CONNECT 2045

TRANSPORTATION UPDATE

PLANCHEYENNE

DRAFT OCTOBER 6, 2020

CHEYENNE METROPOLITAN PLANNING ORGANIZATION

Kimley»Horn

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Abbreviations

- **AADT** Average Annual Daily Traffic
- **AASHTO** American Association of State Highway Transportation officials
- **ADA** Americans with Disabilities Act
- **AFB** Air Force Base
- **AIS** Airport Improvement System
- **AQD** Air Quality Division
- **AV** Automated Vehicles
- **AVL** Automatic Vehicle Location
- **BNSF** Burlington Northern Santa Fe Railroad
- **CDBG** Community Development Block Grant
- **CMAQ** Congestion Management and Air Quality Grant
- **CTP** Cheyenne Transit Program
- **CV** Connected Vehicles
- **DEQ** Wyoming Department of Environmental Quality
- **DFW** Dallas-Fort Worth International Airport
- **DSRC** Dedicated Short Range Communications
- **EPA** Environmental Protection Agency
- **EPS** Electrified Parking Spaces
- **EV** Electric Vehicle
- **FAA** Federal Aviation Administration
- **FAR** Floor Area Ratio
- **FAST** Fixing America's Surface Transportation Act
- **FTA** Federal Transit Administration
- **FY** Fiscal Year
- **GARVEE** Grant Anticipation Revenue Vehicles
- **GBSD** Ground Based Strategic Deterrent
- **FCC** Federal Communications Commission
- **FHWA** Federal Highway Administration
- **HCM** Highway Capacity Manual
- **HUD** Department of Housing and Urban Development
- **IRT** Idling Reduction Technologies
- **ITS** Intelligent Transportation Systems
- **KCYS** Cheyenne Regional Airport
- **LEHD** Longitudinal Employment-Household Dynamics
- **LOS** Level of Service
- **LOTTR** Level of Travel Time Reliability
- **LRTP** Long Range Transportation Plan
- **LTS** Level of Traffic Stress
- **MAP-21** Moving Ahead for Progress in the 21st Century
- **MPO** Metropolitan Planning Organization
- **NAAQS** National Ambient Air Quality Standards
- **NACTO** National Association of City Transportation officials
- **NHS** National Highway System
- **NPA** National Parking Association
- **NPIAS** National Plan of Integrated Airport System
- **PDO** Property Damage Only
- **PTASP** Public Transit Agency Safety Plan
- **RRFB** Rectangular Rapid Flashing Beacons
- **SIB** State Infrastructure Bank
- **SMS** Safety Management Systems
- **STIP** State Transportation Improvement Program
- **STP** Surface Transportation Program
- **SWOT** Strengths, Weaknesses, Opportunities, and Threats
- **TAM** Transit Asset Management
- **TAZ** Traffic Analysis Zone
- **TDM** Travel Demand Model
- **TDP** Transit Development Plan
- **TIA** Traffic Impact Assessment
- **TIF** Tax Increment Financing
- **TIP** Transportation Improvement Program
- **TIS** Traffic Impact Study
- **TPM** Transportation Performance Management
- **TSE** Truck Stop Electrification
- **TTTR** Truck Travel Time Reliability
- **UDC** Unified Development Code
- **UP** Union Pacific Railroad
- **USB** Urban Service Boundary
- **USDOT** United States Department of Transportation
- **V/C** Volume to Capacity Ratio
- **VMT** Vehicle Miles Traveled
- **VPD** Vehicles per Day
- **WYDOT** Wyoming Department of Transportation
- **YOE** Year of Expenditure

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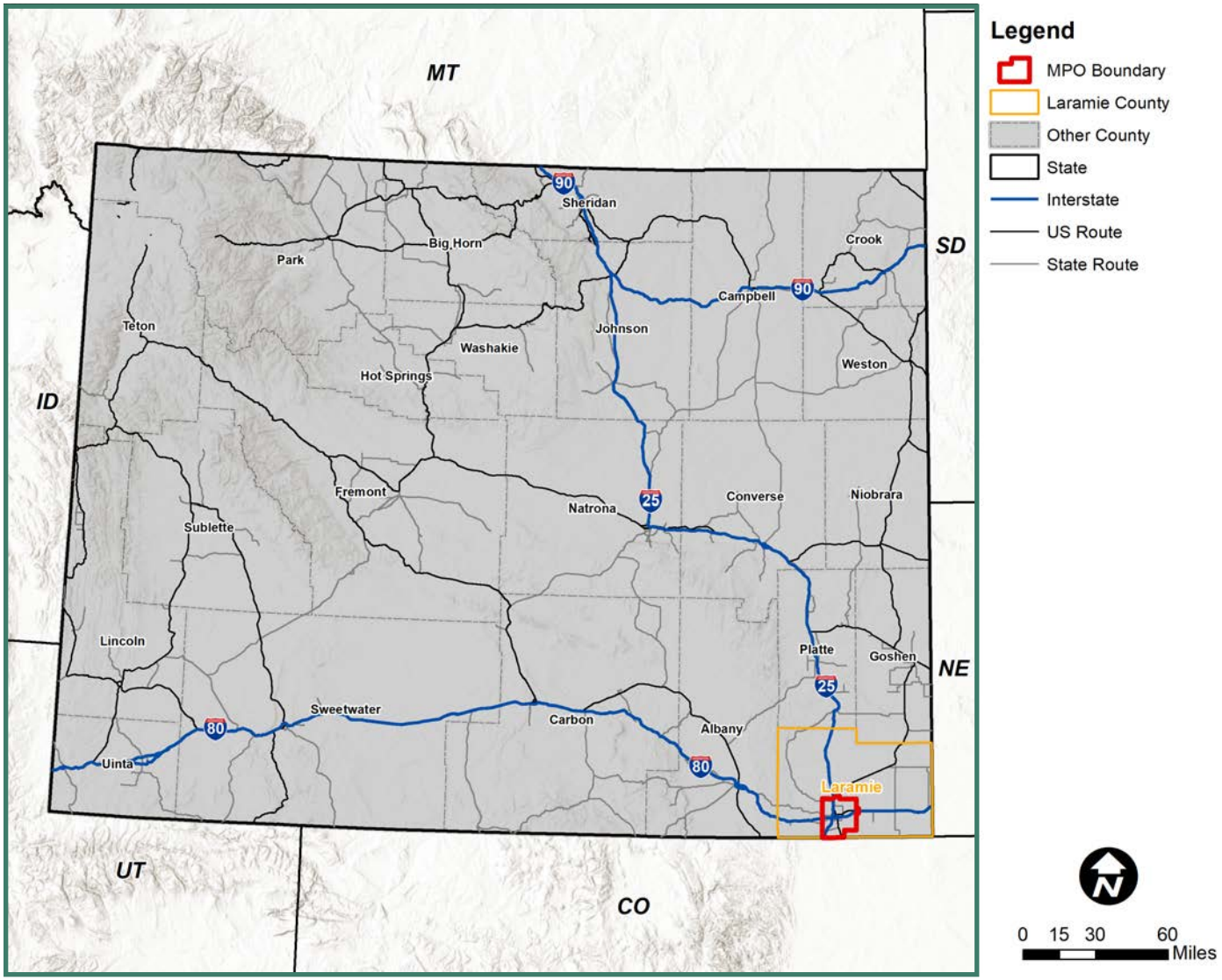
CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

The Cheyenne Metropolitan Planning Organization (MPO) was formed by the Governor of Wyoming in 1981 to oversee transportation planning purposes. Federal law requires that an MPO be formed to provide transportation planning for any urbanized areas with a population of 50,000 residents or greater.

The Cheyenne MPO encompasses approximately 215 square miles and provides transportation planning services to the region that includes the City of Cheyenne as well as adjacent rural and semi-rural portions of Laramie County. The 2019 population of the Cheyenne MPO was 89,429. The Cheyenne MPO region's location within the state of Wyoming is shown in **Map 1**, with a more detailed map of the Cheyenne MPO shown in **Map 2** (on next page).

Map 1: Cheyenne MPO Location

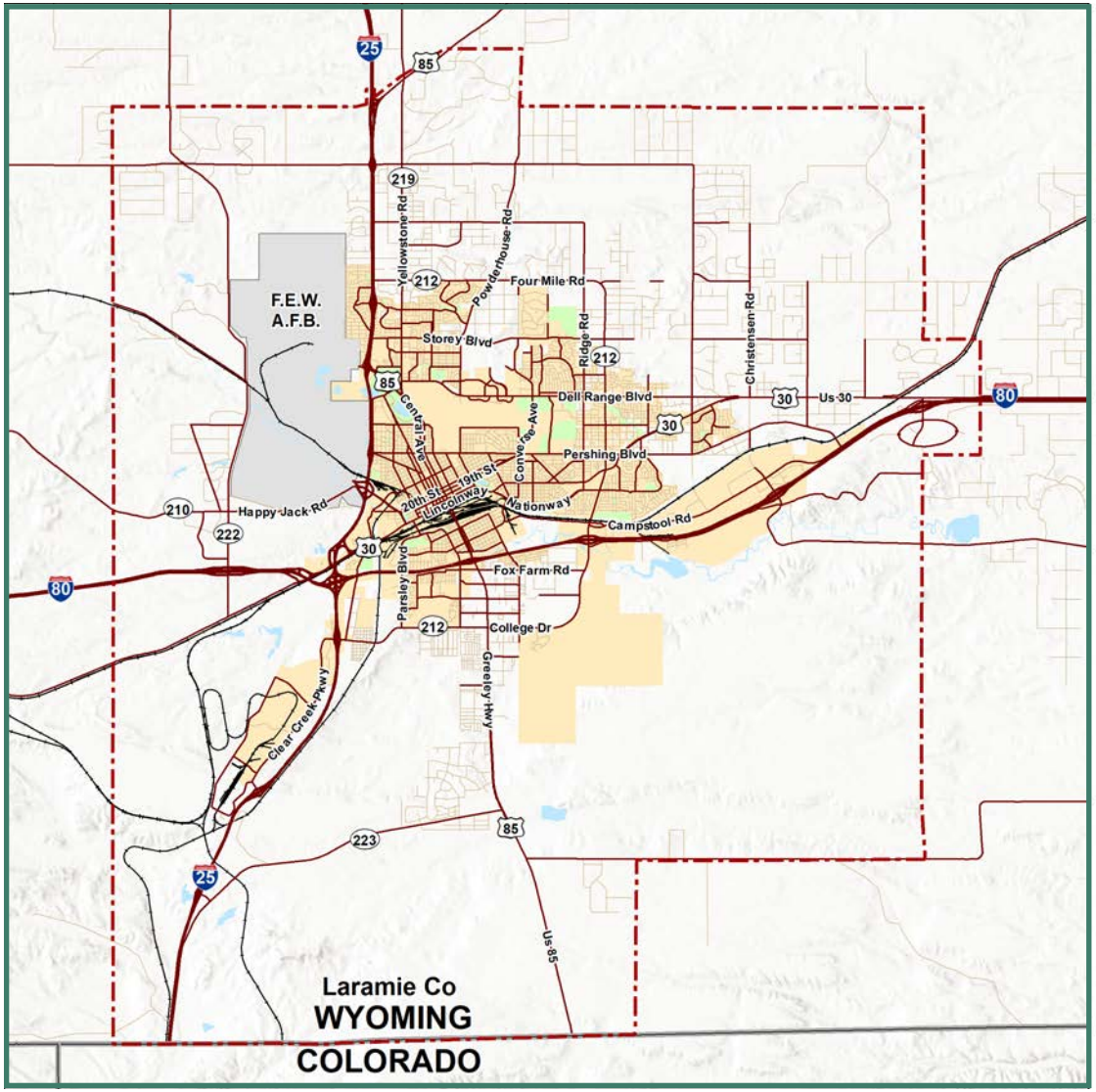


Connect 2045 serves as the Cheyenne region's Long-Range Transportation Plan (LRTP), which defines the region's strategy for creating a regional transportation system that accommodates the current mobility needs of residents, while also looking to the future. It is a 25-year multimodal plan developed in conjunction with the Cheyenne MPO member jurisdictions, Laramie County, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Wyoming Department of Transportation (WYDOT).

The LRTP addresses all modes of transportation, including automobile, bicycle, pedestrian, transit, truck, air, and rail movements. The LRTP is updated once every five years, enabling the plan to evolve as the region continues to grow and develop. This LRTP was prepared in accordance with all federal requirements.

Connect 2045 Long-Range Transportation Plan

Map 2: Cheyenne MPO Region



Legend

- MPO Boundary
- County Boundary
- Freeway
- Major
- Minor
- Railroad
- Water Feature
- Park
- Military Base
- City of Cheyenne Boundary

N

0 0.75 1.5 3 Miles

What is a Long-Range Transportation Plan?

The LRTP is a long-term blueprint for the region's transportation system.

This plan fulfills federal requirements and serves as the region's transportation vision.

Federal funding cannot be allocated to transportation projects and programs unless they are included in this financially constrained plan.

This plan is updated every five years to ensure that it continues to meet the needs of the region.

1.2 PLANNING PROCESS

The Connect 2045 process focused on strong community and citizen engagement, with opportunities for stakeholder feedback occurring throughout the project process, as shown in **Figure 1**. It is important to recognize that individuals within the Cheyenne MPO boundaries have considerable insight into the places they live, work, and travel, and are therefore instrumental to the long-term success of Connect 2045.

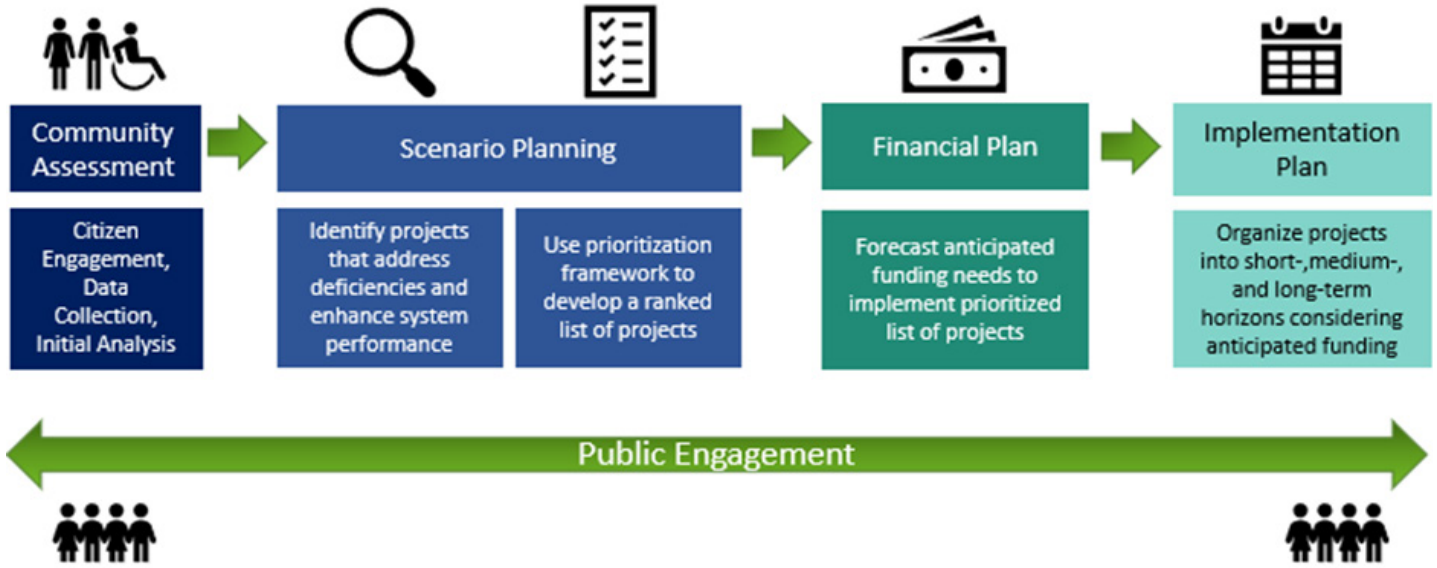
The first stage of the project process is the community assessment component, which uses stakeholder feedback and other strategies to identify the current conditions of the transportation system. Community assessment strategies can include surveying of residents, geospatial analysis using mapping software, review of federal, state, and local data sources, and more. The data collected from the initial community assessment stage is paramount for the next phase of the project process referred to as scenario planning.

Scenario planning dives deeper into the data collected to identify where the system is performing best and identify areas where there are opportunities to enhance or improve the system. Identifying system deficiencies leads to the identification of potential capital projects or improvements that will enhance the system's current performance. Using a pre-determined project prioritization ranking system, the list of projects can then be organized based on need.

The next step in completing the Connect 2045 project is developing a financial plan that considers the anticipated funding levels available to implement the prioritized list of projects. Funding levels can fluctuate each year based on policy updates, tax revenues, and other changes to funding streams, so it is important to use forecasting techniques that result in a reasonable expectation of future funding levels. Once the financial plan is complete, the final stage of the process (the implementation plan) can begin.

The implementation plan ties in the scenario planning and financial planning processes to determine timing of projects based on short-, medium-, and long-term horizons and anticipated funding levels. The Connect 2045 project process considers community input, evaluates current system performance and system deficiencies, prioritizes projects based on urgency and estimated funding levels, and produces an obtainable implementation plan that supports effective long-term transportation planning efforts.

Figure 1: Connect 2045 Project Process



1.3 GUIDING PRINCIPLES

Federal transportation legislation, including Moving Ahead for Progress in the 21st Century (MAP-21) and the subsequent Fixing America's Surface Transportation (FAST) Act, outline funding and procedural requirements for multimodal transportation planning in metropolitan areas and states. They require MPOs and states to develop transportation plans and transportation improvement programs through a performance-driven, outcome-based approach, which is reflected in this LRTP.

The Connect 2045 effort intends to establish a roadmap for the region that can result in a transportation system that contributes to the overall wellbeing of the region and its residents while also meeting federal requirements. The first step to identifying and pursuing steps towards a successful transportation system is identifying what the region sees as the ultimate vision and goals for its transportation future.

There were a few inputs into the 2045 transportation vision and goals for the Cheyenne region, including:

- The federal goals for transportation investments put forth by the USDOT;
- The state goals for transportation investments put forth by WYDOT; and
- Previous goals for the transportation system in the Cheyenne region that have driven development of the current system; and
- Public and stakeholder input.

Based on these inputs, eight goal statements, shown in **Table 1**, have been crafted to guide the development of the Connect 2045 Plan and the prioritization of transportation improvement projects. Objectives and performance measures will be identified in the final Connect 2045 Plan.

Table 1: Connect 2045 Goal Statements

Goal	Goal Statement
Safety	Transportation facilities provide **safe travel options** for **all residents and visitors**.
Growth	Stimulate **growth** in the economy, development, and tourism by providing a transportation system that accommodates **current and future demand** for the movement of **residents, visitors, and goods**.
Integration	Integrate transportation and land use decisions to **create and preserve neighborhoods** that promote **vibrant community** character and **encourage active living**.
Choices	Provide travel choices that are **accessible to all travelers,** promote local mobility, and **reduce the impacts of transportation** on the environment and neighborhoods.
Efficiency	Optimize the use of **existing infrastructure** and **opportunistic funding options** to make **prudent investments** in the transportation network to maintain system predictability.
Connectivity	Develop and maintain a multimodal transportation system that provides **direct, continuous, and safe connections** between local and regional destinations and services.
Resiliency	Design transportation facilities and networks so they are **secure and resilient** to impacts from **manmade or natural disasters.**
Maintenance	**Extend the life** of the transportation system and **promote fiscal responsibility** by emphasizing maintenance over system expansion.

1.3.1 Alignment with Federal Goals

FAST Act and the previous MAP-21 legislation requires MPOs to undertake a planning process that establishes and uses a performance-based approach to transportation decision making that considers projects and strategies that address and support ten federal goals. All of these federal planning goals, shown in **Table 2**, are accommodated within the plan goals set forth in Connect 2045. Eight of these ten were part of the federal legislation during the previous Plan Cheyenne LRTP development. Resiliency and travel and tourism were added as new goal areas through the FAST Act.

Table 2: Connect 2045 Goal Alignment with Federal Transportation Goals

Federal Goals	Goal Statement							
	Safety	Growth	Integration	Choices	Efficiency	Connectivity	Resiliency	Maintenance
(A) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency		●	●			●		
(B) Increase the safety of the transportation system for motorized and nonmotorized users	●			●			●	
(C) Increase the security of the transportation system for motorized and nonmotorized users	●						●	
(D) Increase the accessibility and mobility of people and for freight		●	●	●	●	●	●	
(E) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns		●	●	●	●		●	●
(F) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight		●	●	●		●	●	
(G) Promote efficient system management and operation		●	●		●	●		●
(H) Emphasize the preservation of the existing transportation system		●						●
(I) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation				●			●	
(J) Enhance travel and tourism		●	●	●				

1.3.2 Alignment with State Goals

In addition to aligning with and addressing federal goals, it is important for Connect 2045 to complement and identify transportation investments to support WYDOT's statewide transportation goals, which are shown in **Table 3**. All of these state planning goals are accommodated within the plan goals set forth in Connect 2045.

Table 3: Connect 2045 Goal Alignment with State Transportation Goals

WYDOT 2010 LRTP Goals	Connect 2045 Goal							
	Safety	Growth	Integration	Choices	Efficiency	Connectivity	Resiliency	Maintenance
Keep people safe on the state transportation system	●						●	●
Serve our customers		●		●	●	●	●	●
Take care of all physical aspects of the state transportation system		●			●		●	●
Develop and care for our people	●			●			●	
Respectfully perform our lawful responsibilities	●							●
Exercise good stewardship of our resources		●	●		●		●	●

1.4 PLAN ORGANIZATION

Connect 2045 begins by providing an overview of the community and stakeholder outreach activities conducted throughout the planning process, included in **Section 2 Community and Stakeholder Outreach**. This section includes subsections that discuss three different rounds of community engagement: information gathering, virtual survey, and virtual open house activities. Section 2 concludes with information on the public hearings that occurred as part of the community and stakeholder outreach activities.

Following community and stakeholder outreach information, **Section 3 Current and Future Demographics** looks at the high-level impacts of demographic changes to the transportation system. This section includes subsections that focus on current and future population and employment levels, as well as regional land use and future growth, and concludes by looking at commuting trends of the region.

The next four sections (Sections 4 through 7) look at different modes of the transportation system to determine existing conditions and identify recommendations.

- **Section 4 Regional Roadways** focuses on current conditions of the regional roadway system, including current and forecasted traffic volumes and congestion, interchanges and one-way streets, transportation safety, and concludes with recommendations for roadway capital projects.
- **Section 5 Regional Transit** provides an overview of the current conditions and performance of the regional transit system, as well as provides recommendations for transit improvements that evaluates paratransit services, service expansion, express services, different partnership opportunities and more.
- Following the overview of regional roadway and transit systems, **Section 6 Regional Bicycle and Pedestrian System** focuses on the current bicycle and greenway network, as well as the pedestrian network. This section also includes recommendations for improving the bicycle and pedestrian network in the region.
- The final modal section is **Section 7 Regional Aviation and Freight**, which provides a high-level overview of the existing aviation and freight conditions, while also including aviation and freight recommendations.

Following the overview of different transportation modes, **Section 8 Livability and Economic Growth** looks at the greater context of the region by focusing on principles of livability and transportation, as well as impacts of travel and tourism, system resiliency and reliability, emerging transportation technology, and air quality.

Using the findings from previous sections, **Section 9 Project Prioritization** analyzes the different recommendations and needs of the roadway and bicycle network to identify prioritization of recommended capital improvement projects.

This effort leads to **Section 10 Implementation Plan**, which provides an overview of different funding sources and forecasts anticipated funding levels to understand the overall funding available to satisfy the recommendations of Connect 2045.

The final component of this report is **Section 11 System Performance Report**, which provides the results of the data collection process and looks specifically at safety, infrastructure condition, congestion reduction, and transit asset management findings, and adheres to the federal performance reporting requirements.

CHAPTER 2: COMMUNITY AND STAKEHOLDER OUTREACH

2.1 ROUND 1 – INFORMATION GATHERING

Connect 2045 included a robust, three-part public engagement process consisting of a variety of community and stakeholder outreach strategies. The first phase consisted of gathering information about Cheyenne's existing mobility network and future growth; the second phase focused on prioritizing the project goals, considering project tradeoffs, and identifying improvements; and the third phase presented draft recommendations and project prioritization.

Due to COVID-19, many of the planned in-person outreach events during phases two and three were converted to virtual formats using the Cheyenne MPO website, online engagement tools, and a virtual meeting to continue gathering feedback from the citizens in the project area.

Through all phases of public outreach, approximately 641 people participated.

- Approximately 60 people attended the first Community Open House
- 304 Online Community Survey responses were received
- 90 comments were submitted through the Online Community Input Map
- 12 Focus Group Meetings were held with a total of 30 participants
- 15 people were part of a Steering Committee that met six times at key milestones in the project
- 2 Pop-up Events were held with a total of 30 participants
- 84 people participated in the second online survey with a total of 1,301 individual data points and 224 written responses
- 19 people attended the Virtual Open House
- 9 questions and comments were received on the Recommendations Development Report and Presentation

The first phase of outreach included activities from November 2019 through April 2020 and focused on understanding the existing condition of the Cheyenne region's mobility system. During this phase, several outreach methods were utilized to collect input from people who live, work, and visit Cheyenne.

Outreach methods that were used to collect information and experiences on the existing conditions of the transportation network in the Cheyenne area included:

- Online Community Input Map;
- Online Community Survey;
- Community Open House;
- Focus Group Meetings;
- Pop-Up event at the Annual Holiday Craft Fair; and
- Pop-Up event at the local La Rosa grocery store.

2.1.1 Round 1 Themes

Themes from all of the engagement elements during Round 1 have been compiled into a single SWOT analysis in **Figure 2**.

Figure 2: Public Engagement Round 1 SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Greenway System • Underpasses and green pavement to improve bicycle safety • Transit is clean and affordable • Not much traffic congestion, commutes are short	• Pedestrian and bicycle safety • Maintenance and continuity of the pedestrian and bicycle network • Confusing greenway signage • Safety perception of biking on streets • Awareness of transit routes, ticketing, schedules, etc. • Inefficient transit routes and limited hours • Traffic signal timing • Roadway maintenance • Disconnect between transportation and land use	• Improve multimodal crossings at major roadways • Encourage walking and biking for transportation, not just recreation or exercise • Educate the public on bicycle safety • Educate the public on the transit system • Improve the transit system to attract new riders • Improve intersections with four-way stops or roundabouts • Wayfinding on both roadways and greenways.	• Poor maintenance of walking facilities • Culture and weather – people want to drive rather than walk, bike, or use transit • Distracted drivers • Population growth driving increased traffic congestion

2.1.2 Community Open House

A Community Open House was held on Wednesday November 6, 2019. The open house was hosted at the Kiwanis Community House from 5:30 PM – 7:00 PM. Figure 3 shows photos from the Community Open House.

Figure 3: Community Open House Photos

Open House Attendee Comments on Bicycle Infrastructure Map | Open House Attendees Visit Mobility Stations | Open House Attendees Discuss Mobility at Various Stations

Each mode-specific station included an activity to identify Strengths, Weaknesses, Opportunities, and Threats (SWOT). The purpose of the SWOT activity was to gather information specific to each mode of transportation at a network-wide scale. These activities were facilitated by a project team member. The full results of the SWOT analysis are found in **Appendix A.**

These and other comments received during the Community Open House were used while evaluating existing conditions and developing potential recommendations for facilities, programs, and policies.

2.1.3 Focus Group Meetings

Focus group meetings were conducted in November 2019 with several public agencies and advocacy groups. These meetings were to obtain specific feedback from a variety of stakeholders whose goals can be impacted by the Connect 2045 Plan. Focus group meeting participants were:

- Federal Highway Administration
- Wyoming Department of Transportation
- Laramie County Engineering
- City of Cheyenne (Planning and Development Services, Engineering, Public Works, Cheyenne Fire Department, Cheyenne Police Department, Community Recreation and Events, Mayor's office)
- Laramie County School District 1
- Downtown Cheyenne (Downtown Development Authority)
- Greater Cheyenne Chamber of Commerce
- Visit Cheyenne
- Cheyenne LEADS

Several items that the Plan should look to address were identified through these focus group meetings:

- **LRTP delivery.** Ensuring that there are no gaps in the ability to utilize federal funding.
- **Deferred maintenance.** Addressing the backlog of maintenance needs.
- **Maintenance and maintenance funding.** Ensuring that there is a reliable source of funding to maintain the transportation system at an acceptable level, including transit operations.
- **Serving future growth and redevelopment.** Ensuring that future development does not negatively impact existing neighborhoods and commercial areas.
- **Greenway and bicycle facility development.** Expanding the popular greenway system to serve more areas of existing development as well as new development areas.
- **Transit configuration and operation.** Creating a more efficient and convenient transit system that serves existing riders as well as attracts new riders.
- **Mobility technologies and licensing.** Developing policies to effectively manage new mobility options such as shared bicycles and scooters, as well as transportation options not yet known.

2.1.4 Pop-Up Events

On Saturday November 16th, the project team conducted two Pop-Up events; the first at the annual Holiday Craft Fair at the Laramie County Fair Grounds and the second at La Rosa Market (804 Central Ave., Cheyenne, WY). These events were designed to target those who do not typically attend traditional public outreach activities, particularly Spanish-speaking residents who were engaged at La Rosa Market and people who may only be free on the weekend at the Holiday Craft Fair. At these events, the project team presented a condensed version of the Open House materials – instead of a SWOT activity geared toward an individual mode, one SWOT activity was facilitated for all mobility types in Cheyenne. The feedback from the SWOT activities at each of these Pop-Up events were integrated with the other SWOT results and contributed to the evaluation of existing conditions and were considered when developing potential recommendations for Connect 2045.

Figure 4 shows photos taken during the pop-up events.

Figure 4: Pop-Up Event Photos

Project Team Engages with La Rosa Customers

Project Team Engages with the Owner of La Rosa

Project Team Engages with Visitors at the Holiday Craft Show

2.1.5 Online Community Survey

A Community Survey launched on the project website November 6, 2019 and closed on April 13, 2020. This 30-question online survey asked participants about their experience with the current mobility system in Cheyenne. Questions were specific to certain modes of transportation; walking, biking, transit, and driving and included questions about respondents disposition towards the different modes, perspectives about the availability or condition for different modes, or the transportation environment (such as perceptions of safety), and perspectives on barriers or challenges related to different modes. 304 responses were collected and analyzed.

2.1.6 Online Community Input Map

Public input on issues and opportunities for the transportation network was collected through an Online Community Input Map. Participants could identify specific locations on an online, GIS-based map where they saw issues or opportunities or had comments. The Online Community Input Map launched on the project website November 6th, 2019 and closed on April 13, 2020. Thirteen (13) issues, twenty-one (21) opportunities, and five (5) general comments were posted to the Map.

Figure 5 shows the number of comments related to common themes that emerged from the survey. The highest number of comments pertained to traffic operations and signals as well as safety concerns and how they impact the mobility system.

Figure 5: Online Community Map Comments Common Themes

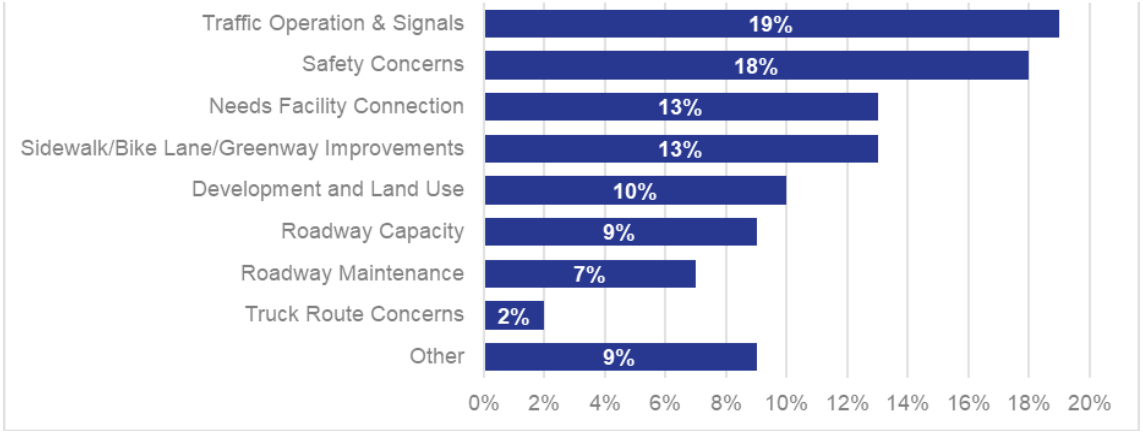


Figure 6 on the next page shows the geographic spread of comments across the study area.

