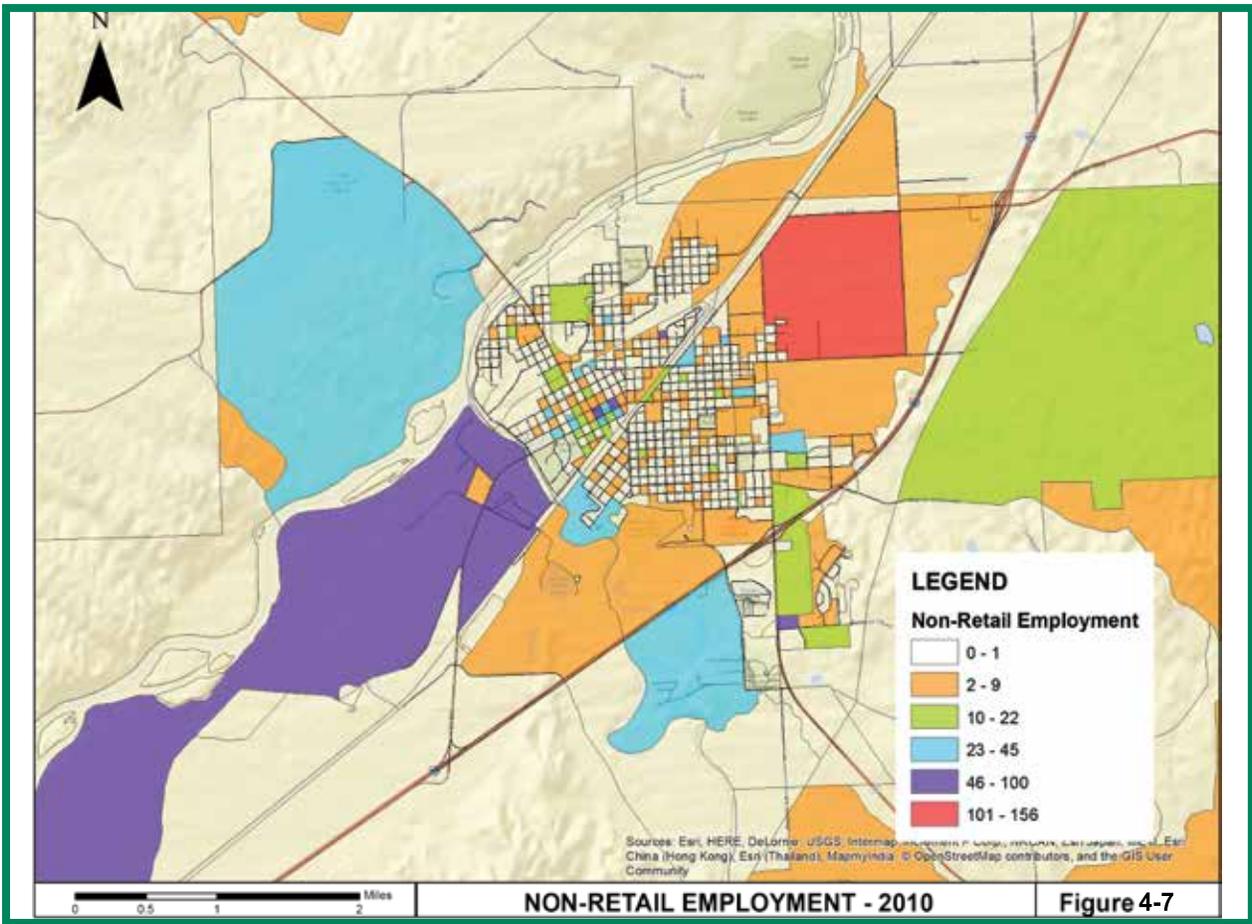
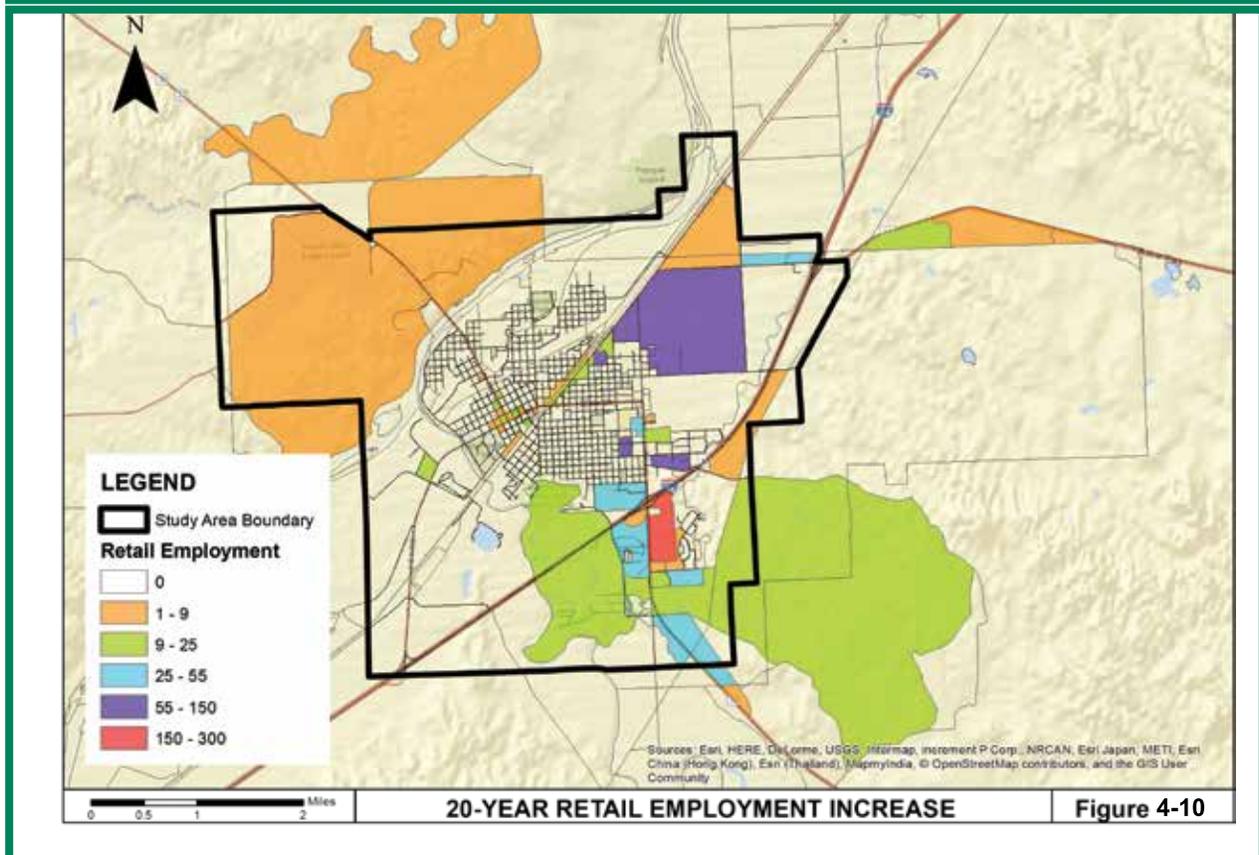
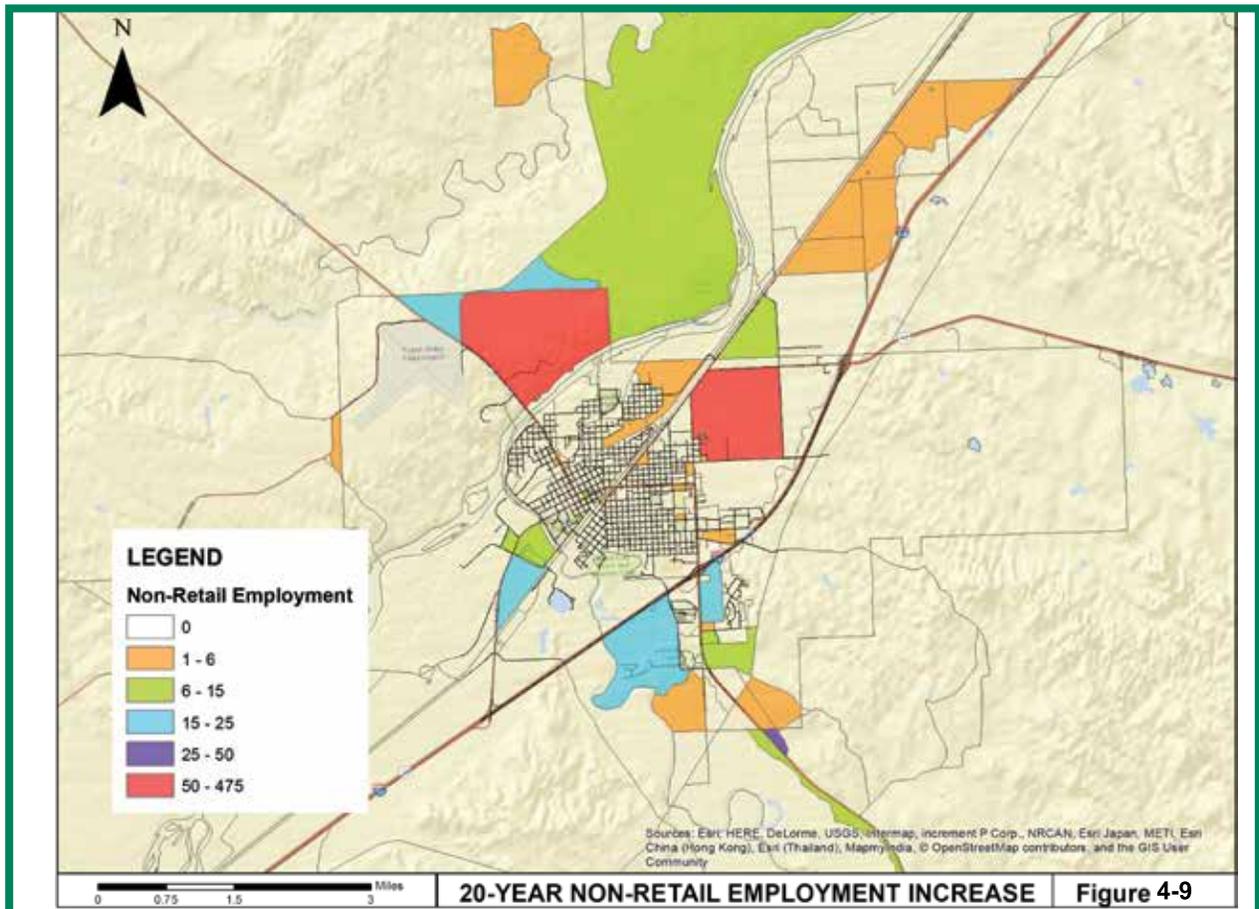


Figure 4-6: Historic Employment Growth

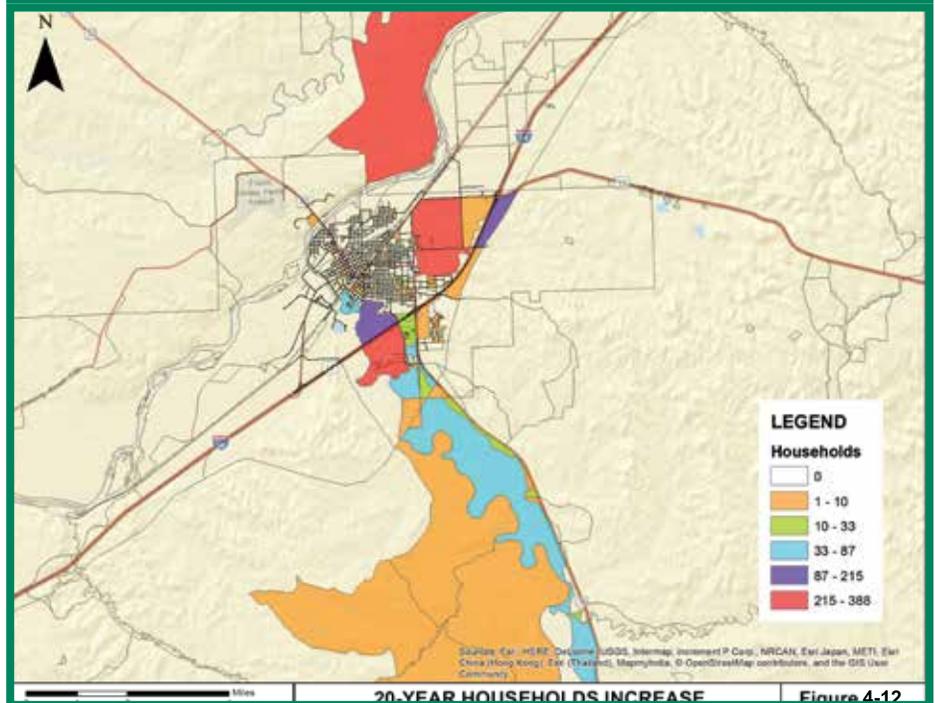
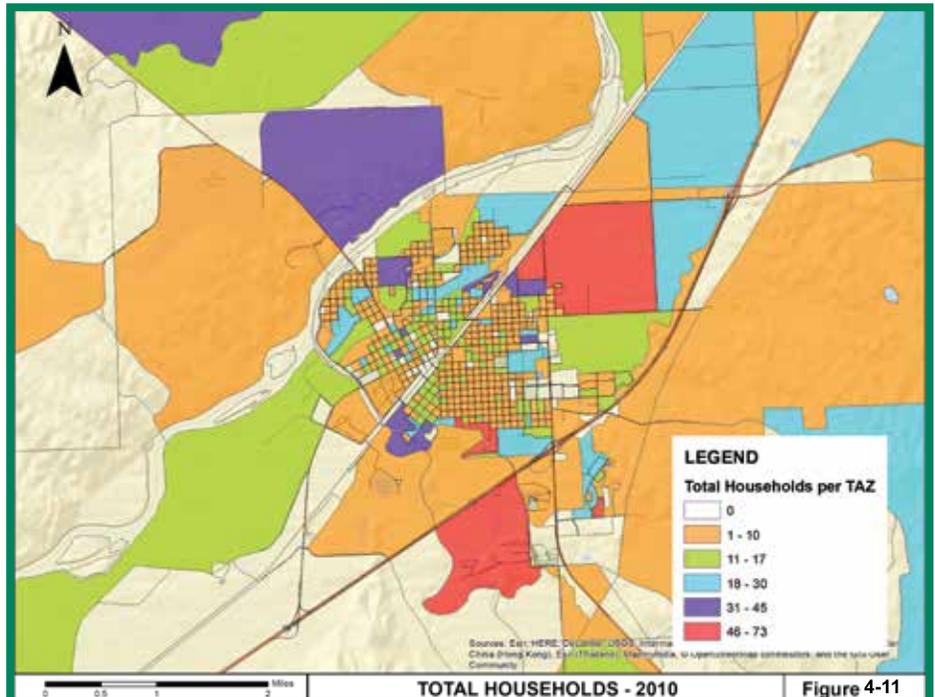
Retail and non-retail growth data was distributed based on future zoning, vacant land availability, and ease and ability to provide utility services. This distribution is presented graphically in Figures 4-9 and 4-10.





HOUSEHOLDS

In this same period, the number of housing units increased by 355. A constant 2 percent per year growth is assumed, resulting in over 7,400 housing units estimated by 2030. The 2010 distribution of households, as well as the distribution of future households' growth is presented in Figures 4-11 and 4-12.



ZONING AND LAND USE

The study area contains approximately 19.3 square miles, while the City of Miles City contains approximately 3.3 square miles. Current zoning within the Miles City limits and immediate surrounding area is presented in Table 4-1.

To determine the impact of population/household growth on the transportation system, the location of the growth as well as its magnitude must be projected. It is intuitive that development occurs first where it is easiest (and least expensive). Extending City infrastructure and utilities (sewer, water and streets) can represent significant cost to development beyond the limits of those existing systems. By examining aerial photography overlaid with zoning information, current city limits, and the future land use plan, we can highlight areas where vacant land exists close to or inside the city limits, with nearby water (and sewer) services that is, or will be zoned residential. Significant population growth is anticipated immediately north and south of I-94 in the southwest portion of town, north of the Yellowstone River in the eastern portion of the city, and the agricultural area east of the Pine Hills Youth Correctional Facility.

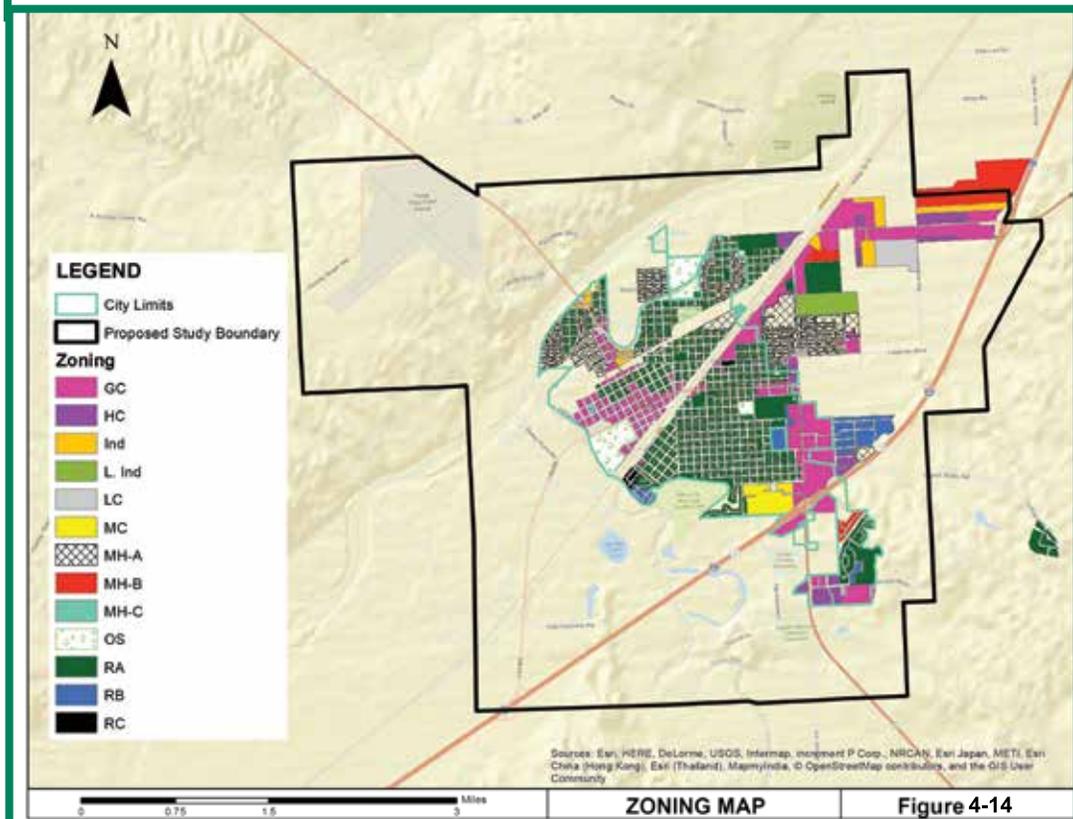
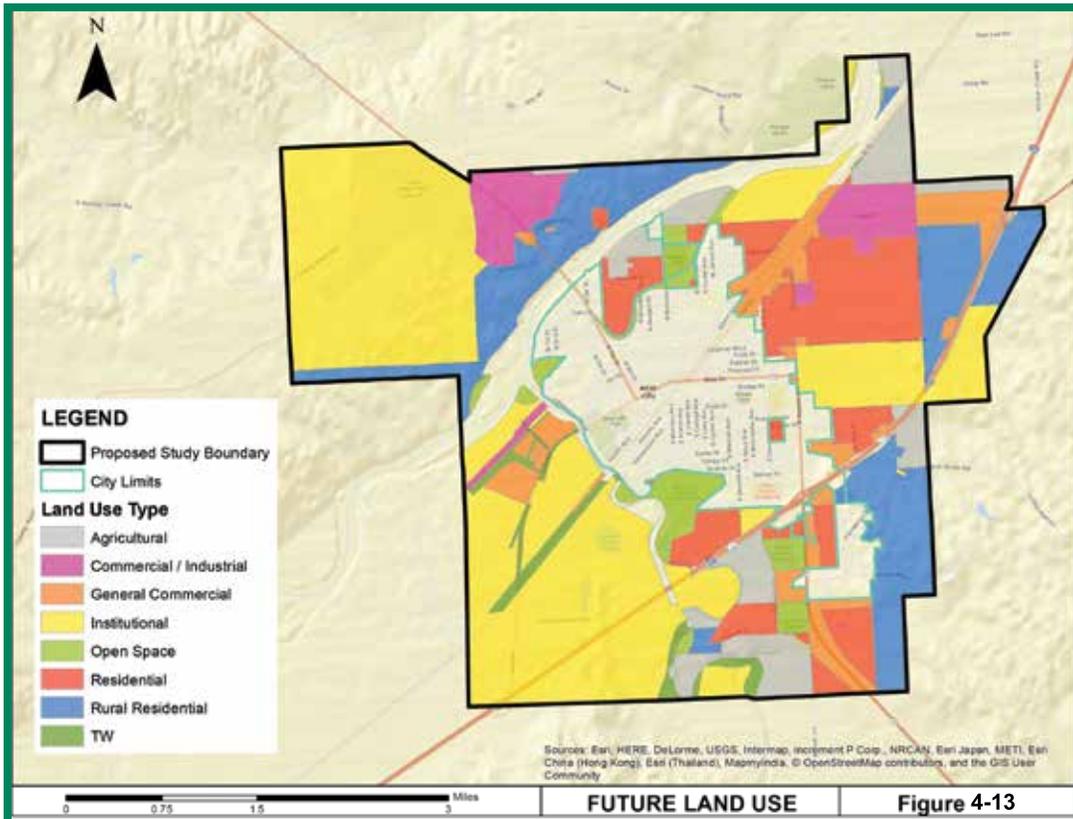
Future land use was defined in the *Miles City Growth Policy* and summarized in Table 4-2. These figures represent areas outside the city limits and within the study area of this report. Projected future land use defined in the *Miles City Growth Policy* and the existing zoning are presented graphically in Figures 4-13 and 4-14, respectively.

Table 4-1: Zoning Breakdown

Zoning Category	Area (Square Miles)
General Commercial	0.80
Heavy Commercial	0.17
Light Commercial	0.08
Medical Campus	0.09
Industrial	0.12
Light Industrial	0.09
Mobile Home Group A	0.40
Mobile Home Group B	0.25
Mobile Home Group C	0.01
Open Space	0.20
Residential Group A	1.16
Residential Group B	0.14
Residential Group C	0.02

Table 4-2: Future Land Use Area Breakdown

Future Land Use Category	Area (Square Miles)
Institutional	6.48
Rural Residential	2.42
Agricultural	1.14
Residential	2.00
Commercial / Industrial	0.78
Open Space	0.61
General Commercial	1.01



CHAPTER 5 | AIRPORT FACILITIES



CURRENT SERVICE

Frank Wiley Airport is primarily used for the transport of mail and goods and limited passenger service. The existing passenger terminal does not meet Transportation Security Agency (TSA) requirements. In the past, the airport provided passenger air service through the subsidized Essential Air Services program; however, commercial passenger service is not currently available. With the acquisition of lands to increase runway protection zones (RPZ's) as well as additional physical improvements to airport runways, operational aspects of the airport could support additional services.

NEEDS AND DEFICIENCIES

The Frank Wiley Airport recently updated its Capital Improvements Plan (CIP) which programs improvements for the next 20+ years. The updated plan is provided in Appendix B which breaks down projects into three time frames: short-term (1-5 years), medium-term (6-10 years) and long-term (11+ years). If future expansion were to meet TSA requirements, passenger service was desired to and from Denver, Colorado and Helena, Montana.



CHAPTER 6 | BICYCLE AND PEDESTRIAN



EXISTING CONDITIONS

Sidewalks

Miles City has almost 55 miles of sidewalks within the city limits. The existing sidewalks are generally in good condition, with few reported problems with existing surfaces. The main concern for sidewalks is connectivity. Existing route analysis shows several gaps throughout the community. The gaps occur at the individual lot, block face and neighborhood levels.

In particular, the lack of sidewalks within school zones influences parents' choice to allow their child to walk to school. Many parents drive children to school, which increases traffic in school zones. This increase in traffic results in safety concerns at crosswalks around schools.

State routes within north of I-94, Main Street and Highway 59 in the downtown core have curb sidewalks and ADA-compliant curb ramps. However, Highway 59 south of the I-94 Interchange and Highway 59 north of the downtown core lack sidewalks which were deemed desirable based upon public input.

Curb Ramps

The Montana Department of Transportation conducted a state-wide inventory of all sidewalks and curb ramps on State-maintained right-of-way. As a part of the Department's ADA Transition Plan (2016), one project was listed in the Miles City area, The Broadus Interchange. The curb ramp inventory is accessed here: <http://mdt.maps.arcgis.com/home/webmap/viewer.html?webmap=2e0e0f82015443718b45b89139be8a3b>

In 2015, the City utilized AmeriCorps NCCC (National Civilian Community Corps) to complete an inventory of sidewalks and curb ramps on city-owned right-of-way. As a result, the City has been improving curb ramps throughout the community.

On-Street Bicycle Facilities

Currently no dedicated on-street bicycle facilities (striped lanes, signage) exist. Citizens indicated that with a few exceptions, most of the local roads are currently bicycle-friendly for trips with destinations within the City. Recreational bicyclists have indicated that routes extending from the City limits to outer-city destinations are typically on narrow road sections with higher speed limits causing uncomfortable conditions.

Multi-Use Trails

Miles City has more than two miles of multi-use trails. The existing primary route for trails extends from the Tongue River around the Fairgrounds and throughout the Spotted Eagle Lake area. The existing trails were constructed through Community Transportation Enhancement (CTEP) funds, Recreational Trail Program (RTP) funds and local match funds from public and private sources.



Multi-use Trail in Riverside Park

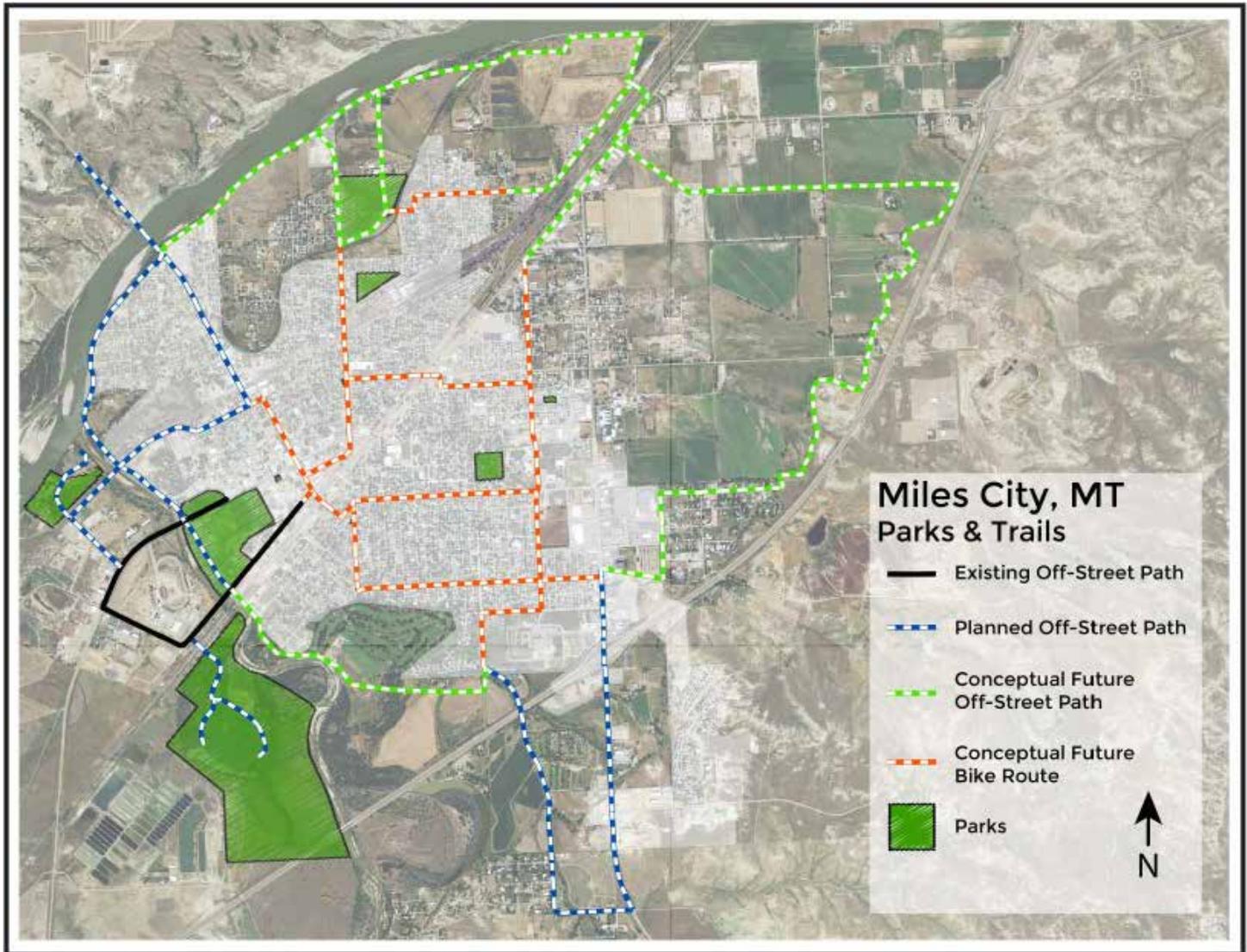


Figure 6-1: Trail Projects Identified in 2015 Growth Policy

Growth Policy Analysis

The Miles City Growth Policy (2015) outlines extensive goals and objectives for trail development. In the Parks and Trails section of the Miles City Growth Policy, Objective 1.1 is to “complete a trails master plan.” Objective 2.1 is to build the trails identified in the Growth Policy map (Figure 6-1). Objective 2.2 is to build an off-street trail loop around Miles City. Objective 3.1 is to hire seasonal and/or full-time staff for trails maintenance and the development of new trails.

In the Public Facilities and Local Services section of the Miles City Growth Policy, the Goal is to increase mobility and transportation access for all. Objective 3.1 of this section is to develop a bicycle network connecting residential neighborhoods and retail centers. Objective 3.3 is to extend the sidewalk network to residential neighborhoods currently lacking sidewalks.

According to City staff, the map in Figure 6-1 was a initial schematic that only depicted potential trail corridors. Efforts through this transportation planning process resulted in different preferences expressed by the community and are identified in Figure 6-2.

NEEDS AND DEFICIENCIES

Sidewalks

The lack of continuous sidewalks has been identified as a barrier to active transportation. Sidewalks were identified by citizens as a high priority for health, safety and expansion of transportation mode choice. A connectivity or gap analysis mapped the locations of existing sidewalks. Four different types of gaps were indicated on the connectivity analysis map, located in the appendix.

- **Spot Gap:** Spot gaps indicate places where sidewalks do not exist on a lot by lot or block by block basis.
- **Linear Gap:** Linear gaps reflect places where sidewalks do not exist on one side of a street for less than three blocks.
- **Corridor Gap:** Corridor gaps reflect places where sidewalks do not exist on one or more sides of a street for more than three blocks.
- **System or Neighborhood Gap:** System or neighborhood gaps reflect areas of persistent missing sidewalks on many directional block faces.

The gap analysis provided the basis for identifying sidewalk projects by neighborhood in order to evaluate potential funding sources, consolidate construction to one neighborhood at a time and to keep projects around a \$200,000 construction budget range for integration into Mile City's Capital Improvement Plan.

On-Street Bicycle Facilities

Shared lane markings or "sharrows," are road markings used to indicate a shared lane environment for bicycles and automobiles. This type of on street facility is designated through pavement markings such as shared lane markings and signage. According to the Urban Bikeway Design Guide, by NACTO, shared lane markings reinforce the legitimacy of bicycle traffic on the street, recommend proper bicyclist position and may be configured to offer directional and wayfinding guidance. The Manual of Uniform Traffic Control Devices (MUTCD) outlines guidance for shared lane markings.



Shared Lane Marking
[www.pedbikeimages.org/Lyubov Zuyeva](http://www.pedbikeimages.org/Lyubov_Zuyeva)

Shared lane markings have the following applications:

- To indicate a shared lane situation where the speed differential between bicyclist and motorist travel speeds is very low.
- As a reasonable alternative to a bike lane in limited circumstances.
- To strengthen connections in a bikeway network.
- To clarify bicyclist movement and positioning in challenging environments.
- In general, shared lane markings are not appropriate on streets that have a speed limit above 35 mph.



Bike Lane
[www.pedbikeimages.org/Libby Thomas](http://www.pedbikeimages.org/Libby_Thomas)

A bike lane is a portion of the roadway that has been designated by striping, signage and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movement between bicyclists and motorists. The configuration of a bike lane requires a thorough consideration of existing traffic levels and behaviors, adequate safety buffers to protect bicyclists from parked and moving vehicles and enforcement to prohibit motorized vehicle encroachment and double-parking. Bike lanes may be distinguished using color, lane markings, signage and intersection treatments.

Bike lanes are typically found on collector or arterial streets with motor vehicle speeds over 25 mph and average daily traffic volumes greater than 3,000 vehicles per day and higher, with greater than 6,000 vehicles per day, typically. Bike lanes are typically not installed on local streets unless there is a compelling reason to do so.

According to the 2010 traffic model volumes, the only roads that would be eligible for a bike lane is Haynes Avenue, north of I-94 and Main Street to Highway 59. Future model volumes indicate that Haynes Avenue, north and south of I-94 would meet the vehicles per day requirement for bike lanes, in addition to Main Street and Leighton Boulevard.

Multi-Use Trails

Miles City has made great strides to build a circuitous trail network that begins at Riverside Park and extends to the Custer County Fairgrounds. The trail is generally a multi-use trail, with an 8-foot minimum width. A small section of this loop along Pacific Avenue is not built to multi-use trail standards. Other popular trail routes are only built to a width for pedestrians and does not easily integrate other modes, namely bicyclists, on those routes. The 2015 Growth Policy conceptually indicates additional multi-use trails, but these routes have not been evaluated for their feasibility for implementation.

Public feedback related to this plan indicated a desire to capitalize on the Yellowstone River levee reconstruction to integrate a multi-use trail that would provide an outer route around the community. The Cemetery Road was cited as a popular bicycle and walking route; however, the narrow width of the existing road is a hazard. Other small trail connections capitalize on the availability of existing right-of-way that is currently not being utilized for a roadway that can become a trail corridor.

RECOMMENDATIONS

Sidewalk Infill Projects

The recommended sidewalk projects are graphically represented in Figure 6-2. Sidewalk infill projects were divided into twenty-three (23) different “neighborhood” areas that kept the average cost around \$200,000. This dollar amount was chosen so that the City could add an annual sidewalk infill project to its capital improvement plan. Project areas could be combined to form larger projects, depending on funding availability.

Note that the numbers associated on Figure 6-2 are project identification numbers, and not an indication of priority. Current city policy indicates that the cost for construction of sidewalks is a property owner’s responsibility. However, this does not preclude the City from pursuing grants, such as Community Development Block Grants for neighborhoods that qualify, as an example.

Americans with Disabilities Act

Miles City desires to create accessible sidewalks that link the north and south sides of the community that include upgrades to curb ramps. In addition, the City has set a goal to complete 10-15 ADA-compliant curb ramp corners each fiscal year. Current city policy is that the curb ramps are the city’s responsibility to construct and maintain. The City is utilizing its NCCC assessment report to make curb ramp improvements, with 26 curb ramps improved in 2016.

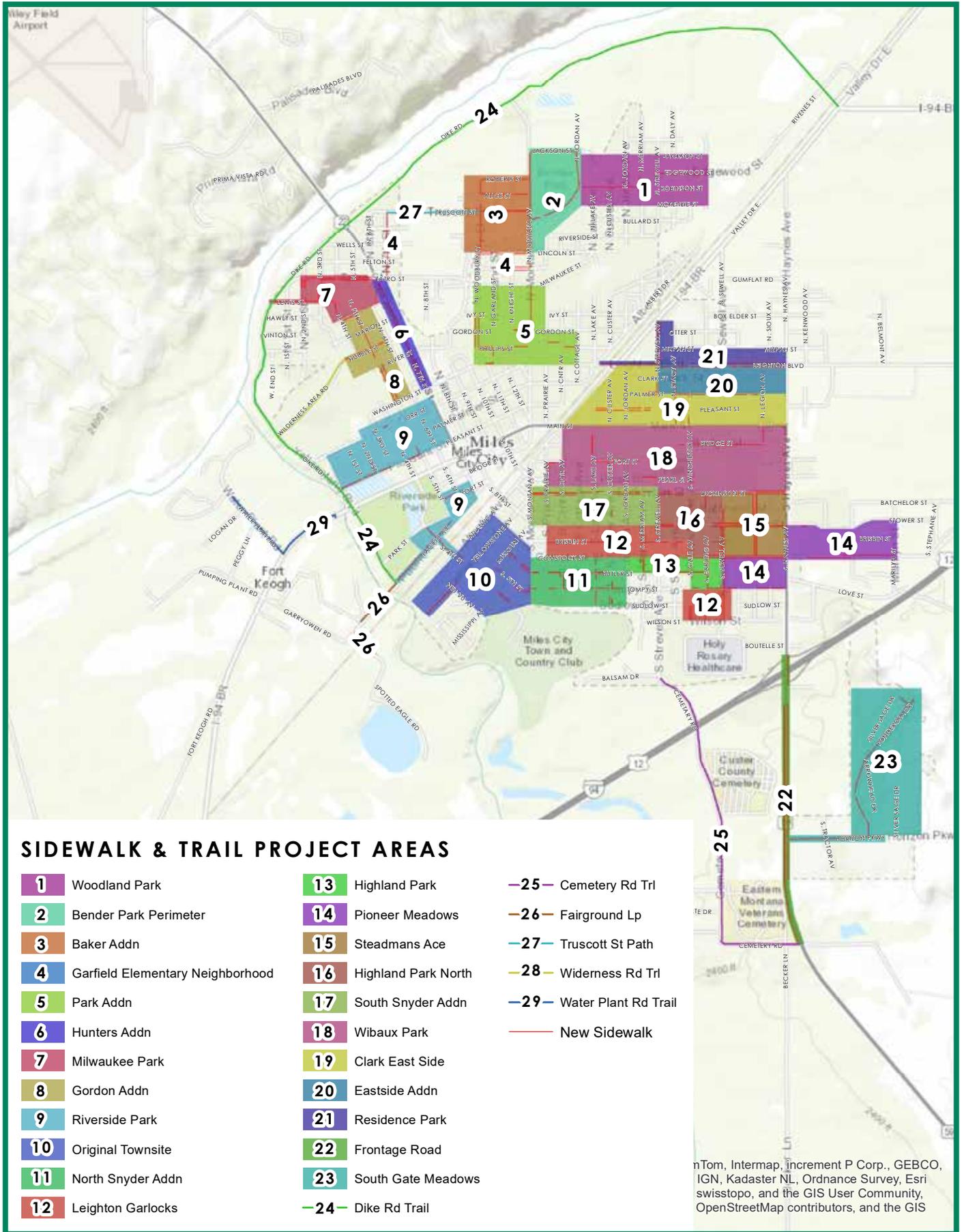


Figure 6-2: Sidewalk & Trail Projects

The City will continue to prioritize these improvements in approximately three ways:

- 50 percent of the improvements will occur within a six block radius of schools, elder care facilities, supermarkets and convenience stores, churches and medical facilities.
- 25 percent of the improvements will be completed due to property owners who request improvements to sidewalks, the city will then make improvements to the curb ramps.
- 25 percent of the improvements will be dedicated to emergency repair.

Multi-Use Trails

Six trail segments were identified and consist of opportunities to complete existing trail loops or to capitalize on road and levy projects. The first priority should be to complete the Fairground Trail loop to Riverside Park. This popular destination also creates a “spur” trail loop to Spotted Eagle. Many of the other multi-use trails are dependent on reconstruction of levees and roads. Longer routes should be analyzed with a feasibility study to determine the full extent of those costs.

Policy (Subdivision Guidelines)

Miles City Code Section 20-41, e.: Construction of sidewalks, indicates that sidewalks are only required where “All persons who reside within a six-block radius of a church, school, convenience store or supermarket shall construct a city sidewalk.” In order to create a complete pedestrian network for Miles City, this section should be revised to, “Any new construction or renovation greater than 50 percent of a building’s square footage will require sidewalk construction for all residential, commercial and industrial development parallel to a city street.”

Miles City Code Section 20-39: Public works standards adopted. Update the language to adopt the “Current Edition” of the Montana Public Works Standard Specifications.

Miles City Code 20-5: Obstructions, is the basis for the requirement of snow removal from sidewalks. Update this language to assign sidewalk maintenance including snow removal to the adjoining property owner. In the event a property owner cannot maintain their sidewalk, develop programs that allow for assistance on a case by case basis.

Miles City Code Section 21-18, item a.7: Add that for new subdivisions, consideration should be given to requiring a multi-use trail on every quarter section or section line so that new development incorporates a trail requirement.

PRIORITIES

Sidewalk infill projects are a priority for the community. Many different stakeholders indicated that the lack of continuity in the sidewalk system affects their mode choice. Where possible, priority areas should include low-income neighborhoods, around schools and major destinations such as elder care facilities, supermarkets or convenience stores and churches.

Property owners who petition the City for improvements can also move up the priority list. When this occurs, the City will compliment the project with a curb ramp improvement project.

Sidewalk infill can be completed with a variety of funding mechanisms. The “Building Active Communities Resource Guide” (2014), pages 39 through 48, provides a variety of case studies to help fund sidewalk projects.

<http://www.dphhs.mt.gov/Portals/85/publichealth/documents/NutritionAndPhysicalActivity/BACIResourceGuide2014.pdf>

PROGRAMS

Program development is equally important to a robust active transportation strategy as is construction and maintenance. Small communities often rely on non-profit organizations, educational facilities or healthcare providers to lead the efforts related to active transportation programming. City and County staff often lead the efforts in construction and maintenance. Programs are an excellent way to engage citizens who want to volunteer their time and talents and can reach many different demographics.

The programs can be generally organized into one of the following categories of programming:

Encouragement: includes activities that promote active transportation;

Education: targets all ages and abilities and teaches the best safety and awareness practices;

Maintenance: addresses the built environment, infrastructure and maintenance;

Enforcement: includes methods to promote compliance with laws that pertain to the roadway, especially those that make active transportation safe; and

Equity: facilitating equitable access to affordable and reliable transportation options for traditionally under-served populations.

ENCOURAGEMENT PROGRAMS

Encouragement solutions are used to make active transportation more exciting or interesting. Such programs are often quick and easy to set up and often require little funding. Encouragement programs not only teach the best safety and awareness practices, but the programs also provide people with incentives to actively participate. The following programs vary in their ease of implementation.

Walking School Bus Program

According to the National Safe Routes to School Partnership, the rate of children walking to school is at an all-time low, and parents have become wary of allowing children to walk alone, in part, due to traffic concerns. Walking School Buses help alleviate the fear – and the time constraints for parents – associated with children walking to school. They may be stand-alone efforts or part of a broader Safe Routes to School program.

Volunteers take turns leading the “bus”, which follows the same route every time and picks up children from their homes or designated “bus stops” at designated times. A Walking School Bus can be as informal as a few parents alternating to walk their children to and from school, but often it is a well-organized effort led by the PTA, a local agency or organization.

<http://www.walkingschoolbus.org/>



How to Implement the Program:

- Organize and recruit volunteers
- Designate meet-up points along a safe route to school
- Coordinate with school administration as necessary for arrival times

Photo Credit: kscj.com

Community Events

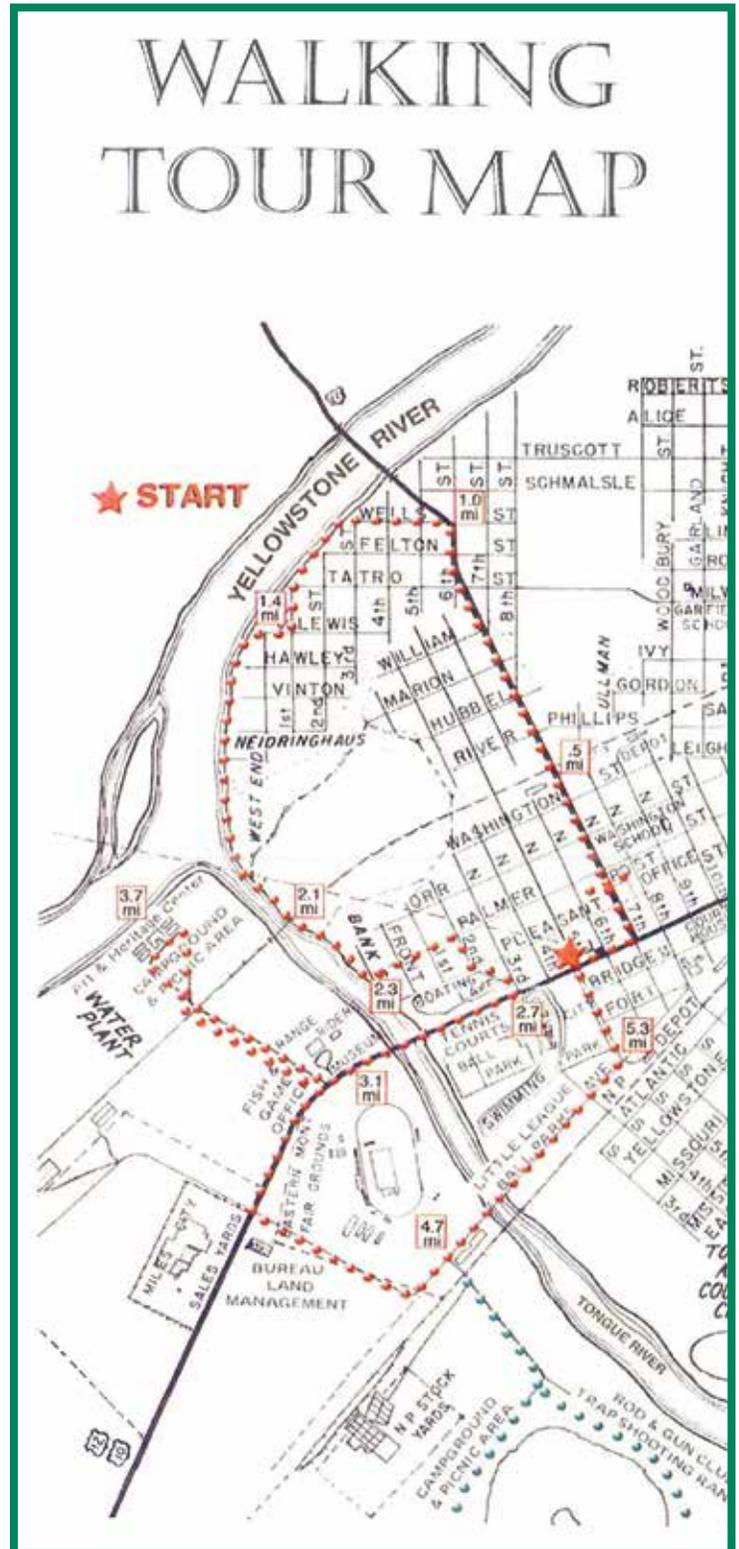
Community events is a broad category that includes the organization of new events, such as a “Find Your Trail Day,” a “Community Bike Days” or a scavenger hunt, as well as working with and expanding on existing community events, such as the “Miles City Montana Volksmarch.” The idea behind these events is to encourage citizens to explore their community by participating in an event. The events would be hosted in a variety of locations, such as downtown or local trails. They should also be advertised throughout both the community and the region to draw regional citizens and tourists to participate, generating revenue for local businesses.

How to Implement the Program:

- Find an organization to develop a new community event, such as a scavenger hunt within the trail system, and include an event chair or committee to plan and execute the event
- Provide facilities or resources, as needed, for the event through fundraising or donations
- Advertise the event both locally and regionally, capturing a broader participation market
- Coordinate with the City and local organizations for assistance, as necessary
- Recruit volunteers to help run the event (students indicated they enjoy these types of events)

Self-Guided Activities

A self-guided activity is where one navigates a route(s) oneself as opposed to having a tour guide, which reduces personnel commitments. Easy-to-use maps, apps or tour booklet can be developed to make sightseeing, nature viewing or historic exploring easy. Activities such as a self-guided historic walk, geocaching, or developing apps/integrating QR-codes at kiosks around town could be implemented under this program. Audio touring could also be incorporated using smart phone or kiosks.



Walking Map Produced for the Miles City Volksmarch

How to Implement these Programs:

- Work with community businesses, non-profits, City, Chamber of Commerce or tourism committee/board to develop self-guided maps, device applications, tour booklets and/or audio tours.
- Provide physical and digital copies of maps and booklets in an accessible format.
- Determine points-of-interest (e.g. nature, history, exercise) and develop easily navigable tour routes. Rotate the routes so that participants have a diverse experience throughout the year.
- Advertise the self-guided programs through tourism funds.
- Start small to gauge interest and increase as per demand.

Helmet Giveaway / Helmet Programs

Free helmets is one way to encourage safety and enforcement for people of all ages while riding a bicycle. While this program can be executed in numerous ways, it is typically targeted at school-aged children as a reward for biking to school. One option is to purchase the helmets, using private, public or grant funds, to give away to children that ride their bikes to school. Another method could be a program, funded in a similar manner, that provides helmets to any individual at community events.

How to Implement the Program:

- Determine the lead organization (e.g. special interest groups, bicycle groups, hospital or school district)
- Raise funds to purchase the helmets (grants, private sponsorships, etc.). Sponsorships could be secured in exchange for marketing on the helmets.
- Look for cooperative opportunities between local organizations.
- Develop a program where police officers give out rewards to children who wear a bicycle helmet.



Elementary School Assembly with a Helmet and Bicycle Giveaway

5-Minute Dismissal Delay for Students Program

This program works to alleviate conflicts around school zones to allow for students who walk or ride their bicycle to school a chance to depart from the school grounds without the interference of vehicle movements. Students who walk or bike to school will be dismissed five minutes earlier than those using buses or vehicles.

How to Implement the Program:

- Evaluate and align dismissal times between all classes at a school.
- Identify a preferred route for student departures.
- Coordinate with crossing guards.

EDUCATION PROGRAMS

Education solutions should be among the first initiatives implemented under this plan. Education activities provide education and resources to participants on how to conduct themselves in a safe manner. Such programs need to identify target audiences, what information to provide and how to deliver the information. These solutions should be developed to target citizens of all ages.

Walking / Biking Education Curriculum

Provide training to physical education instructors (at schools) or individuals at local organizations to become instructors of safe biking and walking. The school district would implement lessons into their physical education curriculum, while local organizations would host community learning events.

How to Implement the Program:

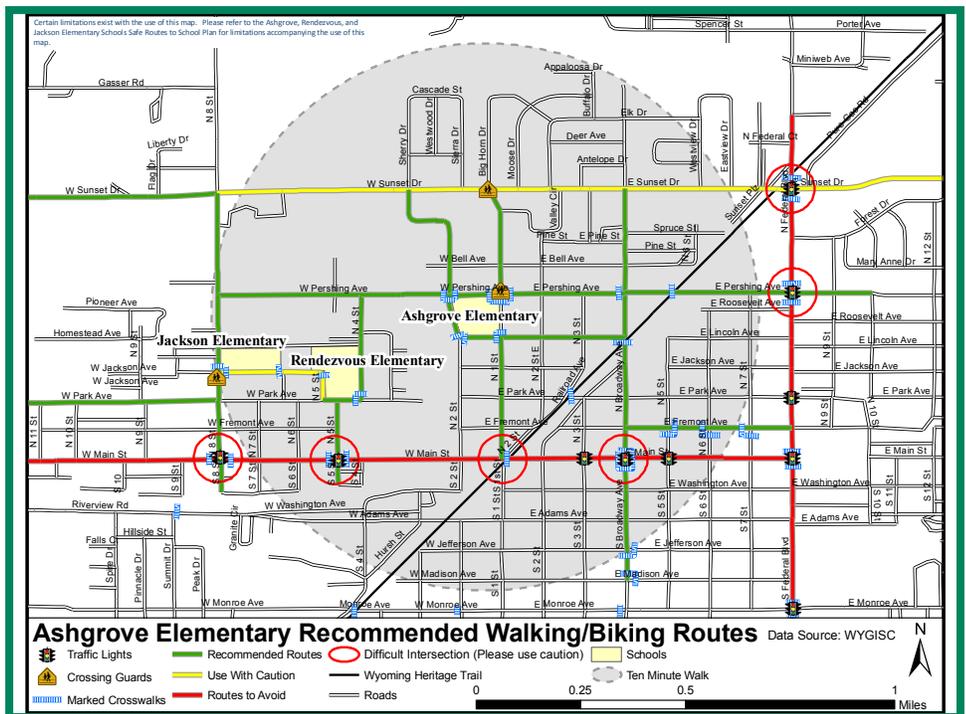
- Provide training to teachers to conduct courses (Journeys from Home curriculum or Traffic Skills 101)
- Incorporate and continue existing courses in the school curricula and community events
- Provide education opportunities at locations in the city throughout the year
- Provide learning opportunities at community events

Develop Recommended Routes Guidebook

Provide a physical or digital guidebook of the recommended (safe) routes around town for walking and biking. This guide would help people determine the best and safest routes to walk. It also provides an opportunity to teach tips on being a safe pedestrian or bicyclist.

How to Implement the Program:

- Identify an agency or local organization to develop and/or host (if digital) the guidebook.
- Provide recommended routes and safety information in the guidebook.
- Work with the school district, community organizations, special interest groups and enforcement officials to identify the routes.



MAINTENANCE PROGRAMS

Snow Removal Assistance for the Mobility Impaired

According to the 2015 U.S. Consumer Product Safety Commission (NEISS, 2016), approximately 34,000 people in the United States are treated in emergency rooms in 2015 for injuries sustained when trying to remove snow, many of whom may underestimate the time, strength and stamina it takes to shovel snow. This program would be designed to offer assistance to help seniors citizens and disabled residents who are unable to remove significant amounts of snow accumulation from their properties. Ultimately, the program will provide safety benefits to the greater community by reducing potential slip-fall hazards, preventing pedestrians and bicyclists from leaving the sidewalks and ensuring that emergency personnel have the best access possible to the residences.

Implementation Ideas:

- Volunteer-Matching Service (Denver Snow Buddies, Chicago Snow Corps) – a partnership between the City and a non-profit volunteer organization that connects healthy volunteers with elderly and disabled individuals who cannot clear their own properties.
- Non-Profit Organizations – Non-profits or church organizations match property owners with volunteers or work within their determined “service area.”



ENFORCEMENT OPPORTUNITIES

The goal of enforcement is to discourage unsafe behaviors of motorists, pedestrians and bicyclists while encouraging compliance of traffic laws and safe behaviors. These efforts go much further than writing tickets or disciplining negative behaviors. Enforcement strategies may include large networks of people such as law enforcement, crossing guards, school officials, parents, student and community members. Each group has their own responsibilities, but they are all equally important in ensuring the overall safety of the community.

Crossing Guard Program

Due to the high number of vehicles dropping children off to school, implement a crossing guard program at major traffic intersections within a six block radius of a school. The School District and the City provide materials (vests, hand signs, etc.) and develops the training for volunteers.

Implementation Ideas:

- Implement a crossing guard program with the School District as the lead agency.
- Resources for crossing guard programs can be found at: http://guide.saferoutesinfo.org/crossing_guard/pdf/crossing_guard_guidelines_web.pdf



EQUITY PROGRAMS

Vice Admiral Vivek Murthy, the 19th U.S. Surgeon General launched the “*Step It Up! The Surgeon General’s Call to Action to Promote Walking and Walkable Communities*” initiative that effectively introduced the development of bicycle and pedestrian infrastructure into the realm of community health. One of the key highlights from the program was to design communities that make it safe and easy for people of all ages and abilities to walk. Walking does not require special skills, facilities or expensive equipment. Walking is the most common form of physical activity for people across the country.

National Public Radio Writer Katherine Hobson, noted in a 2016 article that adults ages 60 and up made up only 4 percent of park-goers, even though they are 20 percent of the population. She also noted that boys accounted for 60 percent of the time children spent on moderate to vigorous physical activity in the parks, among teens, that figure was 68 percent. The article suggested that communities promote the intergenerational use of parks by adding walking trail loops.

A 2014 survey conducted by People for Bikes revealed that men are more likely to ride a bicycle than women. People with incomes less than \$20k per year were more likely to ride a bicycle for both recreation and transportation. Bicycle advocates have indicated that in communities where females comprise of a 50-50 percent split of ridership would be indicative of an equitable bicycle system. Female ridership reflects safe infrastructure, programs that foster social inclusion, low levels of traffic stress and facilities for families.

Existing Healthcare Programs

Primary Care Physician Orders for Exercise

In 2015, Holy Rosary Healthcare Foundation obtained funding from BikeWalk Montana to print and distribute a physician order slip specifically related to exercising and increasing physical activity, including walking and bicycling. The order slip is similar to a traditional written prescription request sent from a physician to a pharmacy to order medication for treatment, instead the treatment mediation was exercise. This program was executed at Holy Rosary Healthcare and Billings Clinic Miles City. The utilization of the program has been mixed based upon individual patient and provider preferences.

Healthy Lifestyles Program

Holy Rosary Healthcare and Billings Clinic Miles City each offer a cardiovascular disease and diabetes prevention program. The 16-week core program includes weekly educational and exercise elements, followed by a 6-month maintenance program. The exercise includes group and individual opportunities including walking, running, biking and several group class activities.

Physical Therapy & Rehabilitation Services

The physical therapy team and pulmonary rehabilitation team at Holy Rosary Healthcare include walking, and in some cases, biking, as a part of the at-home activities involved in a patient who is obtaining care after or to prevent a health event.

Diabetes Self-Management Education Program

This program is recognized by the American Diabetes Association for providing quality care. Billings Clinic Miles City has instituted exercise as a required element of the curriculum and education plan. Walking and biking in the community are encouraged, demonstrated and facilitated by use of “Places to Walk in Miles City” map as well as a variety of smart device applications.

Obesity Prevention in Children and Adults

Clients who obtain services from OneHealth, a federally qualified health center, receive a BMI assessment and recommendations for appropriate interventions, such as diet and nutrition and exercise. Providers recommend that clients achieve their goals through local fitness clubs, walking inside large medical facilities and outdoor routes. Providers also counsel children about taking advantage of early morning sessions at schools.

EVALUATION

The implementation of an active transportation plan should be viewed as an effort similar to that of a road, water, sewer or parks plan. It is important to evaluate efforts for both infrastructure and non-infrastructure projects and programs for their effectiveness and efficiency of the use of both human and fiscal resources.

It is just as important to find an opportunity to celebrate the successful outcomes of the plan! In an increasingly competitive environment for funding, having quantifiable data, supported with first-hand testimonials will ultimately place Miles City at the top list of performing communities. The more the City can demonstrate the achievable benefits resulting from the plan, the easier it will be to garner support for activities.

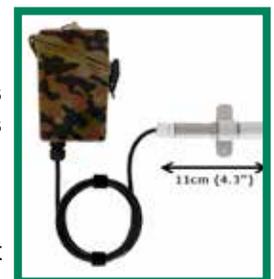
Conduct Pedestrian and Bicycle Counts

Manual Counts

A manual count program should occur twice per year through the use of volunteers at the same location during the same calendar week. The type of data collected is quantity of users, type of user (pedestrian, bicyclist, etc.), gender and time of day.

Permanent Counts

Infrared counters should be placed at high use locations and mounted to a permanent post or pole. This data will most likely only provide count and time data, with no qualifiers as to the type of user.



This infrared trail counter by TRAFx is an example of a permanent device with a web-based software solutions to view and manage the data.

Safe Routes to School Parent Survey

The National Safe Routes to School Parent Survey is sponsored by the Safe Routes to Schools Partnership. Signing up the schools is free. Once a school inputs survey results into the national database, recurring survey efforts on an annual basis can provide a solid foundation for benchmarking success. Existing and new surveys can be administered at any time. www.saferoutesdata.org.

Collect Fatality, Serious Injury and Injury Crash Data

The Montana Department of Transportation (MDT) collects crash data for all accidents occurring on Montana roadways. An analysis of the data for Miles City in the past ten years (2006-2015) indicates zero serious injury or fatality incidents between drivers of vehicles and people walking or bicycling. However, there are crash incidents that resulted in non-serious injury or no injury on an average of 2.3 crashes per year. The incident rate for crashes between drivers of vehicles and people on a bicycle is less at 1.1 per year; however, one crash each in 2006 and 2007 did result in a serious injury.

Provide additional local law enforcement training to ensure that the appropriate data is collected when responding to bicycle or pedestrian crash incidents.

Conduct Surveys Regarding Non-Motorized Transportation Use

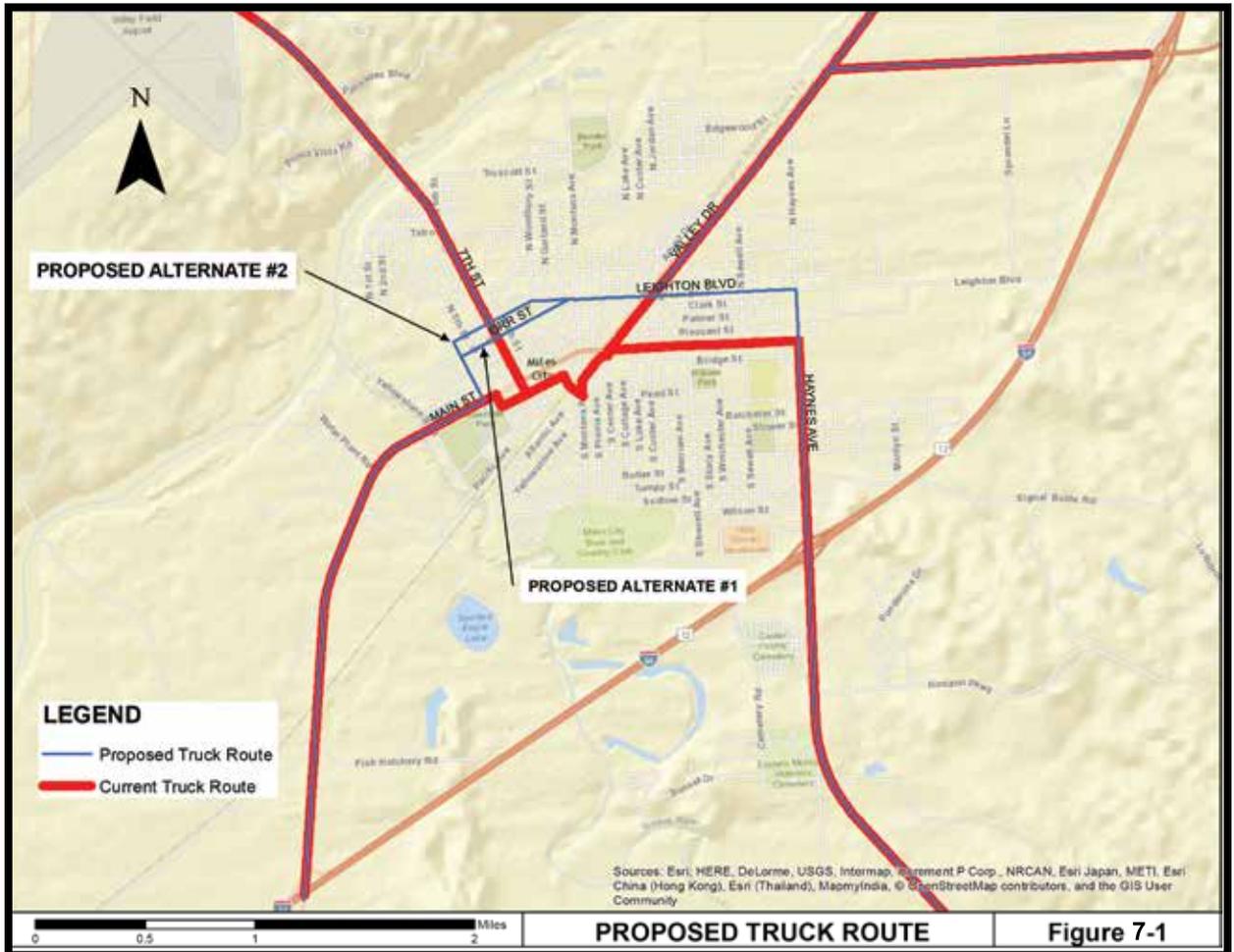
Every five years, conduct a randomly selected household survey that queries residents on their non-motorized transportation use. Utilize this opportunity to reassess priority infrastructure projects and gauge interest in current and potential programs. The results from this survey can be used for grant writing and public support purposes.