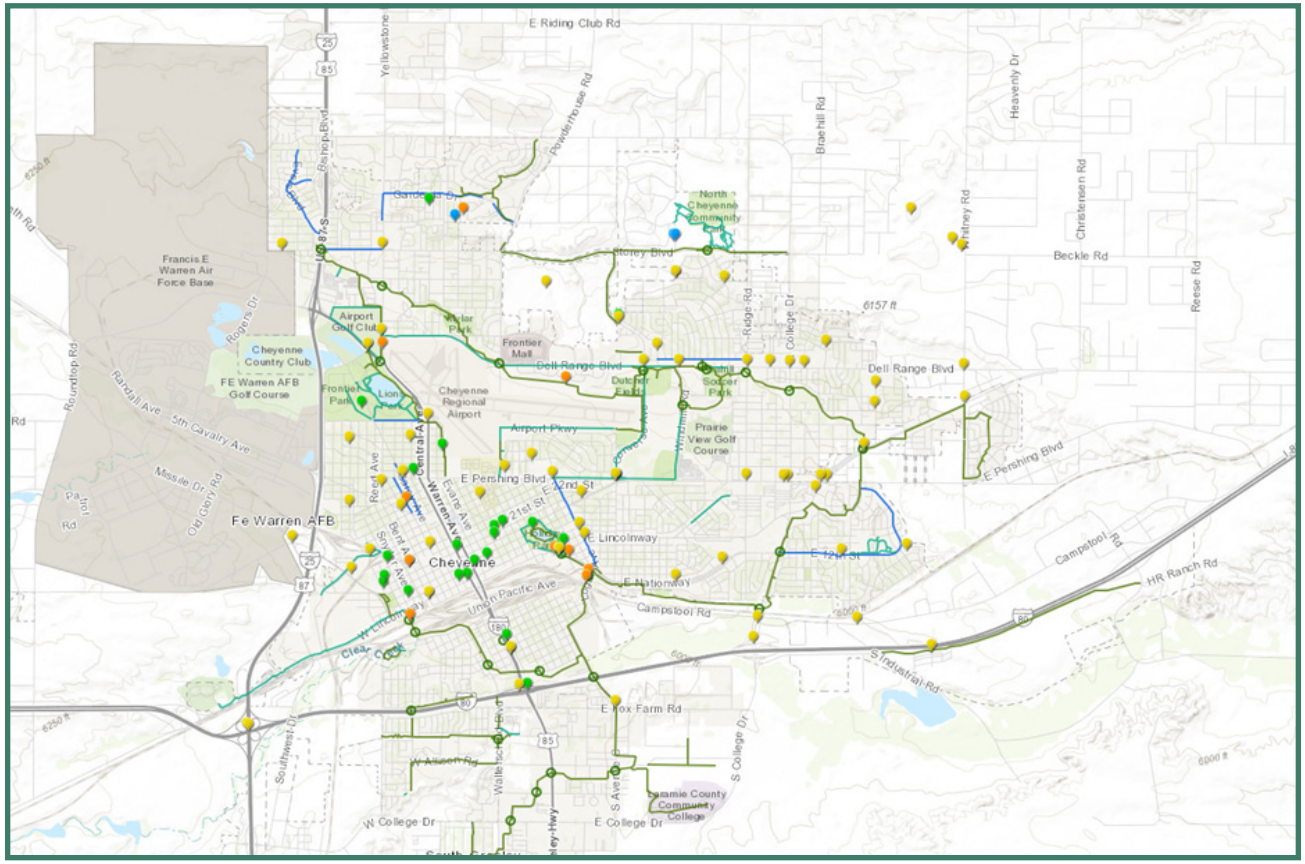
The Online Community Input Map was promoted through the MPO social media channels as well as being announced at the Community Open House.

2.1.7 Comment Cards

Comment cards were distributed at all the public outreach events and asked people to determine their top three priorities for the transportation plan to focus on. Between the Open House and both Pop-Up events, the top three priorities were:

- Pedestrian and bicycle safety, including Safe Routes to School (18 responses)
- Neighborhood traffic management and safety (11 responses)
- Connectivity within the city (10 responses)

Figure 6: Community Input Map Screenshot



2.2 ROUND 2 – VIRTUAL SURVEY

After completing the first round of public and stakeholder engagement, which was largely focused on identifying existing issues with the transportation system in and around Cheyenne, a second round of engagement was conducted to gather information on how and where to spend federal transportation funds over the next 25 years.

Due to guidance for the public to stay at home as much as possible and avoid gatherings due to the COVID-19 outbreak, the second round of public and stakeholder engagement was conducted 100% virtually. A robust and interactive survey was developed using the online survey tool MetroQuest to obtain similar input to a full-day public open house and charrette. A total of 84 respondents completed the survey.

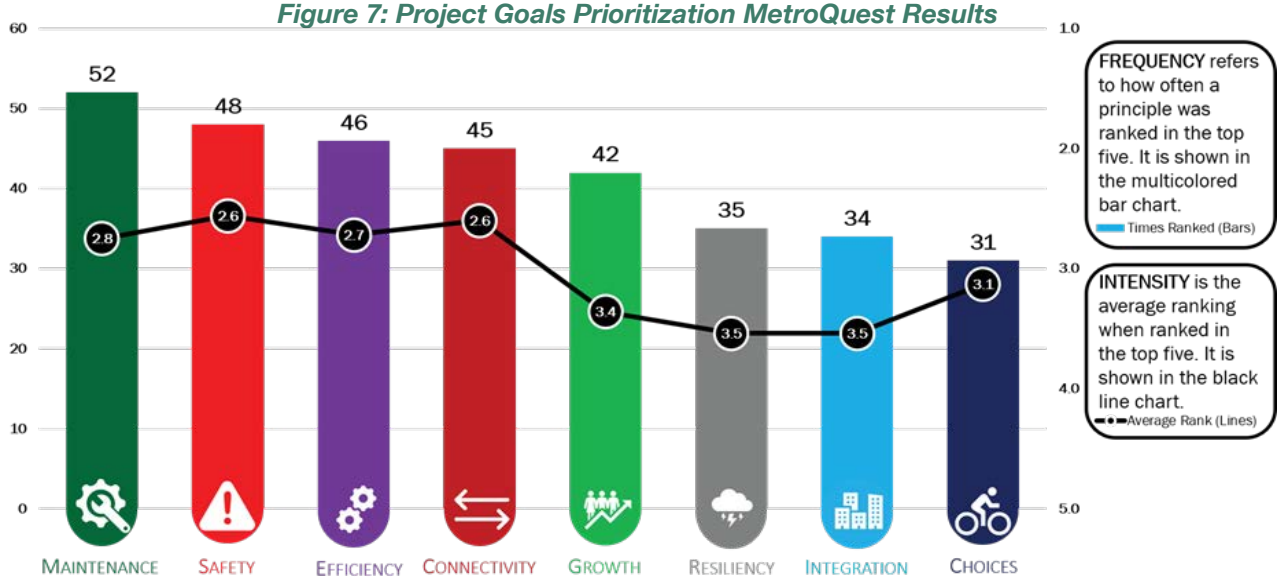
Some of the key results and findings are summarized below. The complete results can be found in Appendix A.

2.2.1 Goals Ranking

Purpose. The goals ranking exercise allowed respondents to prioritize the draft project goals. Respondents were able to click on each goal to see each goal statement and then rank their top five goals by dragging them above the dashed line.

Results. Maintenance, Safety, Efficiency, and Connectivity were the most frequently ranked as well as the highest ranked project goals, as shown in **Figure 7**.

Figure 7: Project Goals Prioritization MetroQuest Results



2.2.2 Investment Trade-offs

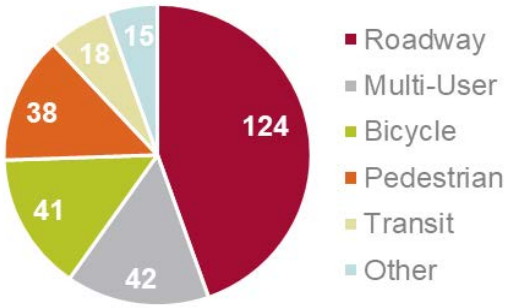
Purpose. The Investment Trade-offs exercise allowed respondents to indicate how transportation money should be allocated between different types of investments, including:

- **Size of Projects.** If investment should be focused on a small number of larger projects or a larger number of small projects.
- **Where We Travel.** If investment should focus on travel within the existing extents of Cheyenne or focus on moving people into and out of central Cheyenne.
- **How We Travel.** If investment should focus more heavily on automobile-oriented projects or pedestrian, bicycle, and transit projects.
- **Where We Invest.** If investment should focus on spreading transportation investments equitably across the region, or if investment should focus on areas of the greatest economic need.
- **How We Invest.** If investment should focus on maintaining the current system or focus on expanding the transportation system.

Results.

- **Size of Projects.** Survey respondents were largely balanced on allocating investments based on project size, with the average score showing a slight preference for a focus on small projects.
  - Focus on small project: 37.0% of responses
  - Focus on big projects: 35.8%
  - Neutral: 27.2%
- **Where We Travel.** Survey respondents generally wanted to make it easier to travel within Cheyenne rather than into and out of Cheyenne.
  - Make it easier to travel within Cheyenne: 48.1% of responses
  - Make it easier to travel beyond Cheyenne: 46.9%
  - Neutral: 4.9%
- **How We Travel.** Survey respondents had a preference toward investing in pedestrian and bicycle infrastructure.
  - Add space for bikes, pedestrians, and transit: 47.4% of responses
  - Add space for cars: 35.9% of responses
  - Neutral: 16.7%
- **Where We Invest.** Survey respondents were more in favor oF concentrating transportation investments in areas of the greatest need over spreading investments evenly across the region.
  - Focus where the need is greatest: 61.5% of responses
  - Spread transportation investments around: 26.9%
  - Neutral: 11.5%
- **How We Invest.** Survey respondents favored maintaining existing infrastructure over expanding the transportation system.
  - Maintain existing transportation system: 61.5% of responses
  - Expand the transportation system: 26.9%
  - Neutral: 11.5%

Figure 8: Improvement Markers by Type



2.2.3 Identifying Potential Solutions

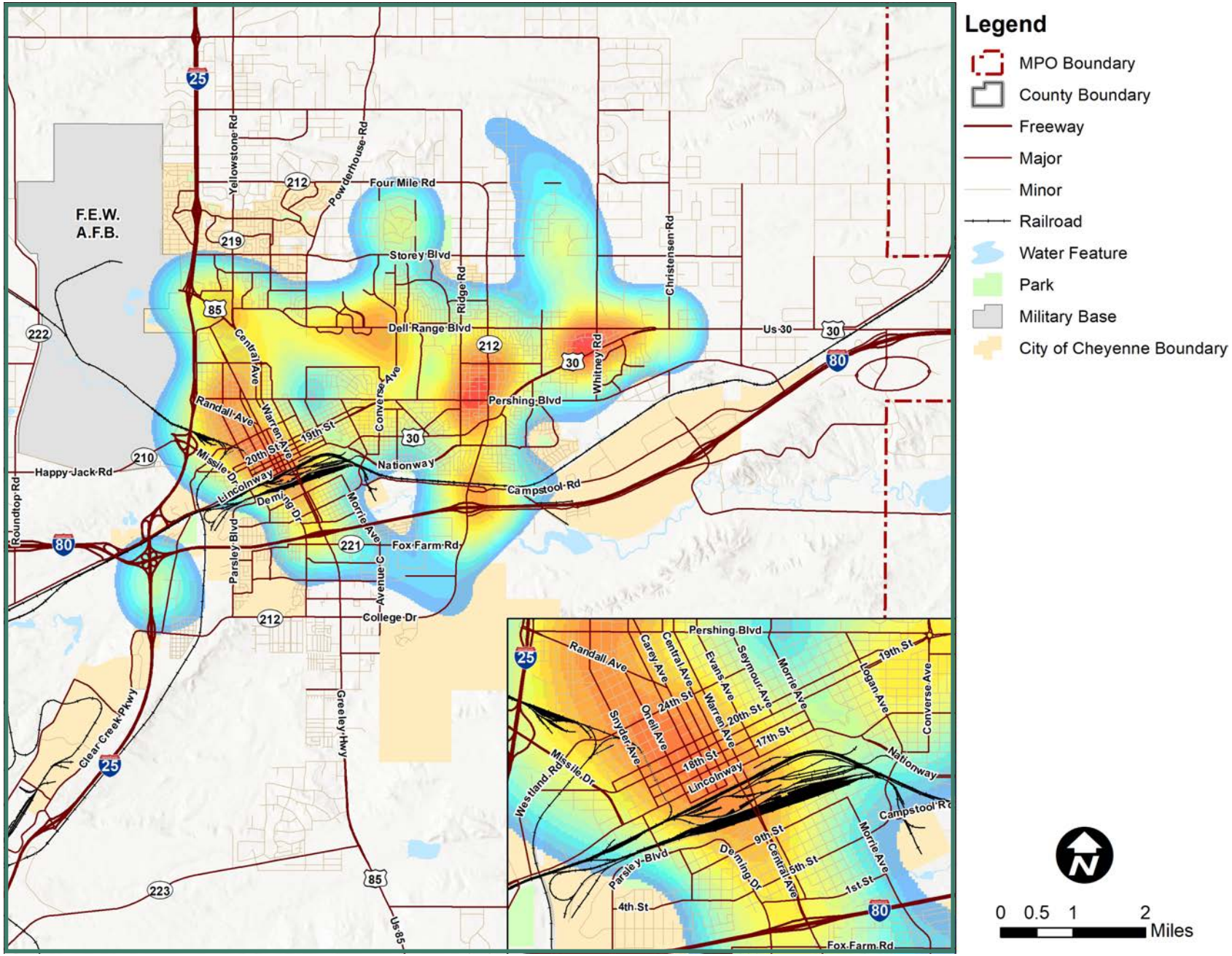
Purpose. This exercise allowed respondents to place markers on a map where they would like to see transportation improvements made. The respondent could indicate the type of project, the goal statement it most supports, and write a description of the suggested project.

Results:

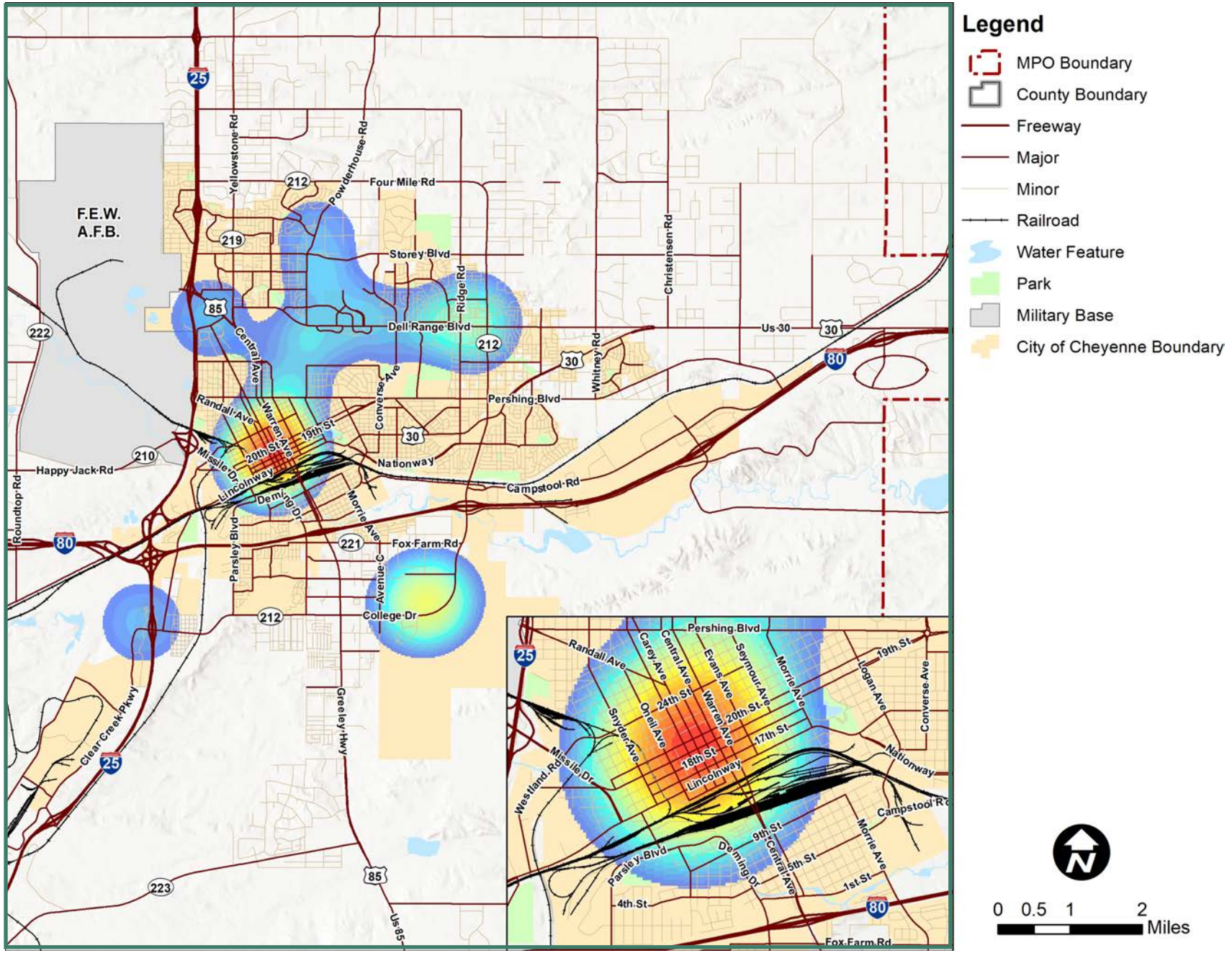
278 total markers were dropped in this page, and **Figure 8** shows the breakdown of markers by type. Analysis results were grouped together by roadway, transit, and active transportation modes. **Map 3** through **Map 5** show heat maps to identify hot spots for requested improvements for each mode around the region.

All three modes have hot spots located in downtown Cheyenne, indicating that multimodal improvements should be focused in central Cheyenne. The roadway and active transportation maps have secondary hot spots on the east side of Cheyenne along the US 30 and Dell Range corridors, indicating that there are substantial needs for roadway capacity and safe pedestrian and bicycle improvements in these areas. Finally, the roadway and transit maps have secondary hot spots centered around the busy retail area located along Dell Range Boulevard north of the airport. This area should be a focus for roadway capacity improvements and providing additional transit service.

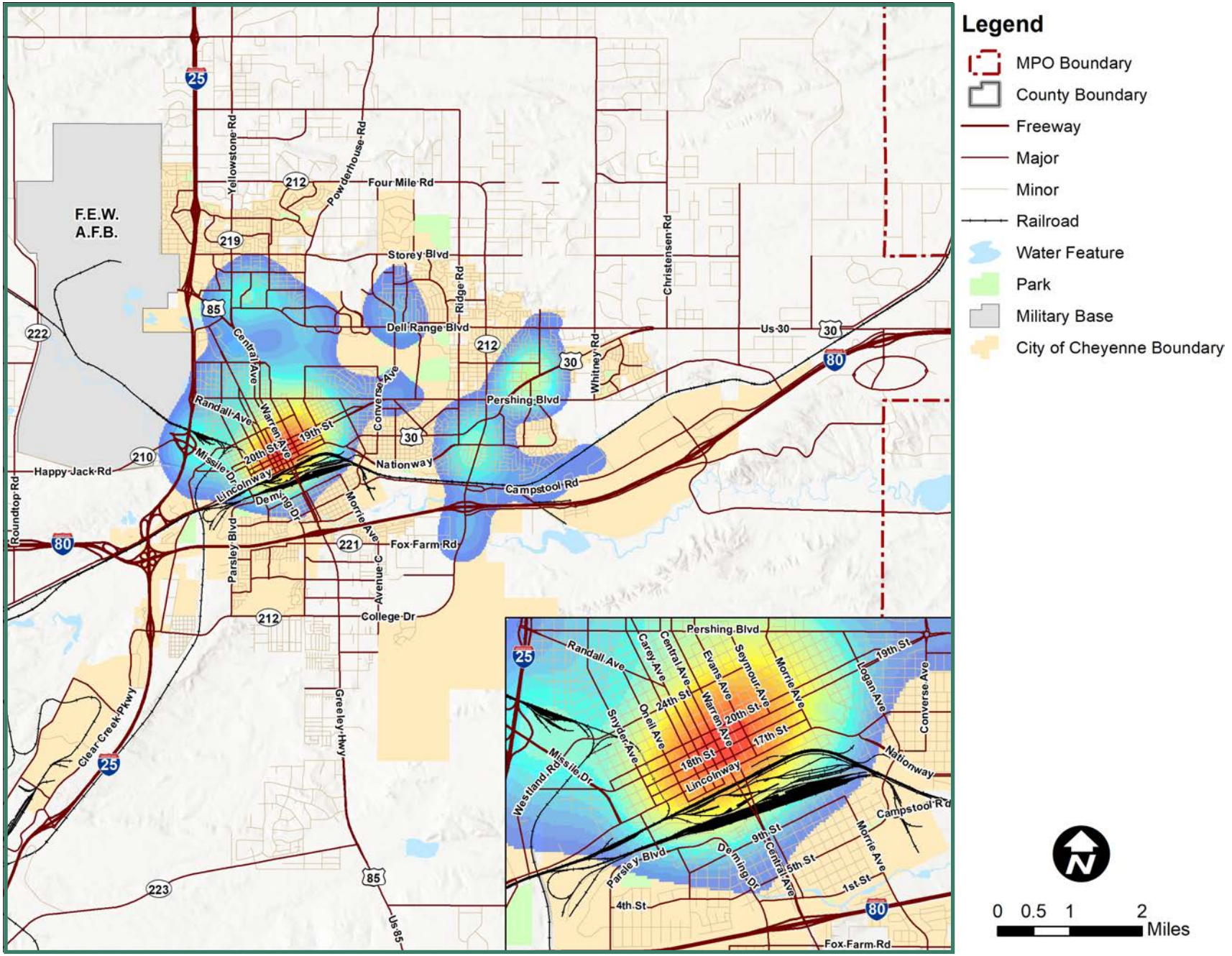
Map 3: MetroQuest Survey Roadway Improvement Heatmap



Map 4: MetroQuest Survey Transit Improvement Heatmap



Map 5: MetroQuest Survey Active Transportation Improvement Heatmap



2.3 ROUND 3 – VIRTUAL OPEN HOUSE

The first two phases of public and stakeholder engagement focused on understanding Cheyenne's mobility system and identifying issues and opportunities with the transportation system. The third and final phase of engagement was conducted to present draft recommendations and gather information on how and where to spend federal transportation funds over the next 25 years.

Due to COVID-19, the planned in-person outreach events during phase three was converted to a virtual format using the Cheyenne MPO website, interactive maps, and a Virtual Open House to gather feedback and answer questions.

A virtual charrette-style workshop was conducted with stakeholders and a public virtual open house was held where a total of 25 participants joined to hear about a summary of what we heard in previous engagement phases, draft recommendations, and an overview of the prioritization process. At the end of the presentation, several questions and comments were stated during the virtual open house. The questions and comments were mainly focused on unincorporated pockets of Laramie County largely or completely surrounded by the City of Cheyenne and issues that arise from these areas, new development, and bike lane safety.

This meeting was recorded and posted along with the recommendations development report, community assessment report, and two interactive maps showing recommendations and prioritization, all open for comment following the virtual open house. Feedback received included comments on developer-funded roadways, transit system improvements, greenway prioritization, and unincorporated improvements, all of which have been considered in the final plan.

Figure 9: Public Engagement Round 3 MPO Website Materials Screenshot

2.4 PUBLIC HEARINGS

TO BE COMPLETED AFTER COMPLETION OF THE PUBLIC HEARINGS

CHAPTER 3: CURRENT AND FUTURE DEMOGRAPHICS

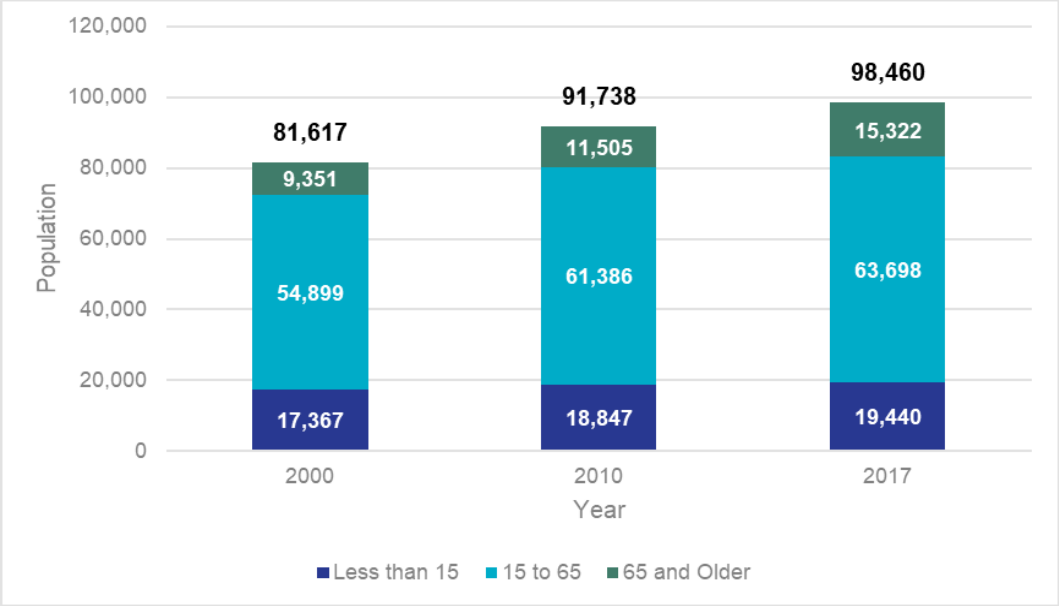
Population, employment, demographics, and growth locations help define transportation needs and choices. As the population grows, the need for roadways to facilitate travel and mobility needs will also grow. This section summarizes current population and employment data as well as a projection of future (2045) population and employment.

3.1 CURRENT POPULATION AND EMPLOYMENT

The total population of Laramie County in 2017 is estimated by the US Census Bureau at approximately 98,500, as shown in **Figure 10**. Since 2000, the population has grown by roughly 16,800 people at an average annual rate of 1.0 percent. The fastest growing age cohort in Laramie County is the population 65 and older, which accounted for 57 percent total growth from 2010 to 2017. The population less than 15 years old saw the lowest rates of growth from 2000 to 2017.

In 2000, the population less than 15 years old and older than 65 (non-working age) made up roughly 33 percent of the total population, whereas in 2017 they now account for 35 percent the population. These demographic shifts are important to evaluate because mobility needs are different for different age groups. Younger and older people are more reliant on transit and how they can efficiently move around the region without a personal vehicle. Working age people will be more focused on improving commuting during peak hours.

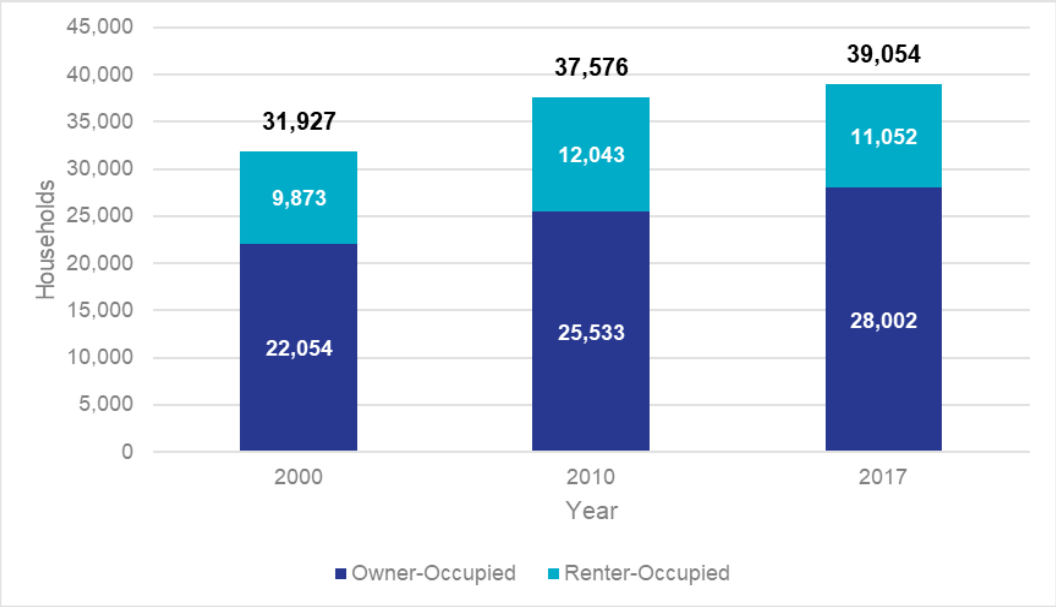
Figure 10: Laramie County Population by Age (2000-2017)



Source: US Census Bureau

In 2017, Laramie County was estimated to have more than 39,000 households with 72 percent owners (approximately 28,000 households) and 28 percent renters (approximately 11,000 households), as shown in **Figure 11**. Between 2000 and 2017, Laramie County grew by an estimated 7,100 households, which is around 420 new households per year. Laramie County housing unit growth has outpaced household growth, adding approximately 9,100 units from 2000 to 2017, or around 540 units per year.

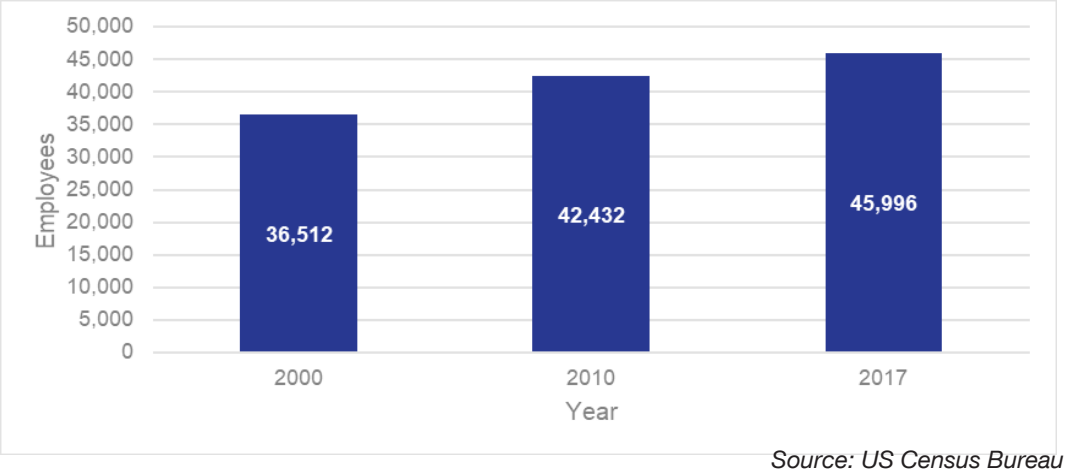
Figure 11: Laramie County Households (2000-2017)



Source: US Census Bureau

In 2018, Laramie County had nearly 46,000 wage and salary jobs, as shown in **Figure 12**. From 2000 to 2018, the county gained nearly 9,500 total jobs which is roughly equivalent to 500 jobs annually. The top three industries include health care and social assistance with 29 percent of growth (2,767 jobs), transportation and warehousing with 18 percent of growth (1,672 jobs), and accommodation and food services with 10 percent of total growth (909 jobs).

Figure 12: Laramie County Employment (2000-2018)



Source: US Census Bureau

Compared to the State of Wyoming, Laramie County has a higher concentration of jobs in public administration, transportation and warehousing, information, finance and insurance, administrative and support services, professional, scientific, and technical services, and retail trade.

3.2 FORECASTED POPULATION AND EMPLOYMENT

This section summarizes forecasted employment, population, and household growth in the planning horizon from 2020 to 2045 for Laramie County and the Cheyenne Planning Area. Additional detail on these trends is provided in **Appendix B: Demographic Characteristics.**

3.2.1 Methodology

Employment-based forecasts are grounded in two growth scenarios, as shown in **Table 4** (on the next page). For the purposes of long-range transportation planning, the high growth forecast is used for travel demand modeling to accommodate all of the potential forecasted growth from 2020 to 2045.