CHAPTER 7 | FREIGHT AND RAIL



EXISTING FREIGHT CONDITIONS

The existing truck route is presented in Figure 7-1. This route utilizes 7th Street, Main Street, and South Haynes Avenue while avoiding the railroad underpass on Main Street between Prairie Avenue and Valley Drive East. The railroad underpass does not have adequate vertical clearance to ensure safe passage of commercial trucks or fire equipment. The current truck route is not well marked and challenging to navigate through the city.



EXISTING RAIL CONDITIONS

One rail operator exists in Miles City, BNSF. Fourteen at-grade railroad crossings exist within Miles City. Of these, all but one are at-grade crossings. The Main Street crossing is an underpass with limited vertical clearance, which creates a barrier to commercial trucks. At-grade railroad crossings can present a safety concern as they present additional conflict points for passenger vehicle travel. In addition, emergency services are affected by the presence of rail crossings as larger emergency vehicles cannot utilize the underpass in its current configuration. Table 7-1 shows the average daily traffic volume for roadways at all railroad crossing locations.

Table 7-1: Railroad Crossing Locations and Daily Traffic Volume of Roadway Crossed

Location (Facility crossed)	AADT of road crossed
Yellowstone Blvd (Dike Rd)	<100
N 5th St	500
MT 59 North	4,700
N 8th St	<100
N Woodbury St	1,500
N Montana Ave	3,250
Edgewood St (X 2)	1,010
Leighton Blvd	4,490
Main St (underpass)	9,390
S 10th St	2,490
S 8th St	2,870
S 4th St	1,280
Spotted Eagle Rd	500

RECOMMENDED PROJECTS

Re-align the truck route to a more user-friendly orientation which requires fewer turning movements. It is desirable to reroute heavy commercial truck traffic away from downtown and residential areas where possible. While it is not possible to completely avoid residential areas, an improved route could have a significant positive effect on operation of road facilities affected by the change, including but not limited to Main Street, 7th Street and South Haynes Avenue. The proposed truck route would use Leighton Boulevard instead of Main Street between MT 59 North (7th Street) and Haynes Avenue. The proposed route is presented graphically in Figure 7-1.

Establishing an inter-modal rail and truck facility would increase the economic vitality of Miles City by providing local trucking companies greater opportunities to provide service for the movement of goods which are carried by rail. Table 7-2 summarizes the recommended improvements to the truck route and estimated project costs.

Table 7-2: Recommended Projects for Freight and Rail

Project Name / Description	Estimated Budget
Establish Inter-modal Rail / Truck Transloading Facility	\$20-30 million
Spotted Eagle Grade Crossing Protection	\$385,000
Valley Drive / Leighton Boulevard Intersection Study	\$30,000
Re-route the Truck Route	\$1.3 million

CHAPTER 8 | ROADWAYS



The automobile is the most commonly used form of transportation in rural cities such as Miles City. The vast majority of expenditures for transportation are spent on the surface transportation system primarily geared toward the movement of vehicles. This chapter provides a summary of the existing surface transportation system as well as a list of potential projects to improve future operation of the road system accounting for the impacts of future growth.

EXISTING CONDITIONS

One of the initial steps in understanding a community's existing transportation system is to first identify what roadways will be evaluated as part of the larger planning process. A community's transportation system is made up of a hierarchy of roadways, with each roadway being classified according to its function. It is standard practice to examine roadways that are functionally classified as collectors, minor arterials, or principal arterials in a regional transportation plan project. These functional classifications occur in both the urban and rural settings.

The reasoning for examining collector, minor and principal arterial roadways, and not local roadways is that when the major roadway system (collectors or above) is functioning to an acceptable level, local roadways are not used beyond their intended function. When problems begin to occur on the major roadway system, vehicles and resulting issues begin to affect neighborhood routes (local roadways). The overall health of a regional transportation system can be typically characterized by the health of the major roadway network.



Most streets and highways have a predominant function: either to provide access to abutting land or allow movement through an area. Functional classification is an important and widely accepted tool in planning highway system development. The classes are defined by certain characteristics as well as the level of access and the type of travel mobility the roads provide. The three classes are arterial, collector, and local roadways. Urban and rural areas have different characteristics as to density and types of land use, nature of travel patterns, and density of street and highway function. Federal regulations recognize these differences through separate urban and rural functional classification systems and associated criteria. Table 8-1 describes the purposes and characteristics of different urban and rural roadway classifications.

Several major highways intersect within the study area, including MT 59, US 12, I-94, and MT 489. The roadway system is broken into six different road types or classifications in the Montana Department of Transportation's (MDT) Travel Demand Model. These are based on the role a particular roadway serves in the context of the entire system as well as the design geometric characteristics of that roadway. Functional classification for the major street networks within the study area, together with examples of each, are listed in Table 8-2.

Table 8-1: Functional Classification Characteristics

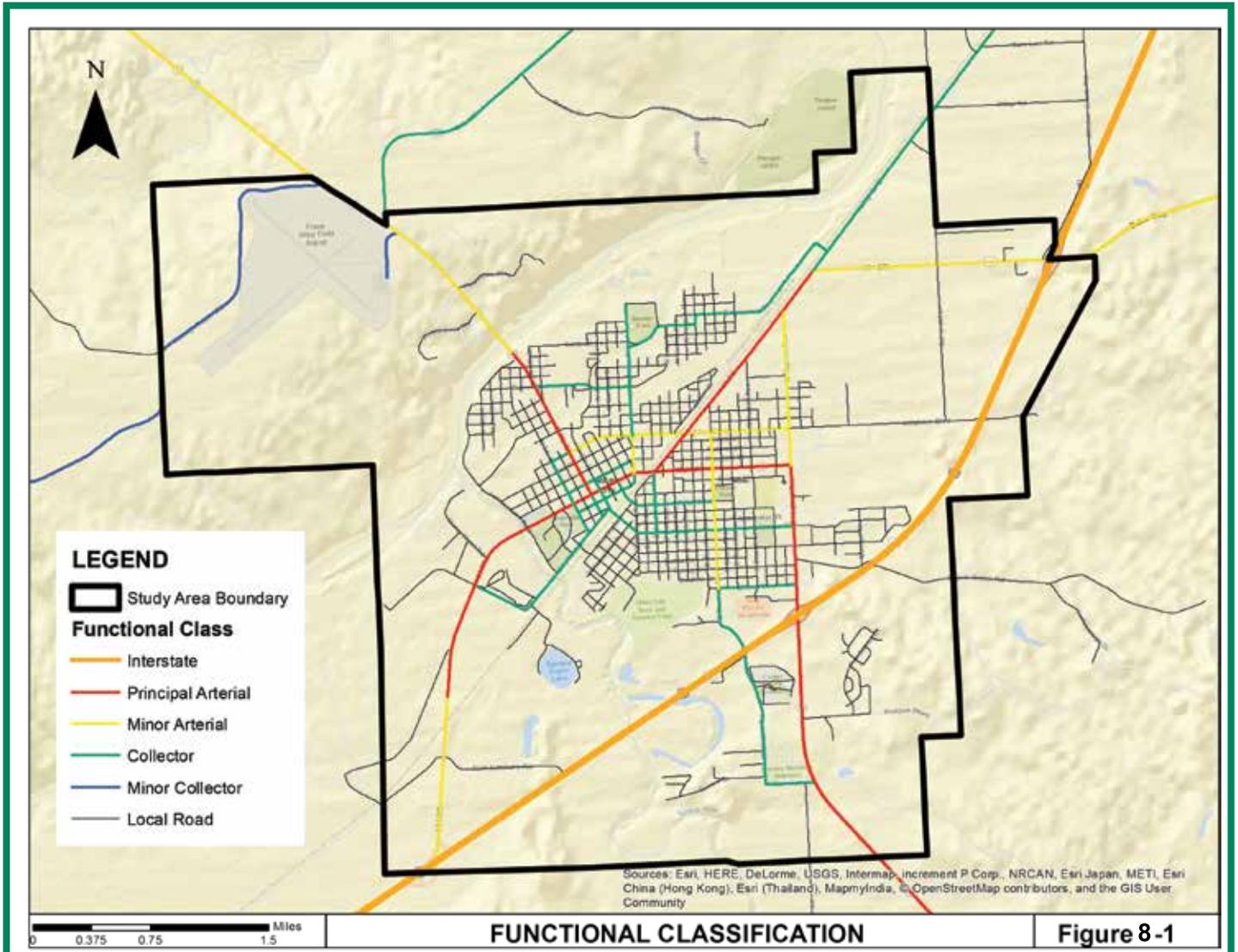
	Functional Classification	Characteristics
*URBAN	Interstate (Principal Arterial)	<ul style="list-style-type: none"> Primary through travel route Longest trip Length
	Principal Arterial	<ul style="list-style-type: none"> Serves major activity centers Corridors with highest traffic volumes Longest trip length within city
	Minor Arterial	<ul style="list-style-type: none"> Interconnects urban principal arterials
	Collector	<ul style="list-style-type: none"> Land access to channel local street traffic to arterial
	Local	<ul style="list-style-type: none"> All remaining streets Direct land access and links to higher classifications
RURAL	Principal Arterial	<ul style="list-style-type: none"> Predominant route between major activity centers Interstate or Intrastate significance Long trip lengths Heavy travel densities Provide service to most large urban areas
	Minor Arterial	<ul style="list-style-type: none"> Link cities and larger towns for major resorts Spaced at intervals so that all developed areas within a reasonable distance of an arterial Interconnects network of arterial highways
	Major Collector	<ul style="list-style-type: none"> Service to travel of primarily intra county importance Serves important travel generations (i.e. County seats, consolidated schools, mining or logging areas)
	Minor Collector	<ul style="list-style-type: none"> Land use access and spaced at intervals consistent with population density
	Local	<ul style="list-style-type: none"> Access to adjacent land - short distances All remaining roads not classified under higher systems

* URBAN (areas with urban boundaries and population > 5,000)

Table 8-2: Functional Classification Characteristics

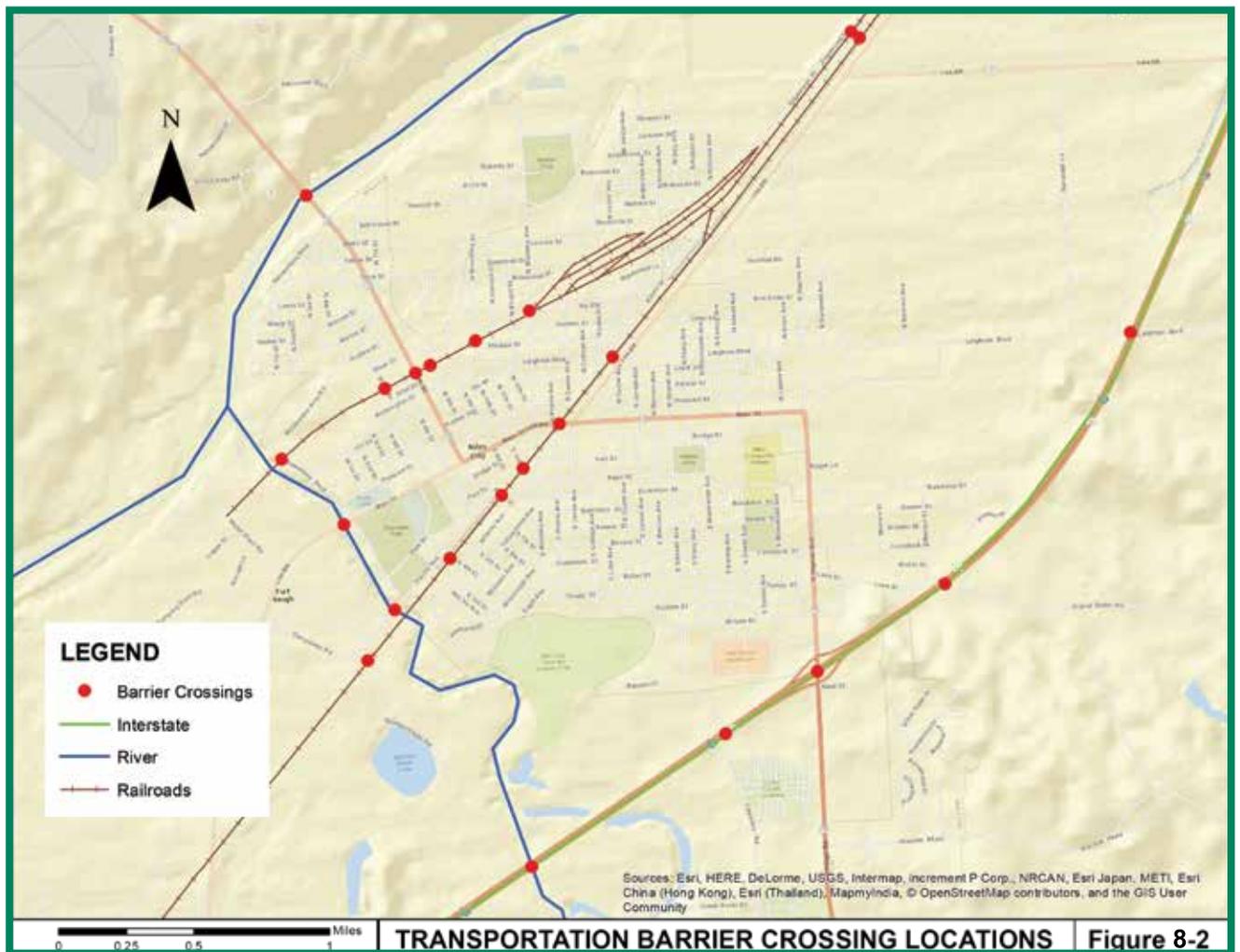
Functional Classification	Examples in Miles City
Interstate (Freeway)	I-94
Principal Arterials	7th Street, Main Street, Valley Drive E, S Haynes Avenue
Minor Arterials	Leighton Boulevard, N Haynes Avenue, N Strevell Avenue
Collector	5th Street, Montana Avenue, Stower Street, Center Avenue, Pacific Avenue, Cemetery Road
Minor Collector	Sheffield Road and Frank Wiley Field Road
Local Roads	Boutelle Street, Comstock Street, Sewell Avenue, and South Montana Avenue

The functional classification of the street network in Miles City from the MDT Travel Demand Model is provided graphically in Figure 8-1.



BARRIERS

There are several obstacles which can impact operation, safety, and continuity of the road system. While these elements do not present impenetrable barriers, they do make crossings more expensive, technically difficult, or environmentally undesirable. Some examples of these include railroads, rivers, grade-separated road facilities (i.e. interstate highways), etc. Within the Miles City planning area, some examples include the BNSF Railroad, the Yellowstone River, the Tongue River and I-94. The barrier crossing locations are presented graphically in Figure 8-2.



TRAFFIC COUNTS

Traffic counts to supplement existing MDT traffic count data were collected during December 2015 at six roadways and six intersections within the study area. Intersection counts were taken for four hours capturing the common morning and evening peak hours (7-9 AM and 4-6 PM). Mainline counts were taken for approximately 24 hours. Table 8-3 describe all locations where additional field count data collection took place, while Table 8-4 summarizes the results of the mainline traffic count data collection.

Intersection Turning Movement Counts	Mainline Volume Counts
Main Street / 7th Street	Pacific Avenue between Yellowstone Blvd and the Fairgrounds
Main Street / Valley Drive E / Center Ave	S 4th Street south of railroad tracks
Main Street / Strevell Ave	S Center Avenue south of Main St
Leighton Boulevard / Valley Drive E	S Montana Avenue between Center Ave and Bridge Street
Stower Street / S Haynes Ave	S Sewell Avenue between Main Street and MCC
Horizon Parkway / MT 59 South	Boutelle Street between S Haynes Ave and Holy Rosary Healthcare

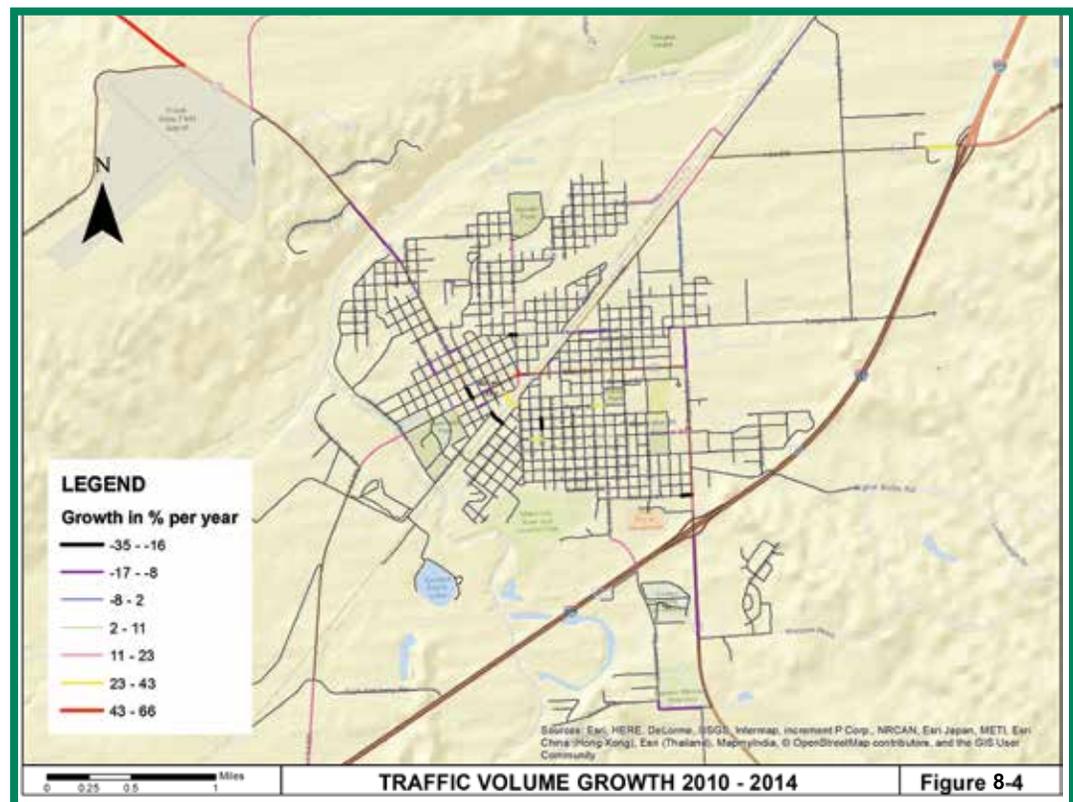
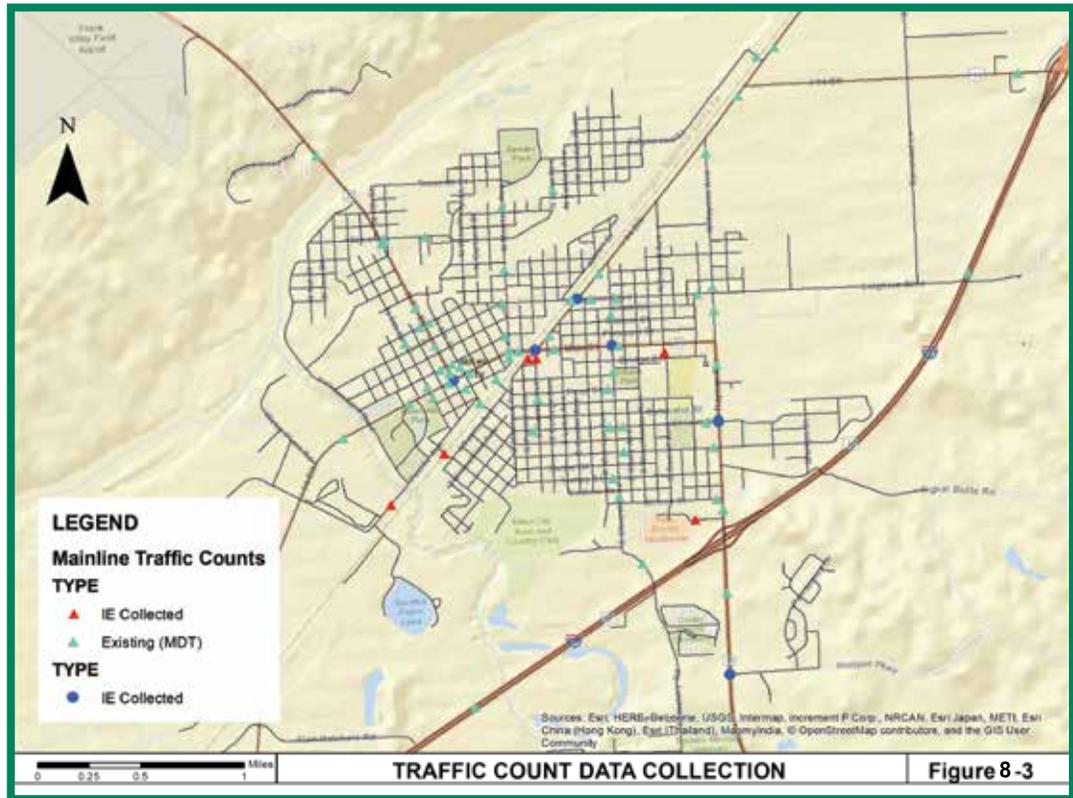
Table 8-3: Traffic Count Data Collection Locations

Facility	Mainline Volume (in vpd)
Pacific Avenue b/w Yellowstone Boulevard and the Fairgrounds	895
South 4th Street south of railroad tracks	1,279
South Center Avenue south of Main Street	704
S Montana Avenue between Center Avenue and Bridge Street	1,030
South Sewell Avenue between Main Street and MCC	822
Boutelle Street between S Haynes Avenue and Holy Rosary Healthcare	939

Table 8-4: Mainline Volumes from Data Collection

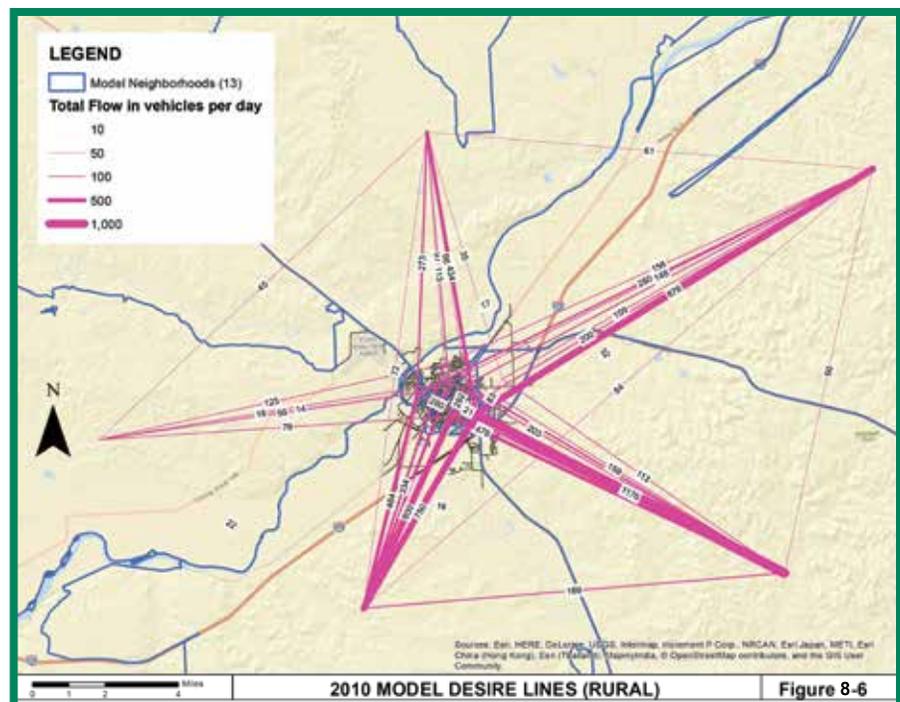
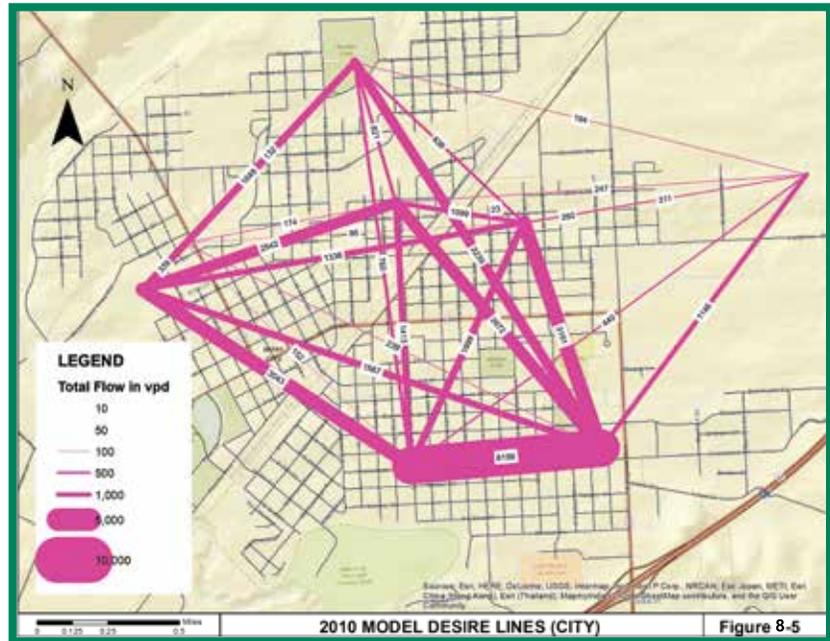
MDT collects mainline traffic counts on a yearly basis at about 70 locations throughout Miles City and the study area. A map showing the locations of all traffic data, either existing or collected for the purposes of this plan, is provided in Figure 8-3.

MDT traffic counts have suggested traffic volumes in Miles City have been increasing slightly over the past five years as shown in Figure 8-4 (which shows growth from 2010-2014 in percent per year).

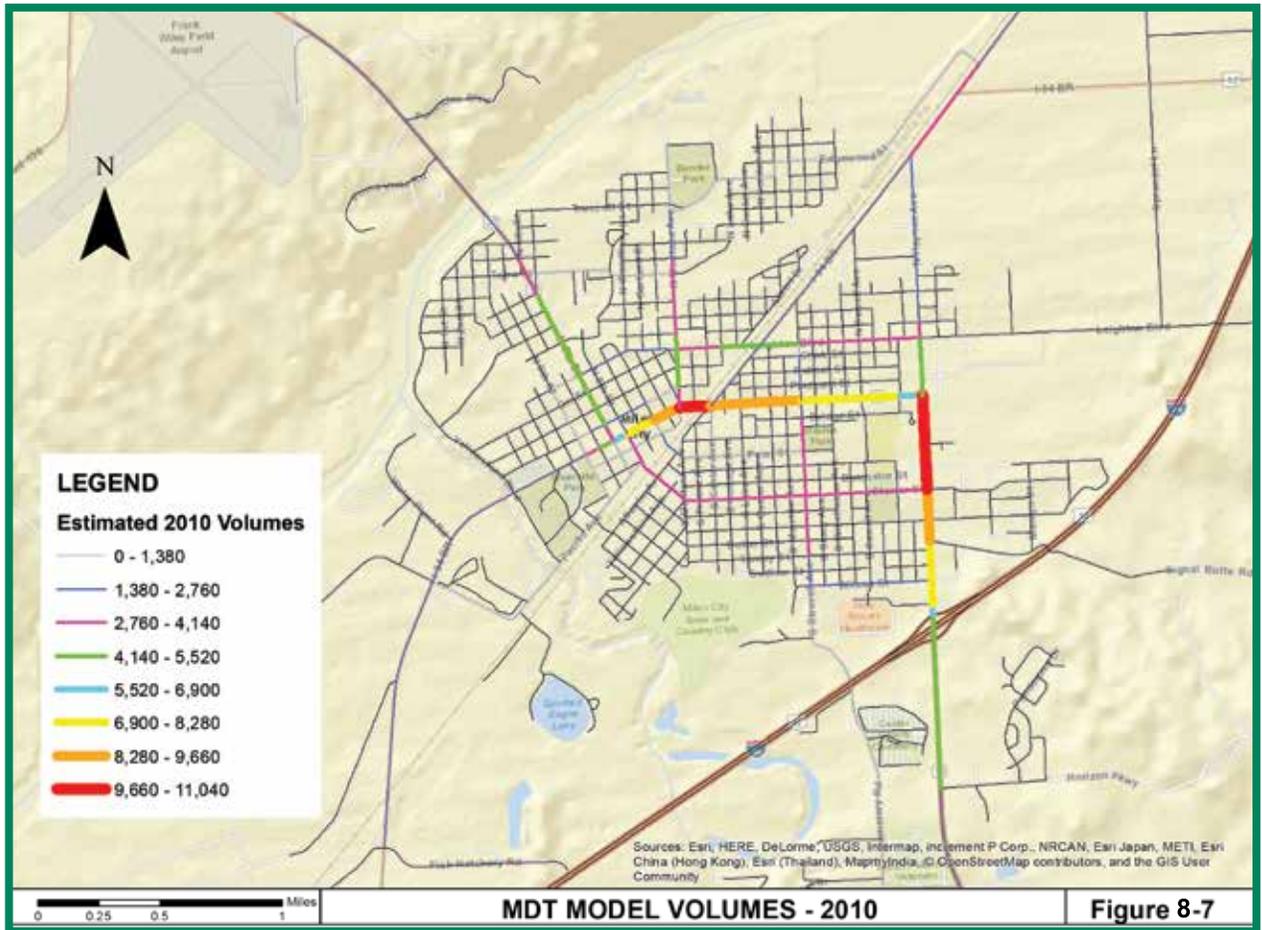


OPERATIONS

The results of year 2010 travel demand modeling are presented in Figures 8-5 and 8-6 which present the total number of vehicular trips between the 13 neighborhoods using a desire line analysis. Desire lines show the total vehicle trip-making (each direction) between two analysis areas. Desire line analysis trips are not directly assigned to road facilities. These figures show a large demand to and from the South Haynes Ave commercial corridor as well as the residential area in the southwestern portion of Miles City.



Traffic volumes (2010) on the road network estimated by the MDT travel demand model are presented in Figure 8-7. This figure shows significant traffic volumes on South Haynes Avenue and Main Street, which matches existing conditions based on existing traffic count data.