The primary economic driver impacting the higher growth forecast is a planned investment in upgrading and modernizing the Air Force's Ground Based Strategic Deterrent (GBSD) weapon system. Other assumptions in the Low and High forecasts include:

- **Significant County Employment Sectors:** Employment growth by industry is grounded in historic growth trends, the Bureau of Labor Statistics forecast rates for the U.S., and the State of Wyoming forecast rates by industry from the Wyoming Department of Workforce Services. Major employment sectors in Laramie County include mining, quarrying, and oil and gas extraction, utilities, transportation and warehousing, health care, and professional and technical services.
- **Government (GBSD; Military and Non-Military):** Historical growth rates are used to forecast the employment in the sectors impacted by GBSD in the low growth scenario, and increased growth rates are used to forecast employment in the sectors impacted by GBSD in the high growth scenario.
- **Demographics (Age Cohort):** Population forecasts by age are based on the state demographer forecast growth rates. However, in the high growth scenario, a higher rate of growth is shown for the population 65 and older until 2030.

Ground Based Strategic Deterrent (GBSD)

Congress has approved a $90 million investment for upgrading the nuclear triad missile defense systems that are located in Wyoming and Colorado (based out of F.E. Warren AFB), in Montana (based out of Malmstrom AFB), and North Dakota (based out of Minot AFB).

These investments will be made to the GBSD triad sequentially over a 10 to 15-year time period. F.E. Warren AFB is estimated by local economic development officials to see major investment beginning in 2025. This effort is estimated to add 2,000 jobs to the Cheyenne Planning Area through a contract with a major military defense firm. This contract is expected to generate jobs in the following industries: construction, manufacturing, information, professional, scientific, and technical services, and public administration. In the High Growth Forecast, GBSD is expected to have a 15-year buildout beginning in 2025.

GBSD investments in F.E. Warrent AFB are expected and has recently been selected as the first location for this project. However, to remain conservative, two forecasts, Low and High, have been created to forecast future demographics with and without GBSD investments at F.E. Warren AFB.

Table 4: Forecast Assumptions

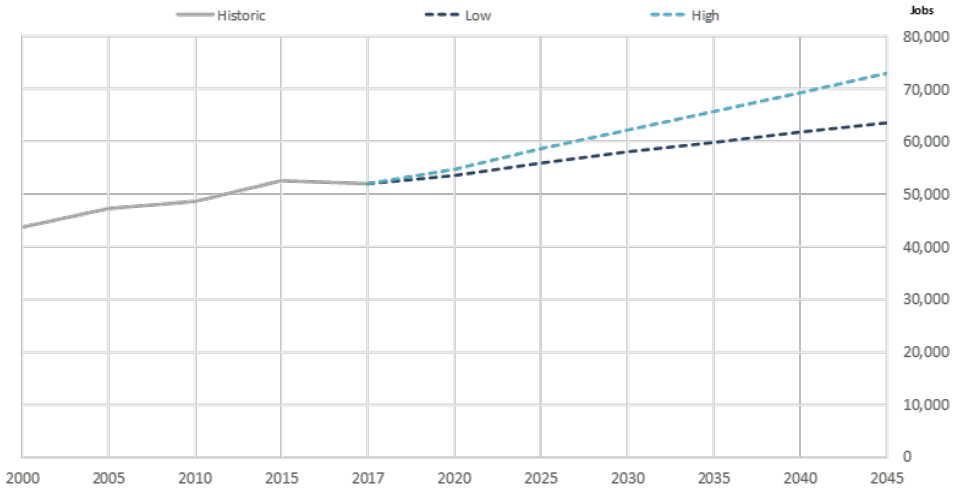
	Low Forecast	High Forecast
Significant County Employment Sectors		
Mining, Quarrying, and Oil and Gas Extraction	Low Increase	Low Increase
Utilities	Low Increase	Moderate Increase
Transportation and Warehousing	Moderate Increase	High Increase
Health Care	Moderate Increase	High Increase
Professional & Technical Services	Moderate Increase	High Increase
Government (GBSD; Military & Non-Military)		
Total Jobs	No Change	2,000
Employment Sectors Affected	N/A	Construction, Manufacturing, Information, Professional, Scientific and Technical Services, Public Administration
Phasing	N/A	2025 (15-year buildout)
Demographics (Age Cohort)		
Labor Force (16-65 Age Cohort)	Wage & Salary Forecast	Wage & Salary Forecast
<16 Age Cohort	State Demographer Rate	State Demographer Rate
>65 Age Cohort	State Demographer Rate	Adjusted Up

Source: Economic & Planning Systems

3.2.2 Employment

Laramie County is forecasted to add between 10,000 and 18,000 jobs from 2020 to 2045, as shown in **Figure 13**. In both growth scenarios, the top five industries for growth in the forecast horizon include health care and social assistance, transportation and warehousing, construction, accommodation and food services, and professional and technical services.

Figure 13: Laramie County Historic and Forecasted Employment (2000-2045)



3.2.3 Population and Households

Since 2010, the Cheyenne Planning Area has captured 86 percent of countywide population growth for an estimated population of approximately 89,400 in 2019, as shown in **Table 5**. Population density across Laramie County has increased from 34 persons per square mile in 2010 to 38 persons per square mile in 2019. Over the planning horizon, the Cheyenne Planning Area is estimated to capture the same portion of total Laramie County population growth (86%).

Table 5: Population Density (2010-2019)

Description	Population		Population Density		2010-2019	
	2010	2019	2010	2019	2010	2019
Geography						
Cheyenne MPO Planning Area	81,163	89,429	382 persons/sq. mi.	416 persons/sq. mi.	8,266	86%
County (Outside MPO Planning Area)	10,575	11,972	4.3 persons/sq. mi.	4.8 persons/sq. mi.	1,397	14%
Total Laramie County	91,738	101,401	34 persons/sq. mi.	38 persons/sq. mi.	9,663	100%
As % of Geography						
Cheyenne MPO Planning Area	88%	88%	-	-	-	-
County (Outside MPO Planning Area)	12%	12%	-	-	-	-
Total Laramie County	100%	100%	-	-	-	-

Source: ESRI Business Analyst; Cheyenne MPO; Economic & Planning Systems

The Cheyenne Planning Area is forecasted to grow by between 22,300 and 31,800 individuals from 2020 to 2045, as shown in **Figure 1**. Estimated population growth in the Cheyenne Planning Area is equivalent to approximately 9,600 to 13,500 new households and 9,300 to 13,500 new housing units by 2045, as shown in **Figure 15**.

Forecasted growth results in an estimated 437 to 635 new housing units annually in Laramie County. Historic residential building permits in Laramie County averaged 533 units annually from 2000 to 2010 and 433 annually from 2011 to 2018. Future residential unit demand is dependent on the impact of the major employment investments, specifically the GBSD timeline.

Figure 14: Laramie County Historic and Forecasted Population (2000-2045)

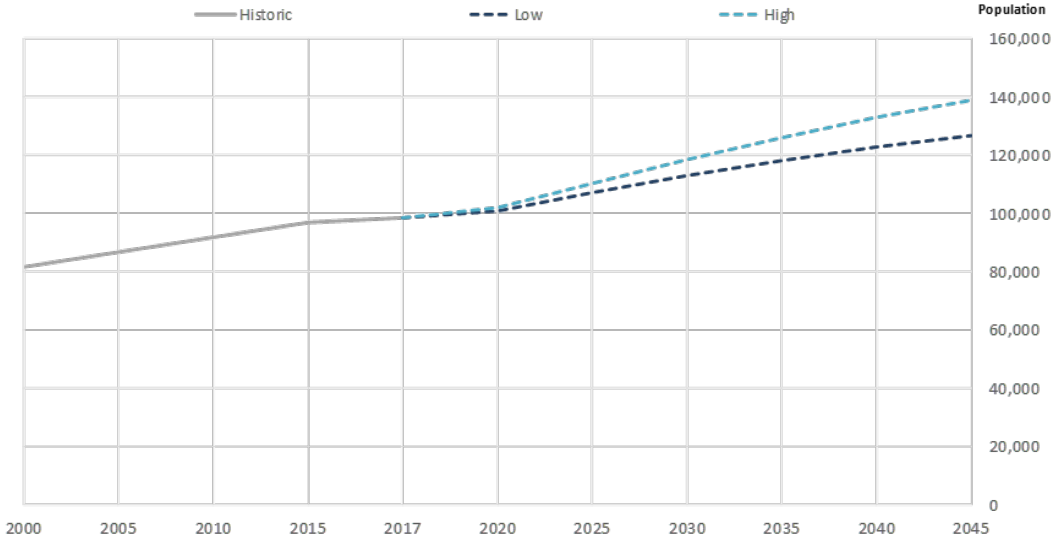
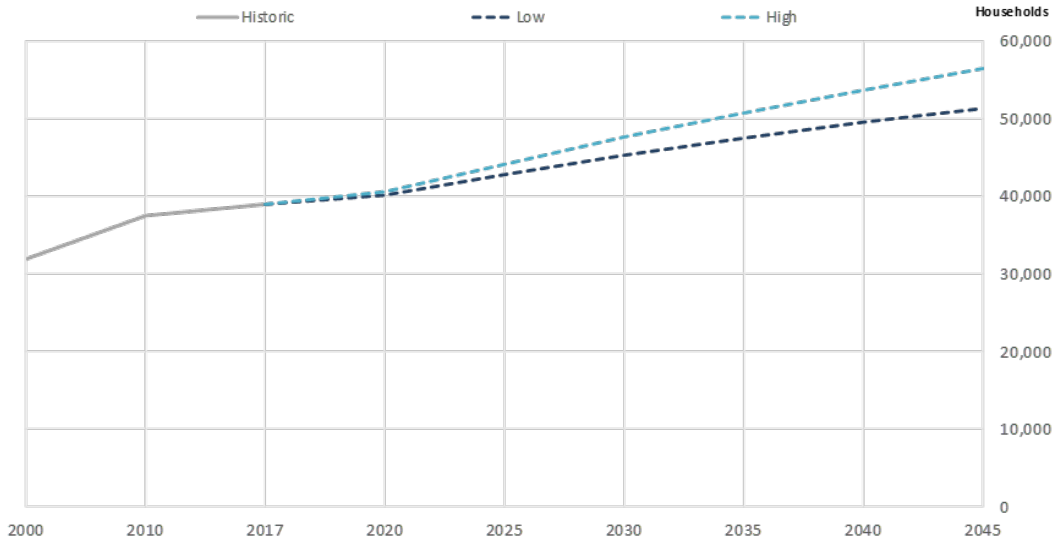


Figure 15: Laramie County Historic and Forecasted Households (2000-2045)



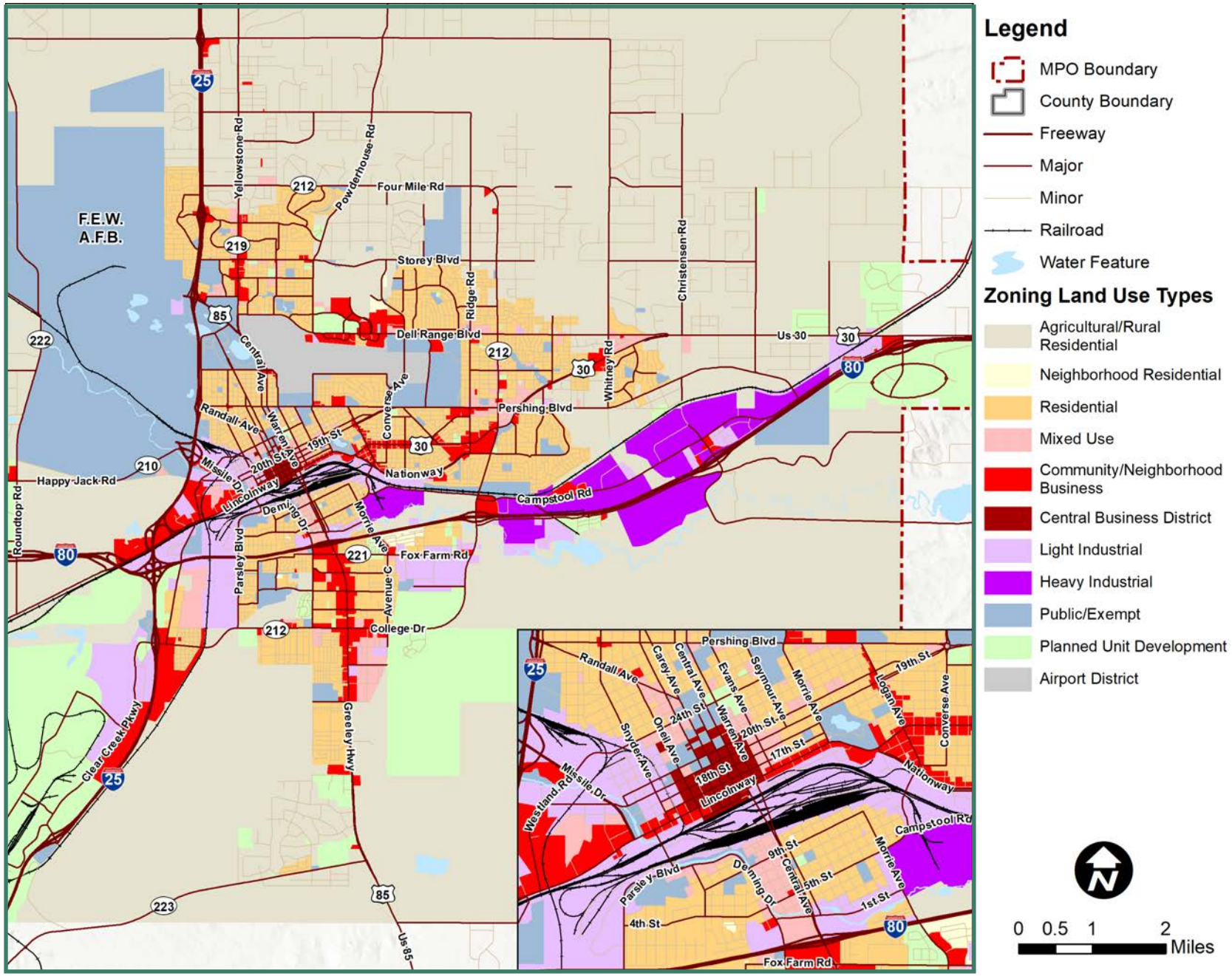
3.3 REGIONAL LAND USE AND DEMOGRAPHICS

Existing land use for the Cheyenne MPO area was inventoried using available data from the MPO and current zoning and is displayed in **Map 6** (on the next page). The MPO area in general is primarily agricultural and residential, with large lot rural residential being the predominant residential development pattern, particularly in unincorporated areas. within the city limits, much of the area is zoned for residential, with supporting areas of community business or mixed-use business. Industrial use activity centers are zoned along the Interstate 80 (I-80) and Interstate 25 (I-25) corridors, with the Francis E. Warren Air Force Base occupying a large area west of I-25 and areas of public use surrounding the Cheyenne Municipal Airport.

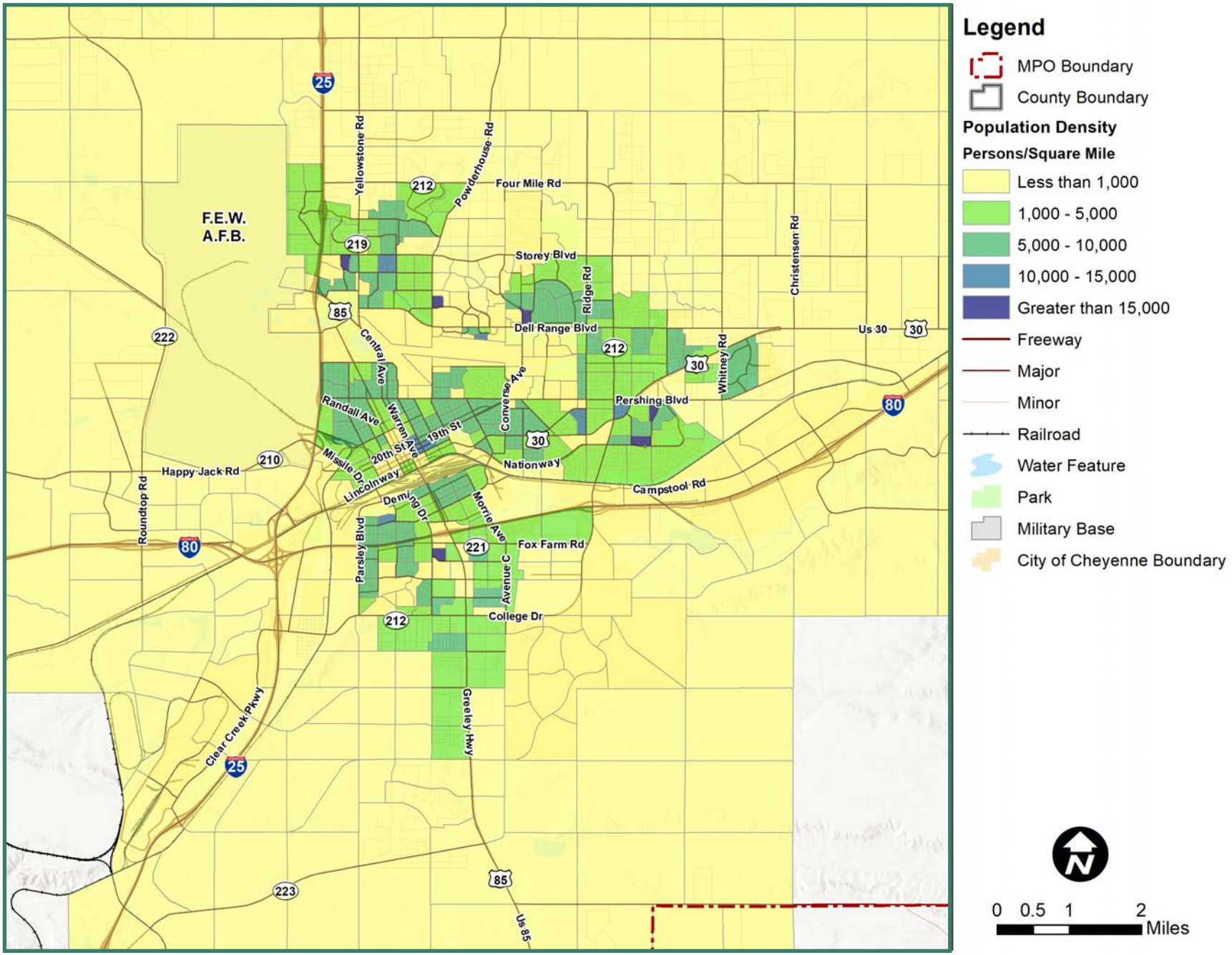
Current population densities are provided in **Map 7**, which is summarized by Traffic Analysis Zone (TAZ) from the regional travel demand model. Population densities are highest in the residential neighborhoods directly north and south of Downtown Cheyenne, as well as residential areas in the northeast and northern portions of the city.

Current employment densities are provided in **Map 8**, which is also summarized by TAZ. Employment densities are highest in Downtown Cheyenne and the cluster of state office buildings around the state capitol. Employment densities are also relatively high along the Dell Range Boulevard corridor, the US 85 corridor south of I-80, and the business parks located along the two interstates in the region.

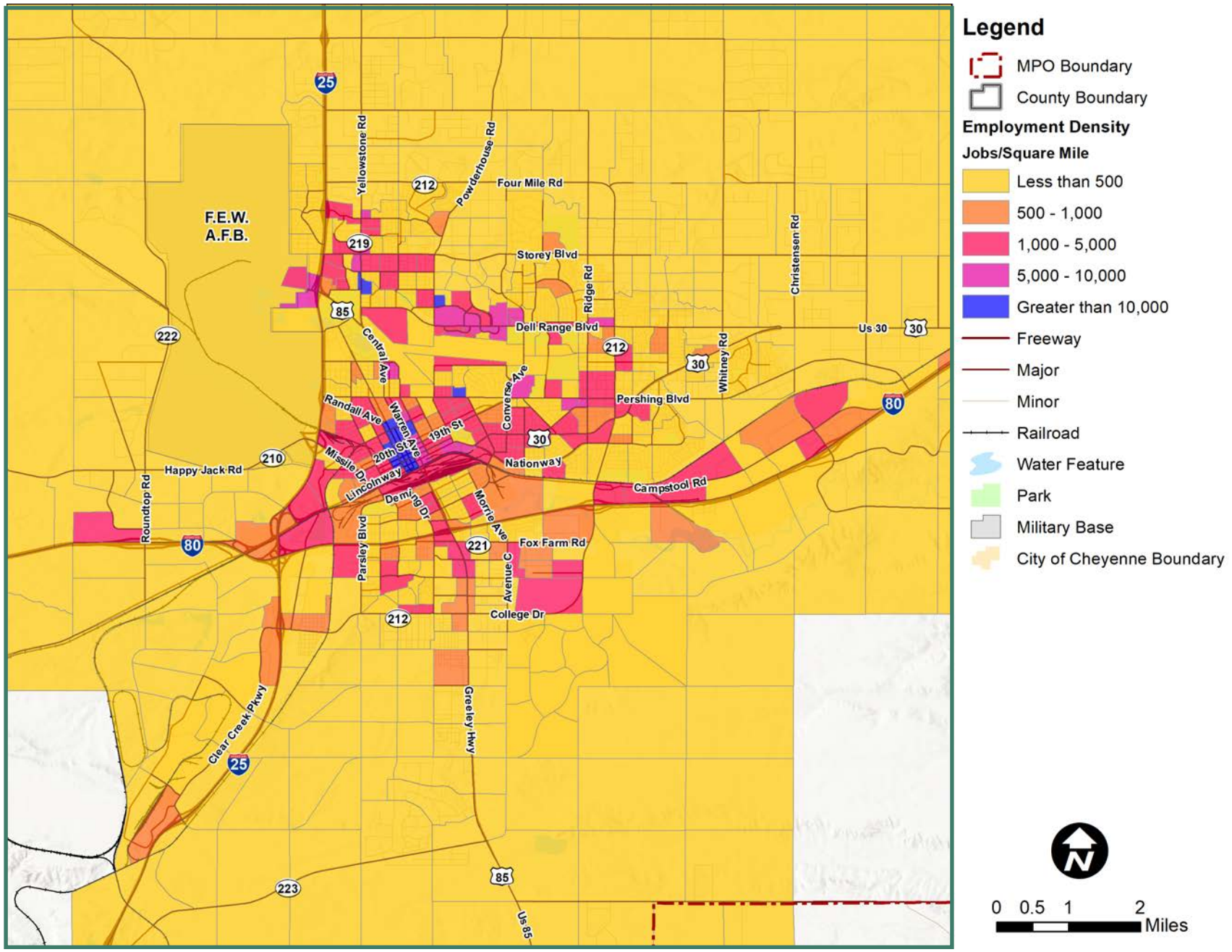
Map 6: Existing Land Use



Map 7: Current Population Density



Map 8: Current Employment Density



3.3.1 Future Land Use

The Future Land Use Plan from 2014 provides a land use framework for future development in the Cheyenne Area. It is not intended to change stable neighborhoods, but rather outline places where new development will occur in the future, including some redevelopment areas. The land use categories outlined in the plan allow future neighborhoods and activity centers to become distinctive, diverse places with a mix of compatible activities. Additionally, the categories provide some flexibility to respond to market conditions over the coming years.

3.3.1.1 Urban Service Boundary

The future land uses are planned for all areas within the Urban Service Boundary (USB). Generally, the USB follows the sewerable boundary where water and sewer can be provided. Most urban development will occur within this area. While much of the land within the USB is already developed in the City of Cheyenne, a considerable amount of vacant land remains that will become the community's future neighborhoods. New urban residential neighborhoods, within supporting businesses and services, will be directed into this area that is generally contiguous with existing development. The USB and anticipated major growth areas are shown in **Map 9** (on the next page).

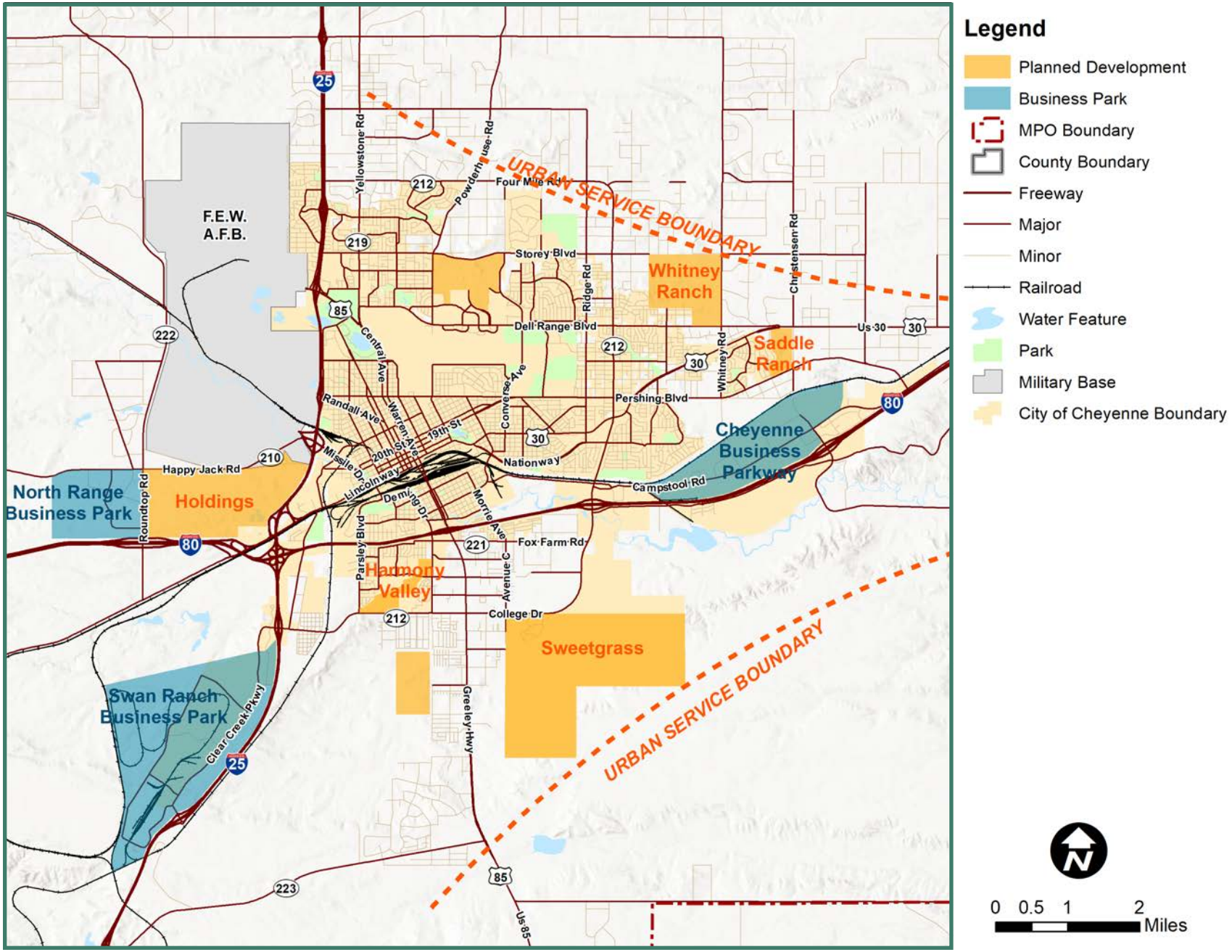
3.3.1.2 Future Land Use Categories

The future land uses categories are grouped under five major groups: Agricultural and Rural, Urban Residential, Mixed-Use, Business and Industry, and Civic and Other Activities. The future land use map is shown in **Map 10**.

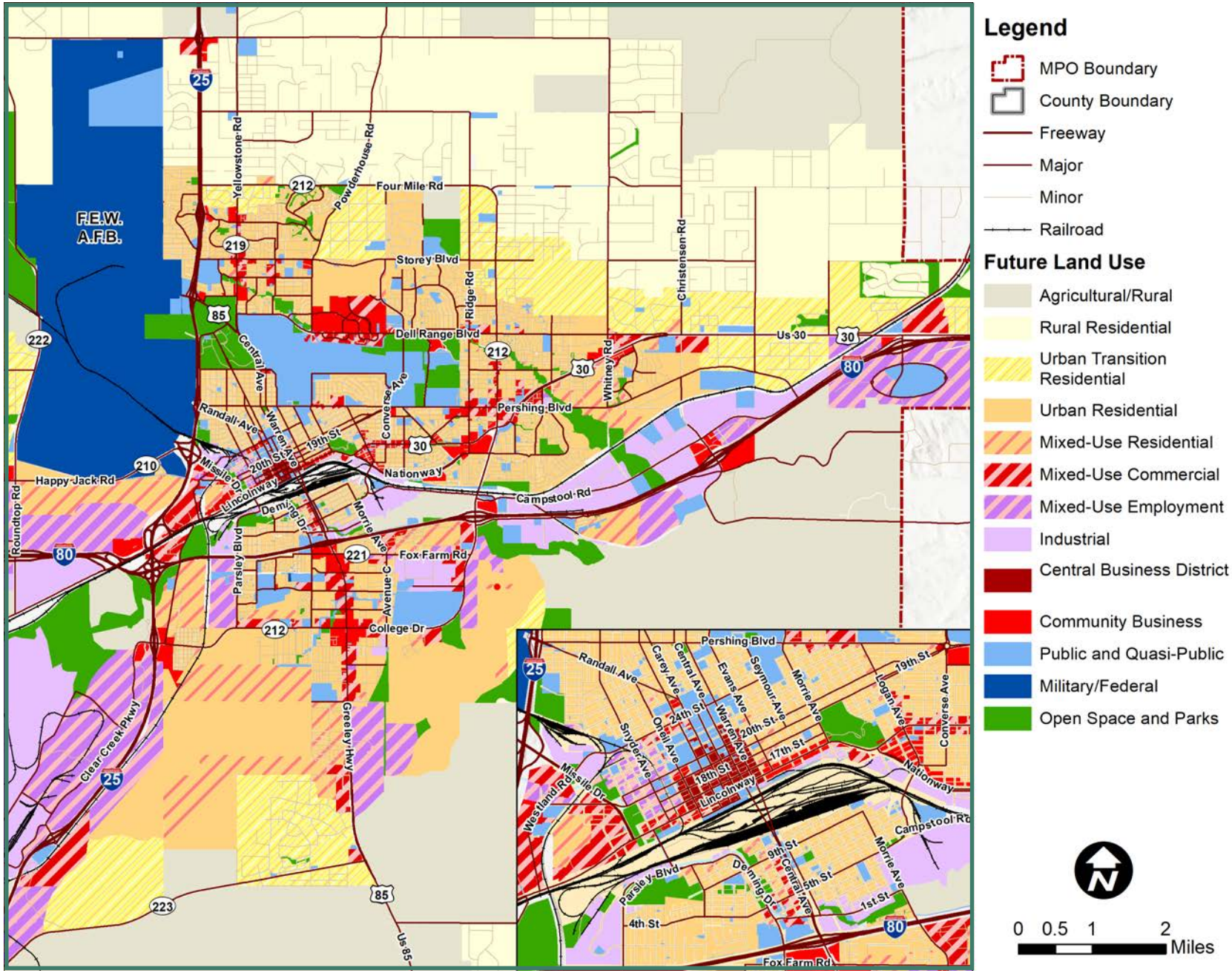
3.3.2 Future Growth

Map 11 and **Map 12** show the forecasted growth in population and employment between 2019 and 2045, respectively. This growth is summarized by TAZ and forms the underlying demographic information for the regional travel demand model (TDM). The forecasted growth largely aligns with the growth areas shown in **Map 9**.