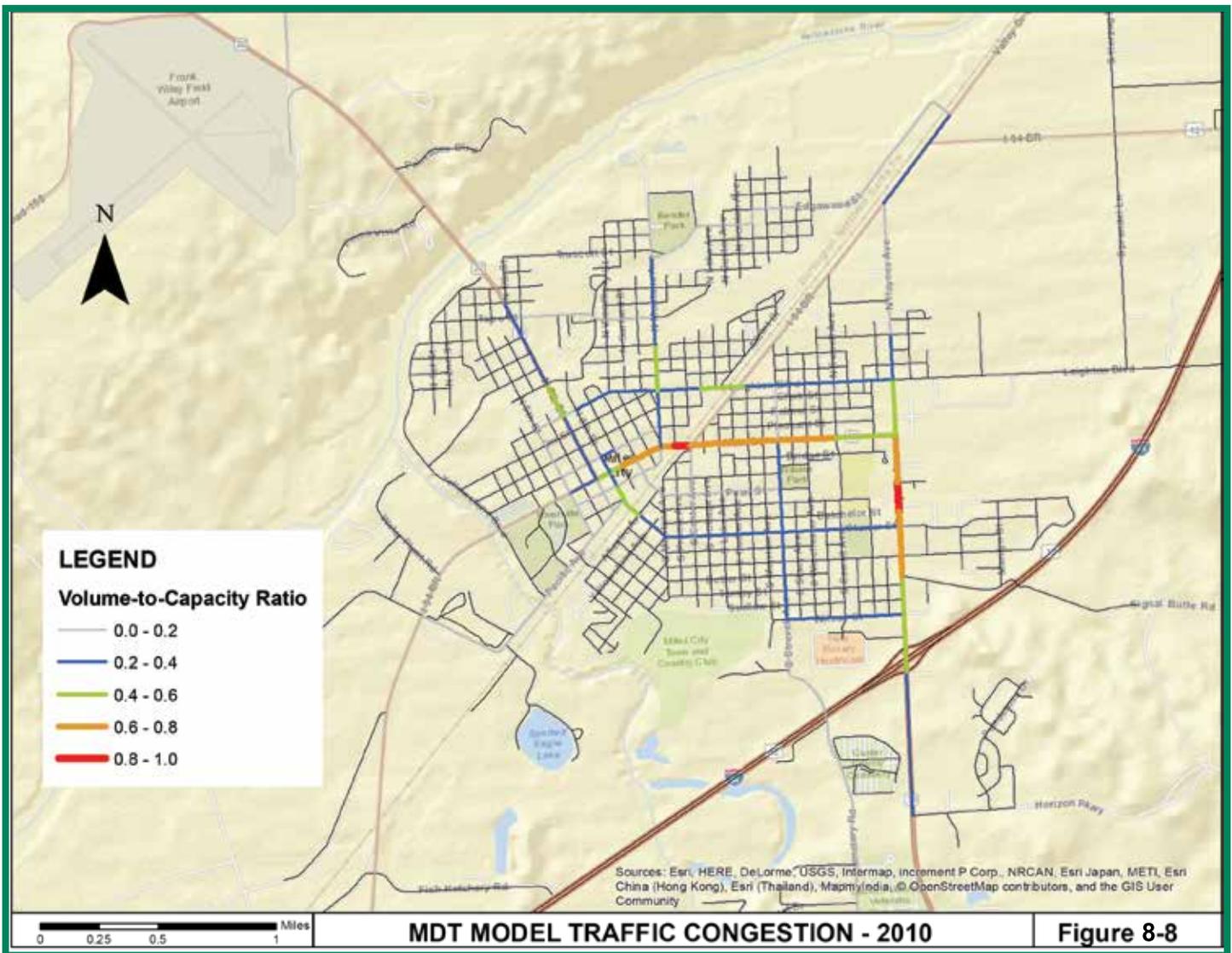


One measure of the operation of a facility is the volume-to-capacity (V/C) ratio. The V/C ratio provides a proportion of the observed traffic volume relative to the maximum volume a particular facility is designed to handle (capacity). A summary of V/C ratio to approximate level-of-service is provided below. Smaller communities such as Miles City generally have a goal of maintaining LOS C or better on streets within the city limits.

Table 8-3: Traffic Count Data Collection Locations

Link V/C Ratio	Approximate Link Peak Hour LOS
0.0 to 0.60	A
0.61 to 0.70	B
0.71 to 0.80	C
0.81 to 0.90	D
0.91 to 1.00	E
>1.00	F

Figure 8-8 shows the estimated V/C ratio for roadways based on the Travel Demand Model. Because of the relatively rural nature of the City of Miles City, only a few roadways in the city show any level of congestion. South Haynes Avenue in front of Wal-Mart, Boutelle Street near the Holy Rosary Healthcare Hospital, and Main Street at the location of the railroad underpass show V/C ratios greater than 0.8, which indicates a potential cause for concern from an operations standpoint. No facilities reported a V/C ratio greater than 1.0, suggesting that no facilities are operating above capacity.



FUTURE CONDITIONS: EXISTING + COMMITTED NETWORK

While future travel demand does not change significantly with the introduction of new streets or with widening of existing streets, changes to route choices will occur with new street connections, shifting traffic from one facility to another, and level of service can be affected with street widening projects as the capacity of these streets will likely increase.

The road network for this assessment includes any additional road facilities already committed in the capital improvements plan (the existing + committed, or E+C, network). The only Miles City committed project at this time is the extension of Dickinson Street east from South Moorehead Avenue to South Haynes Avenue. Additionally, MDT has committed to the reconstruction of the Broadus Interchange and replacing the bridges at the I-94 overpass.

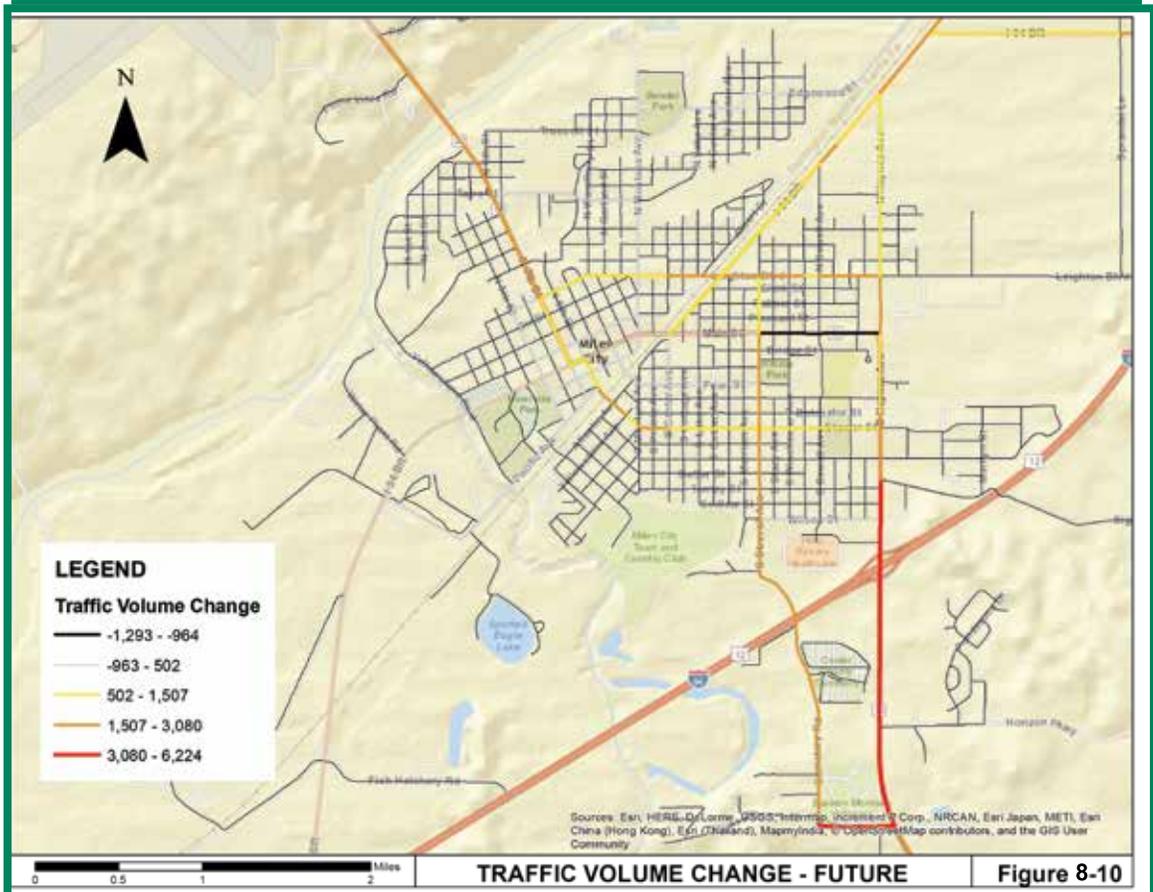
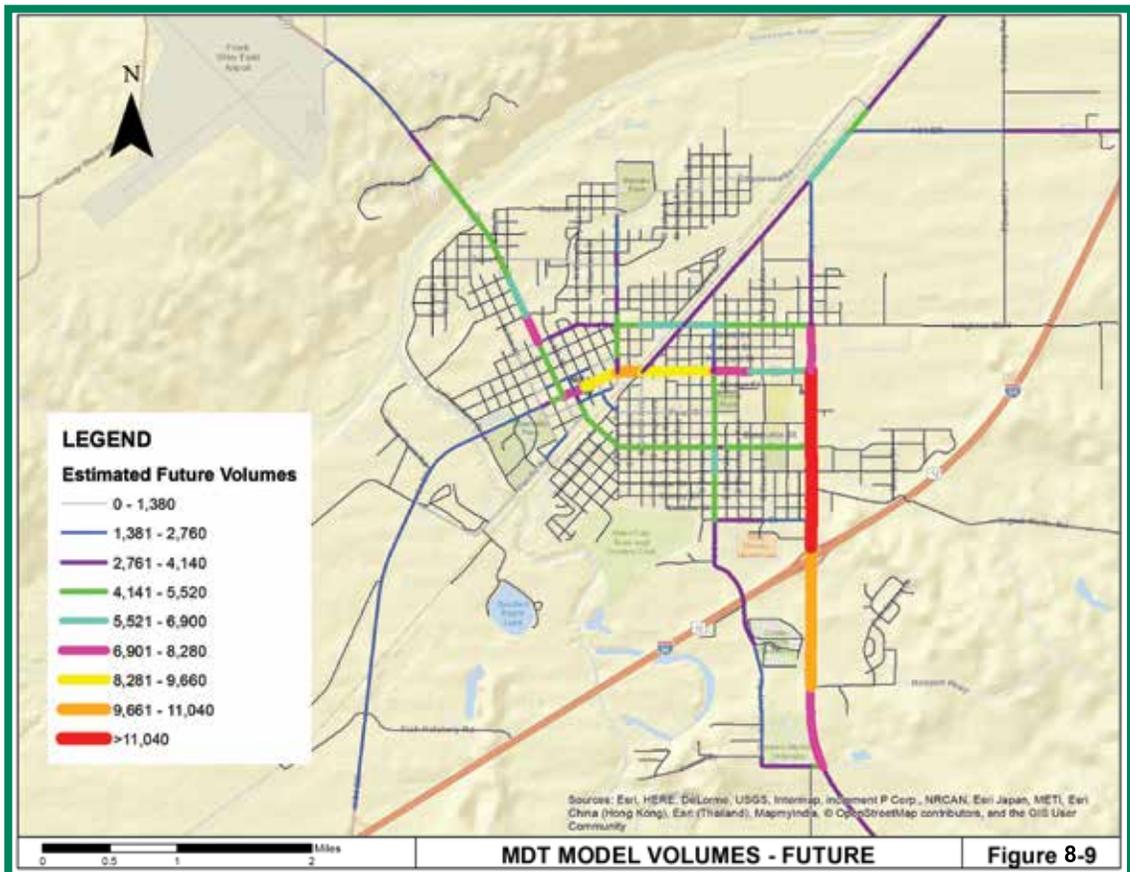
TRAFFIC VOLUMES

Future traffic volumes projected by the MDT Travel Demand Model, based on information discussed in detail in Chapter 4, are presented in Figure 8-9, while Figure 8-10 shows the change in projected volume between existing year and future year. Based on this graphic, facilities which show the largest increase in traffic volume include:

- Cemetery Road and Sunset Drive west of MT 59 south of Miles City
- Horizon Parkway east of MT 59 south of Miles City
- MT 59 / Haynes Avenue between Cemetery Road and Comstock Street
- Stower Street east of Haynes Avenue
- Leighton Boulevard and Belmont Avenue east of Haynes Avenue

These locations may not necessarily need additional capacity as some of these roadways may have enough unused capacity in order to handle the traffic increase. A sensitivity analysis was also performed utilizing a growth rate of 1 percent per year for population, employment and households. For this assessment, proportional distribution of growth remained the same as for the 2 percent per year growth. This analysis was not performed to determine long range improvements, but rather to document area travel statistics under a lower growth scenario.

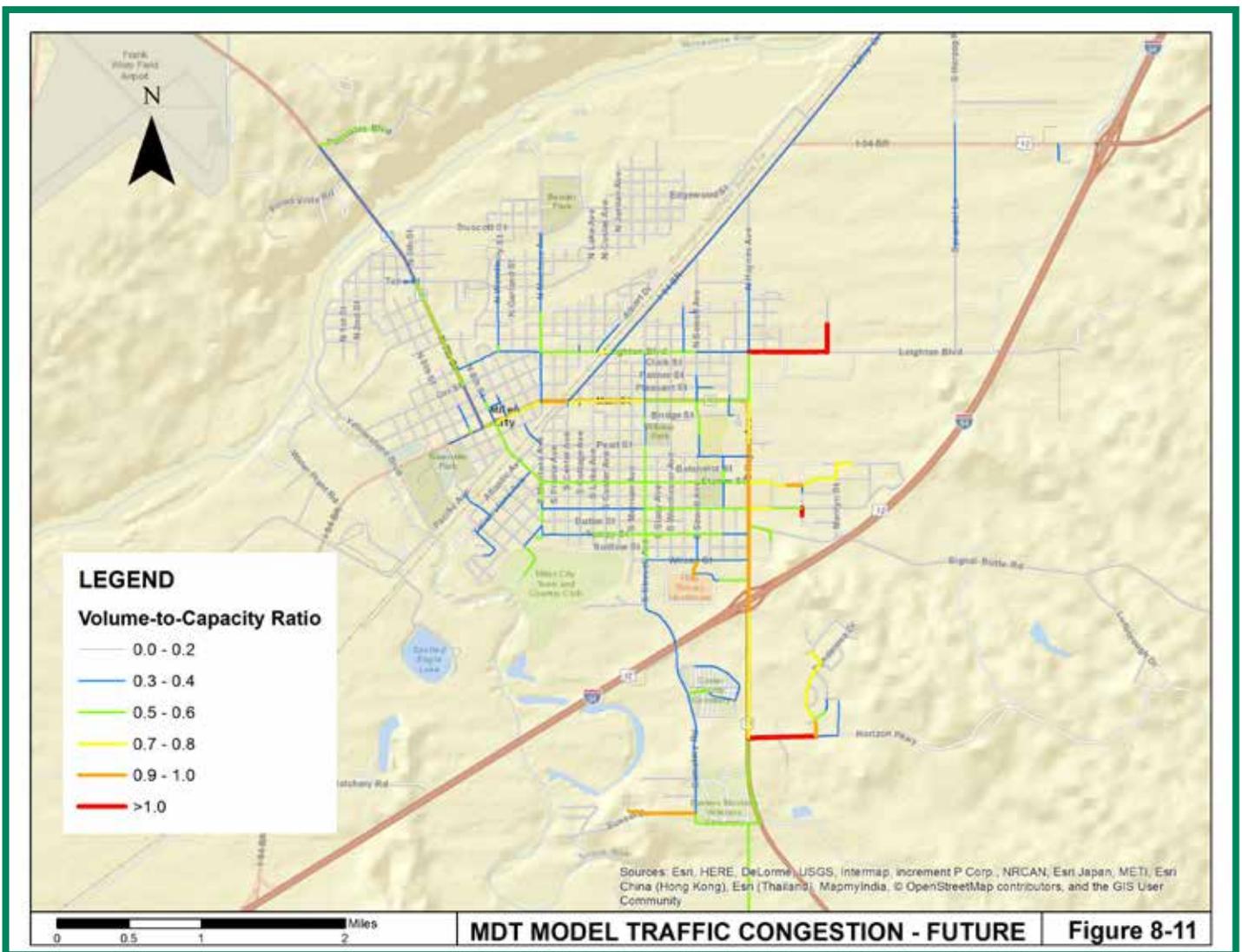
As would be expected, vehicle travel within the modeling area increases in direct proportion to growth of population, households and employment. Daily vehicle miles traveled (VMT) increases about 25% under the 1 percent per year growth scenario and increases about 47% under the 2 percent per year growth scenario. While there are 0.3 miles of congested ($V/C > 0.8$) streets under existing conditions, congestion increases to 0.8 miles under the 1 percent growth scenario and to 2.4 miles under the 2 percent growth scenario.



OPERATIONS

Traffic operations based on volumes projected by the Travel Demand Model are presented in Figure 8-11. This figure shows several roadways with V/C ratios greater than 0.8 including:

- Leighton Boulevard east of Haynes Avenue
- Horizon Parkway east of MT 59
- Michaels Street south of Comstock Street
- Sunset Drive west of Cemetery Road
- Main Street between Montana Avenue and Valley Drive East
- South Haynes Avenue between Roger Lane and Interstate 94



FUTURE CONDITIONS: NEEDS AND DEFICIENCIES

Improvements to the road network include two alternatives:

- Alternative #1: Provide a second access to and from the Southgate Subdivision; Dike Road connecting with US 12 at Valley Drive East and MT 59 (this includes the realignment of Edgewood Street to connect to Dike Road)
- Alternative #2: Additional I-94 interchange at Leighton Boulevard

The primary goals of these improvements are:

- Reduce the amount of traffic and congestion on Horizon Parkway as a second access to the Southgate Subdivision would be provided.
- Reduce demand on South Haynes Avenue by providing additional routes to travel to Haynes Avenue commercial corridor.
- Re-route trucks from South Haynes Avenue to I-94 by providing Leighton Boulevard interchange directly to truck route.

Several alternatives were considered for how to provide the second access to the Southgate Subdivision including:

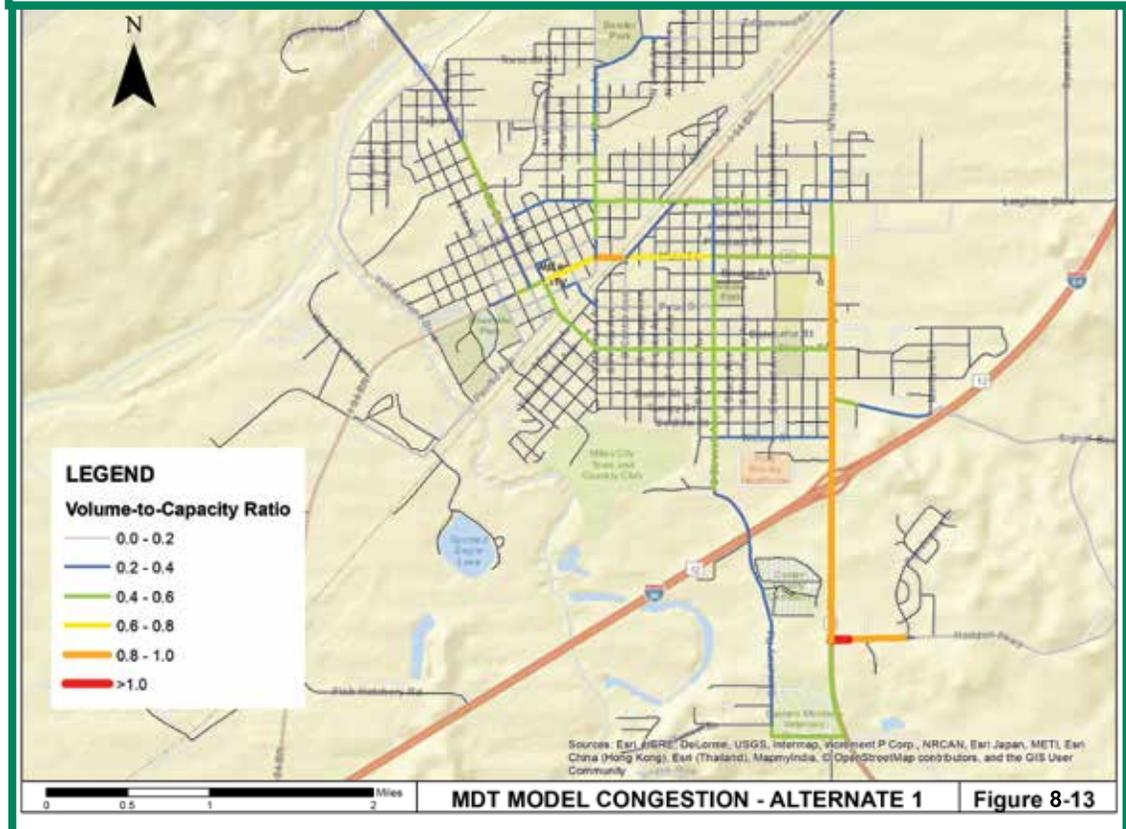
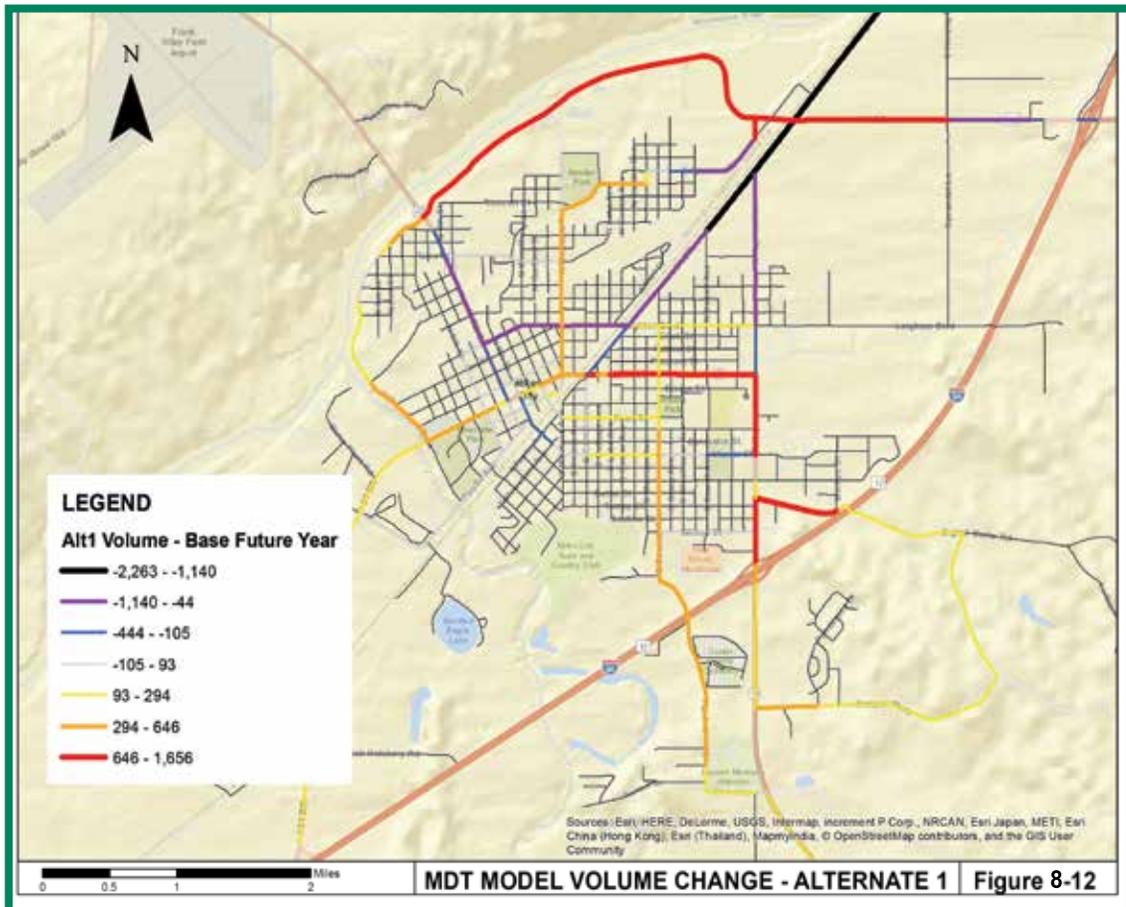
- Extension of Ponderosa Drive to Signal Butte Road or to an extension of Steel Street to gain access to MT 59
- Extension of Willow Circle to MT 59S
- Extension of Pioneer Circle to meet an extension of Steel Street to gain access to MT 59
- New road branching south from Horizon Parkway and intersecting MT 59 across from Cemetery Road
- Extension of Horizon Parkway east and north to Signal Butte Road

Any of the above alternatives that connect to Signal Butte Road will likely also require improvements to Signal Butte Road.

The changes in traffic volumes projected by the MDT Travel Demand Model with Alternative #1 improvements are provided in Figure 8-12. Figure 8-13 shows the V/C ratio with Alternative #1.

These graphics show changes to operations on the road network including:

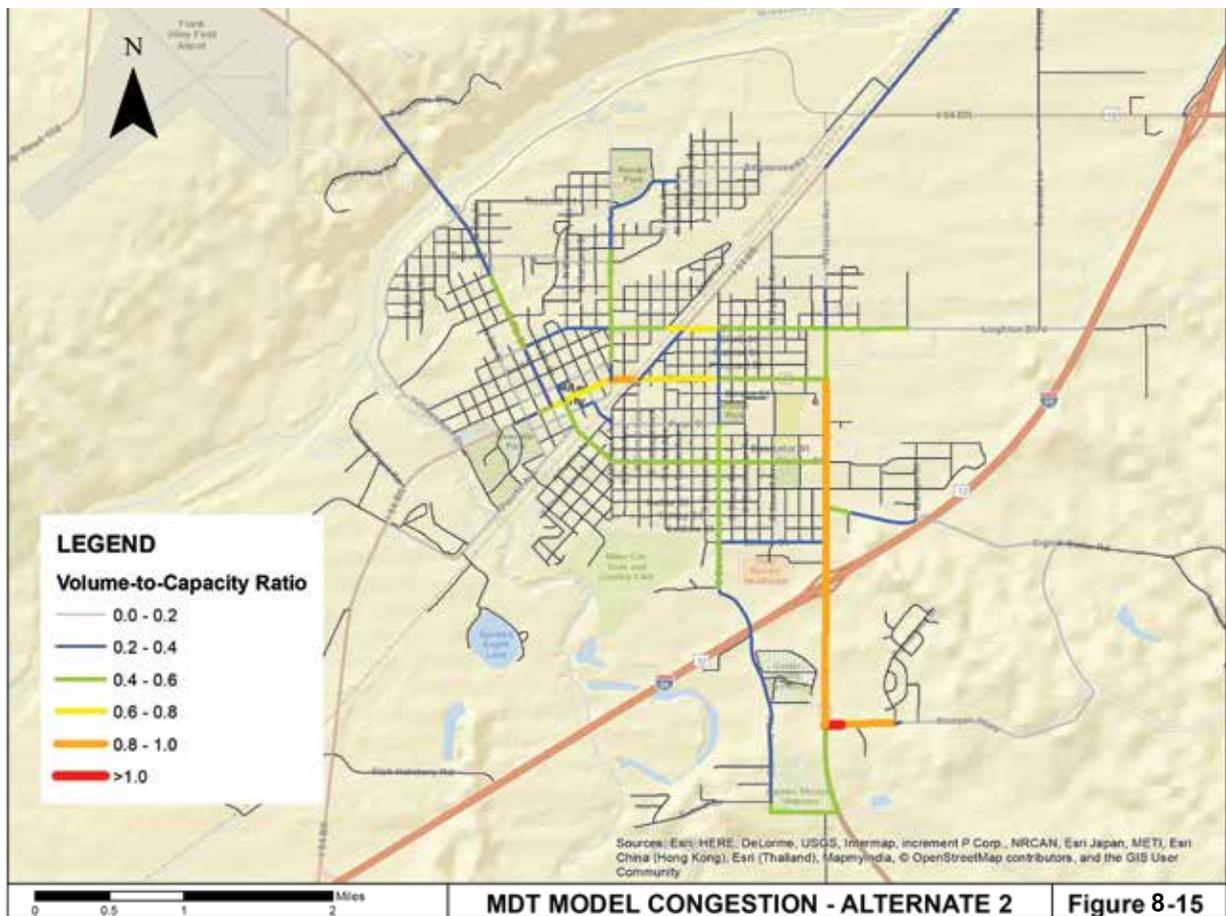
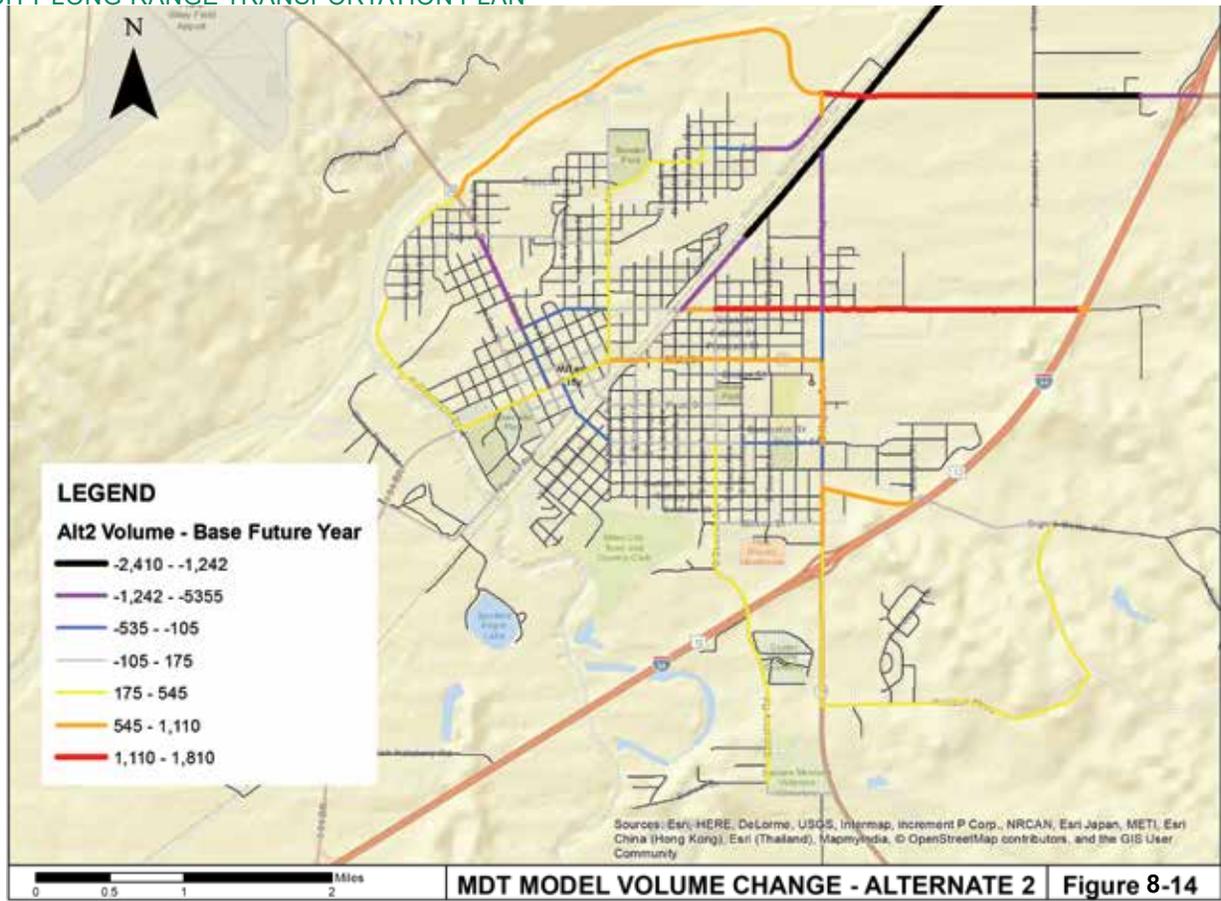
- Traffic volume increase on South Haynes Avenue
- Traffic volume increase on Horizon Parkway west of Ponderosa Drive
- Traffic volume increase on Main Street
- Traffic volume increase on North Montana Avenue
- Significant traffic volume increase on US 12 west of Spandel Lane
- Traffic volume increase on South Strevell Avenue and Cemetery Road
- Traffic volume decrease on North Haynes Avenue
- Significant traffic volume decrease on Valley Drive East
- Traffic volume decrease on Tatro Street and North 7th Street
- Improvement of V/C ratio on Horizon Parkway from 1.1 to 0.9



The changes in traffic volumes projected by the MDT Travel Demand Model with Alternative #2 improvements are provided in Figure 8-14. Figure 8-15 shows the V/C ratio with Alternative #2. This indicates that the addition of the I-94 interchange would significantly improve the operation of Leighton Boulevard west of Belmont Avenue. These graphics show changes to operation of the road network, many of which are similar to Alternative 1 including:

- Traffic volume increase on South Haynes Avenue
- Traffic volume increase on Horizon Parkway west of Ponderosa Drive
- Traffic volume increase on Main Street
- Significant traffic volume increase on Leighton Boulevard
- Significant traffic volume increase on US 12 west of Spandel Lane
- Significant traffic volume decrease on US 12 east of Spandel Lane
- Significant traffic volume decrease on Valley Drive East
- Traffic volume decrease on North Haynes Avenue
- Traffic volume decrease on Tatro Street and North 7th Street
- Improvement of V/C ratio on Horizon Parkway from 1.1 to 0.9
- Improvement of V/C ratio on Leighton Boulevard from 1.0 to 0.5





DEVELOPING AREAS

Future growth is expected to target areas east and south of the developed portion of the City of Miles City. As these areas develop, care should be exercised to ensure development of new streets provide appropriate access while preserving the function and safety of the existing street network, especially the major street network.