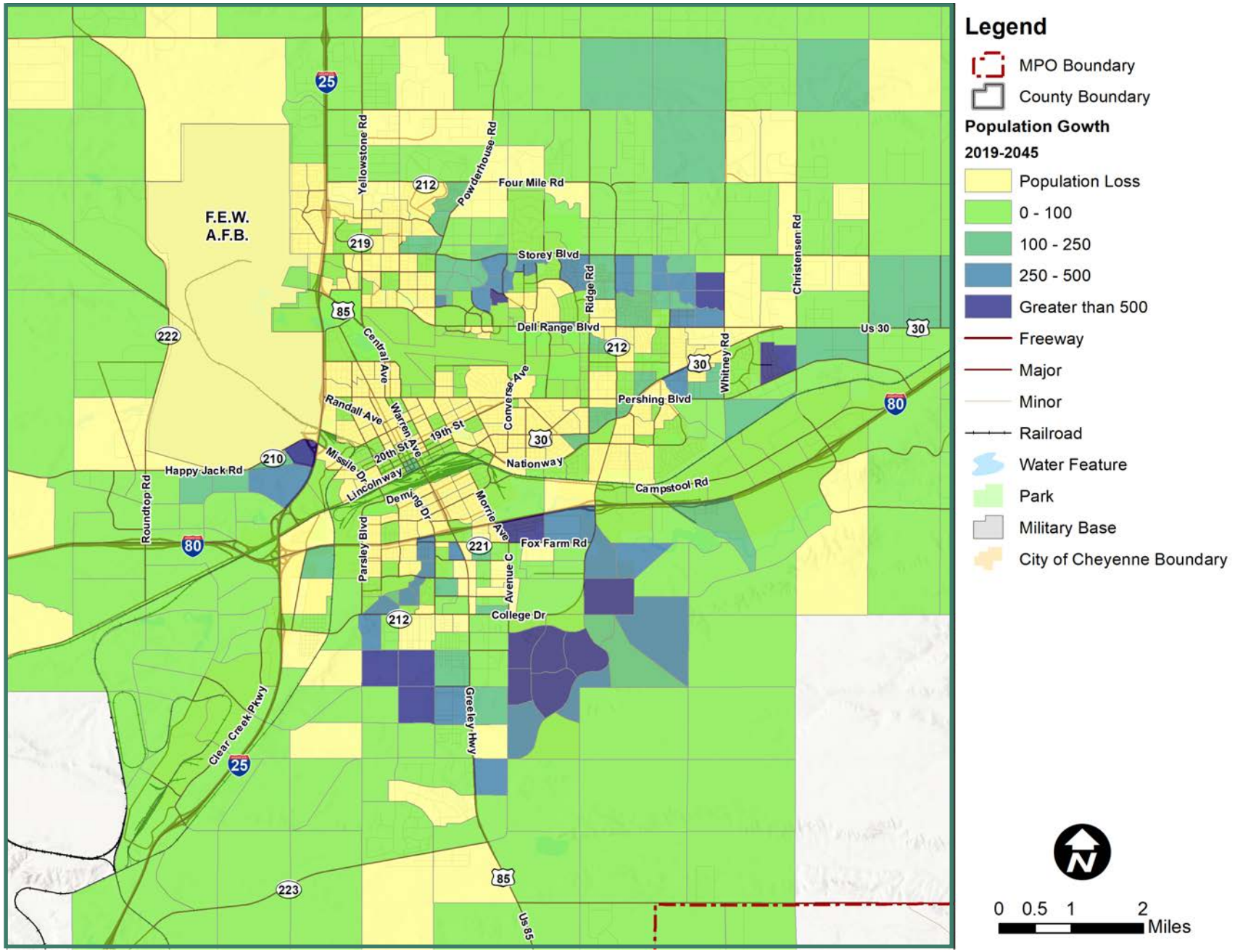
Map 9: Major Growth Areas



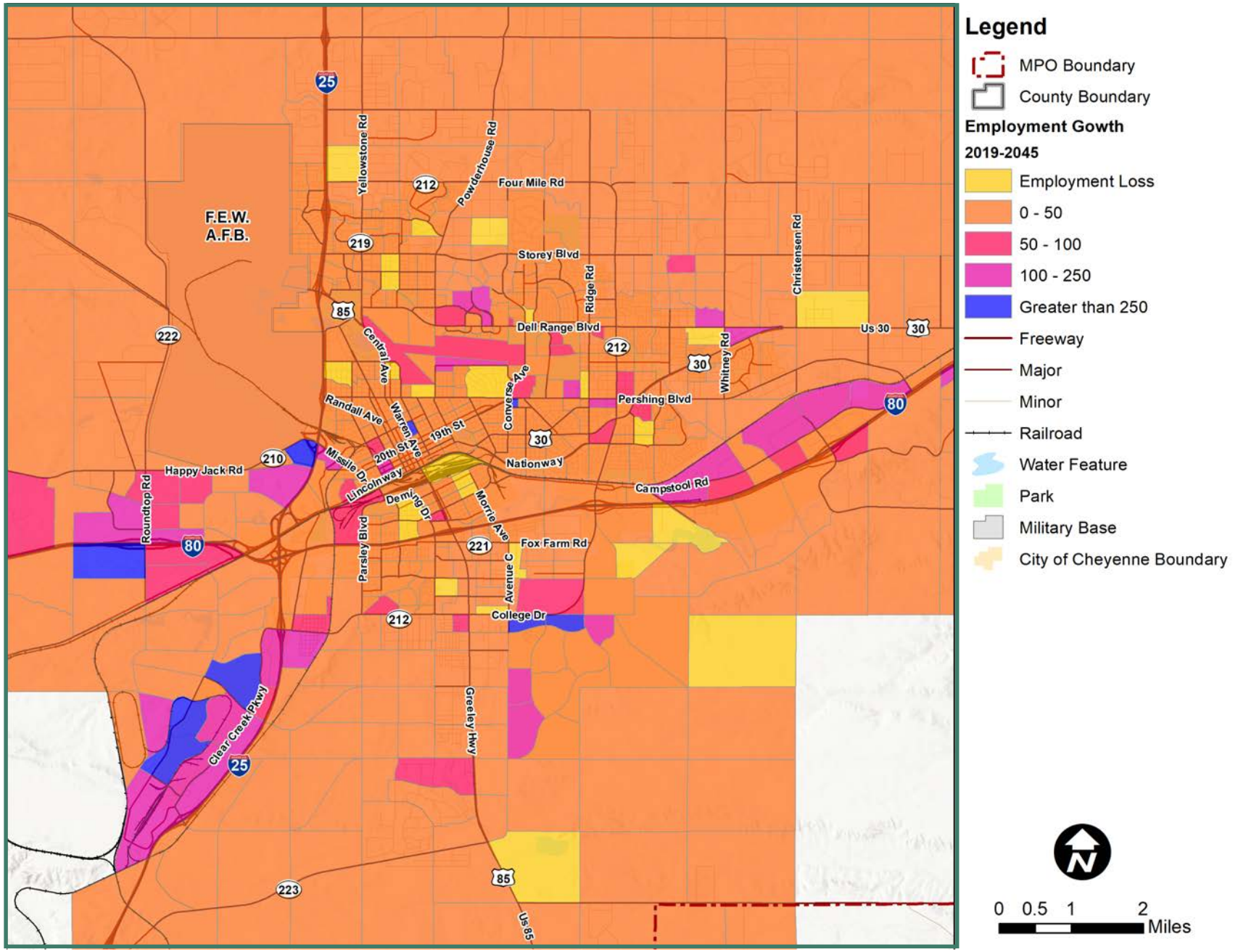
Map 10: Future Land Use Map



Map 11: Forecasted Population Growth (2019-2045)



Map 12: Forecasted Employment Growth (2019-2045)

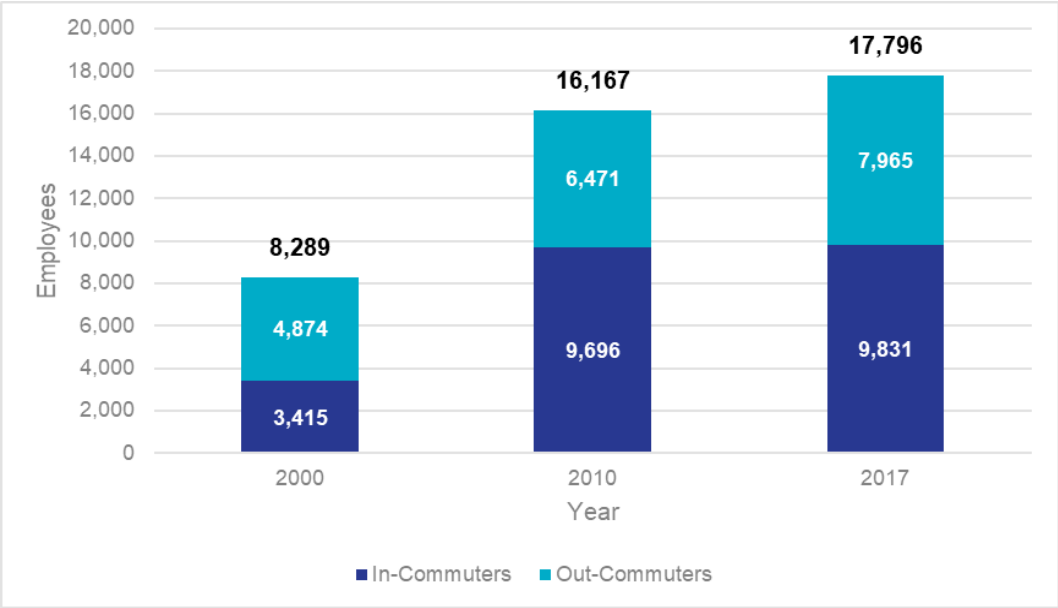


3.4 COMMUTING TRENDS

One of the primary functions of the transportation system is to support commute trips to and from work. The morning and afternoon peak travel periods generally represent the highest periods of travel demand and congestion. Based on U.S. Census Bureau Longitudinal Employment-Household Dynamics (LEHD) Origin-Destination Employment Statistics (2017), **Map 13** shows the inflow commute patterns of workers into Laramie County from surrounding areas in Wyoming and Colorado. The majority of Laramie County workers are employed and live within the area. A growing number of people work in Cheyenne, but commute from surrounding areas. The top commuting flows originate from Albany County, WY; Larimer County, CO; and Weld County, CO.

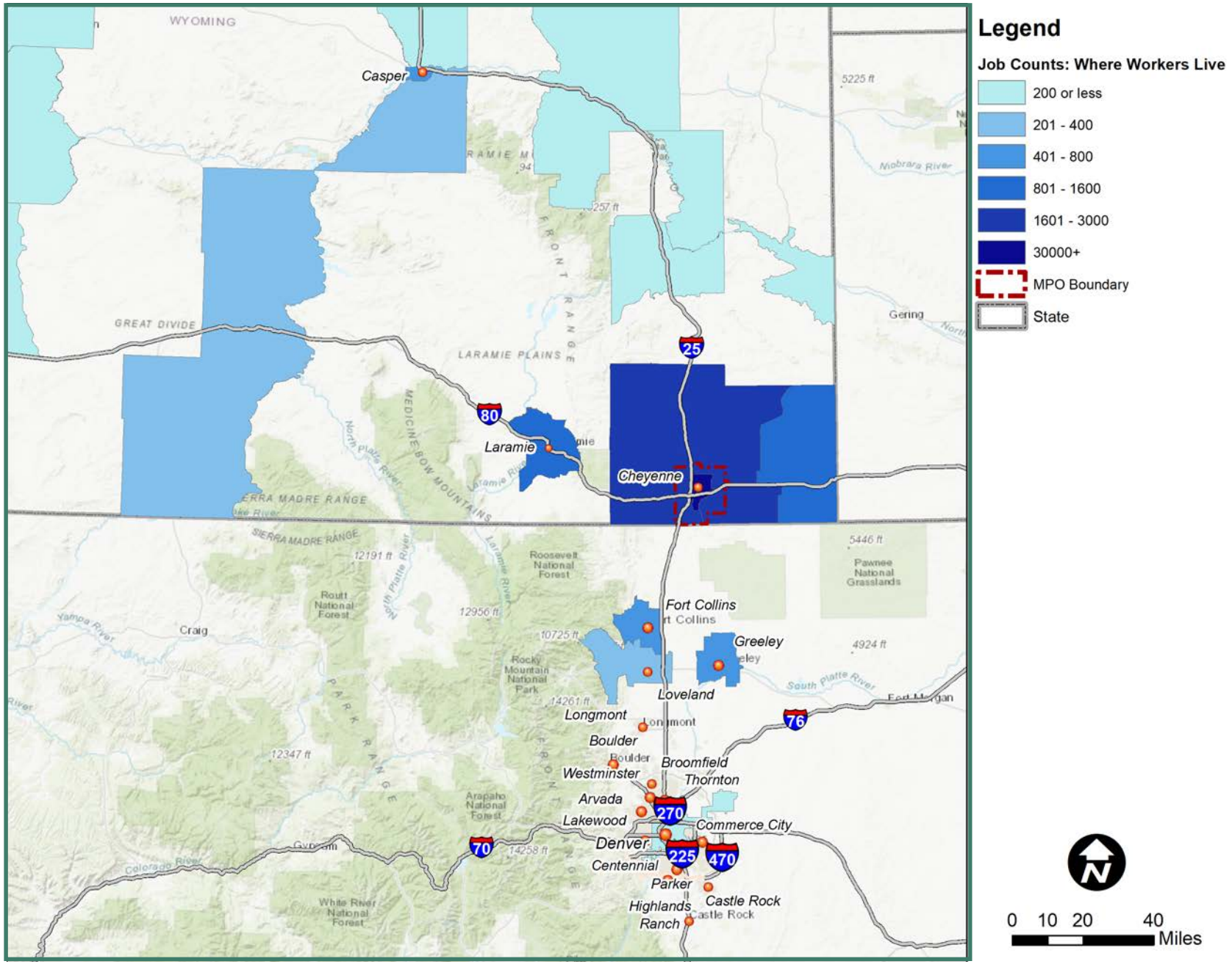
In 2017, roughly 21 percent of jobs were occupied by in-commuters, as shown in **Table 42**; additional details on commuter patterns are provided in Appendix B: Demographic Characteristics. Since 2000, the in-commuting population has grown by 6,400 workers, however, the majority of growth occurred between 2000 and 2010. Since 2010, the in-commuting population has grown by just 135 workers. The out-commuting population has grown more gradually adding around 3,100 workers between 2000 and 2017.

Figure 16: Laramie County Commute Patterns (2000-2017)



Source: US Census Bureau

Map 13: Cheyenne Area Commuting Trends



CHAPTER 4: REGIONAL ROADWAYS

Roadways form the backbone of the transportation system within the Cheyenne region. In addition to accommodating personal vehicles, roadways are also critical infrastructure for freight and transit operations. Pedestrian and bicycle facilities are also largely accommodated within roadway rights-of-way. This section provides the overall vision for roadway expansion as well as smaller-scale improvements that have been identified through the long-range transportation planning process.

4.1 THE REGIONAL ROADWAY SYSTEM

FHWA recommends grouping the roadway network into a hierarchical functional classification system based on the characteristics of the roadway, as well as the service the roadway is intended to provide. The transportation system in the Cheyenne area is organized into the following classifications:

- Interstates
- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roadways

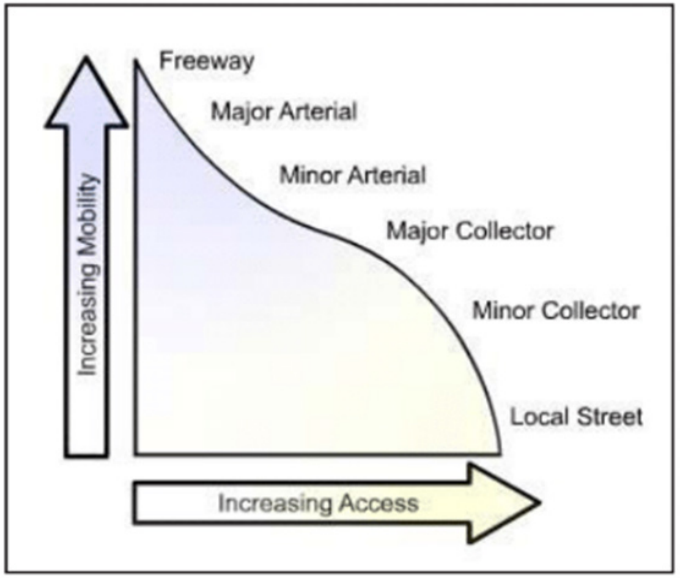
Figure 17 shows the relationship between land access and mobility for the different classifications. Highly classified roads, such as interstates and principal arterials, provide a high degree of mobility and limited access, promoting long-distance travel with minimal disruption to traffic. Conversely, local streets support short-distance, low-speed traffic representing the lowest degree of mobility, but the highest degree of access to adjacent land uses.

Table 6 gives a brief description of the functional classifications and how many miles of each classification is present within the Cheyenne MPO boundary.

Table 6: Functional Classification Statistics

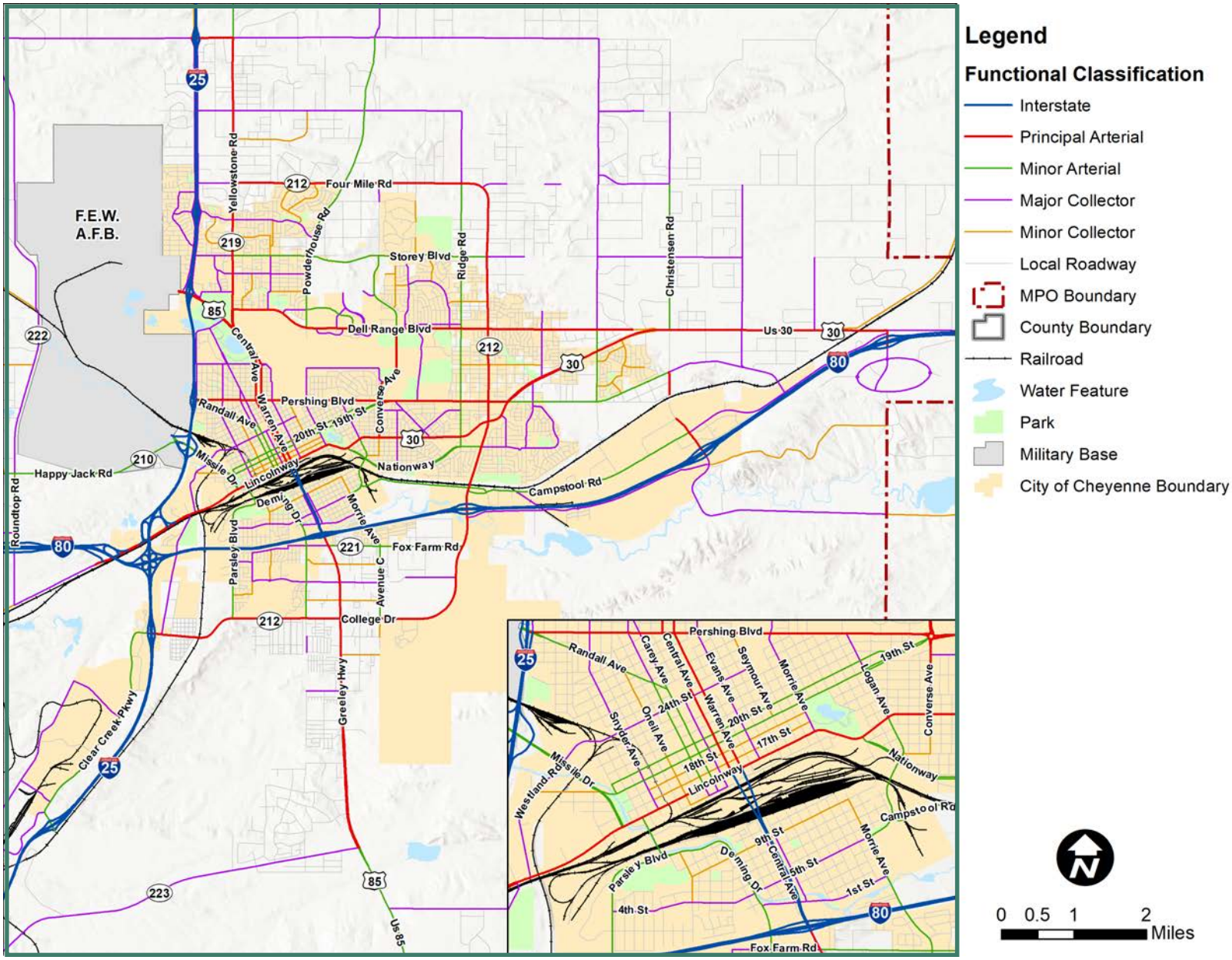
Functional Classification	Centerline Miles	% of Total	Services Provided
Interstate	95	11.4%	Full access control, high speed travel
Principal Arterial	60	7.2%	High speeds and long, uninterrupted travel
Minor Arterial	59	7.1%	Slower speeds than a principal arterial, often provide connections between principal arterials
Major Collector	125	15.1%	Collects traffic from local roads, distributes to arterials
Minor Collector	40	4.8%	Collects traffic from local roads, distributes to arterials
Local Street	451	54.4%	Provides access to land, little or no through traffic
Total	830		

Figure 17: Functional Classification - Mobility vs. Access



Map 14 shows the geographic location of each functional classification throughout the Cheyenne MPO region.

Map 14: Functional Classification



4.2 CURRENT TRAFFIC VOLUMES AND CONGESTION

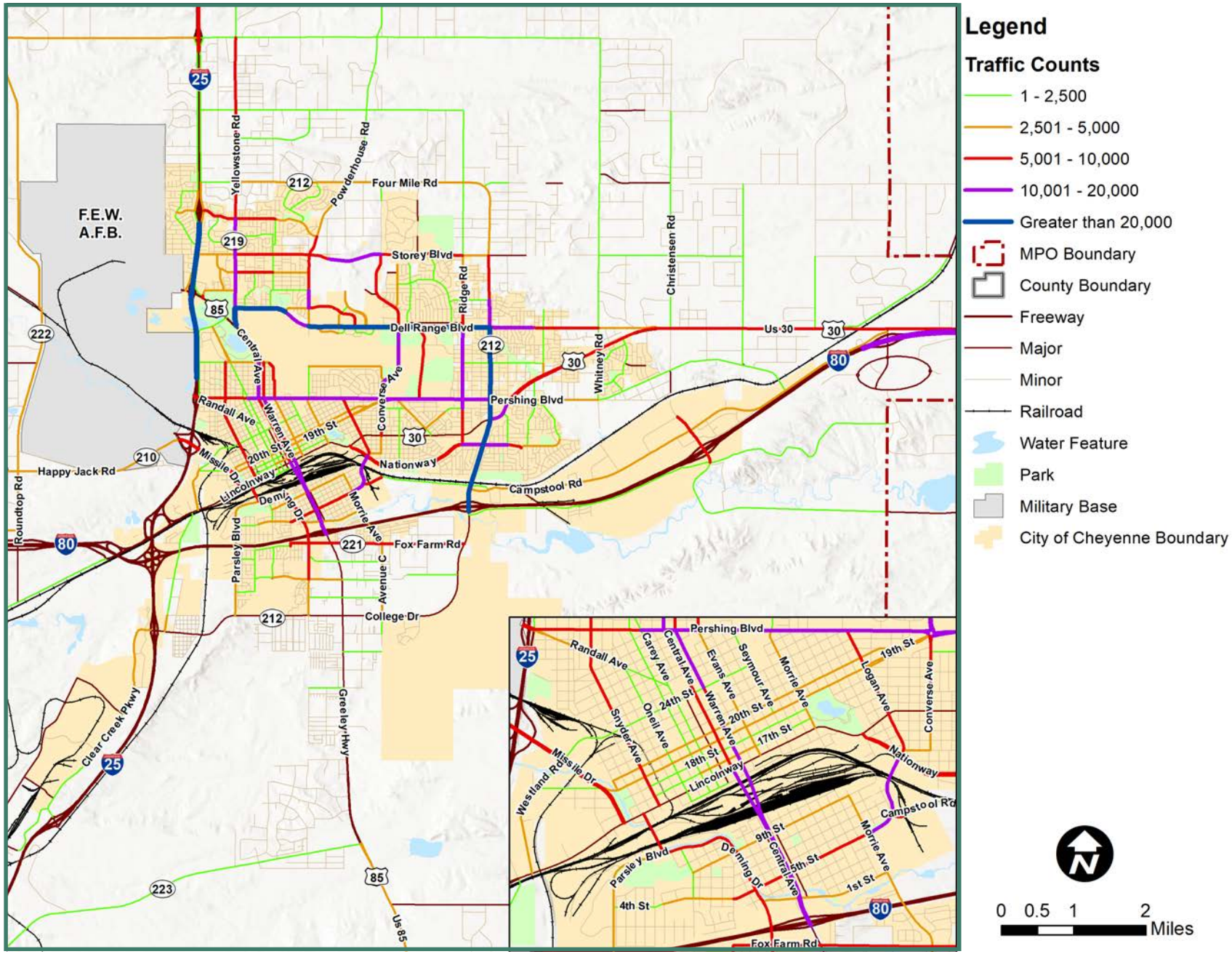
Traffic count volumes were collected by the Cheyenne MPO and WYDOT and compiled for 2015 through 2019. Average annual daily traffic (AADT) volumes are shown in **Map 15**; purple and blue colors correspond to higher traffic volumes. Recent traffic volumes are not available for every functionally classified roadway within the Cheyenne MPO region.

AADT generally corresponds to the functional classification of the associated roadway. The highest traffic volumes within the Cheyenne MPO area are shown in **Table 7**.

Table 7: Highest Traffic Volumes

Roadway	From	To	Daily Traffic (vpd)
Dell Range Boulevard	Powderhouse Road	Converse Avenue	37,666
Yellowstone Road	Central Avenue	Dell Range Boulevard	31,754
College Drive	I-80	US 30	26,470
Dell Range Boulevard	Converse Avenue	Mountain Road	26,092
Dell Range Boulevard	Mountain Road	Windmill Road	23,993

Map 15: Existing Traffic Volumes



Current traffic congestion levels in the Cheyenne MPO region were analyzed using level of service (LOS), a measure that rates the performance of the roadway network in terms of the degree of traffic congestion. This measure uses the letters 'A' through 'F', with an A being the best and F being the worst, depicted in **Figure 18**. LOS grades are defined by the Highway Capacity Manual (HCM) and described below:

LOS A: Free Flow. Traffic flows freely at the posted speed limit. Incidents or vehicle breakdowns have minimal impact on others. LOS A generally occurs late at night in urban areas and frequently in rural areas.

LOS B: Stable Flow. LOS A speeds are maintained, and maneuverability within the traffic stream is slightly restricted. Motorists have a high level of physical and psychological comfort.

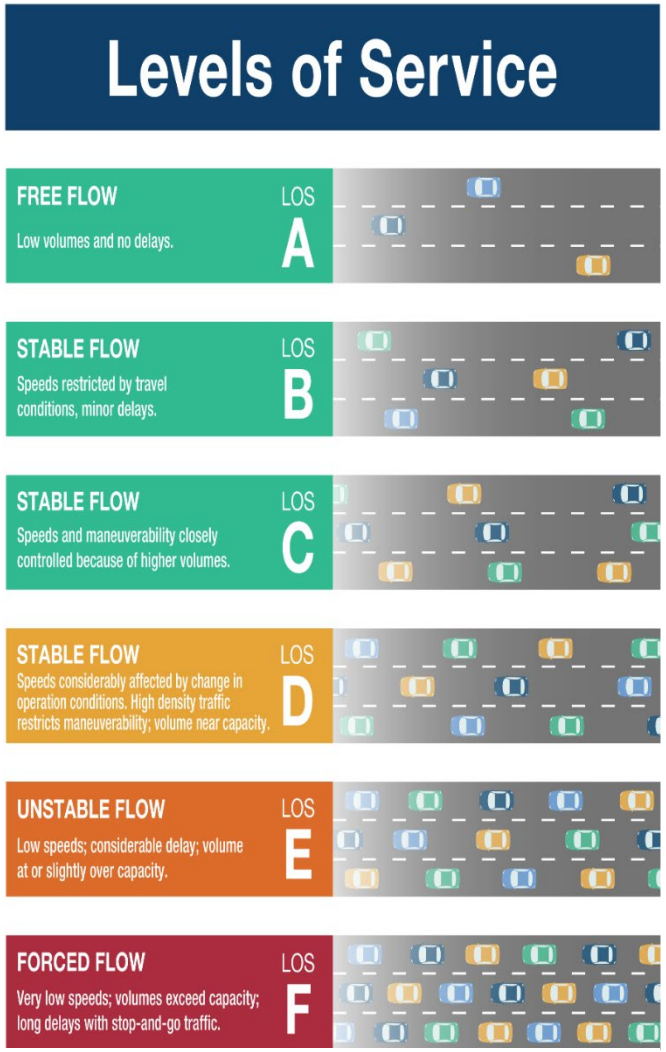
LOS C: Stable Flow. Motorists' ability to maneuver between lanes is noticeably restricted and requires more driver awareness. Roads remain uncongested but are approaching capacity. Minor incidents begin to lead to traffic delays behind the incident. This is the target LOS for most rural highways.

LOS D: Stable Flow. Speeds are decreased and motorist freedom to maneuver is more limited. Examples are a busy shopping corridor in the middle of a workday, or a major arterial during commuting hours. This is the target LOS for most urban streets, as attaining a LOS C would be cost-prohibitive.

LOS E: Unstable Flow. Flow becomes irregular and speed varies rapidly as traffics' ability to maneuver diminishes. Vehicles rarely reach the speed limit. Any incident or disruption to traffic flow, such as crashes or merging ramp traffic or lane changes, leads to congestion.

LOS F: Forced Flow. Every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required. Travel time cannot be predicted, with generally more demand than capacity. This represents a traffic jam.

Figure 18: Traffic Levels of Service



Source: Utah Department of Transportation, https://www.parleyseis.com/

4.3 FORECASTED FUTURE TRAFFIC VOLUMES AND CONGESTION

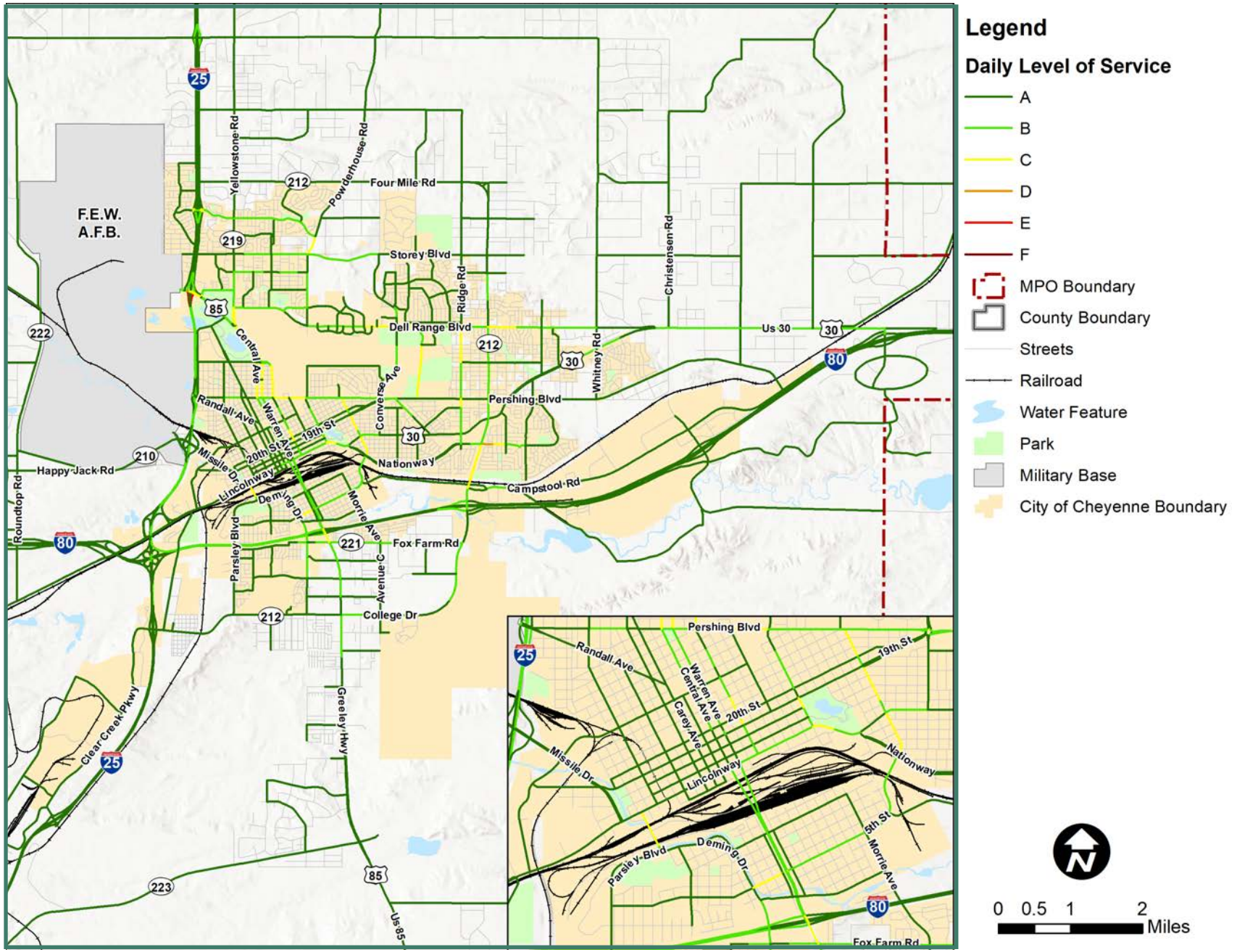
Map 16 shows the current LOS on major roads in the Cheyenne MPO region, based on the volume to capacity (V/C) ratio of daily modeled volumes in the regional travel demand model compared to the roadway capacity as determined by the regional travel demand model. **Map 17** shows the forecasted LOS on major roads in 2045 with only projects that currently have funds programmed included. Most roadways within the Cheyenne area are currently operating at an acceptable LOS (C or better). However, there are portions of the roadway network that are either approaching an unacceptable LOS (D) or are already experiencing an unacceptable LOS (E or F).

Roadway segments that currently have a LOS E or F, or are anticipated to have a LOS E or F by 2045, are provided in **Table 8** below.

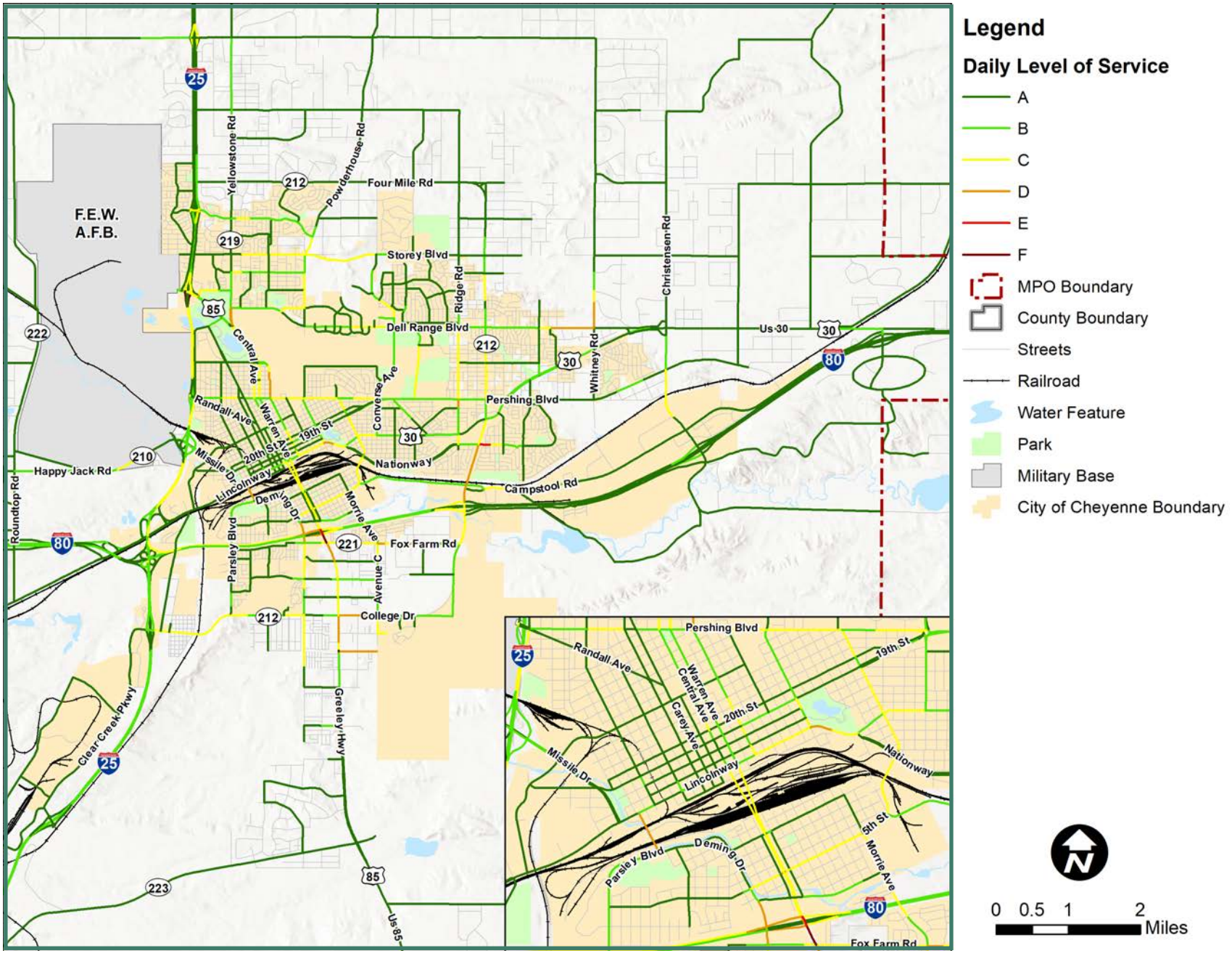
Table 8: Congested Roadways

Roadway	From	To	2019 LOS	2045 LOS
Northbound Off-Ramp	I-25	Central Avenue	E	F
Southbound On-Ramp	Central Avenue	I-25	E	F
12th Street	College Drive	Adams Avenue	D	E
US 85/S Greeley Hwy	I-80	Fox Farm Rd	C	F
College Drive	US 85/S Greeley Hwy	Avenue C	B	D
Ames Avenue	Parsley Boulevard	Lincolnway	C	D
Eastbound Off-Ramp	I-80	US 85/S Greeley Hwy	B	D
Westbound On-Ramp	US 85/S Greeley Hwy	I-80	B	D
Walterscheid Boulevard	Fox Farm Road	1st Street	B	D
US 85/S Greeley Hwy	Country West Road	College Drive	B	D
Evans Avenue	Pershing Boulevard	6th Avenue	C	D
Lincolnway	Morrie Avenue	15th Street	C	D
Fox Farm Road	Morrie Avenue	Avenue C-4	B	D
College Drive	I-80	Nationway	C	D
Ridge Road	Holmes Street	Pershing Boulevard	C	D
Yellowstone Road	Central Avenue	Dell Range Boulevard	C	D
Dell Range Boulevard	Converse Avenue	Mountain Road	C	D
Dell Range Boulevard	El Camino Drive	Whitney Road	B	D
Whitney Road	Dell Range Boulevard	Foxglove Drive	A	D
US 85/S Greeley Hwy	Jefferson Road	Fox Farm Road	B	D
Artesian Road	US 85/S Greeley Hwy	Avenue C	A	D

Map 16: Existing Modeled LOS



Map 17: Forecasted 2045 Modeled LOS



4.4 INTERCHANGES AND ONE-WAY STREETS

4.4.1 Interstate Interchange Assessment

A planning-level analysis of 14 interstate interchanges within the Cheyenne area was performed to evaluate the adequacy of the current interchange configurations. Similar assumptions were used as the one-way street analysis described in the previous section, including analyzing the PM peak hour from recent counts and applying a 1.25% annual growth rate to forecast 2045 turning movements.

The results of this analysis are presented in **Table 9**.

Preliminary improvements to address congestion issues at these locations have been identified:

- **I-25 and Randall Avenue.** The northbound off-ramp is anticipated to become congested LOS E by 2045.
  - **Proposed Improvement.** Widen the off-ramp approaching Randall Avenue for a fourth lane to add a second right-turn lane. One right turn lane would be dedicated for Pershing Boulevard and would not permit right turns on red. The second right turn lane would be dedicated for Randall Avenue and would permit right turns on red.

    The forecasted right turning volumes (to both Pershing Boulevard and Randall Avenue) are anticipated to be 50% higher than the volume of combined left turns and throughs at the traffic signal. However, Warren Air Force Base (AFB) may reopen the gate on Randall Avenue as their primary access and would then require dual left turn lanes.
  - **Operational Impact.** Adding a second right-turn lane improves the anticipated LOS from E to D and reduces the average delay on the ramp by over 10 seconds.
- **I-25 and Central Avenue.** The southbound off-ramp is anticipated to operate at a LOS F in 2045.
  - **Proposed Improvement.** Signalize the I-25 southbound ramp and Central Avenue intersection that operates under the same controller as the existing signalized I-25 northbound ramp and Central Avenue intersection. Note: this matches Roadway Vision Project No. 203.

    Bishop Boulevard intersects Central Avenue less than 300' west of the southbound I-25 off ramp. This proximity may require additional treatments such as prohibiting certain turning movements at Bishop Boulevard to avoid potential safety issues.

Table 9: Interstate Interchange Assessment Results

Interstate	Interchange	Ramp Dir.	2020 LOS	2045 LOS
I-25	High Plains Rd	NB	A	A
		SB	A	A
	College Dr	NB	A	A
		SB	A	A
	Lincolnway	NB	A	A
		SB	A	A
	Missile Dr	NB	B	F
		SB	A	A (F for NB & SB lefts)
	Randall Ave	NB	C	E
		SB	A	B
	Central Ave	NB	C	C
		SB	A (F for SB approach)	F
	Vendehei St	NB	A	B
		SB	A	B
	Horse Creek Rd	NB	A	A
		SB	A	A
I-80	Round Top Rd	EB	A	A
		WB	A	A
	Lincolnway	EB	A	A
		WB	A	A
	US 85	EB	B	C (F for EB approach)
		WB	B	C
	College Dr	EB	B	C
		WB	A (F for WB Thru/Left)	B (F for WB Thru/Left)
	Campstool Rd	EB	A	A
		WB	A	A
	Archer Pkwy	EB	A	A
		WB	A	A

- **Operational Impact.** The southbound approach at the I-25 southbound ramp and Central Avenue intersection operates at a LOS F with a 94-second average delay per vehicle; by 2045, the delay increases to a 2,906-second delay per vehicle. The signalization of the intersection improves the overall intersection from a LOS F to C.

- **I-80 and US 85.** The eastbound off-ramp is anticipated to operate at a LOS F by 2045.
  - **Proposed Improvement.** Add an eastbound right-turn lane on the eastbound off-ramp for a length of at least 250 feet.
  - **Operational Impact.** The addition of a right-turn lane to the eastbound off-ramp would improve the eastbound LOS from an F to a D and reduce the average delay for the ramp by approximately 50 seconds.
- **I-80 and College Drive.** The westbound off-ramp currently operates at a LOS F which is anticipated to further worsen by 2045.
  - **Proposed Improvement.** Signalize the I-80 westbound ramp and College Drive intersection operating under the same controller as the existing signalized I-80 eastbound ramp. The signalized intersection is assumed to operate under a 90-second cycle with permitted-protected left-turn phasing in the northbound approach. Note: this matches Roadway Vision Project No. 205.
  - **Operational Impact.** The westbound through/left-turn movement at the I-80 westbound ramp and College Drive intersection operates at a LOS F with a 125-second delay per vehicle currently, increasing to a 1,117-second delay per vehicle by 2045. The signalization of the intersection improves the LOS to a D for the westbound approach.
- **I-25 and Missile Drive** was also identified as having future congestion issues; however, traffic signals have since been constructed at both ramps in Summer 2020 which will substantially improve traffic operations. Note: this project matches Roadway Vision Project No. 202.

4.4.2 Downtown One-Way Street Assessment

within downtown Cheyenne, are three one-way couplets - two parallel corridors with opposite one-way traffic. Two of the couplets, Central Avenue/Warren Avenue and Pioneer Avenue/Carey Avenue are north-south corridors and the third, 19th Street/20th Street, travels east-west.

The three one-way couplets were individually analyzed for feasibility of conversion to parallel two-way corridors. Two-way corridors provide better drivability and are easier to navigate downtown area. One-way couplets increase confusion for drivers, especially for visitors unfamiliar with the area. Two-way streets also provide higher exposure to downtown businesses with bidirectional traffic traveling along business frontages.

The following analyses assess the LOS comparison between the existing one-way couplets and the proposed two-way corridors in the 2020 base year and 2045 horizon year. 2020 and 2045 traffic volumes were obtained by applying a 1.25% annual growth rate to existing PM peak traffic count volumes. The 1.25% rate was identified as the assumed growth for the 2040 Vision Plan in the Cheyenne Area Master Plan: Transportation Plan. A 90 second cycle length was assumed for each intersection and the splits were optimized for each scenario.

LOS analysis was completed using Synchro 10 software and methodology. LOS is reported for the intersection as a whole. Like the LOS for roadways, each LOS corresponds with a total delay in seconds for the intersection. **Table 10** summarizes the range of average delay in seconds per vehicle for each LOS as stated in the HCM (Special Report 209). Similar to roadway LOS, LOS D and above is considered an acceptable intersection LOS, while LOS E and F are considered unacceptable.

The complete analysis can be found in **Appendix C: One-Way Street Analysis.**

Table 10: Intersection Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Definitions provided from the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2010.

Based on analyses findings, it is feasible to convert the Pioneer Avenue/Carey Avenue and 19th Street/20th Street corridors to two-way roadways, while maintaining acceptable levels of service through the 2045 planning horizon year. Potential considerations include:

- **Carey Avenue and Pioneer Avenue.** Convert the roadways from one-way to two-way streets between 15th Street and 2nd Avenue. Locations where design considerations will need to be considered include:
  - Potential impacts to median splitter islands at Pioneer and Carey Avenues at Randall Avenue.
  - Accommodation for on-street bicycle lanes between Randall Avenue and 2nd Avenue.
- **19th Street and 20th Street.** Convert the roadways from one-way to two-way streets between Dey Avenue and Logan Avenue. Locations where design considerations will need to be considered include:
  - Railroad crossing improvements at Reed Avenue.
  - Modifications to the intersection of 19th Street and Logan Avenue.
  - Evaluation of signal warrants on 20th Street at Evans Ave, Morrie Ave, and Logan Ave with the anticipated reduction in traffic volumes.

Conversely, converting the Central Avenue/Warren Avenue corridors to two-way roadways would lead to unacceptable levels of service, particularly by the 2045 planning horizon year where several intersections are anticipated to operate at LOS F. An additional complication of converting Central and Warren Avenues is the twin viaducts crossing the railroad yard south of Downtown Cheyenne. If these corridors were to be converted to two-way roadways, reconfiguration of the viaducts or adjacent intersections would be required.

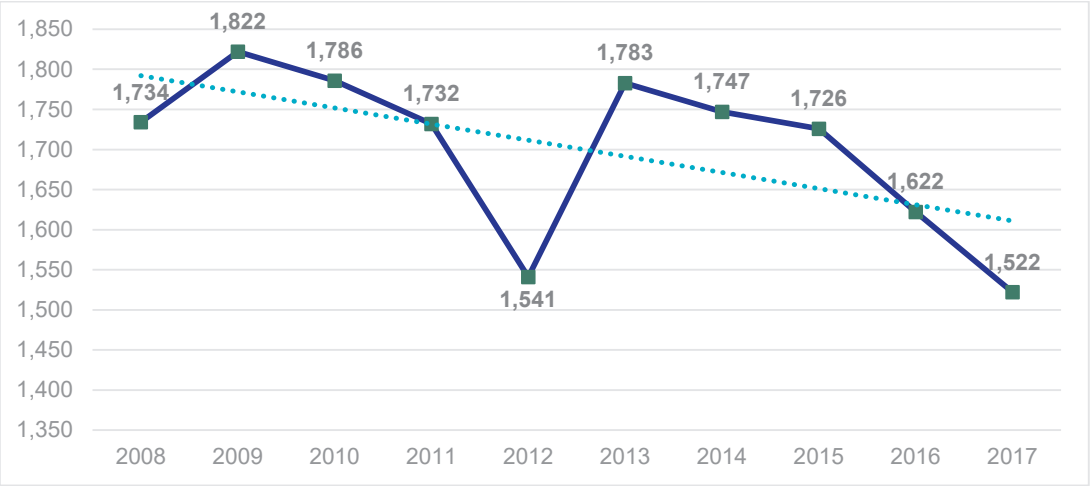
4.5 TRANSPORTATION SAFETY

Crash history for the Cheyenne area transportation network was analyzed using data from the Cheyenne MPO for years 2008-2017. The areas with the highest rate of crashes include:

- Pershing Boulevard;
- Converse Avenue;
- 19th Street (a five-way intersection);
- Dell Range Boulevard; and
- Greeley Highway (Highway 85) as it heads into and out of downtown Cheyenne.

Crash density was not an indicator of crash severity, as there were many fatal and serious injury accidents throughout the MPO, outside of the areas where a higher rate of crashes occurred. Roadways with numerous fatal crashes include I-25, I-80, Highway 212, US 30, and Dell Range Boulevard. **Map 17** shows the 10-year crash densities as well as locations of fatal and suspected serious injury crashes.

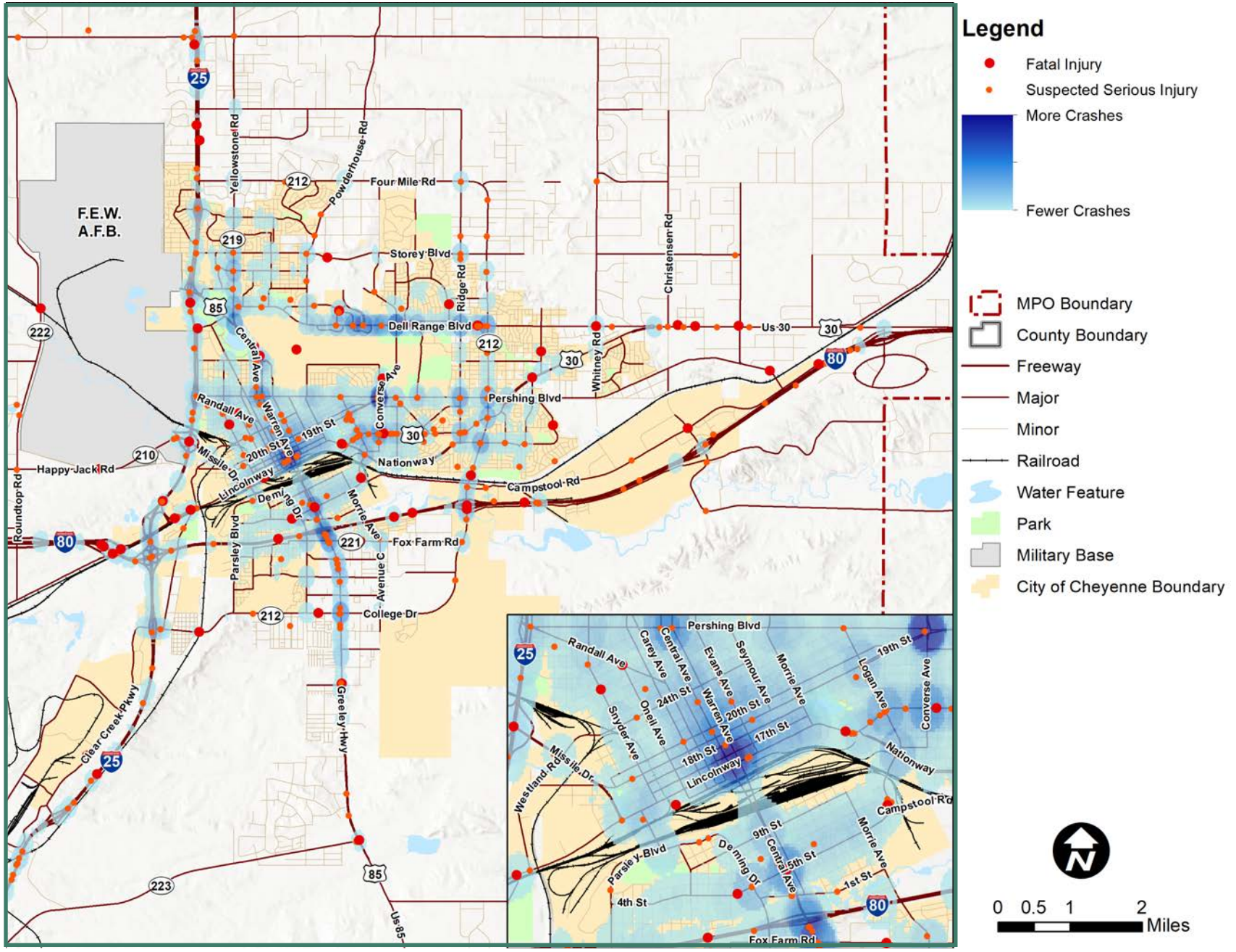
Figure 19: Crashes by Year (2008-2017)



In addition to the crash density analysis, crashes have been stratified in multiple ways to identify high-level trends to inform the future goals of Connect 2045 as well as potential performance measures to evaluate the region's progress toward meeting potential safety goals.

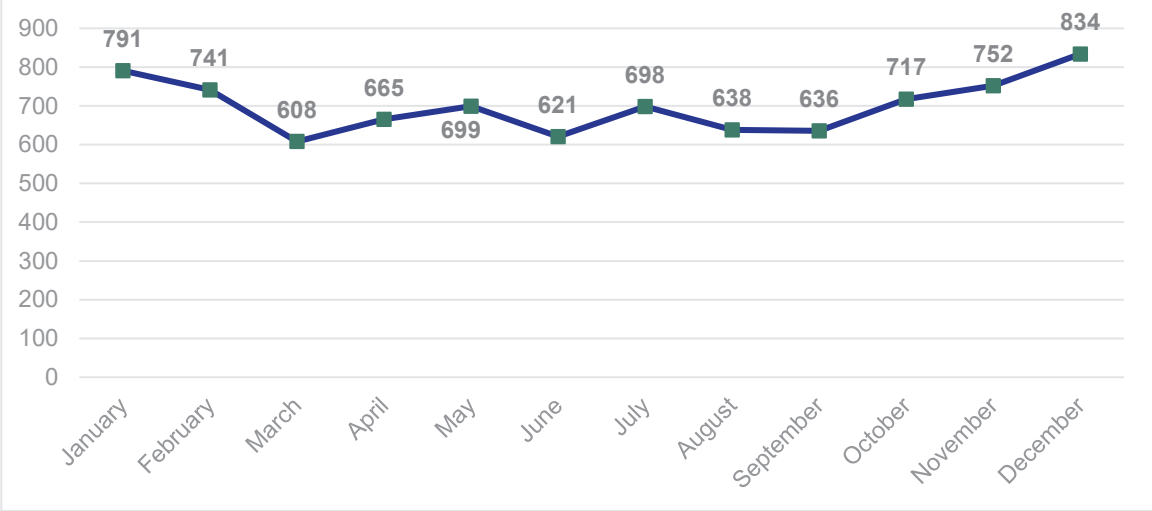
Crashes by year: crashes have generally been decreasing over the decade between 2008 and 2017, as shown in **Figure 19** within the most recent five years of data available (2013-2017), total crashes have declined by approximately 15%.

Map 18: Transportation Safety Trends



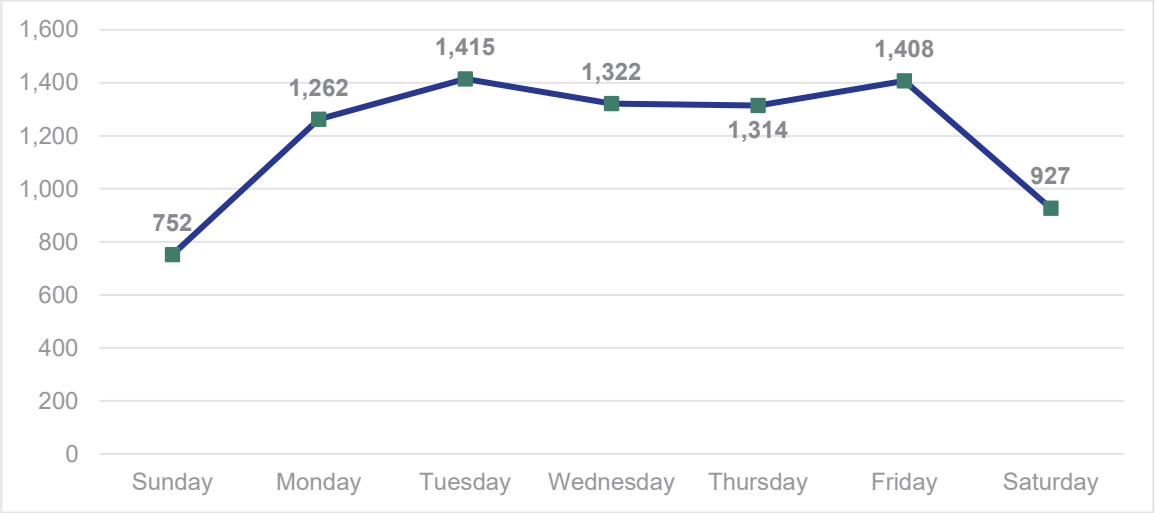
Crashes by month: crashes are generally higher in the winter months (shown in **Figure 20**), with the highest number of crashes occurring in December. Winter weather is likely a contributing factor in the frequency of crashes.

Figure 20: Crashes by Month (2013-2017)



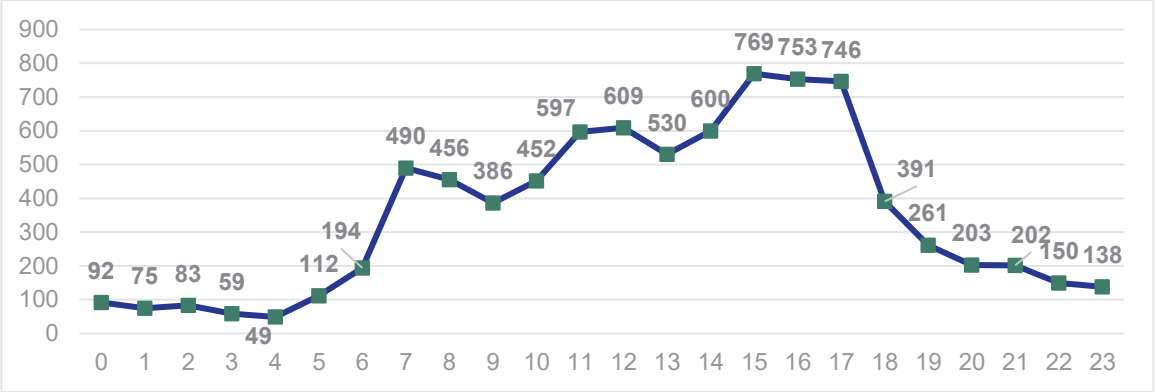
Crashes by day-of-week: crashes are highest in the middle of the week (shown in **Figure 21**), with the highest frequency of crashes on Tuesdays. Crashes on the weekend are substantially less frequent than during the work week.

Figure 21: Crashes by Day-of-Week (2013-2017)



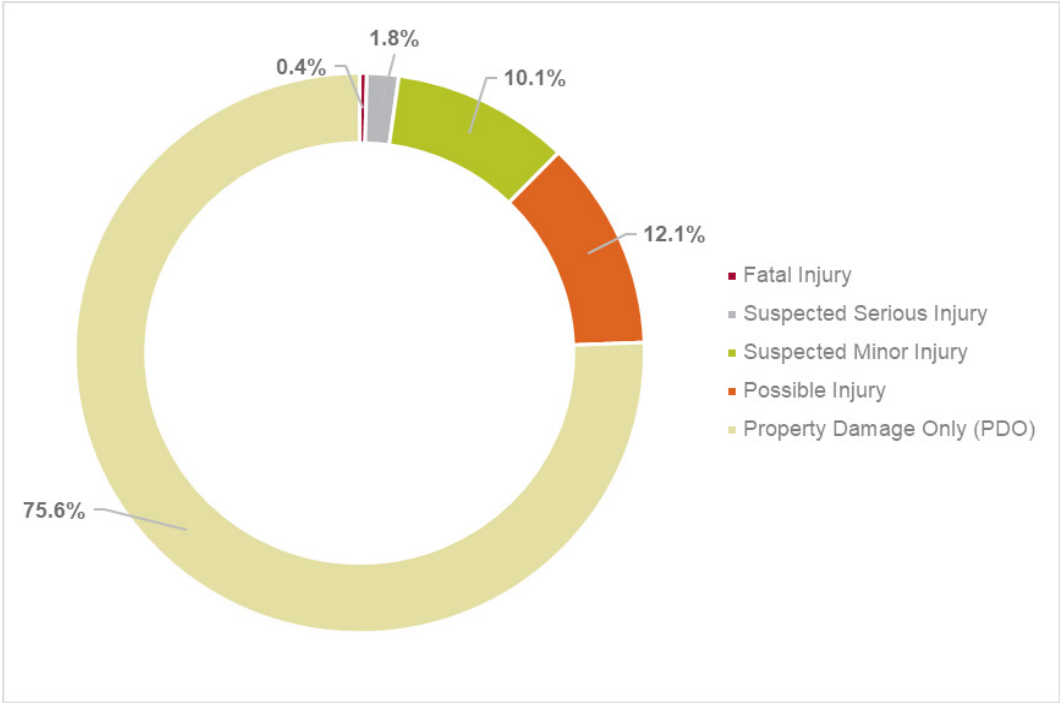
Crashes by time-of-day: crashes are highest during the afternoon rush hours (3 PM – 5 PM, shown in **Figure 22**), with the highest frequency of crashes at 3 PM.

Figure 22: Crashes by Time-of-Day (2013-2017)



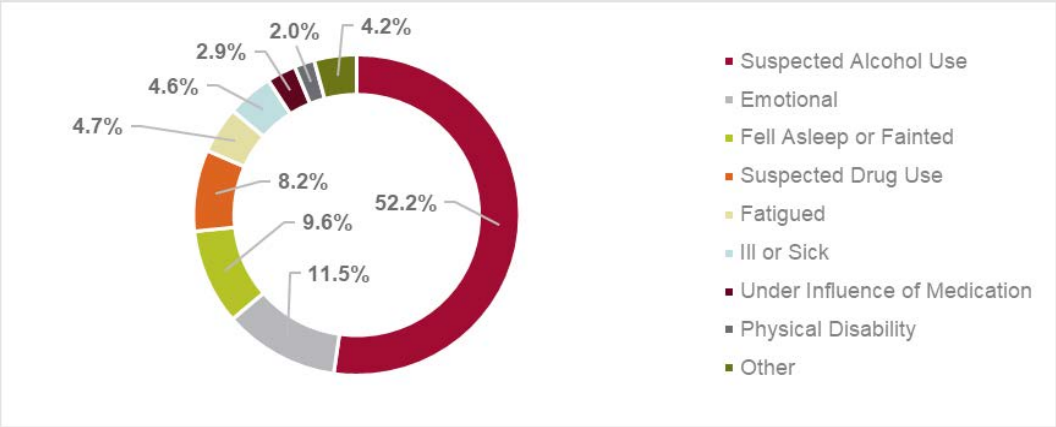
Crashes by severity: within the most recent five years of available data, 34 fatal (0.4%) and 145 suspected serious injury (1.8%) crashes have occurred (as shown in **Figure 23**). Approximately 75% of total crashes were property damage only (no injuries).

Figure 23: Crashes by Severity (2013-2017)



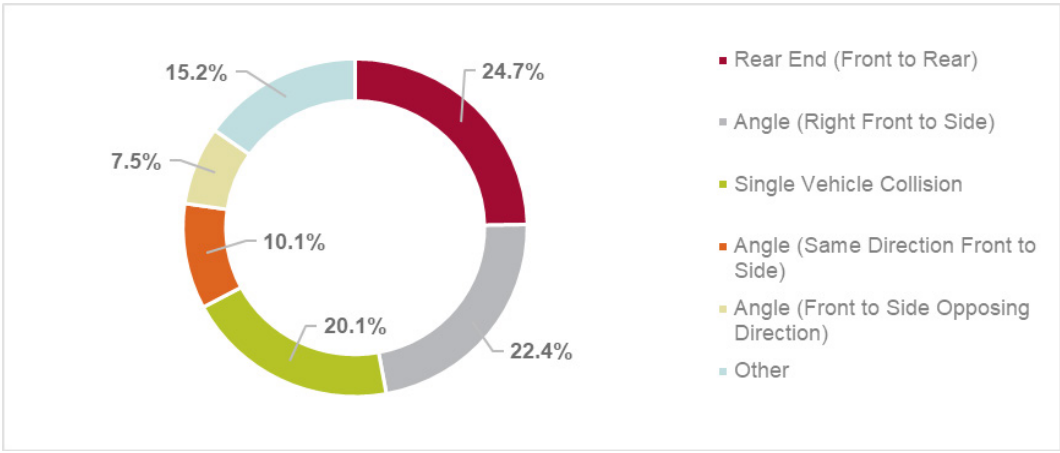
Crashes by driver influence: the most common driver influence in the most recent five years of crash data available, representing over 50% of drivers where an influence is suspected (shown in **Figure 24**). The only other influence representing more than 10% of crashes where a drive is under an influence was 'Emotional', such as depressed or angry at 11.5%.