Direct lot access should be discouraged on arterial streets. Full movement access to arterial streets should be limited to four locations per mile to preserve capacity should those intersections become signalized in the future. Full movement accesses to major collector streets should be limited to eight per mile where possible. To accommodate land ownership and allow development of parcels adjacent to arterial and collector streets, the use of shared approaches (one approach serving more than one property) should be encouraged when direct lot access to arterial and collector streets is unavoidable.

A review of City ordinances regarding subdivisions and development shows changes could be made to encourage development that promotes alternate modes of transportation. The following changes/additions are recommended:

- Section 20-40 should be amended to include sidewalks as required construction on city streets.
- Section 21-18(a)(8)(a) should be revised to provide standards regarding street grades, widths, etc. based on functional classification

RECOMMENDED IMPROVEMENTS

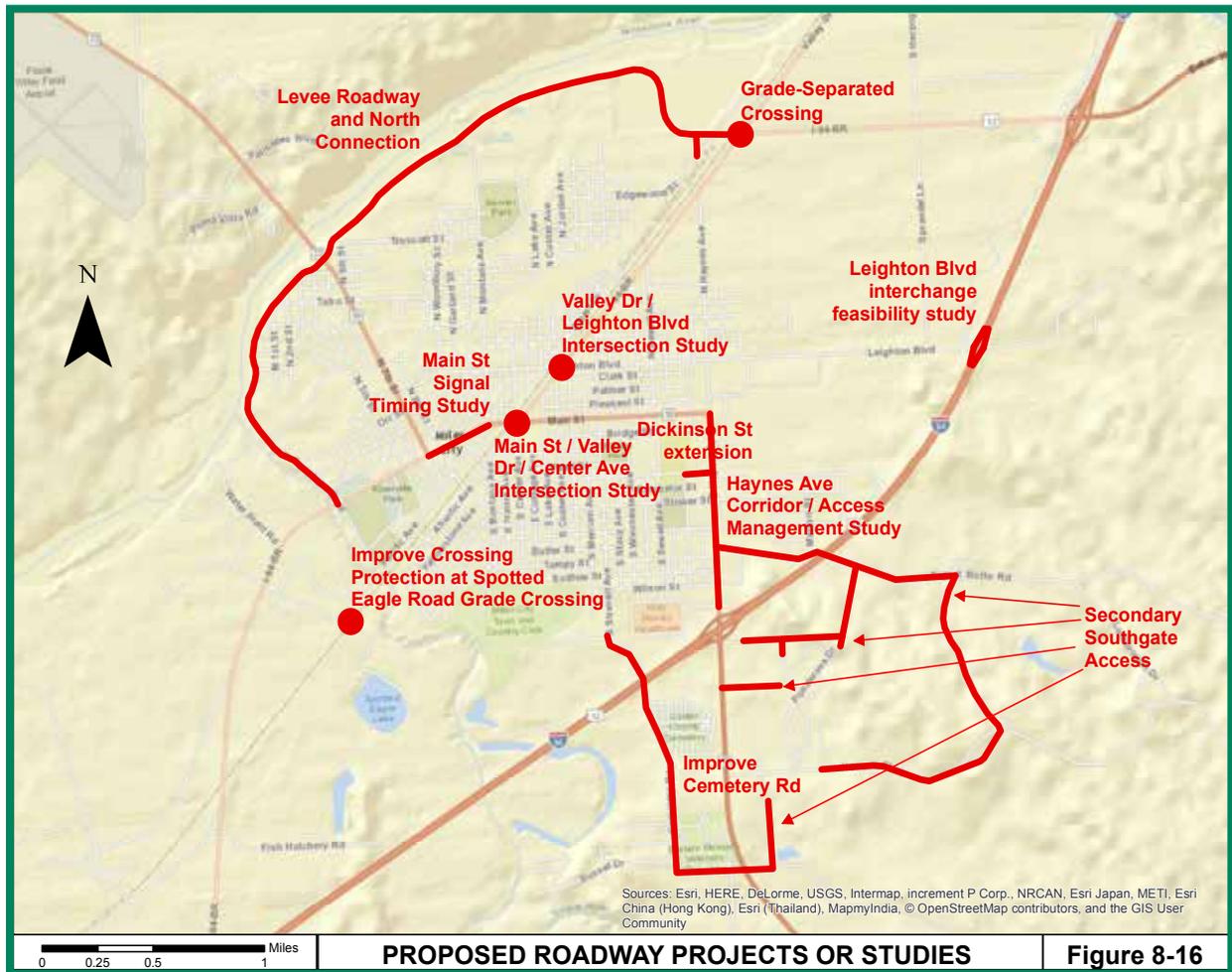
Based on the results of the Travel Demand Modeling as well as feedback from the Project Advisory Committee (PAC) and the public meetings, a list of short-term and long-term projects was developed to address surface transportation network needs and deficiencies. This list (summarized in Table 8-5) includes studies which may lead to future road improvement projects as well. The locations are presented graphically in Figure 8-16.

Project costs shown in Table 8-5 were estimated considering major project elements, including right-of-way acquisition (where necessary), and design and construction engineering. All costs are in 2016 dollars. Details of cost estimates are provided in Appendix C.

In addition to projects or studies to improve capacity and safety of streets and intersections, the public and PAC expressed concerns about intersection controls currently in place, on both the local and major street network. The City of Miles City frequently receives requests from the public for additional stop signs or requests to remove existing stop signs. Examination of individual intersection controls, especially on the local street network, are beyond the scope of this plan. Such requests should be addressed through application of state law and the Manual of Uniform Traffic Control Devices.

Table 8-5: List of Roadway Needs

Project Description	Rationale	Estimated Cost
Short-Term		
Dickinson Street extension	Connect to Haynes Ave	\$320,000
Broadus interchange improvement	Upgrade bridges; construct roundabouts	\$8.3 million
Haynes Avenue Corridor / Access Management Study	Address safety and operations	\$50,000
Main Street / Valley Drive E / Center Avenue intersection study	Address safety and operations	\$30,000
Valley Drive E / Leighton Boulevard intersection study	Address safety and operations	\$30,000
Main Street Signal Timing Study	Address operations along Main St	\$50,000
I-94 Leighton Boulevard interchange feasibility study	Additional connection to I-94, easier connection to proposed truck route change	\$75,000
Long-Term		
Improve protection at Spotted Eagle Road grade crossing	Add crossing protection	\$385,000
Secondary Southgate connection	Provide second access to Southgate subdivision	\$4.8 million
Signal Butte Rd / Love Lane Improvement	Address safety and operations	\$1.5 million
Dike Road Construction	Address future safety and operations	\$4.9 million
Grade-Separated Crossing at Baker Highway	Above railroad with Levee Road Construction	\$13.5 million
Cemetery Rd Improvement	Address future safety and operations	\$2.9 million



CHAPTER 9 | TRANSIT & RIDE SHARING



EXISTING CONDITIONS

Fixed route public transit service is not currently provided by the City or County. Miles City is only one of four cities in MDT's Glendive District that does not have a public transit system. The Custer County Council On Aging provides transportation assistance through a "Dial-a-Ride" program. This non-fixed route system requires advanced scheduling. According to the Montana Department of Health and Human Services Website, service is provided from Miles City to Billings (<http://dphhs.mt.gov/detd/transportation/providerlist>). Reservations are required, and the trip is scheduled with other riders, although the service is curb-to-curb or door-to-door.

Inter-city bus service is provided by Jefferson Lines, a private service provider based out of Minnesota. Miles City is designated as a "destination en route," as a part of the service route along the Billings to Fargo service line. The pick up or drop off location is the M&H Gas Station, located 1019 Main Street in Miles City. Passengers may begin their trip in Miles City through the purchase of a ticket in cash directly with the bus driver, on line or by phone directly with Jefferson Lines. Bags are able to be checked for the route destination when boarding there. According to the latest Jefferson Lines schedule, the schedule shows Miles City departures at 10:35 PM for eastbound, and 11:00 PM for westbound destinations.

Intra-city transit service is provided by Badlands Taxi, a private service provider based in Miles City. The provider offers senior citizen discounts, delivery service and time call pick up. Their hours are Sunday through Wednesday from 7 am to 9 pm, and Thursday through Saturday from 7 am to 3 am. Community members noted, however, that the lack of an accessible vehicle by the provider is an issue, and that a wheelchair accessible vehicle would be desirable.

The Veterans Administration (Montana Health Care System) provides transport services for veterans seeking medical treatment through the Veterans Transportation Program (VTP). The Veterans Transportation Service (VTS) is designed to ensure that all qualifying veterans have access to care through convenient, safe, and reliable transportation. VTS provides qualifying veterans with free transportation services to and/or from participating VA medical centers (VAMCs) in a multi-passenger van. This service ensures that all qualifying Veterans who do not have access to transportation options of their own, due to financial, medical, or other reasons, are able to travel to VA medical facilities or authorized non-VA appointments to receive care.

Miles Community College offers one-day excursions to regional destinations as part of its Distance Education and Community Outreach programs. These programs are open to the public.

The Miles City Airport at Frank Wiley Field has a courtesy car for small-class airplane passengers. When commercial passenger service was present, passengers often relied on a private ride or utilized local hotel shuttles for service to their accommodations.

NEEDS

Community members have indicated that an intra-city fixed-route transit system is not a priority at this time. The on-demand services that are provided by private companies serve the community well.

There has been a need for services that accommodate the mobility-impaired. Past efforts to provide commercial operations were unsuccessful. Consider the acquisition of a on-demand service that provides vehicles with mobility-assist equipment.

CHAPTER 10 | SAFETY



The primary goal of considering safety needs and improvements in the planning process is to improve safety by reducing both the number of crashes, as well as their severity, on public roadways.

FEDERAL AND STATE PLANS

Federal regulations require all states to develop a Strategic Highway Safety Plan. Montana's plan is the *Montana Comprehensive Highway Safety Plan* which was updated in 2015. The *Montana Comprehensive Highway Safety Plan* sets specific and measureable goals for the reduction of fatal and serious injuries on Montana's roadways.

Vision Zero – No fatalities and no serious injuries occur on Montana public roadways, sets:

Sets quantifiable safety targets during 20-year period:

- Reduce fatalities and serious injuries by 50 percent in 20 years (to 852 in 2030)
- Reduce fatalities to 172 by 2020
- Reduce fatality rate to 1.28 fatalities / 100 million vehicle miles traveled (MVMT) by 2020
- Reduce serious injuries to 796 by 2020
- Reduce serious injury rate to 5.9 serious injuries / 100 MVMT by 2020

Accomplishing these goals usually cannot be achieved using only one safety mitigation strategy (e.g. enforcement or engineering). A combination of many strategies is necessary. The most common traffic safety improvement strategies are known as the 4 E's:

Education: Preventative education

Emergency Medical Services: EMS data is valuable to crash data analysis

Enforcement: Affecting behavior of drivers through the threat of incarceration or other consequences

Engineering: Design, construction, and maintenance of facilities

CRASH DATA SUMMARY

Crash data within the city of Miles City was provided by the Montana Department of Transportation (MDT) for the most recent five years available from January 2010 through December 2014. This information shows a total of 640 total crashes: 302 intersection crashes and 338 road segment crashes. All crashes are mapped in Figure 10-1.

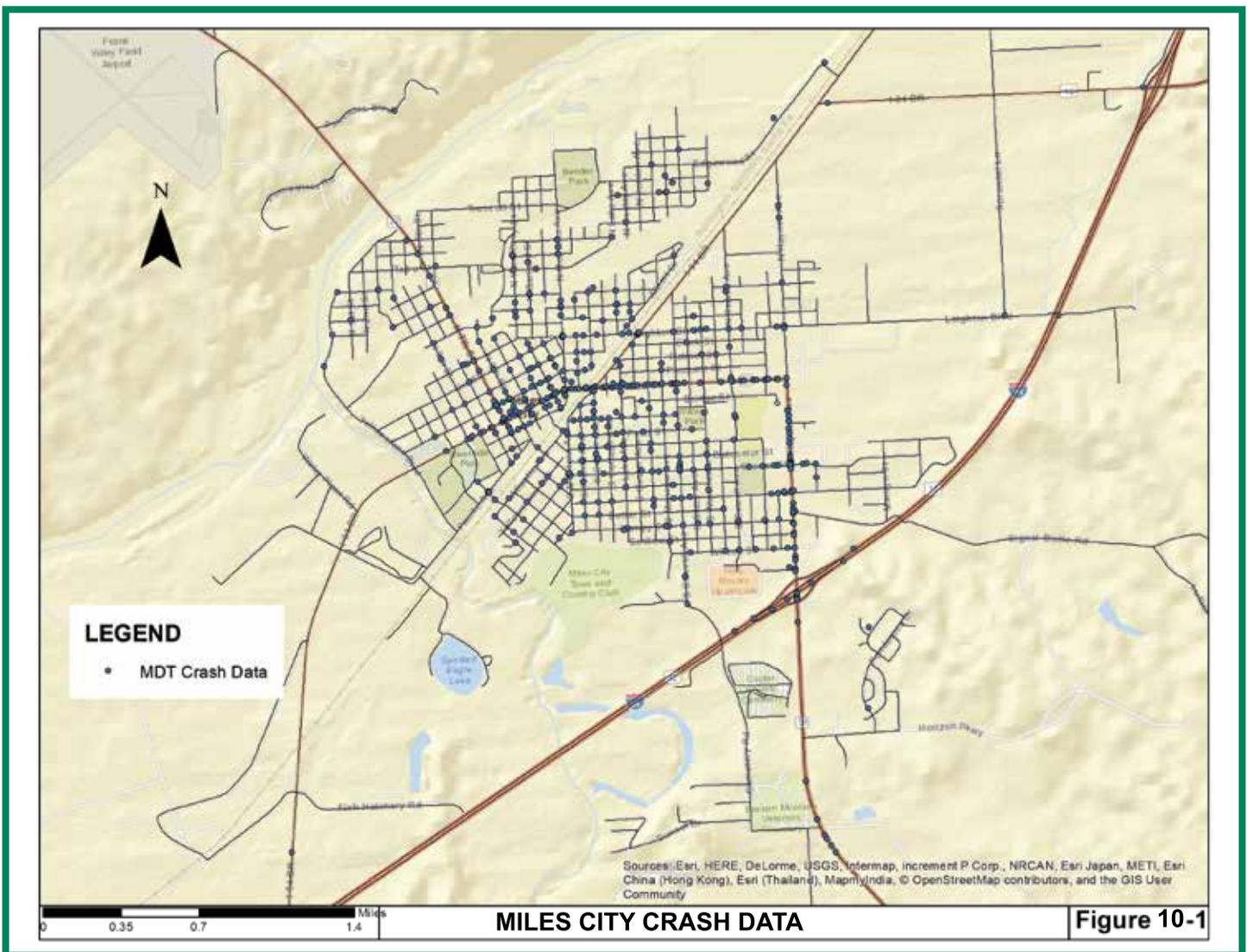


Table 10-1: Crash Breakdown by Lighting Condition

Lighting Condition	# of Crashes
Daylight	503
Dark - Lighted	90
Dark - Not Lighted	31
Dark - Unknown Lighting	1
Dusk	11
Dawn	4

The crash breakdown by lighting condition is provided in Table 10-1. This breakdown suggests the availability of light does not have a significant impact on safety within Miles City.

The crash breakdown by type of crash is provided in Figure 10-2. The majority of reported crashes were reported as being either rear-end or right-angle crashes. The crash breakdown by day of week is provided in Figure 10-3. This shows the majority of crashes have occurred during the standard work week, which is typical for an urban community.

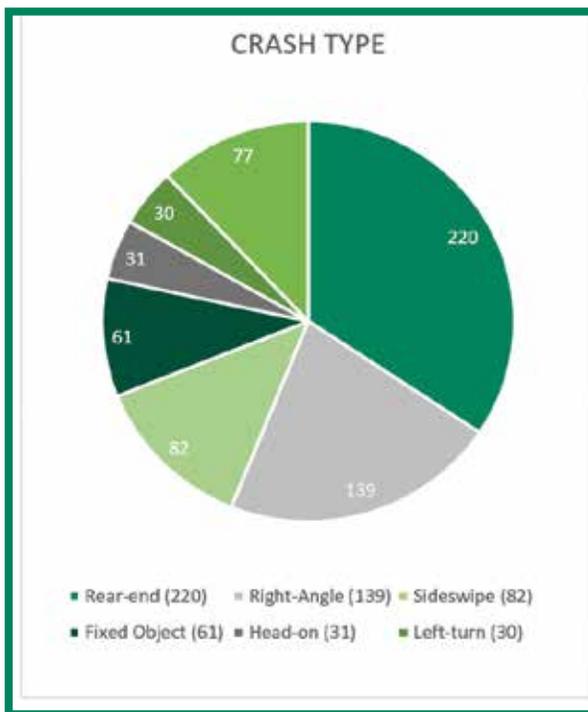


Figure 10-2: Crash Breakdown by Type

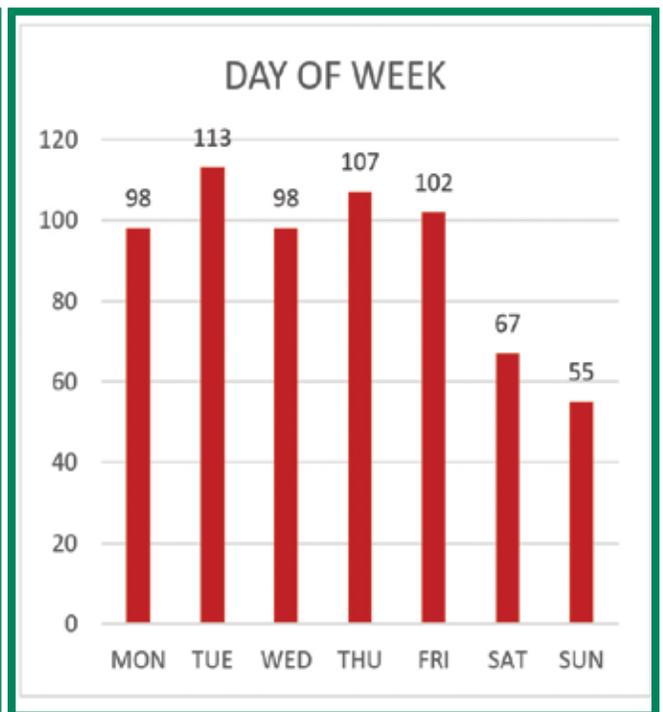


Figure 10-3: Crash Breakdown by Days of the Week

The breakdown of crash severity is provided in Figure 10-4. Most of the reported crashes were property-damage only (PDO) crashes (over 75 percent), with zero fatalities and only four serious-injury crashes.

The breakdown of crashes by road condition is provided in Figure 10-5. This graphic suggest road condition was a contributing factor for approximately one-third of the reported crashes, not uncommon for locations in Montana which see a significant amount of snow. The breakdown of crashes by weather condition is provided in Figure 10-6. Clear or cloudy was reported for approximately 90 percent of the crashes which suggests weather condition does not appear to be a significant contributing factor.

The breakdown by time of day is provided in Figure 10-7. This shows the largest number of crashes have occurred between 3:00 PM and 4:00 PM within the study area.

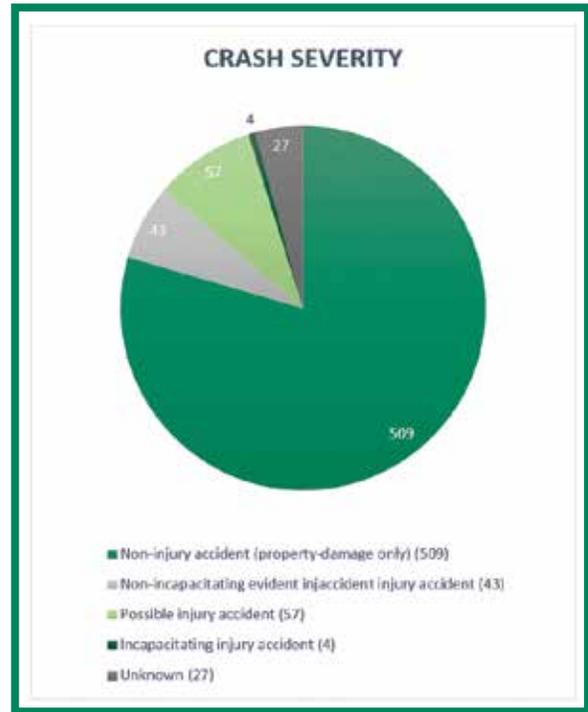


Figure 10-4: Crash Breakdown by Severity

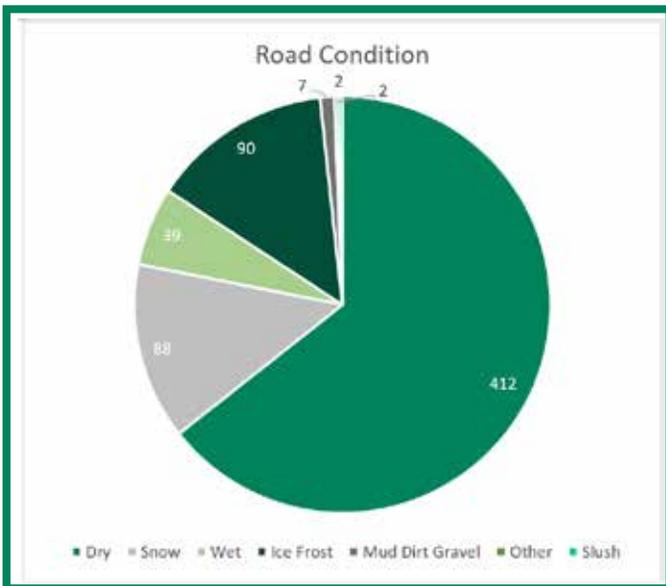


Figure 10-5: Crash Breakdown by Road Condition

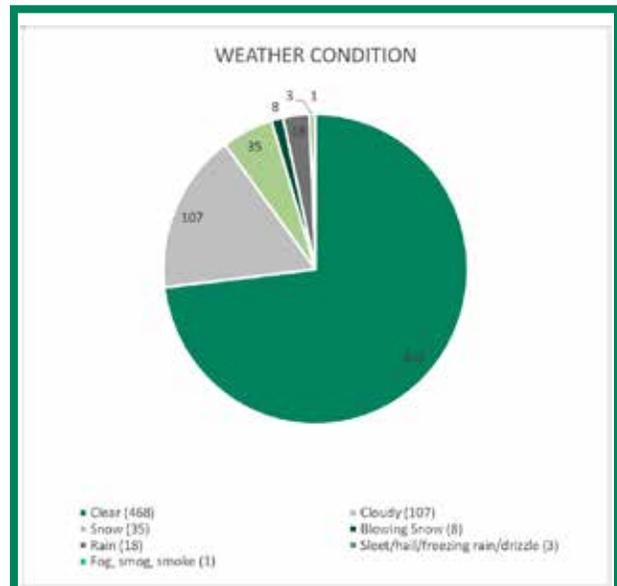


Figure 10-6: Crash Breakdown by Weather Condition

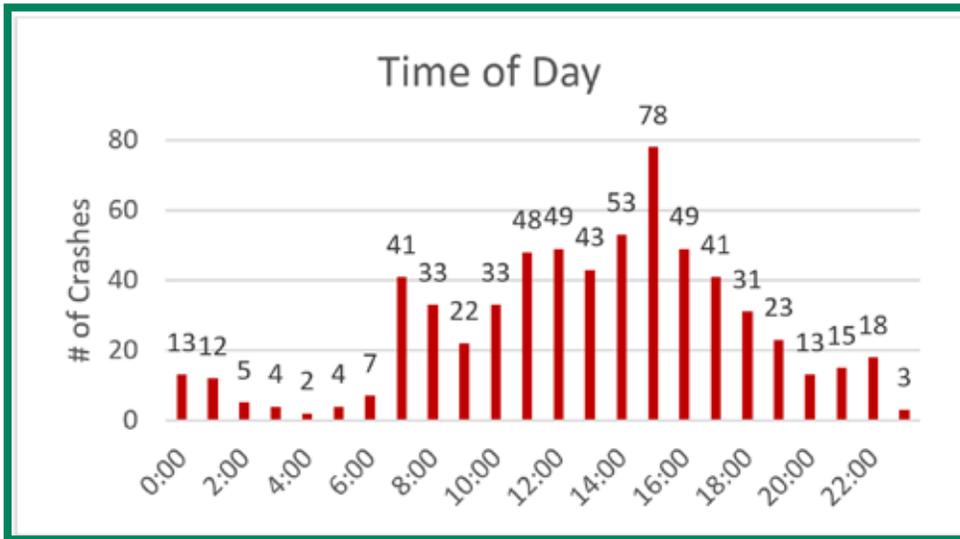
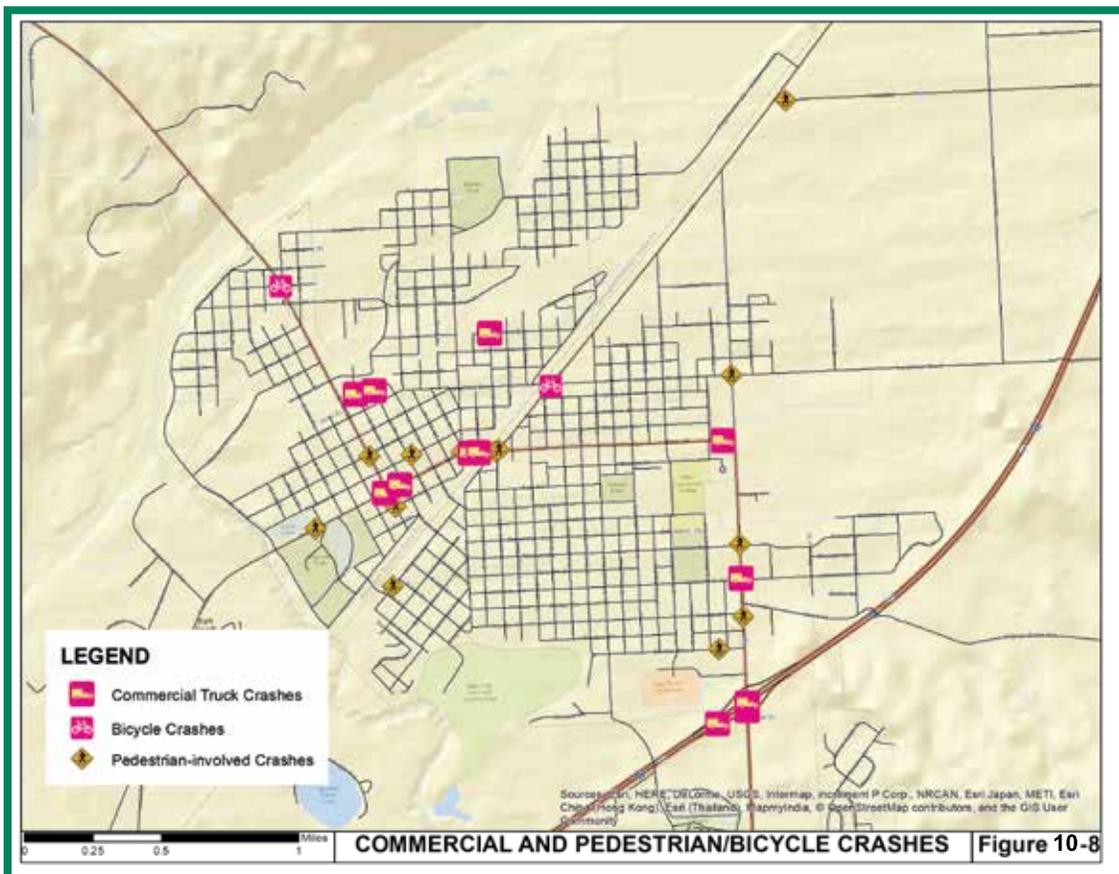


Figure 10-7: Crash Breakdown by Time of Day

Fifteen pedestrian crashes were reported during this period. A map showing the locations of pedestrian crashes is provided in Figure 10-8. Thirteen commercial truck-related (larger than pickup trucks) crashes were reported during this period. Figure 10-8 also provides the locations of commercial truck-related crashes. Neither figure appears to show a specific location or pattern where safety is a concern.



The total number of crashes by itself is typically not enough information to determine whether a particular location is considered unsafe. A location could have a large number of crashes but not necessarily be a safety hazard if a large number of vehicles traverse that location. The crash rate is dependent upon the number of crashes occurring at a specified location and the amount of traffic or “exposure” at that location. The crash rate is determined using the following formulas:

Crash rate / million entering vehicles (MEV) = # of crashes*1,000,000 / [365*N*(AADT1 + AADT2)] for intersections; or

Crash rate / million vehicle miles traveled (MVMT) = # of crashes*1,000,000 / [365*N*AADT*L] for road segments where:

AADT = average annual daily traffic in vehicles per day

N = number of years (5 years for this dataset)

L = length of road segment in miles

The top ten intersection crash rates are summarized in Table 10-2. Note that of the top ten, four intersections reported two total crashes over a five-year period. These intersections are on this list primarily due to low daily traffic volumes. All intersections with only one crash were determined ineligible for this list.

Table 10-2: Top 10 Intersection Crash Rates

E-W Street	N-S Street	Traffic Control	# of Crashes	Crash Rate MEV	Summary	Possible Explanation
Bridge St	11th St	None	2	0.77	No pattern found	No control / awkward geometry
Pleasant St	N 7th St	Signal	9	0.76	5 right-angle, 3 rear-end	Red-light running
Tomy St	S Moorehead Ave	Yield on Moorehead	2	0.75	No pattern found	None found
Roosevelt St	N Montana Ave	Stop control on Roosevelt	2	0.71	No pattern found	Stop sign on east side blocked by vegetation?
Leighton Blvd	Valley Dr E	Signal	9	0.68	4 rear-end, 3 right-angle	Small angle restricting sight distance in SW and NE corners
Stower St	S Montana Ave	3-way Stop	5	0.63	2 rear-end	5-legged intersection with 3-way stop
Stower St	S Haynes Ave	Signal	18	0.63	8 rear-end, 5 left-turn	High-volume
Leighton Blvd	N Haynes Ave	4-way Stop	7	0.63	3 rear-end	None found
Main St	N 7th St	Signal	11	0.63	3 rear-end, 3 right-angle	None found
Lincoln St	N Montana Ave	Stop control on Lincoln	2	0.63	No pattern found	None found

The top 10 highest road segment crash rates are provided in Table 10-3. Five of the top ten segments reported two crashes over the five-year period. Two segments are on Center Ave and two segments are on Strevell Ave.

As for the intersections, road segments with one reported crash were removed from this assessment. A graphic showing the locations of the top ten high crash rate intersections and road segments is provided in Figure 10-9.

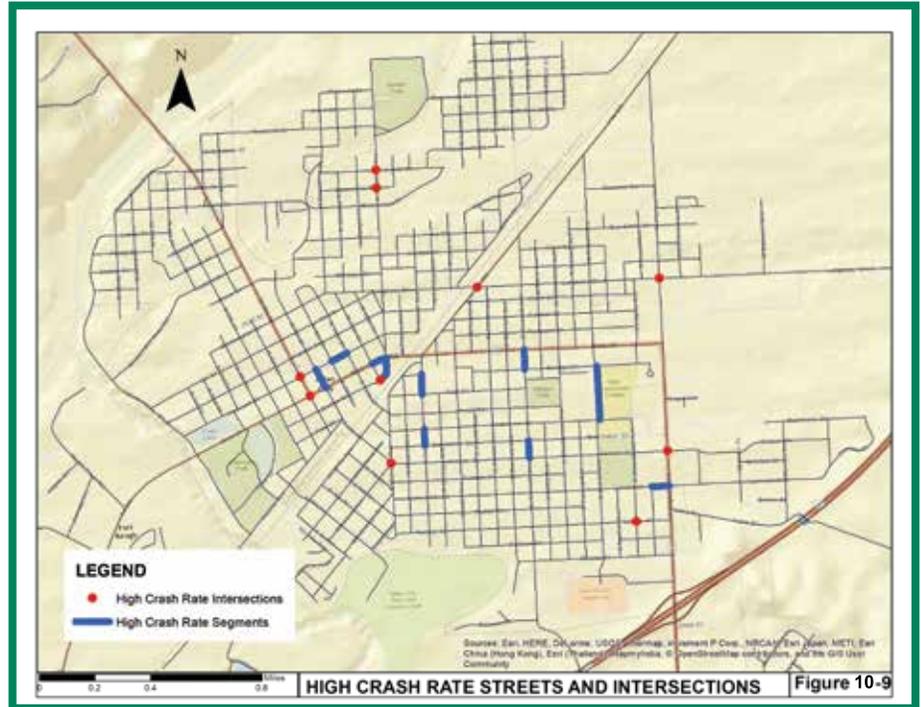


Table 10-3: Top 10 Road Segment Crash Rates

Roadway	# of Crashes	Crash Rate MVMT	Summary	Possible Explanation
S Center Ave b/w Dickinson St and Batchelor St	2	52.47	Both sideswipe opposite direction	Limited road width combined with poor road condition
S Center Ave b/w Bridge St and Fort St	3	32.43	No pattern found	Limited road width with on-street parking, residential driveways; next to high school
S Montana Ave b/w Main St and Bridge St	3	17.73	No pattern found	Off-street parking at Tire Factory next to road
Comstock Ave b/w Doeden St and S Haynes Ave	2	14.54	No pattern found	Recycling center with wide driveway
N 8th St b/w Pleasant St and Main St	3	13.06	No pattern found	None found
S Strevell Ave b/w Batchelor St and Stower St	3	12.47	No pattern found	Limited road width with on-street parking
Pleasant St b/w 9th St and 10th St	2	10.89	No pattern found	One pedestrian crash
Main St b/w 11th St and Montana Ave	5	7.43	3 rear-end	None found
S Strevell Ave b/w Main St and Bridge St	2	7.39	No pattern found	Limited road width with on-street parking
S Sewell Ave b/w Bridge St and Dickinson St	2	6.80	No pattern found	Miles Community College entrance

CRASH SEVERITY

The crash severity index is a measure of the relative severity of crashes (property-damage only or PDO, injury, and fatal/incapacitating injury) at specific locations (either a specific intersection or specific road segment). The index is defined by attributing a factor to crashes based on their severity. Generally, this factor is determined based on the ratio of the cost of a PDO crash to an injury crash or fatal / incapacitating injury crash. For this report, MDT factors were used (PDO = 1, injury = 3.0, fatal/incapacitating injury = 8.0). The index is totaled for the intersection/road segment and then divided by the total number of crashes to determine an average crash severity index per crash. It should be noted that for the entire study area no fatalities and only four incapacitating injuries were reported.

The crash severity index was calculated at the locations of the top ten intersection and road segment crash rates defined in Table 10-2 and Table 10-3. For these locations, only one road segment recorded a crash severity index greater than 1.0 (Pleasant Street between 9th Street and 10th Street recorded a severity index of 2.0). Seven intersections reported a crash severity index greater than 1.0 as listed below:

- Tompy Street and South Moorehead Avenue: 2.0
- Bridge Street and 11th Street: 2.0
- Stower Street and South Haynes Avenue: 1.59
- Leighton Boulevard and North Haynes Avenue: 1.57
- South Montana Avenue and Stower Street: 1.40
- Pleasant Street and 7th Street: 1.22
- Leighton Boulevard and Valley Drive East: 1.22

The Tompy Street and South Moorehead Avenue, and Bridge Street and South 11th Street intersections recorded the highest severity indices as they recorded a low number of crashes (two in these cases) with a high proportion of injury crashes (in these cases 50 percent or one injury crash out of two total crashes).

NEEDS AND DEFICIENCIES

Based on the included information, the proposed project list related to the improvement of safety on Miles City roadways is presented in Table 10-4.

Table 10-4: Safety-Related Projects List

Project Description	Rationale	Estimated Cost
Improve Protection at Spotted Eagle Road Grade Crossing	Add gates	\$385,000
Valley Dr / Leighton Blvd Intersection study	Study for safety and operations improvement	\$30,000
Main St / Valley Dr / Center Ave Intersection Study	Study for safety and operations improvement	\$30,000
Haynes Ave Corridor / Access Management Study	Address congestion, improve capacity and safety	\$50,000

CHAPTER 11 | SECURITY



Planning for security can reduce the negative impacts of man-made or natural disasters such as floods or attempts to sabotage the transportation system. This can also assist in the planning of large community events such as state fairs or the Bucking Horse Sale.

The Federal Emergency Management Agency (FEMA) Disaster Mitigation Act of 2000 sets legal requirements as a condition of receiving monetary grant assistance for mitigation of emergency events. The state plan for Montana is the Montana Emergency Response Framework (MERF, 2012). This plan identifies the state's responsibilities in an emergency and coordinates all emergency response plans in Montana.

Custer County and Miles City officials developed a local pre-disaster mitigation plan in 2005 which was updated in 2013 in conjunction with the state pre-disaster mitigation plan. The plan considers nine types of hazards: drought; earthquakes; flooding; hazardous materials and train derailment; wind, hail, and lightning; wildland fire, and winter storms. The plan described fifty-nine projects to accomplish six fundamental goals including:

1. Mitigate the potential loss of life, property, and infrastructure from flooding.
2. Minimize the economic impacts of drought.
3. Reduce the impacts of severe weather.
4. Reduce the probability of occurrence and/or impacts from a railroad or hazardous material incident.
5. Improve the county's capability to manage natural disaster incidents from beginning to end.
6. Improve planning and fire suppression and provide citizens with tools to live more safely in a wildland fire-prone ecosystem.

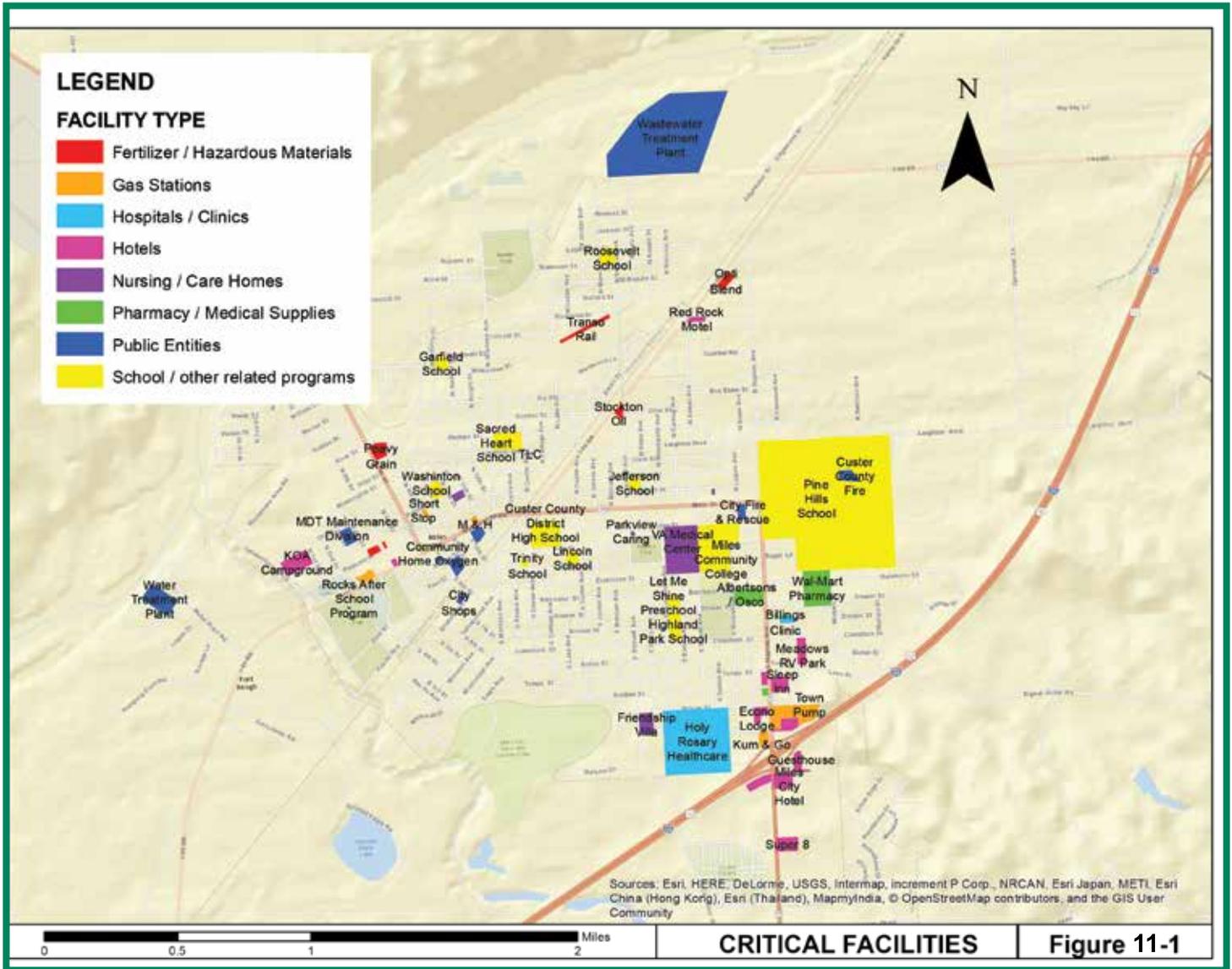
CRITICAL INFRASTRUCTURE

One significant part of an emergency management plan is the availability of surface facilities which can be used for emergency evacuations. Miles City has multiple facilities which can be used for this purpose, which include MT 59 (north and south), US 12, and I-94. The BNSF Railroad and Frank Wiley Airport can also be used in these circumstances.

One significant safety hazard for Miles City is the potential of flooding of the Yellowstone and Tongue Rivers. A major project proposed for the Miles City area is the upgrade of the existing levee to accommodate a 500-year flood event, making the community resilient to catastrophic flood events; thereby protecting life and property. Upgrade of the levee would provide security benefits by reducing the potential of flooding in this area.



The City of Miles City maintains a list of critical facilities which includes buildings such as hospitals, gas stations, hotels/motels, and schools, amongst others. A map showing all critical facilities within Miles City is provided in Figure 11-1.



CHAPTER 12 | RECOMMENDATIONS



AIRPORT FACILITIES

Improvements presented in the most recent Capital Improvements Plan (CIP) propose improvements which would improve operational aspects of the airport, support additional services, and potentially allow resumption of passenger service.

BICYCLE AND PEDESTRIAN FACILITIES

The general goal of these projects is to improve non-motorized connectivity. This could provide opportunities for walking that may improve health while reducing pollution and congestion. The priorities for the projects will vary depending on neighborhood interest and funding desire. The sidewalks complete missing links of existing walkways, providing connections to key population and public facilities (schools, parks, etc.).

The proposed trails connect several public parks such as Spotted Eagle Park, Riverside Park, Water Plant Park, Bender Park, and the two cemeteries south of the city (the Custer County Cemetery and the Eastern Montana Veteran's Cemetery). Non-motorized access would also be provided to the Southgate Subdivision.

FREIGHT AND RAIL

Changing the location of the truck route will improve efficiency for freight by reducing turning movements as well as reduce confusion due to the non-linear nature of the existing route. Construction of an Inter-modal Rail / Truck Transloading facility will increase the economic vitality of Miles City, allowing local trucking companies greater opportunities.

ROADWAYS

The streets projects in this section are recommended in order to improve operation and safety of streets and highways identified through the planning process.

SAFETY

Several studies are included in this plan to evaluate locations with observed safety concerns and provide recommendations for improving safety. Some of the more common types of safety improvements with proven benefits include road diets, flashing yellow left-turn arrows at signalized intersections, medians and pedestrian islands and pedestrian hybrid beacons at locations with significant pedestrian volumes.

OVERALL PROJECTS LIST

These projects were identified through Capital Improvement Plans (CIPs), public and inter-agency feedback, and recommended by the consultants through the transportation planning process. The entire list of committed and recommended projects encompassing all modes of transportation is provided in Table 12-1. Projects are presented by transportation mode (Air, Bicycle/Pedestrian, etc.), and by implementation time-frame (short-term, long-term, etc.).

Table 12-1: Recommended Long-Range Transportation Plan Project List

PROJECT DESCRIPTION	RATIONALE	ESTIMATED COST
AIRPORT FACILITIES		
SHORT-TERM		
Obtain instrument approach procedures for Runway 12-30	In order to provide lower approach minimums	N/A
Aeronautical survey for Runway 4-22	Threshold relocation and an e-alp update	\$140,000
MEDIUM-TERM		
Construction of apron access and partial parallel taxiways	Construction of taxiway system beginning at approximate midpoint of Taxiway B heading west perpendicular to Runway 12-30 intersecting with a partial parallel taxiway from Runway 22 to remove to eliminate 5-node intersection. Sections of taxiway B between partial parallel and hangar access taxiways will also be removed	\$560,000
Relocate helipad to southwest corner of existing apron	Remove conflicts with high-traffic area	\$71,000
Phase 2 (FBO) apron expansion	Apron expansion in northeast corner of existing apron area to serve as access for large FBO building	\$162,000
Routine pavement maintenance	Including crack routing/sealing and fog seal and application of pavement markings for all airport pavements	\$165,000
Relocate airport perimeter fence	For proposed expansion of Runway 4-22. Will be relocated to include runway protection zone and 600 feet from runway centerline to account for future clearance requirements	\$325,000
Relocate Runway 4-22 threshold and extend Runway 4	MT 59 currently traverses the runway protection zone of Runway 22. Relocating the runway will shift the RPZ and establish proper clearance of the area. To maintain runway length at 5,700 feet, Runway 4-22 will be extended to the SW to match distance of Runway 4 threshold relocation	\$2.2 million
Land Acquisition	Acquire two parcels of land within the runway protection zone for Runway 4-22	\$18,000
Relocate Sheffield Road	After the extension of Runway 4-22, Sheffield Road will be located within the RPZ	\$120,000
Routine pavement maintenance	Including crack routing/sealing and fog seal and application of pavement markings for all airport pavements	\$215,000
LONG-TERM		
Phase 3 apron extension (approximately 10,400 SY)	Additional expansion to the northwest for additional hangar lots as well as additional surface parking for aircraft	\$750,000
Parallel taxiway on Runway 12-30 (from Taxiway A to 12 end)	Complete full-length parallel taxiway for Runway 12-30 to eliminate back taxiing on Runway 4-22 and potentially lower the minimums for the approach procedures	\$4.5 million
Land Acquisition	Within the RPZ for Runway 12-30	\$80,000
Construct hangar taxi lanes for future hangar development to the west	A series of taxi lanes and taxiways will be constructed to allow access to the apron and the Runway 4-22 parallel taxiway	\$3,300
Relocate wind cone and segmented circle	Future hangar development to the west will require relocating the wind cone and segmenting circle. The project will move these west of Runway 12-30 approximately 1,200 feet northwest of the end of Runway 12	\$25,000
Environmental Assessment	For Extension of Runway 4-22	\$100,000
Extension of Runway 4-22	Extension is approximately 1,600 ft to a total length of 7,300 ft to allow for higher approach category aircraft.	\$2.9 million
Runway 12-30 rehabilitation	The last rehabilitation was completed in 2008. The project will also include runway lighting circuitry if necessary	\$4,000,000
Routine pavement maintenance	Including crack routing/sealing and fog seal and re-application of pavement markings for all airport pavements	\$215,000
Construct full-length parallel taxiway for Runway 4-22	To eliminate need to back-taxi on Runway 4-22 and aid in development of instrument approach procedures with lower visibility minimums	\$7.5 million

Table 12-1: Recommended Long-Range Transportation Plan Project List (Continued)

PROJECT DESCRIPTION	RATIONALE	ESTIMATED COST
BICYCLE / PEDESTRIAN		
SW1: Woodland Park	Establish connectivity along the south side of Edgewood St., west side of N. Merriam Ave. and north side of Robinson St.	\$87,000
SW2: Bender Park Perimeter	Establish a circuitous sidewalk around a major city park	\$196,000
SW3: Baker Addition	Provides east-west connectivity on Alice & Truscott Streets and the east side on Woodbury St.	\$161,000
SW4: Garfield Elementary Neighborhood	Infill of linear gaps along the south side of Lincoln St., both sides of Roosevelt St. and along the east side of N. 7th Street	\$118,000
SW5: Park Addition	Infill of a linear gap on the east side of N. Montana Ave., several spot gaps on Woodbury St., Phillips St., Gordon St. and Leighton Blvd.	\$167,000
SW6: Hunters Addition	Infill of a corridor gap along State Highway 59/N. 7th St., from Tatro St. to Washington St.	\$164,000
SW7: Milwaukee Park	Establishment of a sidewalk corridor on both sides of Tatro St., the north side of Lewis St. and spot gaps on N. 2nd St. and N. 3rd St.	\$190,000
SW8: Gordon Addition	Corridor gap on N. 5th St. from William St. to Washington St., sidewalk on the north side of Hubbel St., and connectivity to the SW7 neighborhood.	\$149,000
SW9: Riverside Park	Linear gap to establish sidewalk along the north side of Pleasant St. from N. 5th St. to Dike Rd. and misc. spot gap infills on N. 2nd St. & Orr St. Also includes linear gap along the north side of Pacific Ave. and Riverside Park connections from the existing walk, across the tracks to S. 4th St.	\$189,000
SW10: Original Townsite	Sidewalk along the south side of Yellowstone Ave. and misc. spot gap infill on S. 4th, 5th and 6th Streets	\$120,000
SW11: N. Snyder Addition	Linear gap on the north side of Tompy St. and Butler St. misc. spot gap infill on Center, Lake and Custer Avenues	\$155,000
SW12: Leighton Garlocks	Corridor gap on the south side of Brisbin St. from Strevelle Ave. to Prairie Ave.	\$153,000
SW13: Highland Park	Linear gap on the north side of Butler St., spot gaps on S. Merriam Ave., Cale Ave., Earling Ave. and Sewell Ave.	\$150,000
SW14: Pioneer Meadows	Linear gap on Tompy St. from S. Moorehead Ave. to S. Haynes Ave.	\$184,000
SW15: Steadmans Ace	Neighborhood gap bordered and within Dickinson St., S. Haynes Ave., Comstock St. and S. Sewell Ave.	\$314,000
SW16: Highland Park N.	Spot gap infill along Dickinson St., Earling Ave., Stower St., Brisbin St.	\$133,000
SW17: S. Snyder Addition	Corridor gap on both sides of Dickinson St. from Strevelle Ave. to S. Montana Ave., and spot gap infill on Jordan Ave. and Custer Ave.	\$137,000
SW18: Wibaux Park	Spot gap infill on Fort St., Pearl St., Bridge St., and linear gap on Bridge St. from Winchester Ave. to S. Legion Ave.	\$184,000
SW19: Clark East Side	Spot gap infill on Pleasant St., Palmer St. and Stacy Ave.	\$199,000
SW20: Eastside Addition	Corridor gap on Leighton Blvd. and spot gaps on Palmer St.	\$109,000
SW21: Residence Park	Corridor gap on Leighton Blvd., N. Strevelle Ave.	\$154,000
SW22: Frontage Road	Corridor gap on South Haynes Avenue	\$376,000
SW23: Southgate Meadows	Corridor gap on the north side of Horizon Parkway and west side of Ponderosa Drive	\$209,000
TRL24: Dike Road Trail	Approximately 4.0 miles of multi-use trail rebuilt along with the levy and maintenance road	\$2,400,000
TRL25: Cemetery Road Trail	Approximately 1.4 miles of multi-use trail from Balsam Drive to S. Haynes Ave.	\$850,000
TRL26: Fairground Loop Completion & Spotted Eagle Trail Connection	Approximately 0.3 miles of multi-use trail completing the existing loop and providing an off-street connection to Spotted Eagle	\$190,000
TRL27: Truscott Street Path	Approximately 0.4 miles of multi-use trail	\$217,000
TRL28: Wilderness Area Road Trail	Approximately 0.56 miles of multi-use trail connecting north downtown to the Tongue River	\$239,000
TRL29: Water Plant Road Trail	Approximately 0.5 miles of multi-use recreational trail.	\$339,124

Table 12-1: Recommended Long-Range Transportation Plan Project List (Continued)

PROJECT DESCRIPTION	RATIONALE	ESTIMATED COST
FREIGHT AND RAIL		
Re-align truck route	Existing truck route is not well marked and includes many turning movements making it challenging to navigate	\$1.3 million
Establish Intermodal Truck / Rail Transloading Facility	Economic development opportunity to improve the exchange of goods between freight and rail	\$20 – 30 million

PROJECT DESCRIPTION	RATIONALE	ESTIMATED COST
ROADWAYS		
SHORT-TERM		
Dickinson St extension	Connect to Haynes Ave	\$320,000
Broadus interchange improvement	Upgrade bridges; construct roundabouts	\$8.3 million
Haynes Ave Corridor / Access Management Study	Address safety and operations	\$50,000
Main St / Valley Dr / Center Ave intersection study	Address safety and operations	\$30,000
Valley Dr / Leighton Blvd intersection study	Address safety and operations	\$30,000
Main St Signal Timing Study	Address operations along Main St corridor	\$75,000
I-94 / Leighton Blvd interchange feasibility study	Additional connection to I-94, especially with proposed truck route change	\$75,000
LONG-TERM		
Spotted Eagle Grade Crossing Protection	Add crossing protection	\$385,000
Provide second access to Southgate subdivision	Provide secondary access for emergency services and to relieve congestion	\$4.8 million
Signal Butte Rd / Love Ln improvements	Address future safety and operations	\$1.5 million
Dike Road construction	Address future safety and operations	\$4.9 million
Grade-Separated Crossing at Baker Highway	Over Railroad and Valley Dr E in conjunction with Levee Road construction	\$13.5 million
Cemetery Rd improvements	Address future safety and operations	\$2.9 million

CHAPTER 13 | FINANCIAL PLAN



FEDERAL FUNDING SOURCES

Federal sources have legal requirements associated with them in order to be eligible. These usually apply only to state and federal highway projects and are administered by the MDT.

- **National Highway Performance Program (NHPP):** Provides funding for National Highway System (includes Interstate) roads and bridges. Allocated to Districts by the Montana Transportation Commission (MTC).
- **Surface Transportation Block Grant Program (STBG):** Federally apportioned to Montana and allocated by the MTC to various programs, including the Surface Transportation Program Primary Highways (STPP), Surface Transportation Program Secondary Highways (STPS), the Surface Transportation Program Urban Highways (STPU), and the Surface Transportation Bridge Program (STPB), as well as set-asides for programs including the set-aside program of Transportation Alternatives and Recreational Trails. The Federal share for this program is 86.58 percent and the State is responsible for the remaining 13.42 percent. The State share is funded through the Highway Authority State Special Revenue Account (HSSRA) if the project is on-system; the sponsor provides the match if the project is off-system.
- **Highway Safety Improvement Program (HSIP):** Allocated by MTC to safety improvements consistent Montana's Comprehensive Highway Safety Plan (CHSP). Projects must correct or improve a hazardous road location or feature, or address highway safety problem.
- **Interstate Maintenance (IM):** MTC approves and awards projects for improvements on the Interstate Highway System which are let through a competitive bidding process. The IM program finances highway and bridge projects to rehabilitate, restore, resurface and reconstruct the Interstate System. MDT districts are allocated IM funds by the MTC based on system performance. The federal share for this program is 91.24 percent and the State is responsible for the remaining 8.76 percent. The State share is funded through HSSRA.
- **Urban Pavement Preservation Program (UPP):** Sub-allocation of the STPG that provides funding to urban areas with qualifying pavement management systems, as determined jointly by MDT and FHWA. This sub-allocation is approved annually by the MTC and provides opportunities for pavement preservation work on urban routes (based on system needs and identified by the local pavement management systems.)
- **Federal Lands Access Program (FLAP):** Created by MAP-21 for use on public roads, bridges, trails, and transit systems which provide access to federal lands.
- **Rural Development - Community Facilities (RD-CF):** Funding branch of the US Department of Agriculture (USDA) including both loans and grants which can be used for street improvement projects.
- **Motor Carrier Safety Assistance Program (MCSAP):** Grant program providing financial aid to States to improve safety by reducing the number and severity of accidents involving commercial motor vehicles.
- **Community Development Block Grant Program (CDBG):** Program funded by US Department of Housing and Urban Development (HUD) used by local governments to provide housing for low-income households. These funds can be used for construction of transportation facilities.
- **Federal Aviation Administration (FAA):** Federal grant for airport projects which will fund ninety percent of the project.

STATE FUNDING SOURCES

State funding for transportation projects in Montana is distributed by the MDT.

- **State Fuel Tax:** 27.75 cents per gallon on gasoline and diesel fuel used for transportation purposes. The funds are allocated based on population, street mileage, and land area for construction, reconstruction, rehabilitation, and maintenance of rural roads or city streets and alleys. These funds may also be used for the local match of federal funds for streets which are part of the primary, secondary or urban highway system.
- **Rail and Loan Funds; Montana Rail Freight Loan Program (MRFL):** Revolving loan fund administered by MDT for construction, reconstruction, and rehabilitation of railroads and related facilities. Loans are targeted to rehabilitation and improvement of railroads and their attendant facilities, including sidings, yards, buildings and intermodal facilities. Rehabilitation and improvement assistance projects require a 30 percent loan-to-value match. Facility construction assistance projects require a 50 percent match.
- **Treasure State Endowment Program (TSEP):** Provides grants for projects to address issues related to health and safety improvements. Bridges projects are eligible for this program.
- **INTERCAP Loan:** A low-interest state loan which can be utilized to finance any city-sponsored project.
- **Montana Coal Board:** Grant program for areas affected by an increase or reduction of coal production. Funds can be used to assist in construction and reconstruction of designated portions of highways that serve the areas affected by coal development.
- **Big Sky Economic Development Trust Fund Program:** Provides state funds to promote long-term stable economic growth. Financial assistance can be provided in the following two categories: economic job creation projects and planning projects.
- **Montana Aeronautics:** This grant program will fund up to 5 percent of an airport project, while the loan program will fund up to 10 percent of an airport project. Both sources can be used in combination for the same project.

LOCAL FUNDING SOURCES

These sources are generated and distributed by the local government agency.

- **Donations:** Private donations to local government or qualified non-profit organization.
- **Developer contributions:** Cash-in-lieu of park lands may fund trails or the local entity may opt to assess impact fees.
- **Special Improvement District (SID):** Property-based tax district that generates funds to construct public improvements.
- **Tax Increment Financing (TIF):** Allows a local government to generate revenues for a group of blighted properties targeted for improvement, known as a TIF district. As property values increase with improvements made within the district, the incremental increases in property tax revenue are placed in a fund used for public improvements within the district.
- **City Fuel Tax:** Maximum of two cents per gallon increased in one cent increments.

At this time, project priorities are not specifically assigned to the list of recommended projects. However, a projected time-line is assigned (short-term, long-term, etc.). Individual project priorities should be determined by the City of Miles City's Capital Improvement Plan. Potential funding sources for each proposed project in this plan are presented in the table in Appendix D.

APPENDIX A

Advisory Committee Membership | Meeting Participants | Meeting Summary

Name	Representing	Title
Carol Strizich	MT Dept of Transportation	Supervisor, Statewide & Urban Planning
Corrina Collins	MT Dept of Transportation	Planner, Statewide & Urban Planning
Dan Martin	MT Highway Patrol	Sargent
Dawn Colton	City of Miles City	Planner
Gary Warren	Miles City Fire & Rescue	Fire Chief
Jason Strouf	Custer County	Commissioner
Jeff Erlenbusch	City of Miles City	Council Person (as of Jan 2016)
Jeff Langkau	Frank Wiley Field	Airport Manager
Keith Bithell	MT Dept of Transportation - Glendive District 4	Transportation Engineer
Mark Reddick	Miles City Police	Captain
Roxanna Brush	City of Miles City	Councilperson
Troy Ask/Tina Schmidt	City of Miles City	City Shop Laborer

Name	Representing
Paul Lewis	Holy Rosary Healthcare
Mike Coryell	Miles City Economic Development
Jeff Erlenbusch	Ward 4, City Council-elect
Dwayne Andrews	City Council
Tara Andrews	MSU Extension, RSVP
Mike Stevenson	Stevenson Design
John Gordon	Unified School District
Ross Lawrence	Miles Community College
Sylvia Danforth	DEAP
Brandon Janshen	Kiwanis, Milestown Community Improvement
Keith Campbell	Miles City School District
Dawn Colton	City of Miles City
Mark Reddick	Miles City Police Department
Doug Nelson	Trucking
Molly Holmen	WST Energy
Ashley Roness	Miles City Star
Dolores P. Wilson	Citizen
Dave Jewell	Citizen
Ray Miller	
Jerry Forman	Miles Community College
Dale Bartz	Miles City Planning Board
Susan Hocker	Citizen
Burelt Krufzfeldt	Citizen
Jerry Seylatz	Citizen
Ken Holmlund	House District 38

Keith Hall	
Dwayne Rude	Home Owner
Paul Strsgel	Home Owner
Kevin Raasch	Bloedron Lumber
Nathan Jacobson	Home Owner
Jack Austin	Home Owner
Jerry Singleton	Cowtown Ag
Ed & Mavis Heinle	
David Breisch	
Mark Petersen	Fort Keogh
Lew Valheim	Miles City Economic Development
Peg Meteuleeg	
Jason Strouf	County Commissioner
Tina Schmidt	City of Miles City



KEY THEMES FROM FOCUS GROUPS

MEETING DATES:	DECEMBER 2, 2015 AND DECEMBER 3, 2015
PROJECT NAME:	MILES CITY LONG RANGE TRANSPORTATION PLAN
MEETING TYPE:	FOCUS GROUPS
MEETING PURPOSE:	TO COLLECT QUALITATIVE DATA RELATING TO THE AREAS OF FOCUS FOR THE MILES CITY LONG RANGE TRANSPORTATION PLAN

FOCUS AREA #1: BICYCLES AND PEDESTRIANS

Approximately 50 percent of the participants indicated that they own a bicycle, and about half of them utilize their bicycle as a regular mode of transportation. The bicycle mode is used for commuting to work, exercise and general recreation. Utilization of the bicycle for recreation most often involves dogs and family members (children). No participant mentioned any organized group riding.

Most people commence their bike ride from their place of residence. Destinations include civic centers (courthouse, post office), Cemetery Road, Fairgrounds, Haynes Avenue, the hospital, Layton Boulevard and the dump. Participants indicated that there is not a strong presence of students who ride their bikes to school.

The challenges to the bicycle mode of transportation falls into three categories: education, encouragement and infrastructure. Many participants indicated that there is a “tough riding environment” due to narrow shoulder widths and steep ditch profiles. This is particularly prevalent on Cemetery Road where limited sight distance around curves is an issue.