Figure 24: Crashes by Driver Influence (2013-2017)



Crashes by type: The three most common types of crashes that occurred in the most recent five years of data available are rear end, angle (right front to side), and single vehicle collisions, all of which represent between 20% and 25% of crashes, as shown in **Figure 25**.

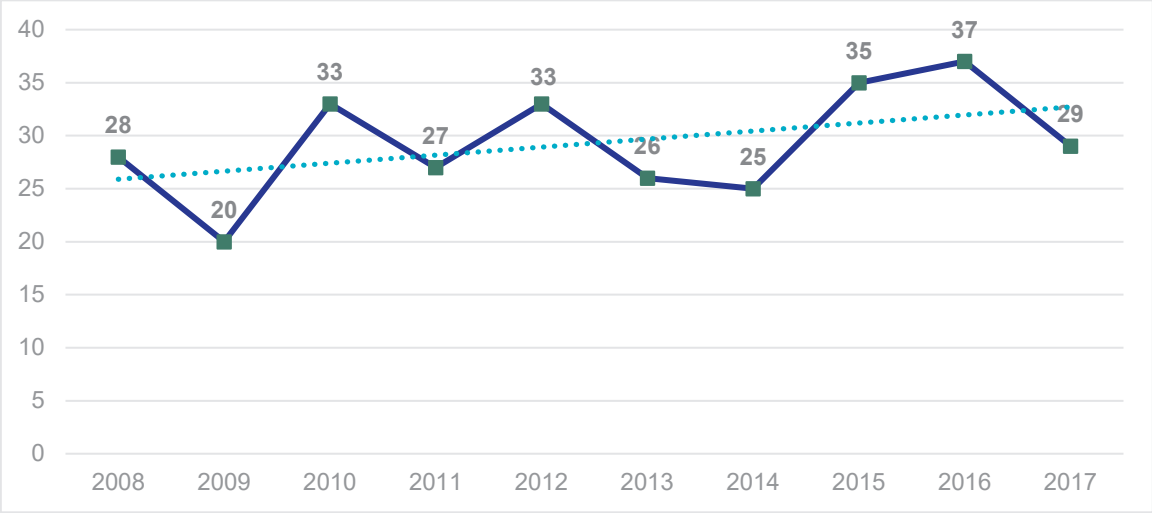
Figure 25: Crashes by Type (2013-2017)



4.5.1 Pedestrian and Bicycle Crashes

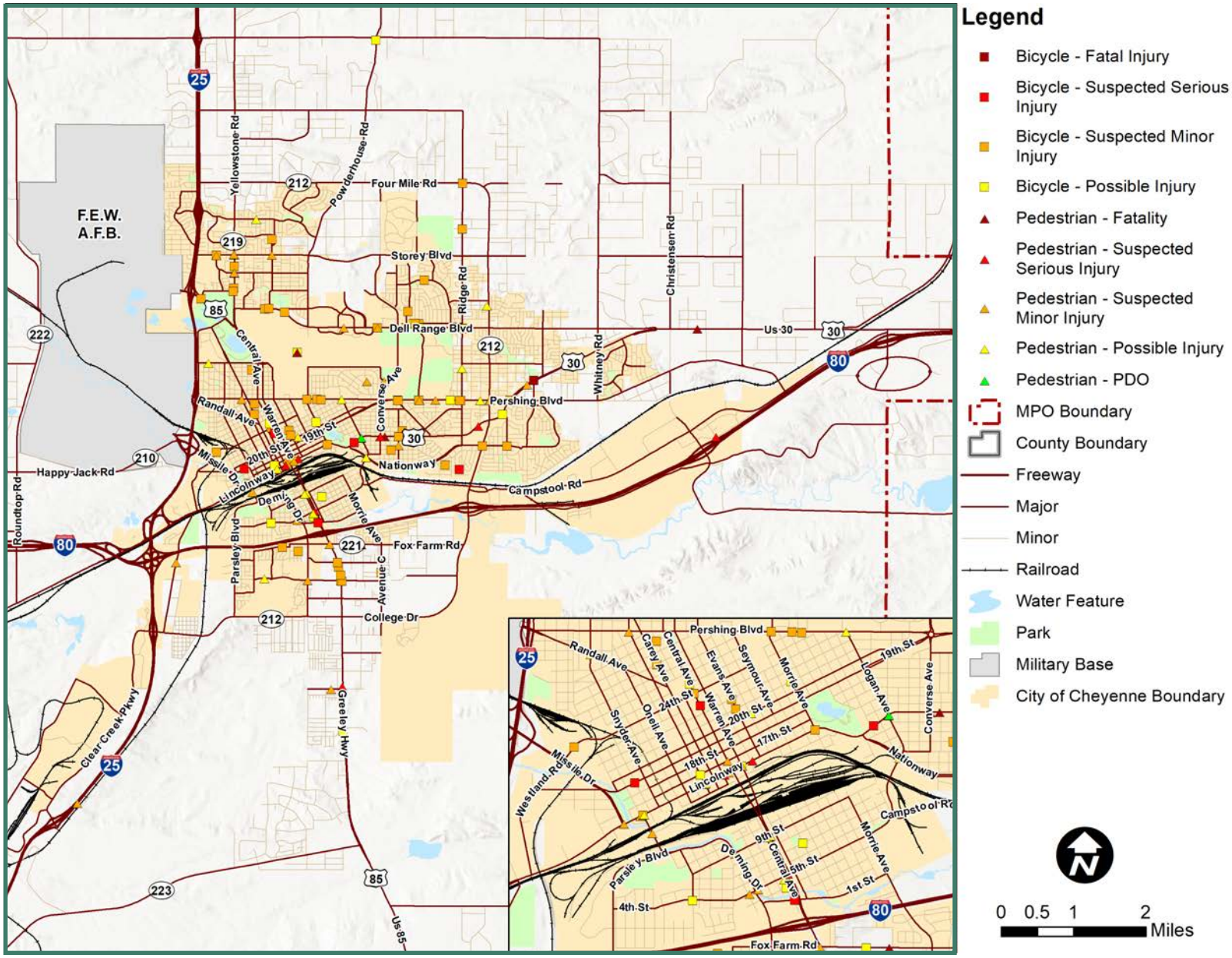
Between 2008 and 2017, there were 293 crashes involving pedestrians or bicyclists, representing 1.7% of total crashes. within the most recent five years of available data (2013-2017), there were five fatal crashes and 16 suspected serious injury crashes involving pedestrians or bicycles. **Figure 26** shows annual pedestrian and bicycle-involved crashes from 2008-2017. Unlike total crashes, pedestrian and bicycle crashes have generally been increasing over the past decade.

Figure 26: Pedestrian and Bicycle Crashes by Year (2008-2017)



Map 19 shows the locations of pedestrian and bicycle crashes within the Cheyenne area.

Map 19: Pedestrian and Bicycle Crashes by Severity (2013-2017)



4.6 ROADWAY CAPITAL RECOMMENDATIONS

The roadway system will continue to form the backbone of the region's transportation system, providing service to multiple modes include personal vehicles, freight, transit, bicycles, and pedestrians. Using the region's Roadway Vision established in the previous LRTP as a base and supplemented with roadway capital projects from a number of different sources, a comprehensive list of potential roadway projects has been assembled in **Table 11**.

Table 11: Roadway Improvement Matrix

Proj. No.*	Primary Route	From	To	Project Desc.
RV-1	Iron Mountain Rd	Whitney Rd	Christensen Rd	Construct new roadway
RV-2	US 85	Terry Ranch Rd	I-80	Access control, ped/bike ennhancements
RV-3	Christensen Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway
RV-4	Riding Club Rd	Ridge Rd	Whitney Rd	Construct new roadway
RV-5a	Four Mile Rd	Braehill Rd	Whitney Rd	Construct new roadway
RV-5b	Four Mile Rd	Christensen Rd	Reese Rd	Construct new roadway
RV-6a	Mountain Rd	Plainview Rd	Storey Blvd	Construct new roadway, add greenway
RV-6b	Chief Washakie Ave	Storey Blvd	Four Mile Rd	Construct new roadway
RV-7	Summit Dr/Storey Blvd	College Dr	Whitney Rd	Construct new roadway
RV-8a	Cutoff Rd	Frontier Mall Dr	Rue Terre	Realign roadway
RV-8b	Rue Terre	Current Dead End	Carlson St	Construct new roadway
RV-8c	Melton St	Powderhouse Rd	Fort Laramie Trl	Construct new roadway
RV-8d	Carlson St	Powderhouse Rd	Melton St	Construct new roadway
RV-8e	Fort Laramie Trl	Prairie Ave	Storey Blvd	Construct new roadway
RV-8f	Cutoff Rd	Rue Terre	Carlson St	Construct new roadway
RV-8g	Cutoff Rd	Carlson St	Storey Blvd	Construct new roadway
RV-8h	Melton St	Rue Terre	Carlson St	Construct new roadway
RV-9a	Archer Pkwy	Prairie Center Cir	US 30/I-80 Service Rd	Widen roadway to 5 lanes
RV-9b	US 30	Westedt Rd	Archer Pkwy	Widen roadway to 3 lanes
RV-10a	Berwick Dr	Wallick Rd	I-80	Construct new roadway and RR overpass
RV-10b	Berwick Dr	I-80	Veta Dr	Construct new roadway
RV-10c	Berwick Dr	Veta Dr	I-25	Construct new roadway
RV-14	Parsley Blvd	Terry Ranch Rd	College Dr	Construct new roadway
RV-15a	Division Ave	Dayshia Ln	Wallick Rd	Construct new roadway
RV-15b	Division Ave	Wallick Rd	College Dr	Construct new roadway
RV-16b	Wallick Rd	Clear Creek Pwky	New Collector	Construct new roadway
RV-16c	Wallick Rd	US 85	Ave C	Construct new roadway
RV-16d	Wallick Rd	Ave C	Sweetgrass Dr	Construct new roadway
RV-16e	Wallick Rd	New Collector	Parsley Blvd	Construct new roadway
RV-16f	Wallick Rd	Parsley Blvd	Division Ave	Construct new roadway
RV-17a	Ave C	US 85	Wallick Rd	Construct new roadway

Proj. No.*	Primary Route	From	To	Project Desc.
RV-17b	Ave C	Wallick Rd	Murray Rd	Construct new roadway
RV-18	High Plains Rd	I-25	US 85	Construct new roadway
RV-22a	Powderhouse Rd	Iron Mountain Rd	Rising Star	Improve as collector
RV-22b	Powderhouse Rd	Rising Star	Lodgepole Creek	Construct new roadway
RV-22c	Powderhouse Rd	Lodgepole Creek	Lodgepole Creek	Construct new bridge
RV-22d	Powderhouse Rd	Lodgepole Creek	Ford Rd	Construct new roadway
RV-22e	Powderhouse Rd	Ford Rd	US 85	Improve as collector
RV-25a	Converse Ave	Storey Blvd	Four Mile Rd	Construct new roadway
RV-25b	Converse Ave	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity
RV-31	Dell Range Blvd	Van Buren Ave	Whitney Rd	Widen roadway to 5 lanes
RV-32a	Roundtop Rd	Otto Rd	I-80	Improve as minor arterial, ped/bike enhancements
RV-32b	Roundtop Rd	Horizon Dr	Happy Jack Rd	Widen roadway to 5 lanes
RV-32c	Roundtop Rd	I-80	Horizon Dr	Widen roadway to 5 lanes
RV-33	Happy Jack Rd	Roundtop Rd	I-25	Widen roadway to 3 lanes, add greenway
RV-34	Missile Dr	Lincolnway	I-25	Streetscape, ped/bike enhancements, greenway underpass
RV-39	Terry Ranch Rd	I-25	US 85	Improve as minor arterial, ped/bike enhancements
RV-41	College Dr	I-25	US 85	Access control, ped/bike enhancements
RV-42/FMP-2	College Dr	Fox Farm Rd	Lincolnway	Widen to 7 lanes, improve Industrial Dr intersect.
RV-45	Powderhouse Rd	Storey Blvd	Iron Mountain Rd	Widen roadway to 3 lanes
RV-47	Converse Ave	Dell Range Blvd	Carlson St	Improve as arterial
RV-61/RV-206	I-80	Roundtop Rd	Roundtop Rd	Improve interchange, widen underpass to 5 lanes
RV-62	I-25	College Dr	College Dr	Widen DDI to 4 lanes
RV-65/FMP-8	I-80	I-25	I-25	Reconstruct interchange
RV-101a	York Ave	Apple St	College Dr	Improve as minor collector
RV-101b	York Ave	Dayshia Ln	Apple St	Construct new roadway
RV-102	New Collector	Terry Ranch Rd	College Dr	Construct new roadway
RV-103a	Apple St	Parsley Blvd	Division Ave	Construct new roadway
RV-104a	Julianna Rd	Parsley Blvd	Division Ave	Construct new roadway
RV-104b	Julianna Rd	US 85	High Plains Rd	Construct new roadway
RV-105	Remington Way	Parsley Blvd	Troyer Dr	Construct new roadway
RV-107c	Allison Rd	US 85/Greeley Hwy	Ave C	Reconstruct roadway
RV-107d	Allison Rd	Ave C	Energy Dr	Construct new roadway
RV-107e	Allison Rd	College Dr	Lummis Dr	Construct new roadway
RV-108	Fox Farm Rd	College Dr	Allison Rd	Construct new roadway
RV-109a	Lummis Dr	College Dr	Allison Rd	Construct new roadway
RV-109b	Lummis Dr	Allison Rd	Campstool Rd	Construct new roadway

Proj. No.*	Primary Route	From	To	Project Desc.
RV-110a/FMP-5	Burlington Trl	Industrial Rd	Campstool Rd	Reconstruct roadway, improve intersections, add greenway
RV-110b	Burlington Trl	College Dr	Industrial/HR Ranch Rd	Reconstruct roadway
RV-111	High Plains Rd	US 85	College Dr/Lummis Dr	Construct new roadway
RV-112a	Sweetgrass Dr	High Plains Rd	Murray Rd	Construct new roadway
RV-112b	Murray Rd	Ave C	High Plains Rd	Construct new roadway
RV-113	Nation Rd	Sweetgrass Dr	Ave C	Construct new roadway
RV-114	Cirrus Dr	College Dr	Murray Rd	Construct new roadway
RV-115	New Collector	High Plains Rd	College Dr	Construct new roadway
RV-116	Beckle Rd	Reese Rd	Westedt Rd/Stewart Rd	Construct new roadway
RV-118a	Van Buren Ave	Carmel Dr	Storey Blvd	Construct new roadway
RV-118b	Van Buren Ave	Storey Blvd	Child Creek	Construct new roadway
RV-118c	Van Buren Ave	Child Creek	Four Mile Rd	Construct new roadway and bridge
RV-119	Rock Springs St	Ridge Rd	Moran Ave	Construct new roadway
RV-120	Ridge Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway
RV-121	Veta Dr	Roundtop Rd	Berwick Dr	Construct new roadway
RV-122a	Horizon Dr	Roundtop Rd	Berwick Dr	Construct new roadway
RV-122b	Horizon Dr	Berwick Dr	Lincolnway	Construct new roadway
RV-123	New Collectors	Happy Jack Rd	Horizon Dr, Berwick Dr	Construct new roadways
RV-124	Swan Ranch Rd	Berwick Dr	Broken Arrow Rd	Construct new roadway
RV-125	Broken Arrow Rd	College Dr	Swan Ranch Rd	Construct new roadway
RV-126a	New Collector (East)	Happy Jack Rd	Berwick Dr	Construct new roadway
RV-126b	New Collector (West)	Happy Jack Rd	Berwick Dr	Construct new roadway
RV-127	New Collector	Roundtop Rd	Berwick Dr	Construct new roadway
RV-128	Campstool Rd	Livingston Ave	Burlington Trl	Improve as minor arterial
RV-129	12th St	College Dr	Adams Ave	Widen to 5 lanes
RV-130/FMP-1	Ridge Rd	Lincolnway	Dell Range Blvd	Improve as arterial, add trail
RV-131	Yellowstone Rd	Dell Range Blvd	Four Mile Rd	Ped/bike enhancements
RV-132	Yellowstone Rd	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity
RV-135	Storey Blvd	Yellowstone Rd	Converse Ave	Widen to 5 lanes and add trail
RV-137	5th St	Deming Dr	Morrie Ave	Improve as collector
RV-138	Walterscheid/ Deming	College Dr	5th St	Widen to 5 lanes
RV-139b	Pershing Blvd	Concord Rd	Logan Ave	Realign Intersection
RV-141	Lincolnway	Reed Ave	House St	Streetscape, ped/bike enhancements
RV-143/DMP-1	Ames Ave	Parsley Blvd	Lincolnway	Improve as minor arterial/mitigate drainage issues
RV-144/DMP-2	Parsley Blvd	College Dr	Ames Ave	Improve as minor arterial/mitigate drainage issues, add greenway
RV-145a/DMP-12	Dell Range Blvd	Yellowstone Rd	College Dr	Enhance ped/bike/drainage

Proj. No.*	Primary Route	From	To	Project Desc.
RV-145b	Dell Range Blvd	College Dr	College Dr	Improve intersection capacity
RV-145c	Dell Range Blvd	Powderhouse Rd	Powderhouse Rd	Improve intersection capacity
RV-145d	Dell Range Blvd	Prairie Ave	Prairie Ave	Improve intersection capacity
RV-145e	Dell Range Blvd	Rue Terre	Rue Terre	Improve intersection capacity
RV-145f	Dell Range Blvd	Stillwater Ave	Stillwater Ave	Improve intersection capacity
RV-145g	Dell Range Blvd	Walmart	Walmart	Improve intersection capacity
RV-149	Bridger Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway
RV-150	Gannett Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway
RV-151	Crane Bluff Rd	Converse Ave	Ogden Rd	Construct new roadway
RV-161	Pershing Blvd	US 30	Christensen Rd	Widen to 5 lanes
RV-162	Windmill Rd	Pershing Blvd	Rock Springs St	Reconstruct roadway and trail
RV-201/FMP-8	I-80	Berwick Dr	Berwick Dr	Construct new interchange
RV-203/CA-6	I-25	Central Ave	Central Ave	Signalize SB ramps/Central Ave intersection
RV-205/CA-8	I-80	College Dr	College Dr	Signalize WB ramps/College Dr intersection
RV-207	I-25	Wallick Rd	Wallick Rd	Construct new interchange
RV-208	Old Happy Jack/19th St	Stinson Ave	Dey Ave	Realign intersection with Missile Dr
RV-209/DMP-5	9th St	Crow Creek	Crow Creek	Reconstruct bridge/greenway/mitigate drainage
RV-212	College Dr	Four Mile Rd	Four Mile Rd	Realign intersection
CA-1	Carey Ave	15th St	2nd Ave	Convert to two-way street
CA-2	Pioneer Ave	15th St	2nd Ave	Convert to two-way street
CA-3	19th St	Dey Ave	Logan Ave	Convert to two-way street
CA-4	20th St	Dey Ave	Logan Ave	Convert to two-way street
CA-5	I-25	Randall Ave	Randall Ave	Widen northbound off-ramp to 4 lanes
CA-7	I-80	US 85	US 85	Add right-turn lane to EB off-ramp
CA-9	Fox Farm Rd	Walterscheid Blvd	College Dr	Improve as collector, widen to 3 lanes
CA-10/DMP-3	Southwest Dr	College Dr	Lincolnway	Improve as collector, mitigate drainage issues
CA-11	Tranquility Rd	Powderhouse Rd	Converse Ave	Improve as collector
CA-12	Whitney Rd	Dell Range Blvd	Storey Blvd	Widen to 3 lanes
CA-13	Pershing Blvd	Evans Ave	Logan Ave	IPed/bike enhancements
CA-14	Christiansen Rd	Iron Mountain Rd	US 85	Construct new roadway
DMP-4	I-25	College Dr	I-80	Mitigate drainage issues
DMP-7/FMP-3	US 85	I-80	5th St	Mitigate drainage issues, improve 5th St intersect.
DMP-8	Campstool Rd	Burlington Trl	HR Ranch Rd	Mitigate drainage issues
DMP-9	Prairie Ave	Dry Creek	Dry Creek	Mitigate drainage issues
DMP-10	Education Dr	Dry Creek	Dry Creek	Mitigate drainage issues
DMP-11	Hilltop Ave	Dry Creek	Dry Creek	Mitigate drainage issues, add trail

Proj. No.*	Primary Route	From	To	Project Desc.
DMP-13	Campstool Rd	Dry Creek	Dry Creek	Mitigate drainage issues, add greenway underpass
DMP-14	Seminoe Rd	Dry Creek	Dry Creek	Mitigate drainage issues
DMP-15	Henderson Dr	Nationway	Homestead Ave	Mitigate drainage issues
DMP-16	Lincolnway	Henderson Dr	Ridge Rd	Mitigate drainage issues, add greenway underpass
FMP-6	Fox Farm Rd	Morrie Ave/Ave C	Morrie Ave/Ave C	Reconstruct intersection, improve ped/bike accommodations
FMP-7	New Collector	Parsley Blvd	Southwest Dr	Construct new roadway
FMP-9	College Dr	BNSF Railroad	BNSF Railroad	Grade separate railroad crossing

*Project numbers are organized by their source plan:

- RV = Roadway Vision
- CA = Community Assessment
- DMP = Drainage Master Plan
- FMP = Freight Mobility Plan

CHAPTER 5: REGIONAL TRANSIT

5.1 THE REGIONAL TRANSIT SYSTEM

The Cheyenne Transit Program offers six fixed routes and paratransit service. of the fixed routes, five are loops oriented through downtown, and the sixth route is a loop that circles within downtown. 8.7 percent of the Cheyenne MPO area is within a quarter of a mile of at least one fixed bus route, while over half (51.8 percent) of the City of Cheyenne is within one quarter mile of at least one fixed bus route. The fixed routes and a quarter mile buffer are shown in **Map 20**.

The routes are named for the directions they travel from downtown: East, Northeast, Northwest, South, West, and Downtown (the downtown loop). These fixed routes operate Monday through Friday from 6:00 a.m. to 7:00 p.m. and Saturday from 10:00 a.m. to 5:00 p.m. Cheyenne Transit Program does not currently offer Sunday service or service on holidays. Each route contains approximately 25 stops and operates at a 60-minute frequency.

All of the Cheyenne Transit Program fixed route buses are lift-equipped to support users who cannot use stairs or depend on mobility devices. In addition to fixed route service, the Cheyenne Transit Program also operates complimentary ADA paratransit service by reservation for area residents who qualify. This service offers curb-to-curb transportation for residents whose conditions prevent them from using fixed route service.

5.2 SYSTEM PERFORMANCE OVERVIEW

System data for the Cheyenne Transit Program provides insight on the current performance of the transit system in Cheyenne. This information provides a foundation upon which to set goals, objectives, and performance measures for transit in Cheyenne. Performance was grouped into three categories (service, ridership, and cost-effectiveness) to provide insight on how much service is being provided, how that service is being utilized, and the cost-effectiveness of this service. The findings in this section are based on data from fiscal year 2019.

5.2.1 Service

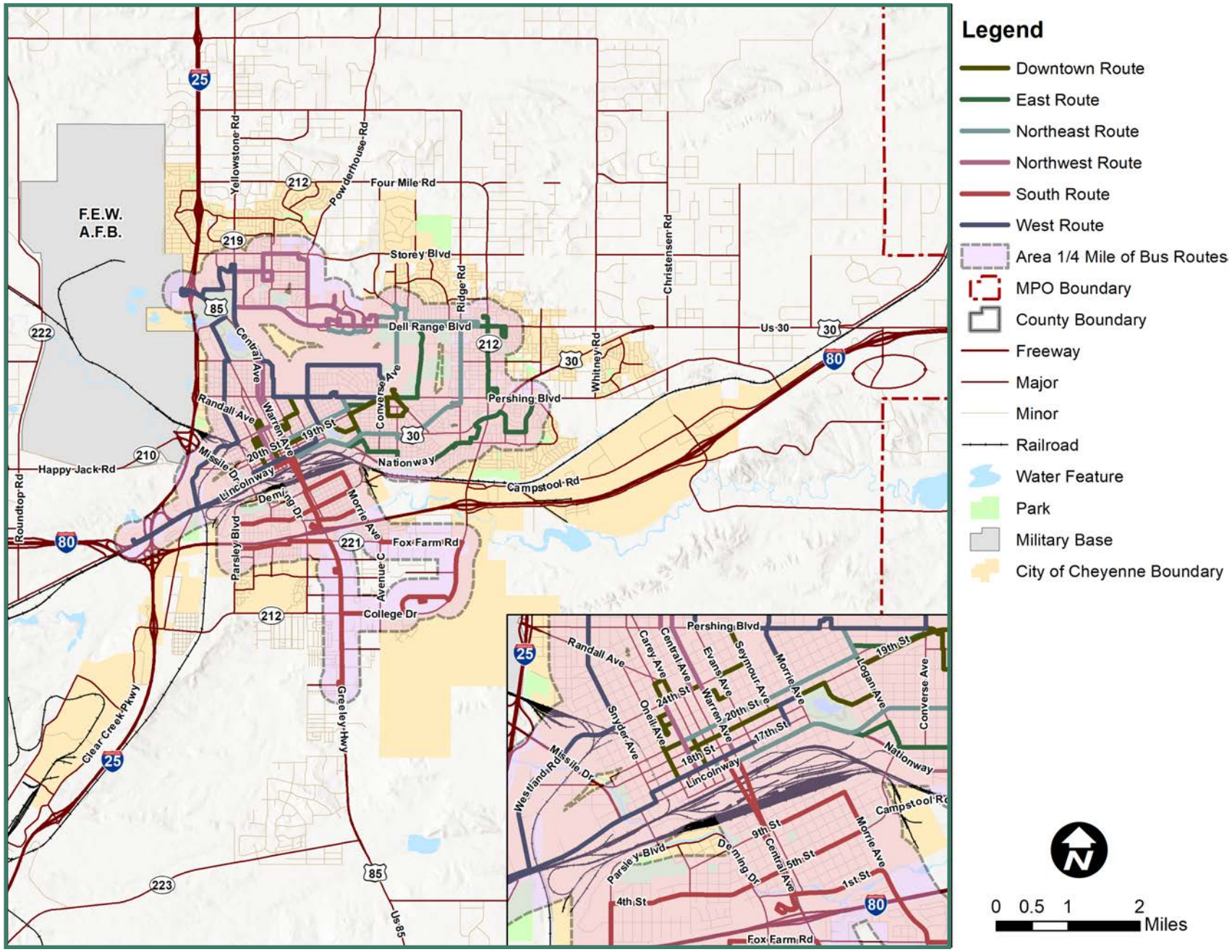
The service performance of the Cheyenne Transit Program was analyzed based on two measures: revenue hours per capita and revenue miles per capita. These measures provide insight on how much service is provided (in time or distance) relative to the amount of people living in the service area.

The Cheyenne Transit Program provided 21,966 revenue hours of fixed route service and 8,445 revenue hours of complementary paratransit service in fiscal year 2019. This equated to 296,541 revenue miles of fixed route service and 103,142 revenue miles of paratransit service

Based on the population of the City of Cheyenne, 0.34 revenue hours per capita of fixed route service are provided, and 0.24 revenue hours per capita of paratransit service are provided based on the population of the Cheyenne MPO.

Based on the population of the City of Cheyenne, 4.64 revenue miles per capita of fixed route service are provided, and 3.32 revenue miles per capita of paratransit service are provided based on the population of the Cheyenne MPO.

Map 20: Transit Access



5.2.2 Ridership

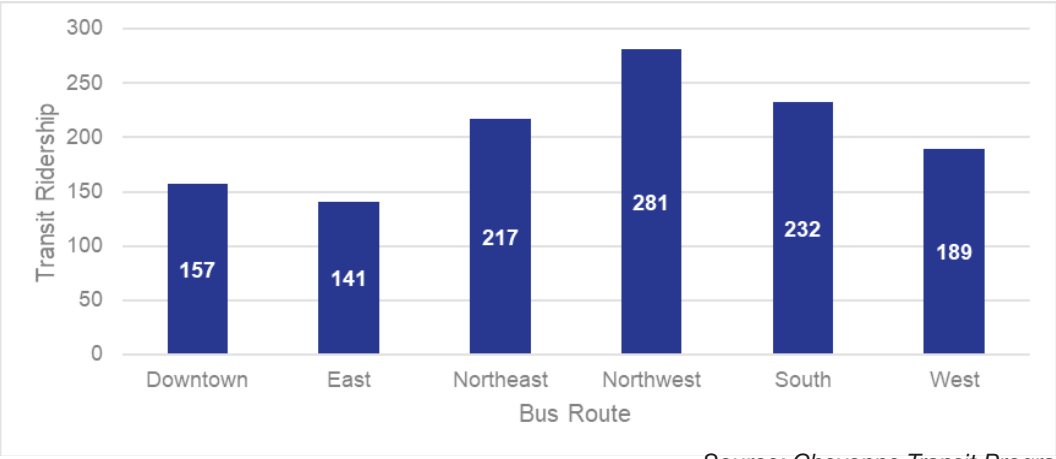
The service performance of the Cheyenne Transit Program was analyzed based on two measures: passengers per revenue hour and passengers per revenue miles. These measures provide insight regarding the effectiveness of the service.

The Cheyenne Transit Program provided a total of 161,521 rides in fiscal year 2019. This included 146,166 rides on fixed route service and 15,355 rides on complementary paratransit service.

5.2.2.1 Ridership by Route

Figure 27 shows the average daily ridership of the six fixed bus routes for 2019. The Northwest Route has the highest ridership, with an average daily ridership of 281 riders, followed by South and Northeast.

Figure 27: Cheyenne Transit Program Ridership by Route (2019)



Source: Cheyenne Transit Program

5.2.2.2 Ridership by Stop

Table 12 (on the next page) shows the average daily ridership for the most heavily utilized stops in the system. The Transfer Station has the highest average daily ridership, with an average of 614 riders, followed by Walmart, Comea Shelter, East Albertsons, East Walmart, and Safeway.

5.2.2.3 Ridership by Revenue Hour

In fiscal year 2019, the Cheyenne Transit Program served 6.65 passengers per revenue hour with fixed route service and 1.82 passengers per revenue hour with paratransit service.

5.2.2.4 Ridership by Revenue Mile

The Cheyenne Transit Program served 0.49 passengers per revenue mile with fixed route service and 0.15 passengers per revenue mile with paratransit service.

Table 12: Highest Ridership Stops in the Cheyenne Transit Program (2019)

Stop	Average Daily Ridership
Transfer Station	614.3
Walmart	55.7
Comea Shelter	35.1
East Albertsons	21.4
East Walmart	20.5
Safeway	17.8
Burke High Rise	14.1
Department of Family Services	13.7
Allison & Desmet	13.4
411/615 Storey	13.1
Post office	12.8
Downtown Safety 4	12.0
Cheyenne Housing	11.1
Library - East Side	10.1
Goodwill	10.0
BLM Building	10.0

5.2.3 Cost-Effectiveness

Several measures were utilized to analyze the cost-effectiveness of the Cheyenne Transit Program. These included: cost per revenue hour, cost per ride, farebox recovery ratio, and subsidy per passenger.

Fixed route operations for fiscal year 2019 cost $937,786, while paratransit operations cost $682,159. $93,597 were collected in fares for fixed route service, and $46,065 were collected in fares for paratransit service.

- **Cost by Revenue Hour.** The cost per revenue hour for fixed route service in Cheyenne was $42.69, while the cost per revenue hour for paratransit service was $80.78.
- **Cost per Ride.** The cost per ride for fixed route service in Cheyenne was $6.42, while the cost per ride for paratransit service was $44.43.
- **Farebox Recovery Ratio.** The farebox recovery ratio for fixed route service in Cheyenne was 9.98%, while the farebox recovery ratio for paratransit service was 6.75%.
- **Subsidy per Passenger.** The subsidy per passenger for fixed route service in Cheyenne was $5.78, while the subsidy per passenger for paratransit service was $41.43.