Participants felt that there was room for improvement to get more students to bike or walk to schools. They felt that a lack of a formal encouragement program, coupled with lacking infrastructure and high vehicle use precludes many parents from letting their kids utilize bicycle or pedestrian transportation choice. Ironically, Miles City has one of the best programs in the State with regards to bicycle education as an institutionalized program in the school. Participants felt that often the students were more informed on the rules of the road than drivers.

Participants were aware of bicyclists around town. Miles Community College has seen an increase in the number of college students who are utilizing bicycles. Those who utilize bicycles indicated an average distance coverage of about four to five miles. This is consistent with the average bicycling trip (4 miles) in the United States. The education and encouragement component within the schools was a source of community pride.

Approximately 80 percent of the participants walked for exercise, recreation or commute. Many who did not utilize a bicycle indicated their preference for walking when given a choice. Many utilize walking as a way for health and exercise, but many utilize this mode for commuting to work as well. Children and dogs were cited as companions when utilizing this activity, although people often walked alone.

Origins include homes and work. Destinations include the walking path at the hospital, Spotted Eagle, the Fairgrounds, Downtown, Main Street and within neighborhoods. A couple of participants shared their experiences walking along Haynes Avenue. Additional areas include the schools, Head Start and Eagles Manor.

Significant discussion centered on the sidewalk network. Many expressed frustration with the intermittent gaps that occur throughout neighborhoods. Busy street crossings are a challenge, even with signage and controls. Several participants discussed a lack of signage as an issue.

Opportunities include the use of crossing guards. Participants also commented positively on the progress for addressing accessible street corners. Much discussion centered on enforcement: the way the laws are interpreted, the use of law enforcement and development regulations. There appeared to be a lack of understanding on how regulations can solve their perceived issues.

Vulnerable populations included the mobility-impaired, elderly and students. Downtown was an area that was cited for a visible number of these people, although none of the participants identified themselves, individually, as a part of these groups.

FOCUS AREA #2: TRANSIT

Participants did identify with an affiliation to mobility-impaired organizations. Transit was cited as a need for people who are economically challenged, people over the age of 65 and people with disabilities. Miles City does not have a regular intra-city transit or bus system. Many of the residents rely on the private taxi service to fulfill this mode choice.

In general, the taxi service works well for Miles City. Riders like the non-scheduled, individualized service that a taxi provides. However, the taxi service falls short when it comes to accessible modes of transportation. The private service's fleet currently does not contain a wheelchair accessible van, and that was cited as a need in the community. Other limitations to the taxi service are the hours of service. Participants felt that for community safety, particularly for special events and weekends that the service should extend past bar closing.

Miles Community College has been offering day-trip bus excursions to places like Fort Peck and Billings. This has allowed the vulnerable populations the opportunity to experience more than the local community. The Veterans Administration does have a van that transports veterans to medical facilities in Miles City and beyond.

Miles City schools do not offer in-town school bus routes. At the high school level, outside communities have feeder buses to the high school in Miles City. There is also a special needs bus that runs for the mobility impaired. This is one of the few if only school districts that does not offer a regular school bus service. This results in much of the school-area congestion with passenger vehicles that was cited in the discussions.

FOCUS AREA #3: AIR SERVICE

Participants indicated that they utilized the commercial passenger air service from Miles City. Two participants currently travel weekly to destinations that used to be served from Miles City. The flight destination that was most desired was Denver, Colorado, followed by Helena, Montana. Participants indicated that a Miles City to Billings, Montana service was not worthwhile, as no time was saved between driving to Billings versus arriving two hours early at the Miles City Airport. One participant indicated that some Miles City air passengers are currently driving as far as Bozeman-Belgrade to capitalize on flight options and costs. No participants indicated that they are traveling to Glendive to utilize the regional air service there.

Passenger air service supported many industries. The hospital utilized the service for physicians, energy industries were utilizing flights for commuters and regular business. Social workers utilized the Helena service to interact with State Departments. Participants also relied on air service to Helena during the legislative sessions. They indicated that organizations had to be more strategic in their timing to travel to Helena without the air service as the travel time by vehicle limited their ability to effectively advocate at the legislature.

Participants indicated that Miles City is home to many local pilots. Most of the airplanes are single-engine aircraft.

The Miles City Airport is currently used for non-passenger service. It is recognized as a hub during fire season by federal land management agencies. The hospital utilizes the airport for both helicopter and fixed-winged medical aircraft. The fueling station is important. One participant indicated that several companies are having difficulty shipping hazardous materials as a part of regular business operations. It was suggested that due to the high number of energy companies, an evaluation of air freight service should be considered.

If commercial passenger air service resumed, participants indicated that the terminal would likely need renovations to meet TSA guidelines. Ground transportation to/from the airport was sometimes an issue, but local hospitality usually filled in with ride sharing.

FOCUS AREA #4: HIGHWAYS AND STREETS

Seventy-five percent of participants indicated that they own three or more vehicles. Participants were divided on their perception of how many of their trips are more or less than a mile. Considering that most of the urbanized area of Miles City is only two miles in diameter, it was not surprising to hear that many of the participants felt that their trips are less than a mile.

The most congested route cited were Haynes Avenue, Main Street and Strevelle Avenue. Streets that are utilized as cut-through streets include Tompy Street (with the most mentions); others mentioned were Legion Street, Stower Street, Wilson Street, Comstock Street, South Lake Street, Leighton Boulevard and North Jordan. In addition South Cale Avenue/ Winchester Avenue and Center Avenue were also mentioned as popular local roads, used for through traffic.

Many of the streets mentioned above have direct access to Haynes Avenue or lead near or past schools. Law enforcement indicates that while people may be utilizing these local roads as collectors, the abundance of uncontrolled intersections contributes to driver awareness and reduced speeds. Road widths on these streets with on-street parking results in many “mirror accidents” that law enforcement will document.

The intersection of Valley Drive East and Leighton Boulevard was mentioned as an area of concern. Several issues are affiliated with that intersection include signal timing, rail road crossings and vehicle stacking. This intersection is also missing a sidewalk.

The Main Street/Valley Drive East/South Center Avenue interchange is another area of concern. Confusing truck route signage has resulted in many trucks (almost 30 to 40 times this past summer) turning into the high school alley from North Cottage Avenue. Participants indicated that they have observed the confusion at all times of the day, not just during peak hours.

Those in the trucking industry indicated that 7th Street at Pleasant Street is a difficult area. The high number of patrons utilizing the post office with on-street parking creates conflicts with people walking in the travel lanes.

South Haynes Avenue and Wilson Street was also cited as a problem intersection due to the high number of trucks leaving the Town Pump gas station. The traffic flow on Haynes Avenue was perceived to not have enough vehicle gap time, making turning maneuvers difficult.

Street maintenance was recognized by the participants as an area that could always use improvement. In general, multiple people felt that the City was maximizing their use of resources for snow removal. Participants indicated that potholes and deteriorating street surfaces needed improvement faster than currently addressed. Multiple mentions were about the positive aspects of Main Street maintenance.

When asked about parking, participants had no concerns about the availability of parking in any area of town.

FOCUS AREA #5: FREIGHT

Several people mentioned the shortcomings of the current designated truck route. Confusing and inadequate signage is contributing to wrong turns. The Main Street underpass was also cited as a pinch point. While most semi drivers are aware of their height limitations, people driving or pulling recreational vehicles (RVs) are not. As a result, the bridge structure is hit, mostly by RV air conditioning units multiple times per year. Some participants indicated that navigation devices are not correctly indicating truck routes, leading to further confusion.

Participants indicated that almost all of them could identify the current truck route. Many indicated that the multiple turns and confusing signage limits the effectiveness of the route. Industries are now recommending to their drivers to avoid the through-town route completely, by utilizing the US Highway 12 Interchange to I-94 to the Highway 59 Interchange. The through town route has limited options for fuel supply, so the interstate route allows them to fuel up at Haynes Avenue before proceeding on to their destinations.

When asked about alternative truck routes, many indicated that Leighton Boulevard should be evaluated as a potential route.

Major origins and destinations for trucks include the Livestock Sale Yard, the truck stops/fueling stations off of Haynes Avenue, local gravel pits and industry businesses on the east side of town. The concentration of truck stops on Haynes Avenue has contributed to traffic congestion for all modes of transportation. Participants indicated that they would like to see the truck stops/fueling stations placed at the other interchanges as well.

Freight to rail exchange was discussed. Companies have indicated a need for freight to rail exchange. However several issues do not allow for an easy solution. Constraints to this include availability of land, zoning, floodplain designation and cost. According to industry sources, cost is the major prohibitive reason that any one company has not proceeded with a yard.

FOCUS AREA #6: RAIL

Within the past year, trains have been given the authority to travel at a higher rate of speed through Miles City. Participants indicated that they have noticed an increase in speed, to the fact that one individual has the timing down to “1 minute and 50 seconds for a train to go through.” Participants were unsure if the trains were traveling at the top speed, but felt that the speed has increased. While most indicated that they had split feelings about increased speed, they acknowledged that crossings were cleared faster, but they also had uneasy feelings about a catastrophic event at the higher speeds.

Participants indicated a high percentage of youth utilizing track crossings, particularly at Spotted Eagle Recreation area and at Main Street or South 10th Street. Law enforcement is monitoring these crossings

regularly, especially when youth are present. People (including adults) are often crossing in the area by Reynold's Market, with a "game trail" there. While "no trespassing" signs are present, they are often ignored.

Railroad crossings that need further safety evaluations include Leighton Boulevard and East Valley Drive; Spotted Eagle Road as it enters the recreation area also had multiple mentions.

FOCUS AREA #7: MISCELLANEOUS TOPICS

Participants felt strongly that growth in Miles City will occur to the south, along Highway 59 and to the east along Highway 12. West Main Street is also an area with some opportunity. They acknowledged that the floodplain issue will ultimately have an impact on new construction and affordability.

Participants felt that Miles City's long-term rate of growth will be steady, at or near a 2 percent average (as suggested). They recognized that growth will have its peaks and bottoms as the commodity markets in energy and agriculture change. Participants felt positive about the return of the younger generation, most with family ties to the community. In fact, one company chose to stay in Miles City due to its young workforce with local ties. It was noted that the health care field, which draws from a regional employment base is utilizing technology, allowing for tele-medicine opportunities. However, with an aging population, health care will continue to be a draw affecting employment, retail, housing and transportation within the community.

Miles City does an excellent job of providing retail opportunities that draws people from a vast region. In other meetings, citizens from Baker and Fairview, Montana have mentioned the importance of Miles City for services and shopping. Participants felt that because Miles City hosts many "events," that this creates a culture of inclusion and experience that people are seeking at all age groups.

The Southgate Subdivision was discussed due to the fact it has only one inlet/outlet. This particular neighborhood has a strong diversity of people, including economically challenged and active walkers and bicyclists. As a result, this places a larger portion of people on the road along Highway 59 and South Haynes Avenue. Without proper infrastructure to support these activities, there was great concern of the probability of an accident there. Participants also indicated a concern over access in the event of a fire, flood or other catastrophic event at the single point of entry.

APPENDIX B

FRANK WILEY FIELD (MILES CITY AIRPORT) CAPITAL IMPROVEMENT PLAN FY 2015-2034

The following is the Capital Improvement Plan for Frank Wiley Field (Miles City Airport) for the period of FY 2015 – FY 2034. A description and brief justification for each project is listed below:

Short-term (1-5 years)

2015 - Reconstruct Runway 4-22

This project will include the rehabilitation of Runway 4-22. The current runway is deteriorating in condition and is beginning to develop frost heave issues. Runway 4-22 will be reconstructed using a thicker layer of non-frost susceptible gravel and will include pavement underdrains.

2015 - Reconstruct northwest apron and Phase 1 apron expansion (approx. 2,500 S.Y.)

The northwest corner of the apron is in poor condition with failing pavement and is in need of reconstruction. The project will remove the existing pavement and base and construct a new pavement section in the area. The project will also include the construction of an expansion of the northwest corner of the apron to allow for increased apron capacity and is the first phase of development for new hangar access.

2015 - Replace Runway 12-30 visual markings with non-precision markings and pavement maintenance

In conjunction with the implementation of an instrument approach procedure, the markings for Runway 12-30 will be upgraded from visual to non-precision instrument. This will be done as with routine pavement maintenance including crack routing and sealing and the application of a fog seal.

2015 - Obtain instrument approach procedures for Runway 12-30

In order to provide lower approach minimums, Frank Wiley Field will seek to obtain instrument approach procedures for Runway 12-30.

2017 - Aeronautical survey for Runway 4-22 threshold relocation

A threshold relocation will require an aeronautical survey and an e-alp update. The aeronautical survey and reporting will be initiated in advance of the relocation to allow ample time for reporting and acceptance.

Mid-term (6-10 years)

Construction of apron access and partial parallel taxiways to eliminate 5-node intersection

The intersection of Runways 4-22 and 12-30 with Taxiway B create a 5 node intersection which creates a safety hazard. The construction of a taxiway system beginning at the approximate midpoint of Taxiway B heading west perpendicular to Runway 12-30 intersecting with a partial parallel taxiway from Runway 22 will remove the non-standard intersection. The sections of Taxiway B between the partial parallel and hangar access taxiways will also be removed to complete the removal of the 5-node intersection.

Relocate helipad

The location of the existing helipad conflicts with safe apron usage. It is currently located in a high-traffic area in the west-center of the existing apron. The helipad will be relocated to the southwest corner of the existing apron moving it away from existing operations.

Phase 2 (FBO) apron expansion (approx. 2,950 S.Y.)

The project will include the construction of an expansion of the northeast corner of the existing apron area. This expansion will serve as apron access for a large FBO building.

Relocate airport perimeter fence

The proposed future extension of Runway 4-22 will require relocation of the airport perimeter fence. The current fence will be relocated to include the runway protection zone and to a distance of 600 feet from runway centerline to account for future clearance requirements.

Relocate Runway 4-22 threshold and extend Runway 4

MT State Highway 59 currently traverses the runway protection zone of Runway 22. Relocating the runway threshold will shift the RPZ and establish proper clearance of the area. To maintain runway length at 5,700 feet, Runway 4-22 will be extended to the southwest to match the distance of the Runway 4 threshold relocation.

Routine pavement maintenance

Crack routing and sealing of all airport pavements to prolong the pavements serviceable life. Fog seal will be applied to oxidized pavement sections. Pavement markings will be re-applied to all areas with fog seal or deemed necessary due to deterioration from snow-removal activities.

Acquire Runway 4-22 Runway Protection Zones

In order to ensure land use is compatible with airport activities, two parcels of land that make up the runway protection zone for runway 4-22 will be acquired.

Relocate Sheffield Road

After the extension of Runway 4-22, Sheffield Road will be located within the runway protection zone (RPZ). Sheffield Road will be relocated outside of the current RPZ as well as the ultimate RPZ for planned future expansion.

Long-term (11+ years)**Phase 3 apron expansion (approx. 10,400 S.Y.)**

This project will expand the northwest corner of the existing apron. This expansion is needed to open up future hangar lots as well as produce additional surface parking for aircraft.

Partial parallel taxiway on Runway 12-30 (Taxiway A to 12 end)

The project will include the completion of the full-length parallel taxiway for Runway 12-30. The taxiway will eliminate the need for back taxiing on Runway 4-22 and will potentially lower the minimums for the approach procedures.

Acquire Runway 12-30 Runway Protection Zones

In order to ensure land use is compatible with airport activities, two parcels of land that make up the runway protection zone for runway 12-30 will be acquired.

Construct hangar taxilanes

Hangar development to the west of the apron will require access to the existing taxiway system. A series of taxilanes and taxiways will be constructed to allow access to the apron and the runway 4-22 parallel taxiway.

Relocate wind cone and segmented circle

Development of the hangar area to the west of the apron will require the relocation of the wind cone and segmented circle. The project will move the facility to the west of Runway 12-30 approximately 1,200 feet northwest of the 12 end.

Environmental Assessment for Runway 4-22 Extension

The environmental assessment will be prepared for the proposed extension of Runway 4-22 to allow for a determination well in advance of proposed construction.

Extend Runway 4-22 to 7,300 feet

Runway 4-22 will be extended to allow for higher approach category aircraft. The extension will lengthen the runway to the west approximately 1,600 feet.

Runway 12-30 rehabilitation

The last major rehabilitation project on Runway 4-22 was completed in 2008 and pavement conditions have reached critical. The project will also include a rehabilitation of the runway lighting circuit if necessary.

Routine pavement maintenance

Crack routing and sealing of all airport pavements to prolong the pavements serviceable life. Fog seal will be applied to oxidized pavement sections. Pavement markings will be re-applied to all areas with fog seal or deemed necessary due to deterioration from snow-removal activities.

Construct parallel taxiway for Runway 4-22

The project will include the construction of a full-length parallel taxiway for Runway 4-22. The parallel taxiway will eliminate the need to back-taxi on Runway 4-22 and will aid in development of instrument approach procedures with lower visibility minimums.

FY-2015 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Reconstruct RW 4-22	\$133,200.00	\$490,000.00	\$2,151,500.00	\$308,300.00	\$3,083,000.00	7/1/2015	6/30/2016
Reconstruct Northwest Apron	\$61,320.00	\$0.00	\$262,500.00	\$35,980.00	\$359,800.00	7/1/2015	6/30/2016
Pavement Maintenance RW-4-22	\$45,000.00	\$0.00	\$0.00	\$5,000.00	\$50,000.00	7/1/2015	6/30/2016
Pavement Maintenance RW 12-30	\$820.00	\$107,000.00	\$0.00	\$11,980.00	\$119,800.00	7/1/2015	6/30/2016
Northwest Apron Expansion	\$147,300.00	\$3,000.00	\$0.00	\$16,700.00	\$167,000.00	7/1/2015	6/30/2016
TOTAL FY 2015	\$387,640.00	\$600,000.00	\$2,414,000.00	\$377,960.00	\$3,779,600.00		

FY-2016 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2016	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2017 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Aeronautical Survey for RW 4-22 Threshold Relocation	\$0.00	\$135,000.00	\$0.00	\$15,000.00	\$150,000.00	7/1/2017	12/31/2018
TOTAL FY 2017	\$0.00	\$135,000.00	\$0.00	\$15,000.00	\$150,000.00		

FY-2018 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2018	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2019 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2019	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2020 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Reconfigure TW B / Runway Intersection	\$500,400.00	\$0.00	\$0.00	\$55,600.00	\$556,000.00	7/1/2020	12/31/2021
Pavement Maintenance Runways	\$0.00	\$76,500.00	\$0.00	\$8,500.00	\$85,000.00	7/1/2020	12/31/2021
Pavement Maintenance Taxiways	\$0.00	\$36,000.00	\$0.00	\$4,000.00	\$40,000.00	7/1/2020	12/31/2021
Pavement Maintenance Apron	\$0.00	\$36,000.00	\$0.00	\$4,000.00	\$40,000.00	7/1/2020	12/31/2021
FBO Apron Expansion	\$0.00	\$145,350.00	\$0.00	\$16,150.00	\$161,500.00	7/1/2017	12/31/2018
Relocate Helipad	\$0.00	\$63,720.00	\$0.00	\$7,080.00	\$70,800.00	7/1/2017	12/31/2018
TOTAL FY 2020	\$500,400.00	\$357,570.00	\$0.00	\$95,330.00	\$953,300.00		

FY-2021 - REQUIRED							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Environmental Assessment for Land and Future Improvements	\$0.00	\$90,000.00	\$0.00	\$10,000.00	\$100,000.00		
TOTAL FY 2021	\$0.00	\$90,000.00	\$0.00	\$10,000.00	\$100,000.00		
TOTAL FY 2015-2021	\$888,040.00	\$1,092,570.00	\$2,414,000.00	\$488,290.00	\$4,882,900.00		

To the best of my knowledge and belief, all information shown on this Capital Improvement Plan is true and correct and has been duly authorized by the Sponsor.

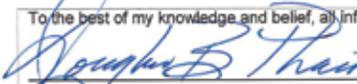
Douglas Phair, Chairman (Date) Miles City Airport Commission

5-YEAR CAPITAL IMPROVEMENT PLAN FOR (Miles City Airport)

DATE: 1/15/2015

FY-2021 - REQUIRED							
Project Description <i>(by Funding Year in Priority Order)</i>	FEDERAL FUNDS			LOCAL FUNDS	Total \$	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Environmental Assessment for Land and Future Improvements	\$0.00	\$90,000.00	\$0.00	\$10,000.00	\$100,000.00		
TOTAL FY 2021	\$0.00	\$90,000.00	\$0.00	\$10,000.00	\$100,000.00		
TOTAL FY 2015-2021							
	\$888,040.00	\$1,092,570.00	\$2,414,000.00	\$488,290.00	\$4,882,900.00		

To the best of my knowledge and belief, all information shown on this Capital Improvement Plan is true and correct and has been duly authorized by the Sponsor.

 1-15-15
 Douglas Phair, Chairman
 Miles City Airport Commission
 (Date)

FY-2022							
Product Description <i>(by Funding Year in Priority Order)</i>	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Relocate Airport Perimeter Fence	\$292,050.00	\$0.00	\$0.00	\$32,450.00	\$324,500.00		
Runway 4-22 Extension/ Threshold Relocation	\$1,470,180.00	\$479,220.00	\$0.00	\$216,600.00	\$2,166,000.00		
Acquire RW 4-22 RPZ	\$0.00	\$16,200.00	\$0.00	\$1,800.00	\$18,000.00		
Relocate Sheffield Road	\$0.00	\$104,580.00	\$0.00	\$11,620.00	\$116,200.00		
TOTAL FY 2022	\$1,762,230.00	\$600,000.00	\$0.00	\$262,470.00	\$2,624,700.00		

FY-2023							
Product Description <i>(by Funding Year in Priority Order)</i>	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2023	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2024							
Product Description <i>(by Funding Year in Priority Order)</i>	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2024	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2025							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Pavement Maintenance Runways	\$0.00	\$94,500.00	\$0.00	\$10,500.00	\$105,000.00		
Pavement Maintenance Taxiways	\$0.00	\$49,500.00	\$0.00	\$5,500.00	\$55,000.00		
Pavement Maintenance Apron	\$0.00	\$49,500.00	\$0.00	\$5,500.00	\$55,000.00		
Parallel Taxiway for RW 12-30				\$450,000.00	\$4,500,000.00		
Acquire Land for RW 12-30 Runway Protection Zones (8.0 Acres)				\$8,000.00	\$80,000.00		
TOTAL FY 2025	\$1,762,230.00	\$600,000.00	\$0.00	\$262,470.00	\$2,624,700.00		

FY-2026							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2026	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2027							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2027	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

FY-2028							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Runway 12-30 Rehabilitation (mill and overlay)				\$400,000.00	\$4,000,000.00		
TOTAL FY 2028	\$0.00	\$0.00	\$0.00	\$400,000.00	\$4,000,000.00		

FY-2029							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
No Project	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
TOTAL FY 2029	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

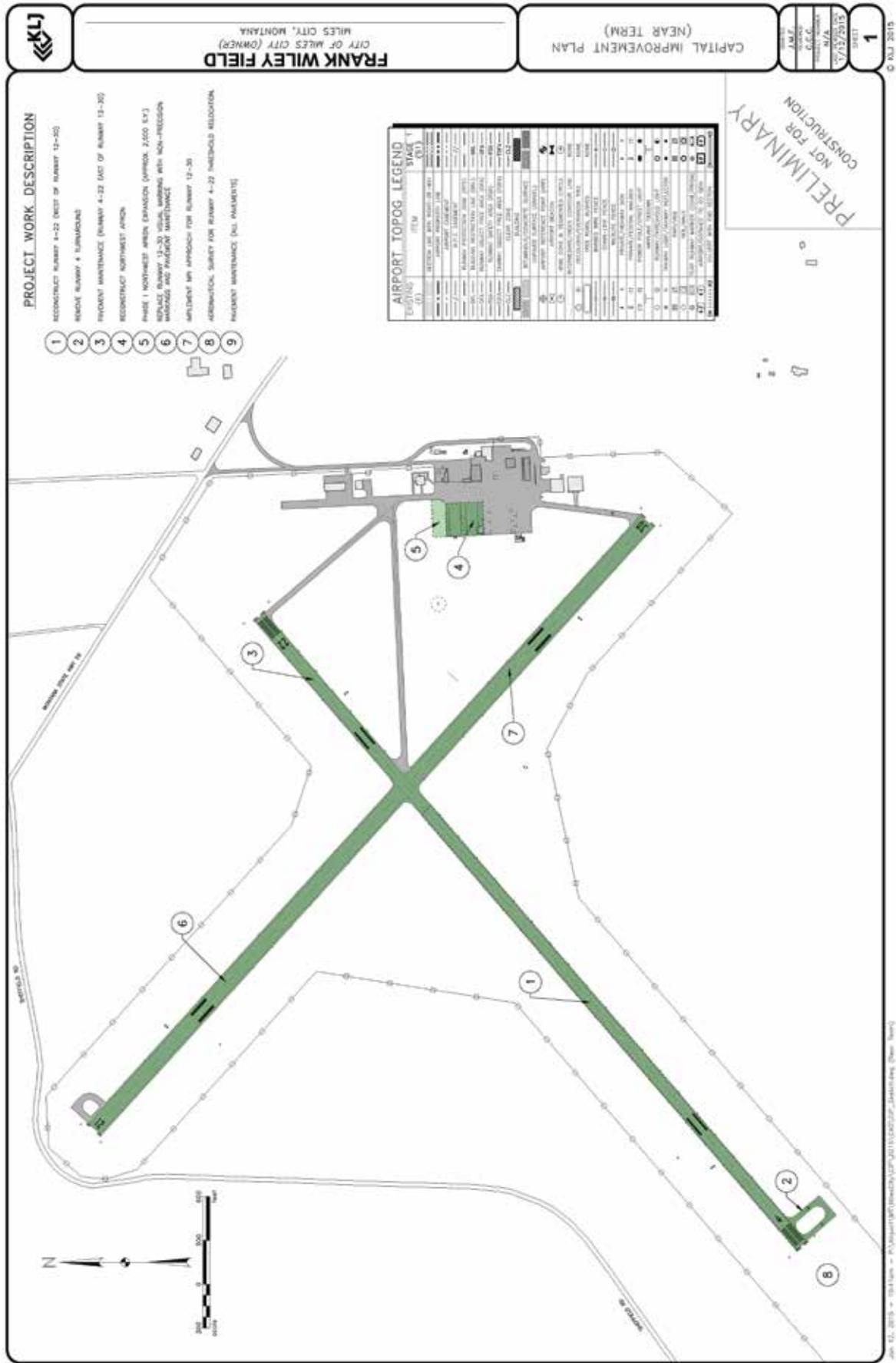
FY-2030							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Pavement Maintenance Runways	\$0.00	\$94,500.00	\$0.00	\$8,500.00	\$105,000.00		
Pavement Maintenance Taxiways	\$0.00	\$49,500.00	\$0.00	\$5,500.00	\$55,000.00		
Pavement Maintenance Apron	\$0.00	\$49,500.00	\$0.00	\$5,500.00	\$55,000.00		
Construct Hangar Access Taxilanes				\$325,000.00	\$3,250,000.00		
Relocate Windcone and Segmented Circle				\$2,500.00	\$25,000.00		
TOTAL FY 2030	\$0.00	\$193,500.00	\$0.00	\$347,000.00	\$3,490,000.00		

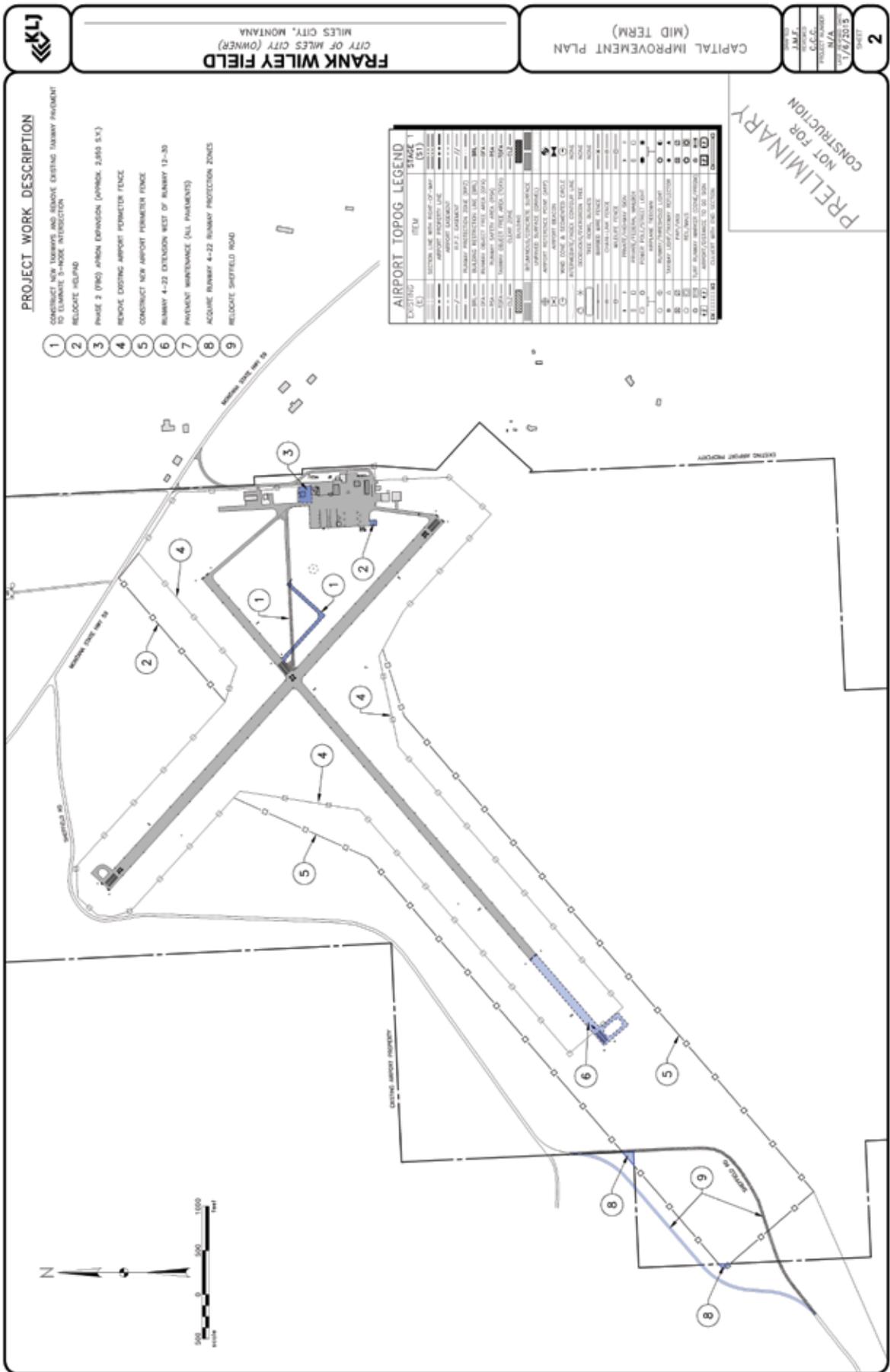
FY-2031							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Environmental Assessment for RW 4-22 Extension to 7,300-feet				\$7,500.00	\$75,000.00		
Environmental Assessment for RW 4-22 Parallel Taxiway				\$7,500.00	\$75,000.00		
TOTAL FY 2031	\$0.00	\$0.00	\$0.00	\$15,000.00	\$150,000.00		

FY-2032							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Parallel Taxiway for RW 4-22 (Earthwork and Drainage)				\$400,000.00	\$4,000,000.00		
TOTAL FY 2032	\$0.00	\$0.00	\$0.00	\$400,000.00	\$4,000,000.00		

FY-2033							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Parallel Taxiway for RW 4-22 (Paving and Electrical)				\$350,000.00	\$3,500,000.00		
TOTAL FY 2033	\$0.00	\$0.00	\$0.00	\$350,000.00	\$3,500,000.00		

FY-2034							
Product Description (by Funding Year in Priority Order)	Federal Funds			Local Funds	Total	Start Date	Completion Date
	St. Aprmnt	NPE	Discretionary	Other			
Phase III Apron Expansion (10,400 SY)				\$75,000.00	\$750,000.00		
Runway 4-22 Extension to 7,300 LF				\$286,000.00	\$2,860,000.00		
Parallel Taxiway for RW 4-22 Extension				\$140,000.00	\$1,400,000.00		
TOTAL FY 2034	\$0.00	\$0.00	\$0.00	\$501,000.00	\$5,010,000.00		





APPENDIX C

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
				Signing / striping to re-route truck route
Re-Align Truck Route				
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	4,500	\$20.00 /sq.yd.	\$90,000	Reconstruct 1,000 LF of Leighton Blvd. b/w Montana & Woodbury
Road Base (12")	4,500	\$10.00 /sq.yd.	\$45,000	Reconstruct 1,000 LF of Leighton Blvd. b/w Montana & Woodbury
Grading (Uncl.Ex.)	1,500	\$10.00 /cu.yd.	\$15,000	Reconstruct 1,000 LF of Leighton Blvd. b/w Montana & Woodbury
Borrow		\$15.00 /cu.yd.	\$0	
Curb/Gutter	650	\$15.00 /lin.ft.	\$9,750	
Sidewalk	300	\$30.00 /sq.yd.	\$9,000	
Utilities		\$75,000.00 /mile	\$0	
Drainage (Storm Inlets/Pipes)		\$300,000.00 /mile	\$0	
Signing/Striping	2.00	\$90,000.00 /mile	\$180,000	
Lighting		\$400,000.00 /mile	\$0	
Const. Traffic Control	0.20	\$85,000.00 /mile	\$17,000	
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
		/each	\$0	
		/each	\$0	
SUB-TOTAL			\$365,750	
Engineering/Design/Const. Serv. (20%)			\$73,150	
R.O.W. (purchase)	22,000	\$2.00 /sq.ft.	\$44,000	South side of Leighton Blvd b/w Montana & Woodbury
Relocate Res.	2	\$300,000.00 /each	\$600,000	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$1,082,900	
Contingency (20%)			\$216,580	
GRAND TOTAL			\$1,299,480	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
				replace bridges and construct roundabouts
Broadus interchange				
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")		\$20.00 /sq.yd.	\$0	
Road Base (12")		\$10.00 /sq.yd.	\$0	
Grading (Uncl.Ex.)		\$10.00 /cu.yd.	\$0	
Borrow		\$15.00 /cu.yd.	\$0	
Curb/Gutter		\$15.00 /lin.ft.	\$0	
Sidewalk		\$30.00 /sq.yd.	\$0	
Utilities		\$75,000.00 /mile	\$0	
Drainage (Storm Inlets/Pipes)		\$300,000.00 /mile	\$0	
Signing/Striping	0.20	\$90,000.00 /mile	\$18,000	
Lighting		\$400,000.00 /mile	\$0	
Const. Traffic Control	0.20	\$85,000.00 /mile	\$17,000	
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Bridge	18,000	\$150.00 /sq ft	\$2,700,000	40 ft width X (230' + 220') length
Traffic Signals		\$300,000.00 /each	\$0	
Roundabouts	2	\$1,500,000.00 /each	\$3,000,000	
		/each	\$0	
SUB-TOTAL			\$5,735,000	
Engineering/Design/Const. Serv. (20%)			\$1,147,000	
R.O.W. (purchase)	5,000	\$2.00 /sq.ft.	\$10,000	
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$6,892,000	
Contingency (20%)			\$1,378,400	
GRAND TOTAL			\$8,270,400	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Dickinson St extension - S Haynes Ave to S Moorehead Ave				Extend Dickinson St to S Haynes Ave
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	3,000	\$20.00 /sq.yd.	\$60,000	
Road Base (12")	3,000	\$10.00 /sq.yd.	\$30,000	
Grading (Uncl.Ex.)	750	\$10.00 /cu.yd.	\$7,500	
Borrow	750	\$15.00 /cu.yd.	\$11,250	
Curb/Gutter	1,300	\$15.00 /lin.ft.	\$19,500	
Sidewalk	300	\$30.00 /sq.yd.	\$9,000	
Utilities	0.15	\$75,000.00 /mile	\$11,250	
Drainage (Storm Inlets/Pipes)		\$300,000.00 /mile	\$0	
Signing/Striping	0.15	\$90,000.00 /mile	\$13,500	
Lighting		\$400,000.00 /mile	\$0	
Const. Traffic Control	0.15	\$85,000.00 /mile	\$12,750	
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
		/each	\$0	
		/each	\$0	
SUB-TOTAL			\$174,750	
Engineering/Design/Const. Serv. (20%)			\$34,950	
R.O.W. (purchase)	27,500	\$2.00 /sq.ft.	\$55,000	
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$264,700	
Contingency (20%)			\$52,940	
GRAND TOTAL			\$317,640	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Spotted Eagle Grade Crossing Protection				Install gates at railroad crossing
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")		\$20.00 /sq.yd.	\$0	
Road Base (12")		\$10.00 /sq.yd.	\$0	
Grading (Uncl.Ex.)		\$10.00 /cu.yd.	\$0	
Borrow		\$15.00 /cu.yd.	\$0	
Curb/Gutter		\$15.00 /lin.ft.	\$0	
Sidewalk		\$30.00 /sq.yd.	\$0	
Utilities		\$75,000.00 /mile	\$0	
Drainage (Storm Inlets/Pipes)		\$300,000.00 /mile	\$0	
Signing/Striping	0.10	\$90,000.00 /mile	\$9,000	
Lighting		\$400,000.00 /mile	\$0	
Const. Traffic Control	0.10	\$85,000.00 /mile	\$8,500	
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
Railroad X-ing Gates	1	\$250,000.00 /each	\$250,000	
		/each	\$0	
SUB-TOTAL			\$267,500	
Engineering/Design/Const. Serv. (20%)			\$53,500	
R.O.W. (purchase)		\$2.00 /sq.ft.	\$0	
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$321,000	
Contingency (20%)			\$64,200	
GRAND TOTAL			\$385,200	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Southgate Secondary Connection				provide second connection to the Southgate Subdivision
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	40,000	\$20.00 /sq.yd.	\$800,000	
Road Base (12")	40,000	\$10.00 /sq.yd.	\$400,000	
Grading (Uncl.Ex.)	20,000	\$10.00 /cu.yd.	\$200,000	
Borrow	20,000	\$15.00 /cu.yd.	\$300,000	Area for realignment requires considerable embankment.
Curb/Gutter		\$15.00 /lin.ft.	\$0	Assme rural section w/o curb
Sidewalk		\$30.00 /sq.yd.	\$0	Assume rural section w/o sidewalk
Utilities	1.70	\$75,000.00 /mile	\$127,500	
Drainage (Storm Inlets/Pipes)	1.70	\$300,000.00 /mile	\$510,000	
Signing/Striping	1.70	\$90,000.00 /mile	\$153,000	
Lighting	0.20	\$400,000.00 /mile	\$80,000	
Const. Traffic Control	1.70	\$85,000.00 /mile	\$144,500	
Misc. Major Elements		\$120.00		
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
SUB-TOTAL			\$2,715,000	
Engineering/Design/Const. Serv. (20%)			\$543,000	
R.O.W. (purchase)	360,000	\$2.00 /sq.ft.	\$720,000	
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$3,978,000	
Contingency (20%)			\$795,600	
GRAND TOTAL			\$4,773,600	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Signal Butte / Love Ln				improve Signal Butte Rd / Love Lane so it can be classified as a collector
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	16,000	\$20.00 /sq.yd.	\$320,000	
Road Base (12")	16,000	\$10.00 /sq.yd.	\$160,000	
Grading (Uncl.Ex.)	5,500	\$10.00 /cu.yd.	\$55,000	
Borrow	5,500	\$15.00 /cu.yd.	\$82,500	
Curb/Gutter		\$15.00 /lin.ft.	\$0	Assme rural section w/o curb
Sidewalk		\$30.00 /sq.yd.	\$0	Assume rural section w/o sidewalk
Utilities		\$75,000.00 /mile	\$0	
Drainage (Storm Inlets/Pipes)	0.70	\$300,000.00 /mile	\$210,000	
Signing/Striping	0.70	\$90,000.00 /mile	\$63,000	
Lighting	0.20	\$400,000.00 /mile	\$80,000	
Const. Traffic Control	0.70	\$85,000.00 /mile	\$59,500	
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
		/each	\$0	
SUB-TOTAL			\$1,030,000	
Engineering/Design/Const. Serv. (20%)			\$206,000	
R.O.W. (purchase)		\$2.00 /sq.ft.	\$0	
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$1,236,000	
Contingency (20%)			\$247,200	
GRAND TOTAL			\$1,483,200	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Dike Rd construction				Construct roadway along proposed levee
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	50,500	\$20.00 /sq.yd.	\$1,010,000	
Road Base (12")	50,500	\$10.00 /sq.yd.	\$505,000	
Grading (Uncl.Ex.)	31,500	\$10.00 /cu.yd.	\$315,000	Assume 1 ft. depth over ROW for length of project.
Borrow	31,500	\$15.00 /cu.yd.	\$472,500	
Curb/Gutter		\$15.00 /lin.ft.	\$0	Assume rural section w/o curb
Utilities	0.50	\$75,000.00 /mile	\$37,500	Assume utility conflicts only where road exists
Drainage (Storm Inlets/Pipes)	1.50	\$300,000.00 /mile	\$450,000	Reduced cost for rural construction
Signing/Striping	2.15	\$90,000.00 /mile	\$193,500	
Lighting		\$400,000.00 /mile	\$0	Lighting only major intersections
Const. Traffic Control	0.10	\$85,000.00 /mile	\$8,500	Only required were route follows existing roads
Misc. Major Elements				
Drainage Structures	4	\$75,000.00 /each	\$300,000	Misc. small drainageway crossings.
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
Environmental Mitigation	1	\$100,000.00 /each	\$100,000	
SUB-TOTAL			\$3,392,000	
Engineering/Design/Const. Serv. (20%)			\$678,400	
R.O.W. (purchase)		\$25,000.00 /Ac.	\$0	90 ft. ROW where new road is being constructed.
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$4,070,400	
Contingency (20%)			\$814,080	
GRAND TOTAL			\$4,884,480	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Baker Highway Grade-Separated X-ing				Crossing over/under Valley Dr E connecting Dike Rd and US-12
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	1,200	\$20.00 /sq.yd.	\$24,000	
Road Base (12")	1,200	\$10.00 /sq.yd.	\$12,000	
Grading (Uncl.Ex.)	1,000	\$10.00 /cu.yd.	\$10,000	
Borrow	1,000	\$15.00 /cu.yd.	\$15,000	
Utilities		\$75,000.00 /mile	\$0	
Drainage (Storm Inlets/Pipes)	0.30	\$400,000.00 /mile	\$120,000	
Signing/Striping	0.30	\$90,000.00 /mile	\$27,000	
Lighting		\$400,000.00 /mile	\$0	
Const. Traffic Control	0.30	\$85,000.00 /mile	\$25,500	Only required were route follows existing roads
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	Misc. small drainageway crossings.
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
Overpass Bridges	60,000	\$150.00 /sq.ft.	\$9,000,000	Assume 1500 ft. span
Environmental Mitigation	1	\$200,000.00 /each	\$200,000	
SUB-TOTAL			\$9,433,500	
Engineering/Design/Const. Serv. (20%)			\$1,886,700	
R.O.W. (purchase)		\$25,000.00 /Ac.	\$0	90 ft. ROW for new road, 60 ft. for existing route.
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$11,320,200	
Contingency (20%)			\$2,264,040	
GRAND TOTAL			\$13,584,240	

CONCEPTUAL ESTIMATE OF PROJECT COSTS				
Miles City Long Range Transportation Plan				
Cemetery Road Improvements				Improve Cemetery Road to a collector to serve future traffic
ITEM	ESTIMATED QUANTITY	ESTIMATED UNIT COST	EXTENDED COST	NOTES
Asphalt (4")	38,750	\$20.00 /sq.yd.	\$775,000	Assumes complete reconstruction of Cemetery Rd
Road Base (12")	38,750	\$10.00 /sq.yd.	\$387,500	Assumes complete reconstruction of Cemetery Rd
Grading (Uncl.Ex.)	25,900	\$10.00 /cu.yd.	\$259,000	Assume 2 ft. depth over ROW for length of project.
Borrow	5,000	\$15.00 /cu.yd.	\$75,000	
Curb/Gutter		\$15.00 /lin.ft.	\$0	Assume rural section w/o curb
Utilities	0.50	\$75,000.00 /mile	\$37,500	Assume utility conflicts only where road exists
Drainage (Storm Inlets/Pipes)	0.50	\$300,000.00 /mile	\$150,000	Reduced cost for rural construction
Signing/Striping	1.70	\$90,000.00 /mile	\$153,000	
Lighting		\$400,000.00 /mile	\$0	Lighting only major intersections
Const. Traffic Control	1.70	\$85,000.00 /mile	\$144,500	Only required were route follows existing roads
Misc. Major Elements				
Drainage Structures		\$75,000.00 /each	\$0	
Canal Structures		\$150,000.00 /each	\$0	
Traffic Signals		\$300,000.00 /each	\$0	
SUB-TOTAL			\$1,981,500	
Engineering/Design/Const. Serv. (20%)			\$396,300	
R.O.W. (purchase)		\$25,000.00 /Ac.	\$0	90 ft. ROW for new road, 60 ft. for existing route.
Relocate Res.		\$300,000.00 /each	\$0	
Relocate Bus. or Comm. Estab.		\$400,000.00 /each	\$0	
SUB-TOTAL			\$2,377,800	
Contingency (20%)			\$475,560	
GRAND TOTAL			\$2,853,360	

CONCEPTUAL ESTIMATE OF SIDEWALK PROJECT COSTS

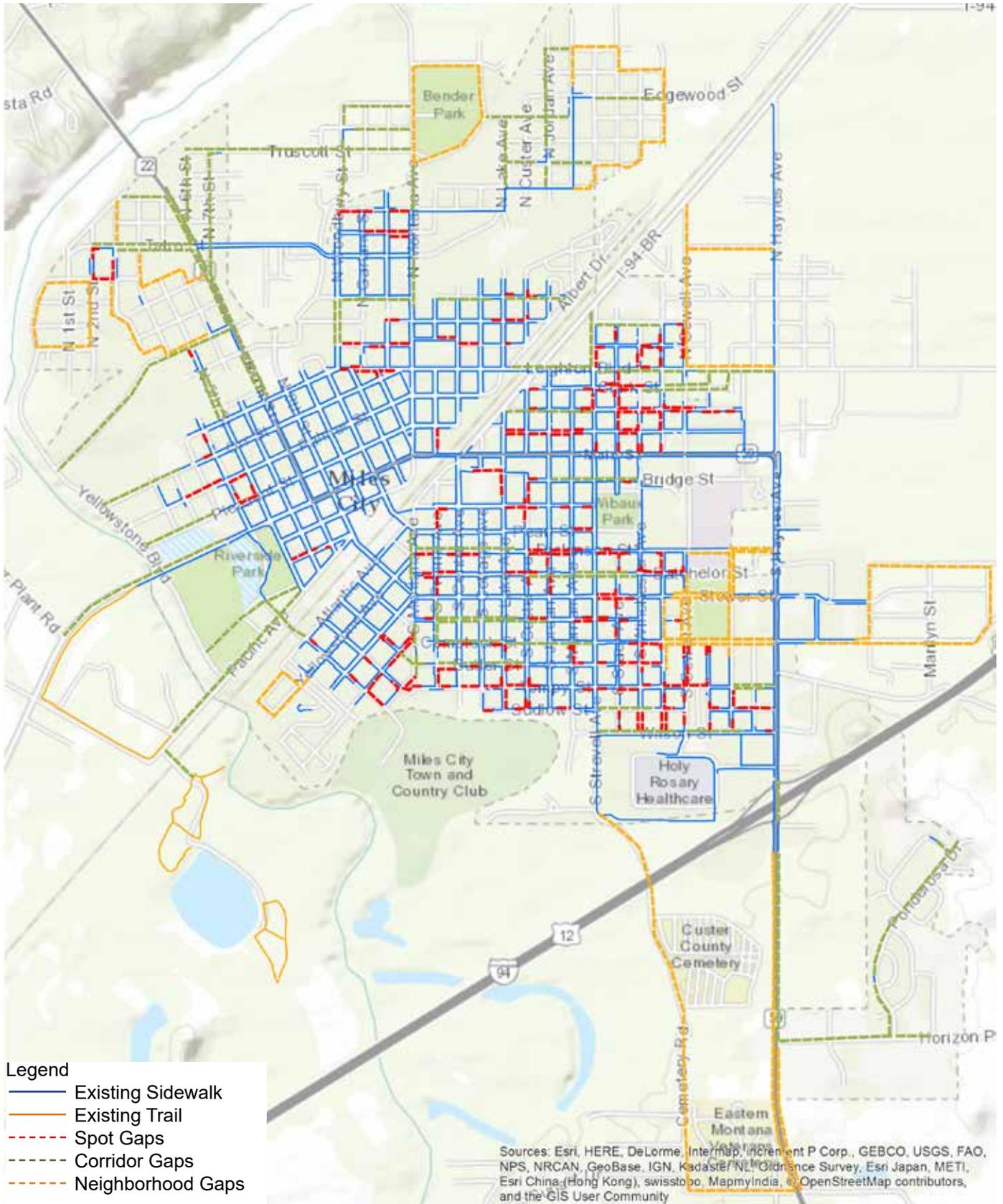
Project ID	Linear feet	Sidewalk Construction (LF)	\$ 30.00	A/E Fees (LF)	\$ 6.00	TOTAL	\$ 49.32
1	2,120.78					\$	104,596.62
2	4,758.45	Revolving Fund (LF)	\$2.10	Bond (LF)	\$0.90	\$	234,686.51
3	3,914.49					\$	193,062.60
4	2,880.02	Issuance (LF)	\$2.10	Contingency (20%)	\$ 8.22	\$	142,042.39
5	4,059.26					\$	200,202.46
6	4,000.33					\$	197,296.08
7	4,618.15					\$	227,766.91
8	3,613.47					\$	178,216.39
9	4,600.21					\$	226,882.16
10	2,918.44					\$	143,937.56
11	3,782.69					\$	186,562.22
12	3,715.04					\$	183,225.67
13	3,638.54					\$	179,452.89
14	4,465.13					\$	220,220.01
15	7,624.26					\$	376,028.45
16	3,230.19					\$	159,313.02
17	3,329.33					\$	164,202.46
18	4,486.40					\$	221,269.40
19	4,830.55					\$	238,242.78
20	2,655.97					\$	130,992.34
21	3,742.78					\$	184,593.86
22	9,142.07					\$	450,887.09
23	5,096.80					\$	251,373.93

CONCEPTUAL ESTIMATE OF TRAIL PROJECT COSTS

Project ID	Linear Feet	Trail Construction (LF) 10' wide concrete	Revolving Fund (LF)	Issuance (LF)	A/E Fees (LF)	Bond (LF)	Contingency	TOTAL
		\$ 81.17	\$ 2.10	\$ 2.10	\$ 16.23	\$ 0.90	\$ 11.50	\$ 114.00
24	21117.61							\$ 2,407,492.01
25	7414.47							\$ 845,279.24
26	1665.72							\$ 189,898.74
27	1898.33							\$ 216,417.21
28	2097.79							\$ 239,156.45
29	2974.67							\$ 339,124.28

APPENDIX D

Sidewalk Connectivity Analysis



APPENDIX E

Projects & Funding Sources

MILES CITY TRANSPORTATION CAPITAL IMPROVEMENTS PLAN

Project Description	Estimated Cost	Rationale	Comment	RD CF	INTE RCAP
ROADWAYS					
Dickinson Street extension	\$320,000	Provide additional connection to S Haynes Ave	Short Term	X	X
Broadus interchange improvement	\$8.3 million	Upgrade bridges; construct roundabouts	Short Term	X	X
Haynes Ave Corridor / Access Management Study	\$50,000	Address safety and operations	Short Term	X	X
Main St / Valley Dr / Center Ave Intersection Study	\$30,000	Address operations and safety	Short Term	X	X
Valley Dr / Leighton Blvd Intersection Study	\$30,000	Address operations and safety	Short Term	X	X
Main St Signal Timing Study	\$50,000	Address operations along Main St in downtown corridor	Short Term	X	X
I-94 Leighton Blvd interchange feasibility study	\$75,000	Additional connection to I-94, easier connection to proposed truck route change	Short Term	X	X
Improve Protection at Spotted Eagle Road Grade Crossing	\$385,000	Add crossing protection	Long Term	X	X
Dike Road	\$4,900,000	Address safety and operations	Long Term	X	X
Grade-Separated Crossing at Baker Highway	\$13,500,000	Provide connection from proposed Levee Rd to US 12	Long Term	X	X
Cemetery Rd improvements	\$2,900,000	Address future safety and operations	Long Term	X	X
Signal Butte Rd / Love Ln improvements	\$1,500,000	Address future safety and operations	Long Term	X	X
Secondary Southgate connection	\$4,800,000	Provide second access to Southgate Subdivision	Long Term	X	X
FREIGHT AND RAIL					
Re-Route Truck Route	\$1,300,000	Provide more direct truck route	Short Term	X	
Intermodal Rail/Truck Transloading Facility	\$20-30 million	Improve commerce, reduce truck traffic	Long Term	X	

OUTSIDE FUNDING SOURCE ELIGIBILITY

TSEP Planning	TSEP Construction	CDBG	NHPP	STBG	HSIP	SID	TIF	MCSAP	Coal Board	Big Sky Trust	FAA Grant	MT Aeronautics Grant	MT Aeronautics Loan
									X				
X	X		X	X					X				
			X	X	X				X				
									X				
		X							X				
		X							X				
									X				
									X				
X	X		X	X	X				X				
						X			X				
						X			X				
						X			X				
								X	X	X			
						X	X		X	X			

MILES CITY TRANSPORTATION CAPITAL IMPROVEMENTS PLAN

Project Description	Estimated Cost	Rationale	Comment	RD CF	INTE RCAP
AIRPORT FACILITIES					
Obtain instrument approach procedures for Runway 12-30	??	In order to provide lower approach minimums			
Aeronautical survey for Runway 4-22	\$140,000	Threshold relocation and an e-alp update			
Construction of apron access and partial parallel taxiways	\$560,000	Construction of taxiway system beginning at approximate midpoint of Taxiway B heading west perpendicular to Runway 12-30 intersecting with a partial parallel taxiway from Runway 22 to eliminate 5-node intersection. Sections of taxiway B between partial parallel and hangar access taxiways will also			
Relocate helipad to southwest corner of existing apron	\$71,000	remove conflicts with high-traffic area			
Phase 2 (FBO) apron expansion	\$162,000	Apron expansion in northeast corner of existing apron area to serve as access for large FBO building			
Routine pavement maintenance	\$165,000	includes crack routing/sealing and fog seal and application of pavement markings for all airport pavements			
Relocate airport perimeter fence	\$325,000	For proposed expansion of Runway 4-22. Will be relocated to include runway protection zone and 600 feet from runway centerline to account for future clearance requirements			
Relocate Runway 4-22 threshold and extend Runway 4	\$2.2 million	MT 59 currently traverses the runway protection zone of Runway 22. Relocating the runway will shift the RPZ and establish proper clearance of the area. To maintain runway length at 5,700 ft, Runway 4-22 will be extended to the SW to match distance of Runway 4 threshold relocation.			
Land Acquisition	\$18,000	Acquire two parcels of land within the runway protection zone for Runway 4-22			
Relocate Sheffield Road	\$120,000	After the extension of Runway 4-22, Sheffield Road will be relocated within the RPZ			
Routine pavement maintenance	\$165,000	includes crack routing/sealing and fog seal and application of pavement markings for all airport pavements			
Phase 3 apron extension	\$750,000	Additional expansion to the northwest for additional hangar lots as well as additional surface parking for aircraft	approximately 10,400 SY		
Parallel taxiway on Runway 12-30 (from Taxiway A to 12 end)	\$4.5 million	Complete full-length parallel taxiway for Runway 12-30 to eliminate back taxiing on Runway 4-22 and potentially lower the minimums for the approach procedures			
Land Acquisition	\$80,000	Acquire land within the RPZ for Runway 12-30			
Construct hangar taxi lanes for future hangar development to west	\$3,300	A series of taxi lanes and taxiways will be constructed to allow access to the apron and the Runway 4-22 parallel taxiway			
Relocate wind cone and segmented circle	\$25,000	Future hangar development to the west will require relocating the wind cone and segmenting circle. The project will move these west of Runway 12-30.	Approximately 1,200 feet northwest of the end of		
Environmental Assessment	\$100,000	Extension of Runway 4-22			

OUTSIDE FUNDING SOURCE ELIGIBILITY

TSEP Planning	TSEP Construction	CDBG	NHPP	STBG	HSIP	SID	TIF	MCSAP	Coal Board	Big Sky Trust	FAA Grant	MT Aeronautics Grant	MT Aeronautics Loan
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
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											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X
											X	X	X

MILES CITY TRANSPORTATION CAPITAL IMPROVEMENTS PLAN

Project Description	Estimated Cost	Rationale	Comment	RD CF	INTE RCAP
Extention of Runway 4-22	\$2.9 million	Extension is approximately 1,600 ft to a total length of 7,300 ft to allow for higher approach category			
Runway 12-30 rehab	\$4 million	The last rehabilitation was completed in 2008. The project will also include runway lighting circuitry if necessary.			
Routine pavement maintenance	\$215,000	includes crack routing/sealing and fog seal and application of pavement markings for all airport pavements			
Construct full-length parallel taxiway for Runway 4-22	\$7.5 million	to eliminate need to back-taxi on Runway 4-22 and aid development of instrument approach procedures with lower visibility minimums			

OUTSIDE FUNDING SOURCE ELIGIBILITY

TSEP Planning	TSEP Construction	CDBG	NHPP	STBG	HSIP	SID	TIF	MCSAP	Coal Board	Big Sky Trust	FAA Grant	MT Aeronautics Grant	MT Aeronautics Loan
											X	X	X
											X	X	X
											X	X	X
											X	X	X

MILES CITY TRANSPORTATION CAPITAL IMPROVEMENTS PLAN

Project Description	Estimated Cost	Rationale	Comment	RD CF	INTE RCAP
BICYCLE AND PEDESTRIAN					
Sidewalk 1: Woodland Park	\$87,000	Establish connectivity along the south side of Edgewood St., west side of North Marriam Ave., and north side of Robinson St.			X
Sidewalk 2: Bender Park Perimeter	\$196,000	Establish a circuitous sidewalk around a major city			X
Sidewalk 3: Baker Addition	\$161,000	Provides east-west connectivity on Alice and Truscott Streets and the east side on Woodbury St.			X
Sidewalk 4: Garfield Elementary Neighborhood	\$118,000	Infill of linear gaps along the south side of Lincoln St., both sides of Roosevelt St., and along the east side of N. 7th St.			X
Sidewalk 5: Park Addition	\$167,000	Infill of a linear gap on the east side of N. Montana Ave., several spot gaps on Woodbury St., Phillips St., Gordon St. and Leighton Blvd.			X
Sidewalk 6: Hunters Addition	\$164,000	Infill of a corridor gap along State Highway 59/N. 7th St. from Tatso St. to Washington St.			X
Sidewalk 7: Milwaukee Park	\$190,000	Establishment of a sidewalk corridor on both sides of Tatso St., the north side of Lewis St. and spot gaps on N. 2nd St. and N. 3rd St.			X
Sidewalk 8: Gordon Addition	\$149,000	Corridor gap on N. 5th St., from William St. to Washington St., sidewalk on the north side of Hubbel St., and connectivity to the Milwaukee Park neighborhood			X
Sidewalk 9: Riverside Park	\$189,000	Linear gap to establish sidewalk along the north side of Pleasant St., from N. 5th St. to Dike Rd. and misc. spot gap infills on N. 2nd St. & Orr Street. Also includes linear gap along the north side of Pacific Avenue and Riverside Park connections from the existing walk, across the track to S. 4th St.			X
Sidewalk 10: Original Townsite	\$120,000	Sidewalk along the south side of Yellowstone Avenue and misc. spot gap infill on S. 4th, 5th and 6th Streets			X
Sidewalk 11: N. Snyder Addition	\$155,000	Linear gap on the north side of Tompy St. and Butler St., misc. spot gap infill on Center, Lake and Custer			X
Sidewalk 12: Leighton Garlocks	\$153,000	Corridor gap on the south side of Brisbin St. from Strevelle Ave. to Prairie Ave.			X
Sidewalk 13: Highland Park	\$150,000	Linear gap on the north side of Butler St., spot gaps on S. Merriam Ave., Cale Ave., Earling Ave. and			X
Sidewalk 14: Pioneer Meadows	\$184,000	Linear gap on Tompy St. from Moorehead Ave. to S. Haynes Ave.			X
Sidewalk 15: Steadmans Ace	\$314,000	Neighborhood gap bordered and within Dickinson St., S. Haynes Ave., Comstock St. and S. Sewell Ave.			X
Sidewalk 16: Highland Park N.	\$133,000	Spot gap infill along Dickinson St., Earling Ave., Stower St., Brisbin St.			X
Sidewalk 17: S. Snyder Addition	\$137,000	Corridor gap on both sides of Dickinson St. from Strevelle Ave. to S. Montana Ave., and spot gap infill on Jordan Ave. and Custer Ave.			X
Sidewalk 18: Wibaux Park	\$184,000	Spot gap infill on Fort St., Pearl St., Bridge St. and linear gap on Bridge St. from Winchester Ave. to S. Legion Ave.			X
Sidewalk 19: Clark East Side	\$199,000	Spot gap infill on Pleasant St. Palmer St. and Stacy			X
Sidewalk 20: Eastside Addition	\$109,000	Corridor gap on Leighton Blvd. and spot gaps on Palmer St.			X
Sidewalk 21: Residence Park	\$154,000	Corridor gap on Leighton Blvd. N. Strevelle Ave.			X

OUTSIDE FUNDING SOURCE ELIGIBILITY

TSEP Planning	TSEP Construction	CDBG	NHPP	STBG	HSIP	SID	TIF	MCSAP	Coal Board	Big Sky Trust	FAA Grant	MT Aeronautics Grant	MT Aeronautics Loan
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
		X		X		X	X		X				
		X		X		X	X		X				
				X		X			X				
		X		X		X	X		X				
		X		X		X	X		X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X			X				

MILES CITY TRANSPORTATION CAPITAL IMPROVEMENTS PLAN

Project Description	Estimated Cost	Rationale	Comment	RD CF	INTE RCAP
Sidewalk 22: Frontage Road	\$376,000	Corridor gap on S. Haynes Ave.			X
Sidewalk 23: Southgate Meadows	\$209,500	Corridor gap on the north side of Horizon Parkway and west side of Ponderosa Dr.			X
Trail 24: Dike Road Trail	\$2,400,000	Approximately 4.0 miles of multi-use trail rebuilt along with the levy and maintenance road			X
Trail 25: Cemetery Road Trail	\$850,000	Approximately 1.4 miles of multi-use trail from Balsam Dr. to S. Haynes Ave.			X
Trail 26: Fairground loop completion & Spotted Eagle Trail connection	\$190,000	Approximately 0.3 miles of multi-use trail completing the existing loop & providing an off-street connection to Spotted Eagle			X
Trail 27: Truscott Street Trail	\$217,000	Approximately 0.4 miles of multi-use trail along Truscott St.			X
Trail 28: Wilderness Area Road Trail	\$239,000	Approximately 0.56 miles of multi-use trail connecting north downtown to the Tongue River			X
Trail 29: Water Plan Road Trail	\$339,124	Approximately 0.5 miles of multi-use trail			X

OUTSIDE FUNDING SOURCE ELIGIBILITY

TSEP Planning	TSEP Construction	CDBG	NHPP	STBG	HSIP	SID	TIF	MCSAP	Coal Board	Big Sky Trust	FAA Grant	MT Aeronautics Grant	MT Aeronautics Loan
				X		X			X				
				X		X			X				
		X		X		X	X		X				
				X		X			X				
				X		X			X				
				X		X			X				
				X		X	X		X				
				X		X			X				