5.2.4 Peer Comparison

To evaluate how the Cheyenne Transit Program is performing, five peer agencies were analyzed. Peers were identified through the integrated National Transit Database system and included Pocatello, ID; Texarkana, TX; Dubuque, IA; Wausau, WI; and Billings, MT.

- **Service. Table 13** shows the peer analysis conducted for transit service. The Cheyenne Transit Program has slightly less fixed route transit service provided than its peers and slightly more paratransit service provided than its peers. This indicates that it would likely be beneficial for the Cheyenne Transit Program to identify opportunities to shift system ridership and resources from its paratransit service to its fixed route service.

Table 13: Transit Service Peer Analysis

Peer	Fixed Route		Paratransit	
	Revenue Hours per Capita	Revenue Miles per Capita	Revenue Hours per Capita	Revenue Miles per Capita
Pocatello, ID	0.33	4.11	0.44	5.98
Texarkana, TX	0.30	4.67	0.07	0.84
Dubuque, IA	0.62	7.53	0.37	4.08
Wausau, WI	0.36	5.04	0.03	0.23
Billings, MT	0.35	5.17	0.10	1.25
Peer Average	*0.39*	*5.30*	*0.20*	*2.48*
Cheyenne, WY	**0.34**	**4.64**	**0.24**	**3.32**

- **Ridership. Table 14** shows the peer analysis conducted for transit ridership. The ridership productivity of the Cheyenne Transit Program is lower than its peers for both fixed route and paratransit service. This indicates that improvements and adjustments to the service could be beneficial to increase the ridership and effectiveness of the transit system.

Table 14: Transit Ridership Peer Analysis

Peer	Fixed Route		Paratransit	
	Passengers per Revenue Hour	Passengers per Revenue Mile	Passengers per Revenue Hour	Passengers per Revenue Mile
Pocatello, ID	9.42	0.75	2.51	0.18
Texarkana, TX	12.90	0.84	1.84	0.15
Dubuque, IA	10.66	0.87	2.52	0.23
Wausau, WI	18.99	1.34	2.06	0.23
Billings, MT	11.41	0.77	3.87	0.32
Peer Average	*12.68*	*0.91*	*2.56*	*0.22*
Cheyenne, WY	**6.65**	**0.49**	**1.82**	**0.15**

- **Cost Effectiveness. Table 15** shows the peer analysis conducted for fixed route cost effectiveness. The cost per revenue hour of fixed route service for the Cheyenne Transit Program is less than most of its peers, but the cost-effectiveness of the fixed route service is slightly worse. Route adjustments and improvements would be beneficial to increase the cost-effectiveness of the transit system.

Table 15: Fixed Route Transit Cost Effectiveness Peer Analysis

Peer	Cost per Revenue Hour	Cost per Ride	Farebox Recovery Ratio	Subsidy per Passenger
Pocatello, ID	$41.96	$4.45	9.61%	$4.02
Texarkana, TX	$68.96	$5.34	6.52%	$5.00
Dubuque, IA	$61.42	$5.76	11.99%	$5.07
Wausau, WI	$113.48	$5.97	13.03%	$5.20
Billings, MT	$93.91	$8.23	10.10%	$7.40
Peer Average	*$75.94*	*$5.95*	*10.25%*	*$5.34*
Cheyenne, WY	**$42.69**	**$6.42**	**9.98%**	**$5.78**

- **Table 16** shows the peer analysis conducted for paratransit cost effectiveness. The cost per revenue hour of paratransit service for the Cheyenne Transit Program is more than most of its peers, and the cost-effectiveness of this service is also worse. Encouraging those currently utilizing the paratransit service to shift to the fixed route system would be beneficial for decreasing the amount of this expensive service, freeing up operating expenses to make improvements to both the fixed-route and paratransit service.

Table 16: Paratransit Cost Effectiveness Peer Analysis

Peer	Cost per Revenue Hour	Cost per Ride	Farebox Recovery Ratio	Subsidy per Passenger
Pocatello, ID	$52.87	$21.07	2.38%	$20.57
Texarkana, TX	$25.18	$13.65	13.86%	$11.76
Dubuque, IA	$54.99	$21.83	14.73%	$18.61
Wausau, WI	$88.94	$43.23	4.65%	$41.22
Billings, MT	$111.32	$28.78	15.46%	$24.33
Peer Average	*$66.66*	*$25.71*	*10.22%*	*$23.30*
Cheyenne, WY	**$80.78**	**$44.43**	**6.75%**	**$41.43**

5.3 TRANSIT RECOMMENDATIONS

5.3.1 Update Transit Development Plan

In 2013, the Cheyenne Transit Program (CTP) developed a five-year Transit Development Plan (TDP). Since the last TDP, significant changes have occurred in Cheyenne and to the area's transit system. As part of 2013 recommendations, the CTP has made significant technology updates which include automated scheduling, Automated Vehicle Location (AVL), automated fare box and passenger counting, and expanded reporting capabilities.

Additionally, Cheyenne is in the planning process for constructing a new transit center by submitting a Section 5339 grant application through WYDOT for $1,300,000. This facility will provide a safer and more comfortable experience for riders transferring or waiting for buses. It will also move the transit center from the current location in the Downtown Parking Garage to east of downtown at the corner of Lincolnway and Crook Avenue. Other improvements for the system include new bus branding and an updated dispatch system. These significant changes impact the recommendations provided by the 2013 TDP, and present opportunity for CTP that could be furthered by an updated plan.

5.3.2 Paratransit Service

The CTP should explore inefficiencies in paratransit to improve service and return on investment. Currently, the paratransit system is significantly costlier than peer agency systems reviewed in the Connect 2045 Community Assessment, indicating opportunity for improvement. The City could explore frequent origins and destinations that could be served by the existing fixed route service, potentially improving service span and frequency for users and reducing costs. Paratransit users could be further incentivized to use fixed route service through changes to the fare structure. By improving the cost-effectiveness of paratransit service, additional operating expenses could be freed up to be able to invest more into fixed-route service or expand paratransit service operations.

5.3.3 Express Service

To better serve riders, Cheyenne could offer express service to most frequently used stops at times with high potential for ridership.

- In 2019 the highest ridership stops, outside of the transfer station, were North Walmart, East Albertsons, East Walmart, and Safeway. Cheyenne could create a retail or shopping route which directly serves a few retail centers such as the Frontier Mall and the East Walmart, shuttling riders from the downtown center to these destinations quicker than what the current system can.
- Cheyenne could create express or limited stop versions of existing fixed routes with the highest ridership during times with high commuter ridership potential.

5.3.4 Service Expansion

Future employment growth suggests that Southwest Cheyenne and East Cheyenne have significant job growth potential. The Southeast has the greatest potential for population growth. Further investigation into expanding routes that cover these areas could be conducted.

The periphery of the existing service area has populations with high ridership potential, and existing service gaps could be filled by extending routes:

- The northwest corner of the city has the highest concentration of persons 65 and older. Expanding the reach of the West or Northwest route could cover residential areas that have many seniors.
- Areas along the periphery of the city lack transit coverage for low-wage jobs. Additionally, low income areas are effectively covered except for the manufactured homes south of the city, the apartments in the northeast portion of the City, and the area directly west of the West route.

5.3.5 Limit Transfers

The 2013 TDP offered alternatives to the current fixed route system that could limit the current need for transfers downtown. In balancing the desire for single-seat rides with access and flexibility provided by the current "pulse" system, CTP could explore combining or inter-lining the five routes that visit downtown by combining pairs of routes making them 120-minute loops that stop twice at the transit center, instead of 60-minute routes that may begin and end there. Riders that are traveling across town would no longer need to transfer buses, potentially providing better service and comfort.

Since downtown is centrally located and has a high concentration of jobs and other activities, it remains an important connection for riders. However, CTP could explore the possibility of a route that would circle the outer section of the city to provide further connection to current routes, while removing the necessity to travel downtown to transfer. This could provide expanded access for areas without service on the periphery of the city and add some efficiency for riders.

5.3.6 Partnerships

Currently several major employers – including the Walmart Distribution Center and the Crete Carrier Corporation in the western part of the city and Sierra Trading Post, Echostar, and Magpul Industries in the eastern part of the city – do not have transit service coverage. Transit service could connect these companies to more employees and provide better job access for residents. These companies could be surveyed or convened to discuss the potential of East and West employment shuttles geared toward shift changes and transit pass partnerships. A partnership with the Laramie County School District could also be explored to serve students and staff.

5.3.7 Public Outreach and Route Testing

Further outreach including surveys and public meetings are recommended before investing in service expansion. As routes are altered with the new transit center, there is an opportune time for new routes or service changes to be rolled out. Since seniors are anticipated to be a growing portion of the city's residents and a group that could be increasingly transit-dependent, investments to understand their service needs is recommended.

CHAPTER 6: REGIONAL BICYCLE AND PEDESTRIAN SYSTEM

This section provides a review of the existing bicycle, greenway, and pedestrian conditions in Cheyenne and identifies recommendations for improvements. GIS map data of non-motorized transportation assets were provided by Cheyenne MPO, City of Cheyenne, and WYDOT. Facilities including on-street bicycle facilities, the Greenway system, and existing pedestrian network. In addition to reviewing these map layers, the project team performed a desktop review, using Google Maps of the on-street bicycle facilities to confirm newly implemented facilities, and this review was confirmed by a field visit. Ultimately, an analysis was performed to rate the Bicycle Level of Traffic Stress (LTS) of existing on-street facilities and greenways/trails and to understand gaps in the existing bike network and Greenway system.

6.1 EXISTING BICYCLE AND GREENWAY NETWORK

The on-street bicycle system in the study area is made up of a mixture of Greenway trails and on-street bicycle facilities (See **Figure 28**). Both have been planned for many years, but the implementation of the Greenway system has been prioritized over on-street bicycle facilities. However, in recent years, the public has advocated for the implementation of the on-street system more quickly so that people have the option to travel safely by bicycle to/from the many destinations found throughout the study area.

Figure 28: Existing Bicycle Facility Types

Shared-Lane Markings Downtown

On-Street Bike Lane North of Downtown

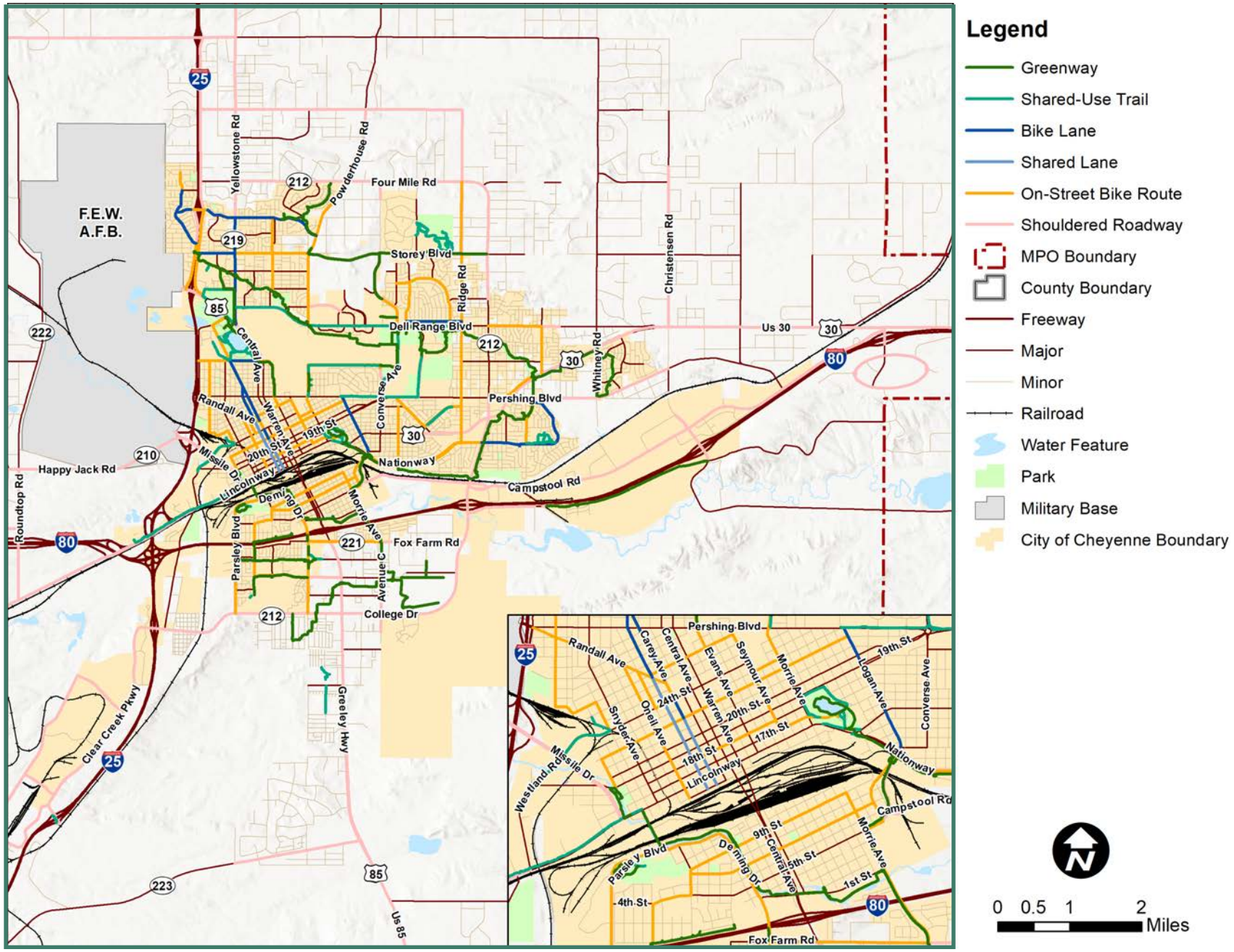
Greenway near Dell Range Boulevard

A map showing existing bicycle facilities within the Cheyenne region is provided in **Map 21** and **Table 17** identifies the current mileage per facility:

Table 17: On-Street Bicycle Facilities in the Cheyenne Area

Bicycle Facility Type	Mileage
On-street bike lanes	7.6 centerline miles
Shared Roadway/Bike route miles	59.3 centerline miles
Greenway	37 miles

Map 21: Existing Bicycle Facilities



6.1.1 Existing On-Street Bicycle Infrastructure

The existing on-street bicycle network in the Cheyenne area is primarily made up of shared lane markings, bike lanes, bike routes/shared roadways, and shouldered roadways. The on-street network is largely disconnected and can feel uncomfortable for much of the areas' population. The Cheyenne Area On-Street Bicycle Plan and Greenway Plan identifies several opportunities to improve the connectivity of this system:

- 19th, 20th, and 15th Streets will provide east/west connections across downtown Cheyenne.
- North of downtown, Hynds Boulevard and Central Avenue have been identified as near-term corridors to provide additional connections in the network.
- Bicycle facilities along Storey Boulevard and Powderhouse Road are planned in the northeast neighborhoods.
- Bicycle facilities on Deming Drive and North Greeley Highway south of downtown are planned to be implemented in the near-term.

6.1.2 Existing Greenway Infrastructure

The Greenway system in Cheyenne is robust. For years the system has been expanding and today has completed nearly 37 miles of trails. 96% of Cheyenne residents live within one mile of a greenway segment (Cheyenne Area Master Plan: Transportation Plan 2014). Throughout the system, there are over and under passes in order to provide a safe, separated facility for people to cross identified barriers for Greenway users.

There are two goals of the Greenway system: to create a hub-and-spoke system that encompasses the city in one continuous loop; and to connect the non-contiguous segments of the bicycle network to serve all neighborhoods while accommodating future growth.

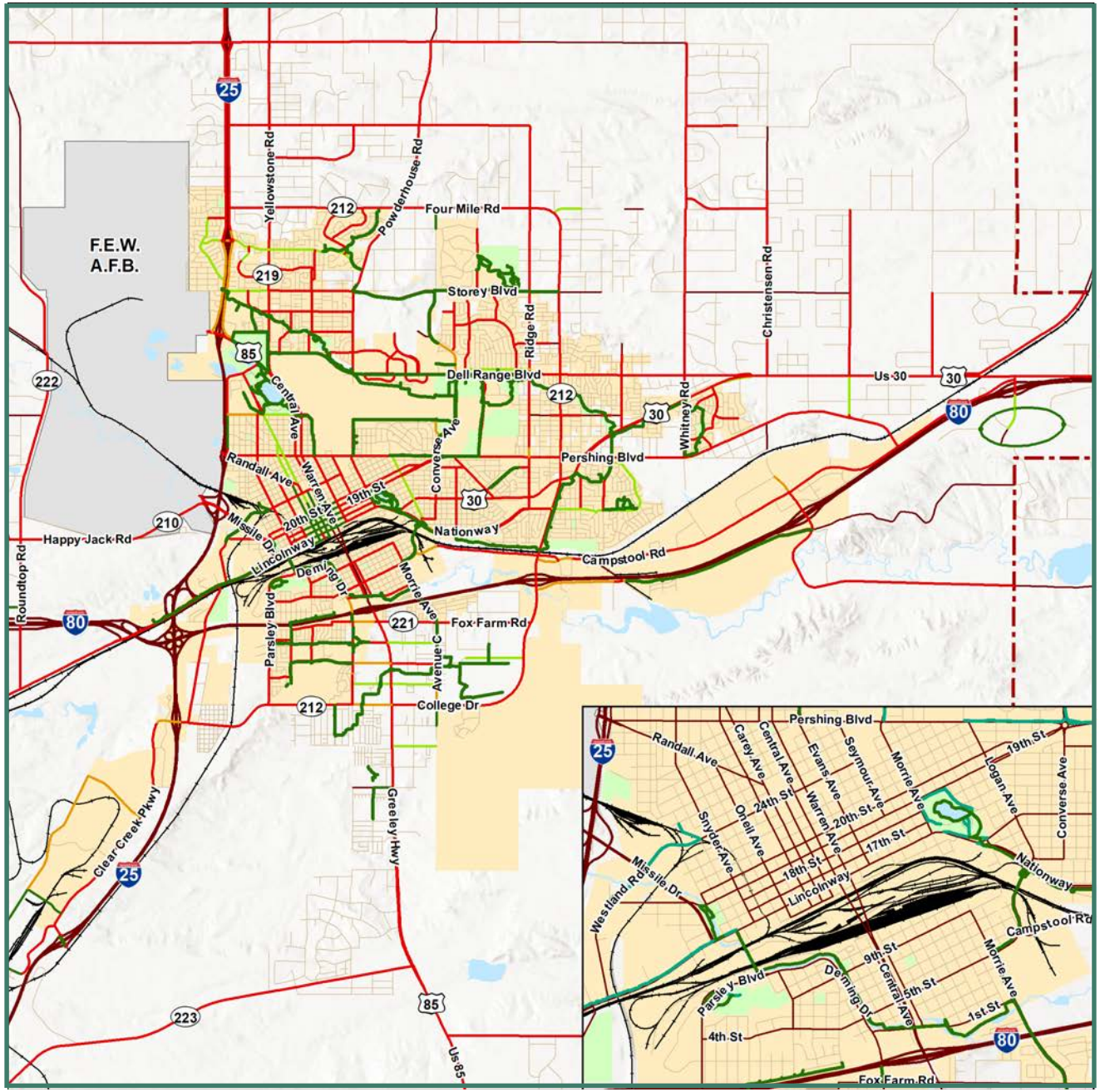
6.1.3 Bicycle Level of Traffic Stress

A Bicycle LTS was performed to generally understand the existing on-street bicycle network in Cheyenne. LTS is a rating given to a roadway segment indicating the traffic stress it causes to a typical adult riding a bicycle; this analysis is not intended to quantify the experience of the type of rider considered to be "strong and fearless", meaning a person who feels comfortable riding their bicycle in nearly any weather, on most roadways, or bicycle facility. Bicycle LTS rates the level of traffic stress on each street based on roadway characteristics, such as the presence and quality of a bicycle facility, speed limit, number of lanes, and presence of parking. In this analysis, highways, dirt roads, and local residential roads were not included.

- **Level 1**: Considered to be a comfortable facility for all ages and abilities. This typically includes streets that have speed limits of 25 MPH or less, one travel lane in each direction, and may include the presence of a bike lane.
- **Level 2:** Considered generally comfortable for most people riding bikes. This typically includes streets with a speed limits of 30 MPH or less and a bike lane.
- **Level 3:** Thought to be comfortable for only confident bicyclists. This typically includes streets with a speed limit of 30 MPH or less and a shouldered roadway.
- **Level 4:** Considered generally uncomfortable, even for confident bicyclists. This typically includes streets that have speed limits of 30 mph or more and lack any type of bicycle facility.

The existing Bicycle LTS within the Cheyenne region is provided in **Map 22**.

Map 22: Existing Bicycle Level of Traffic Stress



6.2 EXISTING PEDESTRIAN NETWORK

6.2.1 Sidewalks

Cheyenne has a fairly complete network of facilities for pedestrians, as shown in **Map 23**. However, while sidewalk facilities may be present, not all facilities are created equal. Land uses have had an impact on the development of the sidewalk network.

The sidewalk network in Downtown Cheyenne is expansive and connects most of the businesses within the district. These sidewalks also have adequate street lighting for night time travel. Several locations downtown and along major roadways provide pedestrian refuge islands as a way to provide people walking with a safe place to stop and wait while crossing roadways.

There are neighborhoods and areas that have detached sidewalks that provide separation from vehicular traffic often by means of a tree lawn. However, many neighborhoods in the study area have attached sidewalks where the sidewalk rolls into the curb and down to the street. These facilities are not separated from vehicular traffic except for when a car is parked on the side of the street, temporarily creating a barrier between the sidewalk and the street. These attached facilities can feel uncomfortable to travel on for certain demographics of the population, such as young children, the elderly, and those with mobility impairments.

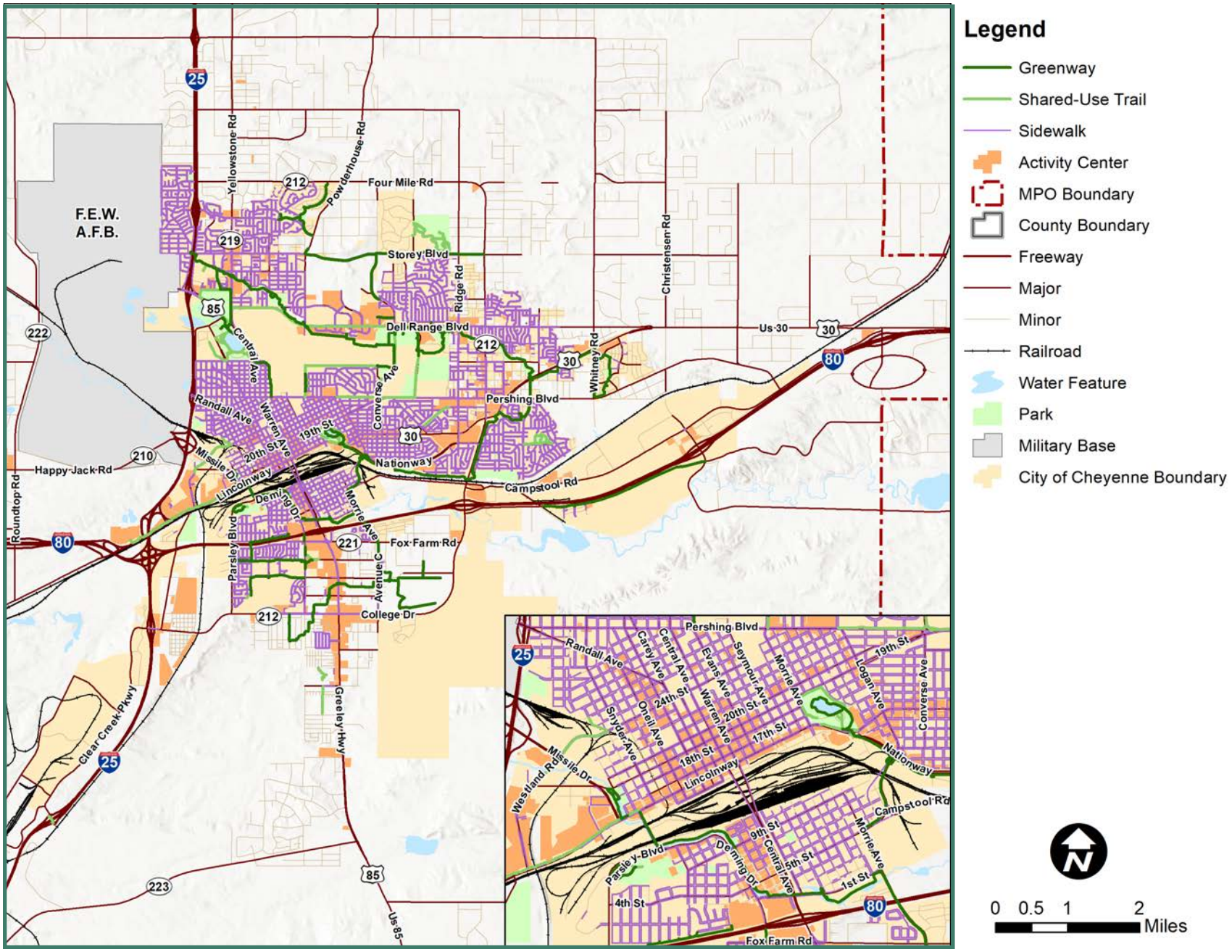
6.2.2 Intersections

From the perspective of a pedestrian, the quality of the intersections in the Cheyenne area varies greatly by location and type.

6.2.2.1 Crosswalks

Many of the major roadway intersections in the Cheyenne area have marked crosswalks to facilitate a safe pedestrian crossing. Continental (zebra-stripe) and standard (two parallel white lines) markings are the two main types of crosswalk markings used throughout the study area. Based on information provided in focus group meetings and from previous plans, a majority of the crosswalks are painted on an annual basis in order to maintain visibility.

Map 23: Existing Pedestrian Infrastructure



6.2.2.2 Curb Ramps

Curb ramps make sidewalks and streets accessible by ramping down to connect with the crosswalks. In the past, Cheyenne has constructed curb ramps as part of their standard development practices. Newer ramps that have been constructed have detectable warnings, which meet current Americans with Disabilities Act (ADA) standards. However, many older ramps are in poor condition and do not meet current ADA standards for longitudinal and cross criteria.

6.2.2.3 Intersection Controls

In most cases, motor vehicle traffic at major roadway intersections in the Cheyenne area is controlled by traffic signals, stop signs, or roundabouts. These traffic control devices on arterial and collector roadways help pedestrians cross these higher speed and higher volume roadways more safely. Additionally, several mid-block crossings have been implemented to bolster the pedestrian system and provide roadway crossings at logical locations in between major intersections. Many of the mid-block crossings are controlled by Rectangular Rapid Flashing Beacons (RRFBs), which are activated by pedestrians and activate flashing lights at a crosswalk. RRFBs increase the visibility of the crosswalk and provide warning to drivers that a pedestrian is present.

6.3 BICYCLE AND PEDESTRIAN GAPS

6.3.1 Network Gaps

In addition to understanding the general comfort of existing bike facilities, notable gaps in the bike network and Greenway system have been identified. “Gaps” are defined by corridors and areas that are disconnected from the bike network

- Corridor gaps include segments of roadways longer than 0.5 miles that do not provide adequate facilities for the ‘typical cyclist’.
- Lineal gaps are segments of roadways shorter than 0.5 miles that do not provide adequate facilities for the “typical cyclist”.
- Area gaps include areas that lack “low-stress” (Traffic Stress Level 1, 2, or 3) bicycle facilities.

Map 24 shows the identified gaps in the bicycle network in the Cheyenne area.

6.3.1.1 Corridor and Lineal Gaps

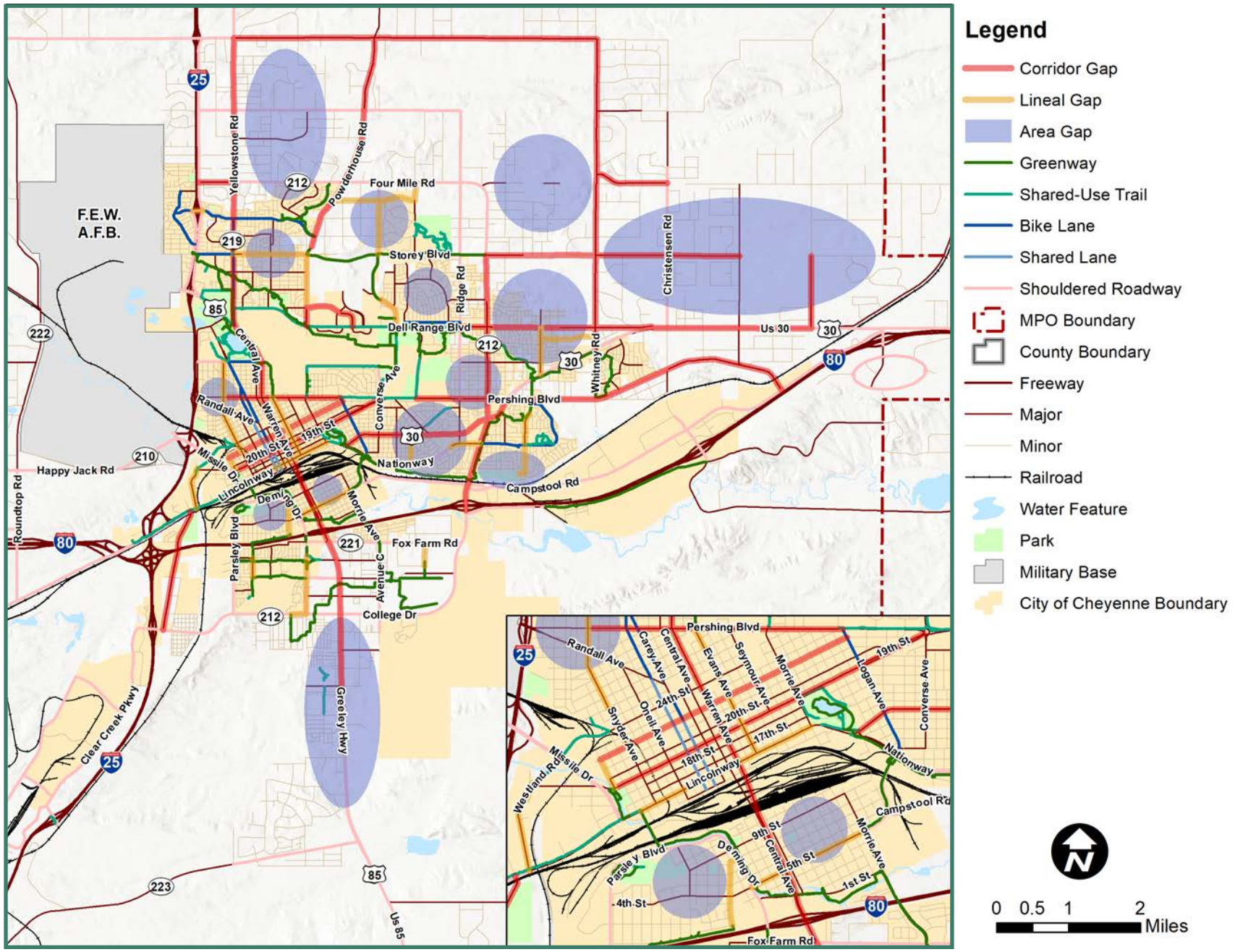
Corridor and lineal gaps include the neighborhoods northeast of downtown, including: Dell Range Boulevard, parts of Pershing Boulevard, and East Lincolnway. Other major corridor gaps in the system include Whitney Road and Reese Road. Both of these corridors provide north/south connection in and out of Cheyenne. Additionally, other corridors in the study area create major barriers to the bike network including:

- Lincolnway between Holliday Park and N College Drive;
- N College Drive between I-80 and Carla Drive;
- Dell Range Boulevard between Moran Avenue and US 30;
- Greeley Highway (US 85) between Terry Ranch Road and 1st Street;
- Pershing Boulevard between Carey Avenue and Logan Avenue; and
- Pershing Boulevard between Windmill Road and Lincolnway.

6.3.1.2 Area Gaps

The most expansive area gaps in the study area are northeast of downtown Cheyenne. Other major area gaps are present at the northern edge of the study area, in the area east of Yellowstone Road along Four Mile Road, and south of I-80, most notably between West College Drive and Terry Ranch Road along US 85.

Map 24: Bicycle System Gap Analysis



6.4 BICYCLE AND PEDESTRIAN RECOMMENDATIONS

The Cheyenne MPO area envisions a bikeway, pedestrian, and trail network that provides connectivity, safety, and travel options to its residents and visitors. Based on this vision, the Cheyenne MPO has a goal to develop an extensive multimodal network that creates a more bike- and walk-friendly Cheyenne for all ages and abilities.

Existing plans including the 2012 Cheyenne On-Street Bicycle Plan and Greenway Plan Update, 2014 Cheyenne Area Master Plan Transportation Plan, and 2010 Cheyenne Metropolitan Area Pedestrian Plan were reviewed and incorporated into the recommended bicycle and pedestrian network.

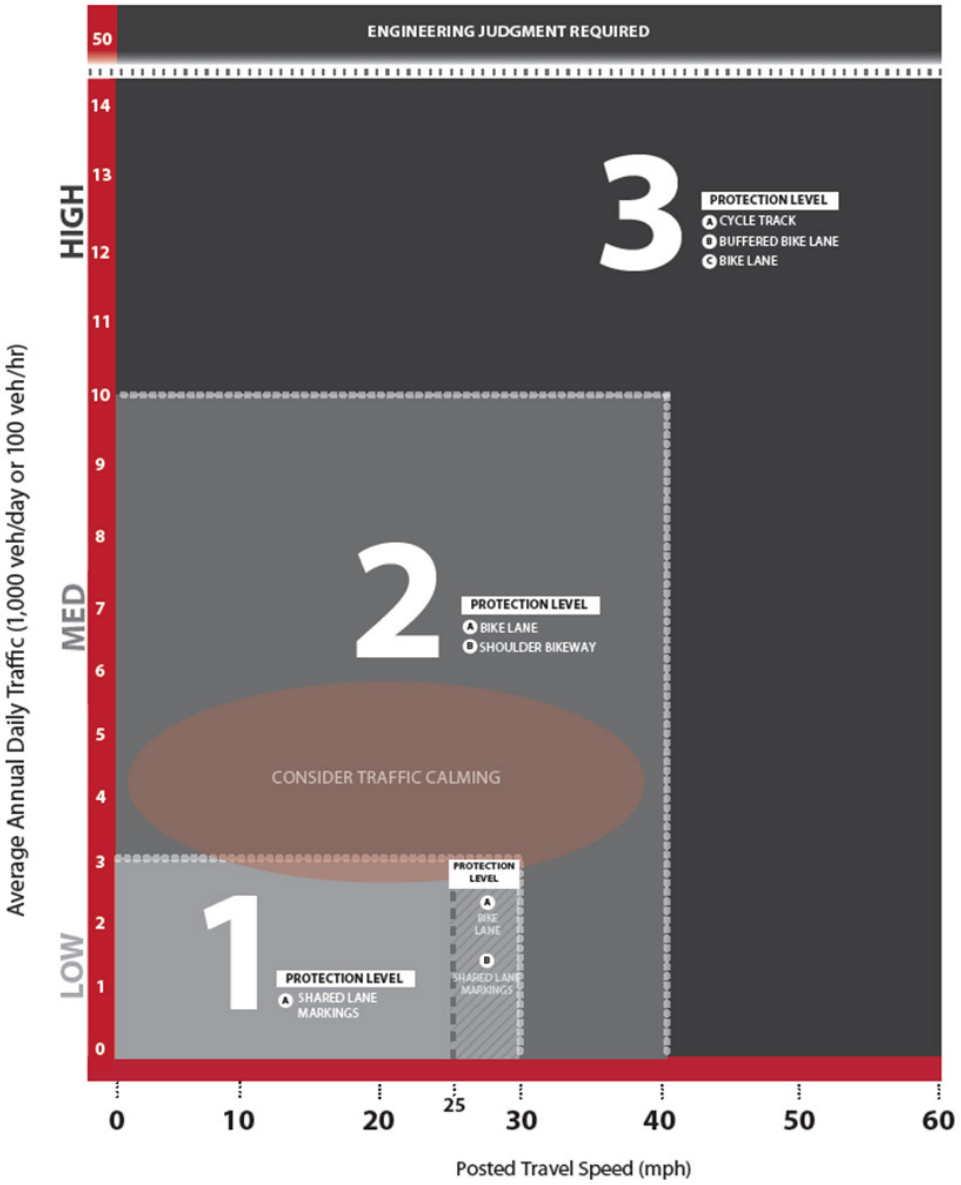
Through public input, focus group meetings with key stakeholders, and community outreach efforts, Cheyenne would like to prioritize safe and easy access to the greenway system, expanding the greenway system, connections to downtown Cheyenne with protected bike lanes, and improving downtown walkability.

6.4.1 Bikeways and Trails Network

As part of the Community Assessment, a bicycle level of traffic stress analysis and network gaps analysis were performed to assess the existing comfort and connectivity of the on-street bikeways and trails network. A bicycle level of traffic stress measures the level of comfort for bicyclists on each street based on roadway characteristics, such as the presence and quality of a bicycle facility, speed limit, number of lanes, and the presence of parking. Based on the level of traffic stress, a network gaps analysis determined which areas of the city were lacking low-stress connections/corridors for bicyclists. The bikeway facility selection chart (**Figure 29**), developed as part of the 2012 Cheyenne On-Street Bicycle Plan and Greenway Plan Update, recommends the appropriate facility type based on the existing roadway characteristics. These guidelines are generally in line with guidance on bicycle facility selection by FHWA and the National Association of City Transportation officials (NACTO).

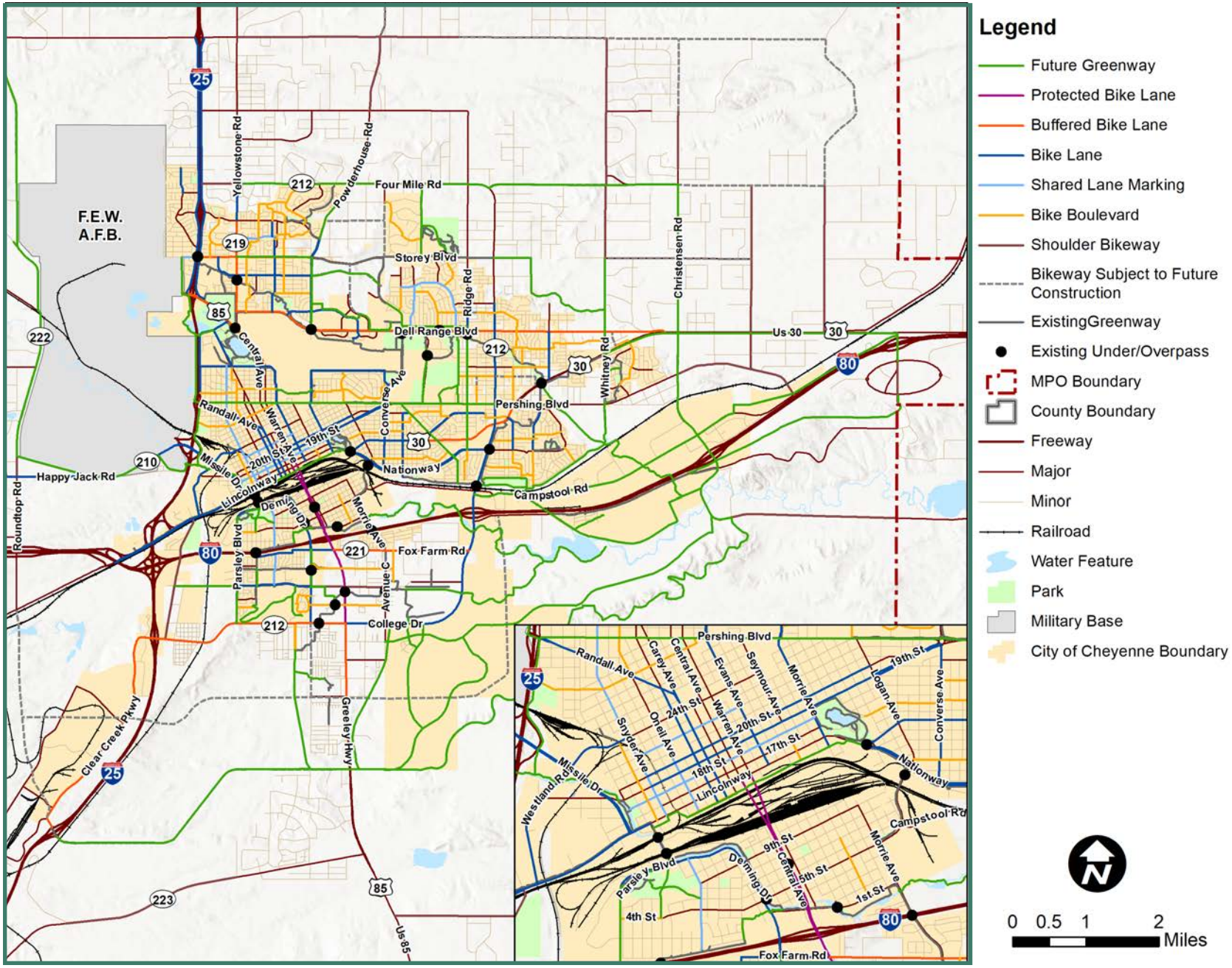
Using the facility selection chart, a low-stress network for the Cheyenne region was identified and is depicted in **Map 25**. It represents routes that feel more comfortable to a typical adult with an interest in riding a bicycle, but who is concerned about interactions with vehicular traffic. Examples of best practices for facility design are provided in **Appendix B.**

Figure 29: Bicycle Facility Selection Chart



Source: Cheyenne On-Street Bicycle Plan and Greenway Plan Update (2012)

Map 25: Recommended Bikeways and Trails Network Map



6.4.2 Pedestrian and Trails Network

Making Cheyenne a more walkable city enhances the City's health and safety, sustainability, and economic competitiveness by improving overall quality of the public realm and community feel. Sidewalks also give people more options for how they move around the city. People might use sidewalks for their entire journey, as a short connection to some other mode of transportation, or for recreation. Since sidewalks are so critical to mobility, a high-quality sidewalk system is a cornerstone of the transportation network.

While pedestrian strategies are integrated throughout the LRTP, this section outlines how pedestrian facilities should be equitably implemented throughout Cheyenne. Cheyenne has a good sidewalk system supplemented with a comprehensive network of greenways and shared-use trails. However, critical gaps and undersized facilities persist throughout the community which need to be addressed.

The City should focus their pedestrian program on filling in gaps where they currently exist and continuing to upgrade crosswalks to meet ADA requirements. Undersized pedestrian facilities can be upgraded over time as street reconstruction occurs using the sidewalk design guidelines from the 2012 Cheyenne Metropolitan Area Pedestrian Plan. Pedestrian facilities should also be prioritized around existing and future high-pedestrian activity centers, transit corridors, and those street intersections with safety concerns.

As part of the Community Assessment, existing pedestrian facilities such as sidewalks and trails were mapped to understand infrastructure gaps throughout the city. Generally, the developed portions of the city have complete infrastructure including sidewalks and crossings with appropriate signals and markings. However, through community outreach efforts, several key pedestrian needs and issues were identified including:

- Additional crossing treatments throughout Cheyenne
- Sidewalk repair and maintenance outside of the downtown area
- Connections from downtown to the greenway system
- Corridor and intersection pedestrian improvements along Pershing Boulevard
- Improved pedestrian crossing treatments along Lincolnway in the downtown area

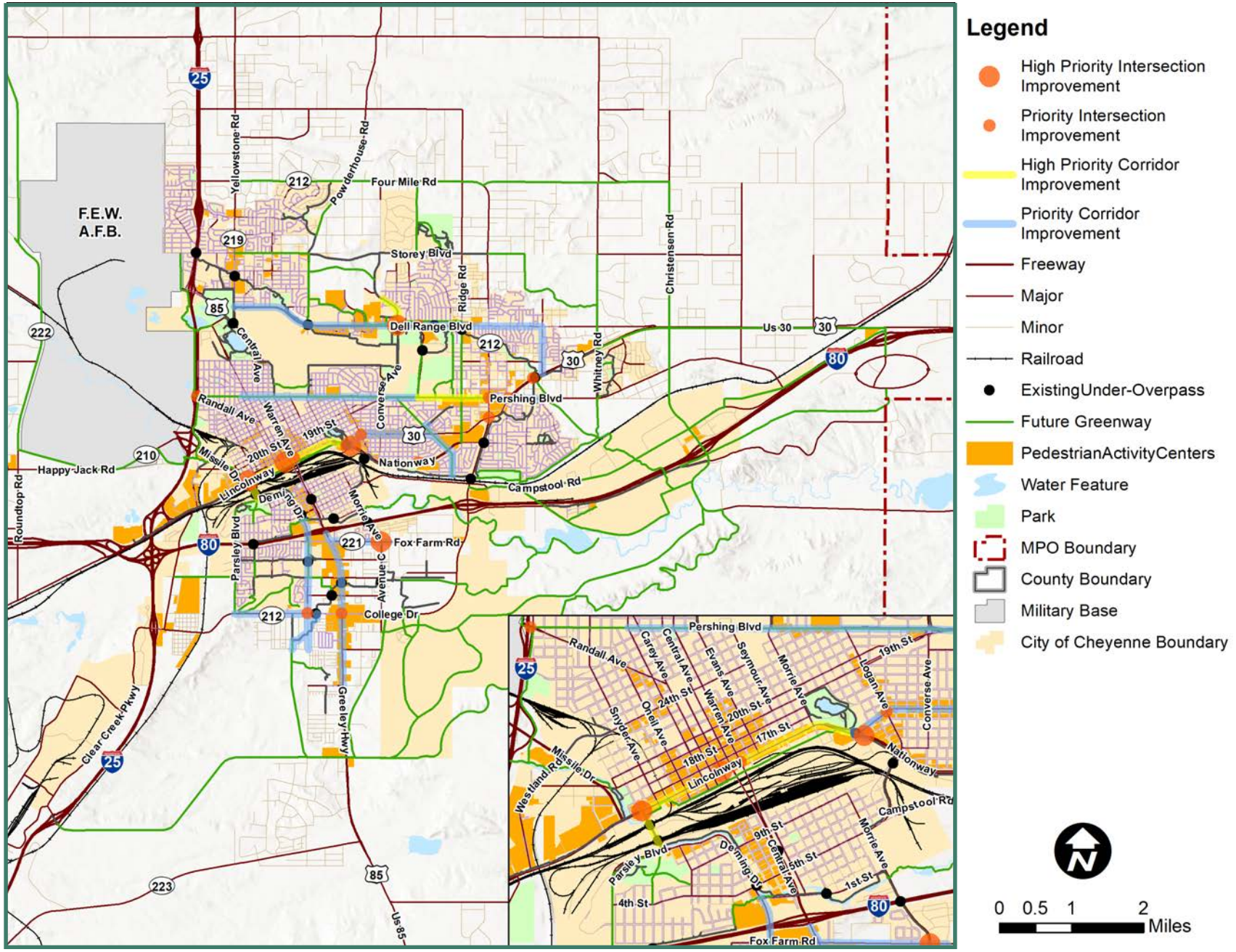
The recommended pedestrian and trails network can address these key issues by implementing geometric elements and operational improvements at priority intersections, priority corridors, and in high-pedestrian activity areas. Priority intersections and corridors are derived from previously identified locations from the 2012 Cheyenne Metropolitan Area Pedestrian Plan, pedestrian crash locations identified during the Community Assessment, and recommendations received through focus group meetings with key stakeholders, and community outreach efforts.

The recommended pedestrian and trails network is shown in **Map 26**. Example pedestrian facilities and intersection treatments are shown in **Appendix B.**

6.4.3 Bicycle and Pedestrian Plan Update

The current bicycle and transportation plan was completed in 2012. Quite a few changes to the multimodal system have occurred since that time, as well as updated guidance on best practices. Therefore, it is recommended that the MPO, City of Cheyenne, and Laramie County update the regional bicycle and pedestrian plan to reflect these changes.

Map 26: Recommended Pedestrian and Trails Network Priority Areas



CHAPTER 7: REGIONAL AVIATION AND FREIGHT

7.1 AVIATION

7.1.1 Existing Aviation

Cheyenne Regional Airport (KCYS) is located approximately 2 miles north of downtown Cheyenne and just east of Cheyenne Frontier Park. By passenger volume, KCYS was the 6th largest airport in the Wyoming in 2019. However, 2019 was a notable year for the airport, as it achieved a total passenger volume of 31,939, almost ten times higher than the volume in 2018 and higher than the previous five years combined. The reason behind this spike is that in late 2018, American Airlines began to provide service to Cheyenne from Dallas/Fort Worth International Airport (DFW), the fourth largest airport in the nation. On April 6, 2020, service between KCYS and DFW was suspended due to the COVID-19 Pandemic. This service was being provided through a contract with American based on a guaranteed a level of passenger volume. Annual passengers at KCYS is shown in **Table 18**.

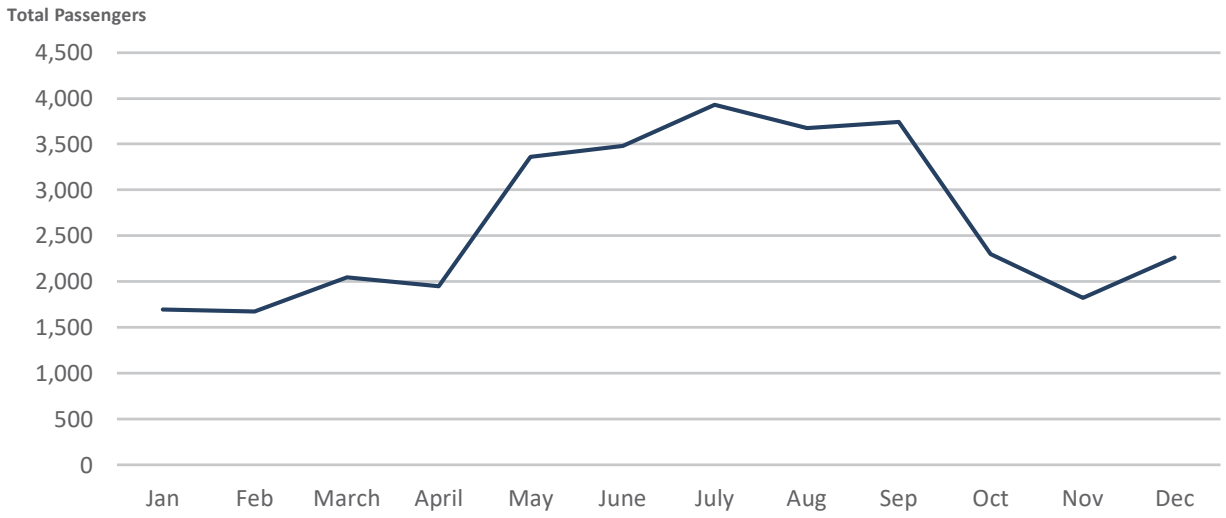
Table 18: Passengers at Cheyenne Regional Airport (2014-2019)

Description	2014	2015	2016	2017	2018	2019	2014-2019		
							Total	Ann. #	Ann. %
Arriving Passengers	4,479	2,410	1,575	861	1,504	16,061	11,582	2,316	29%
Departing Passengers	4,432	2,232	1,624	864	1,759	15,888	11,456	2,291	29%
Total Passengers	**8,911**	**4,642**	**3,199**	**1,725**	**3,263**	**31,949**	**23,038**	**4,608**	**29%**

Source: WYDOT Aeronautics Department; Economic & Planning Systems

Monthly passenger volume at KCYS is indicative of the seasonal nature of travel to Cheyenne. As shown in **Figure 4**, passenger volume in 2019 was highest in summer as total volume stayed above 3,400 between May and September and peaked in July with 3,920 total passengers. In contrast, the winter months typically drew around 2,000 total passengers with a low of 1,680 passengers in February.

Figure 30: Monthly Passengers at Cheyenne Regional Airport (2019)



Source: WYDOT Aeronautics Division; Economic & Planning Systems

7.1.2 Aviation Recommendations

Developing commercial air service remains a priority for the city and the Cheyenne Airport. Over the next few years, the KYCS plans to invest $62 million into repairing its runways. Most of the funding for these improvements will come from federal sources, including $39.5 million from the FAA and $18.0 million from the Air National Guard. The remaining $4.5 million is expected to be paid for by local sources including WYDOT and airport revenues. These improvements are expected to affect air service for a total of 70 days in 2021.

Despite its success in 2019, KYCS will likely not resume its contract with American Airlines to provide service to Dallas. However, KYCS anticipates that it will re-establish service to Denver in the fall of 2020. with the completion of the runway improvements, KCYS will seek to expand commercial service to other markets. It is targeting 'leisure' markets for service, including Las Vegas and Phoenix.

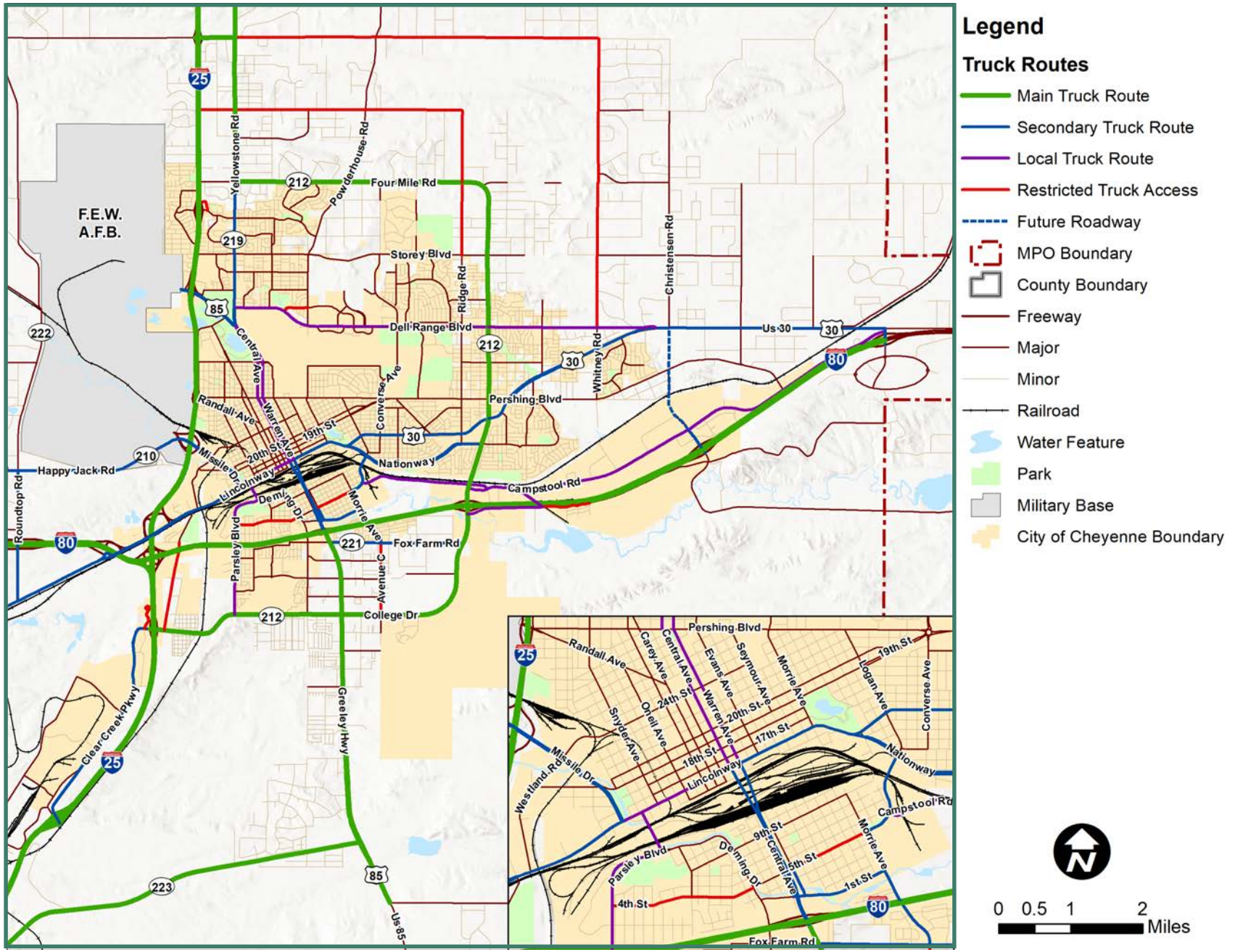
7.2 FREIGHT

7.2.1 Existing Freight

The freight network serving the Cheyenne area is comprised of highway, railway, aviation, and pipeline systems. In particular, I-80 is one of the nation's busiest routes for moving freight coast to coast. As documented in the 2016 Cheyenne Regional Freight Mobility Plan, the region has a growing manufacturing and distribution industry base which includes several major companies such as Lowe's, Walmart, Sierra Trading Post, and Holly Frontier Refinery.

Major planned industrial growth areas include the Swan Ranch Industrial Park south of the City along I-25 and the North Range Business Park to the west along I-80. Cheyenne's access to high-level transcontinental transportation corridors is a major strength for its economy. In order to better accommodate truck and freight goods movement, the Regional Freight Mobility Plan included a comprehensive review of existing truck routes with recommended changes. **Map 27** illustrates the updated truck route map.

Map 27: Freight Network



7.2.2 Freight Recommendations

7.2.2.1 Cheyenne Regional Freight Mobility Plan

The Cheyenne Regional Freight Mobility Plan was completed in June 2016 and presents a framework for regional Vision, Goals and Performance Measures, and identifies projects, programs and policies to enhance the movement of freight in the region. Key recommendations from this plan are described below.

One important component of freight planning on a local level is to identify routes that are best suited for freight movement as well as those routes that are not suited for freight. The City of Cheyenne has an ordinance that identifies roadways where trucks are restricted and where truck traffic is preferred. For these preferred truck routes, strategies to improve truck vehicle operations and support efficient freight movement can include:

- Set access management rules to preserve truck mobility in and out of key facilities.
- Identify signal timing policies to time traffic signals that are at or near known freight generators and receivers to accommodate truck movements.
- Set guidelines or policies for construction activity so it is scheduled to minimize disruptions during peak business activity/seasons, to avoid disrupting a key route and its relief route simultaneously, and to avoid commercially sensitive time periods (like month-end).

Near-Term Projects

- Conduct a corridor study along Campstool Way/Campstool Road between College Drive and the major freight generators along the corridor.
- Prepare a study to recommend geometric improvements and identify signal timing improvements at South Industrial Road and College Drive.
- Conduct a study to investigate the need for a left-turn signal at East 5th Street and US 85 and for reconstruction of the corner radii to accommodate trucks.
- Widen College Drive at Dell Range Blvd to provide an additional left turn lane.
- Coordinate with the Colorado Department of Transportation to examine combining I-25 Ports of Entry.
- Conduct a Truck Parking Study.
- Conduct a Transload Market Assessment.

Mid- and Long-Term Projects

- Construct geometric improvements at S. Industrial Road and College Drive, based on near-term study outcomes.
- Reconstruct corner radii of East 5th Street and Interstate 180 based on near-term study findings.
- Reconstruct the north-east corner radius at Converse Avenue and Dell Range Boulevard.
- Reconstruct Burlington Trail Road and its intersection with South Industrial Road/HR Ranch Road.
- Complete a study and implement recommended re-configuration for the intersection at Fox Farm Road/Morrie Avenue/Avenue C.
- Construct a new roadway to connect Southwest Drive to Parsley Boulevard, south of I-80.
- Reconstruct interchanges at I-80 and Lincolnway, I-25 and Lincolnway, and I-25/I-80.
- Design and construct a grade separated crossing where the BNSF railroad crosses College Drive.

7.2.2.2 Smart Freight Mobility

In addition to the capacity and safety projects, the Cheyenne Regional Freight Mobility Plan suggests use of intelligent transportation systems (ITS) to improve safety and operational efficiency of freight travel. ITS technologies, systems, and processes elevate data collection and dissemination of information that can contribute to addressing two major challenges for freight within the Cheyenne region: adverse weather conditions and the availability of truck parking.

WYDOT is a partner in the I-80 Coalition, which is a multi-state partnership that is focused on improving safety and mobility along the I-80 corridor between California and Nebraska as shown in **Figure 31**. The Departments of Transportation in California, Nevada, Utah, Wyoming, and Nebraska have partnered to focus on developing effective methods for sharing, coordinating, and integrating traveler information and operational activities across state borders. The I-80 Coalition has received a federal grant to pursue heightened collaboration and to develop systems and processes to further support the Coalition's mission of improving safety and operational efficiency of the multi-state corridor.

Figure 31: I-80 Coalition Boundaries

Source: Kimley-Horn

One area that the I-80 Coalition is focusing on is implementing a system and establishing agreements on operations aimed at notifying freight and travelers several hundred miles in advance of a major restriction of the roadway, whether from a crash, weather, or emergency closure, and advising trucks to seek parking options before they get to portions of the corridor that do not have sufficient truck parking and other amenities.

It would be beneficial for the Cheyenne region to stay involved with the I-80 Coalition efforts to see how they may contribute, which could be in the form of real-time traffic, weather, or emergency data that can be shared or supporting investments in local truck parking or other amenities to support stranded drivers.

One investment that would support the I-80 Coalition mission, as well as the long-range transportation goals of the Cheyenne region, is in technologies and systems that support 'cleaner' truck idling at parking locations. Idling occurs when freight operators are forced to stop due to extreme weather events or during winter

months when drivers are sleeping and need to stay warm. Regular idling is an inefficient use of fuel and creates air pollution. Idling reduction technologies (IRT) allow freight operators to shut down the main engine of a truck while still providing services such as heat, air-conditioning, and/or electricity.

One type of IRT approved by the EPA is Electrified Parking Spaces (EPS) and Truck Stop Electrification (TSE) . The devices can be on-board equipment (e.g., power inverters, plugs), off-board equipment (e.g., electrified parking spaces or systems that directly provide heating, cooling or other needs), or a combination of the two. Cheyenne regional transportation partners may consider investing in the off-board technology to support driver safety and emissions reduction as it relates to freight movement in the I-80 and I-25 corridors. Examples of these technologies are shown in **Figure 32**.

Figure 32: Examples of Truck Stop Electrification

Source: *(left)* https://www.epa.gov/verified-diesel-tech/idling-reduction-technologies-irts-trucks-and-school-buses; *(right) IdleAir.com*

CHAPTER 8: LIVABILITY AND ECONOMIC GROWTH

8.1 LIVABILITY PRINCIPLES

8.1.1 Livability in Transportation

Transportation investments are powerful and far reaching. Seldom is a transportation investment a stand-alone exercise. Increasingly, transportation investments are being leveraged to accomplish broader community goals, addressing a wider range of needs, and serving multiple programs.

The form, function, and character of transportation infrastructure and adjoining land uses are intrinsically linked – starting with the first crossroads, rail stations, or interstate interchanges. In fact, transportation infrastructure is the foundation of city building. Transportation investments provide the means and conveyances for circulation, establishes the block structure, organizes land uses, and influences the architectural qualities of buildings.

The Interagency Partnership for Sustainability Communities is a partnership between the U.S Department of Housing and Urban Development (HUD), United States Department of Transportation (USDOT), and U.S Environmental Protection Agency (EPA) that define six Livability Principles to guide investments to create more livable, prosperous and sustainable communities:

1. Provide more transportation choices
2. Promote equitable, affordable housing
3. Enhance economic competitiveness
4. Support existing communities
5. Coordinate policies and leverage investment
6. Value communities and neighborhoods

These Principles help to organize and guide an array of federally-sponsored programs and policies aimed at creating and supporting strong, sustainable, and inclusive communities. For example:

- The Community Development Block Grant (CDBG) program makes funding available to agencies to construct sidewalks and streetscape improvements (lighting, benches, etc.) with the goal of creating more accessible and walkable environments and encouraging economic development and healthy lifestyles for residents.
- Regional Planning Grants are awarded to municipalities to coordinate multi-jurisdictional planning for transportation investments that increase transportation choices.
- Community Challenge Grants provide funding for investments at the neighborhood- and corridor-scale that encourage safe, accessible, and active transportation choices within neighborhoods.

Leveraging transportation investments to accomplish community, environmental, and economic development goals can lead to more comprehensive, cost-effective solutions and broad community support.

8.1.2 Livability Goals and Initiatives

Cheyenne is familiar with integrating livability initiatives into transportation investments. The most recent example is the Reed Avenue Rail Corridor Plan and the intent of that project to promote safety, livability, and economic revitalization to the West Edge of Downtown. with foundations laid by this executed investment plan and others, the region has an opportunity to consider other transportation projects that promote and advance livability in the region and, in turn, position itself to apply for federal grants that would increase funding to accomplish more of these transportation and mobility projects.

8.1.2.1 Connecting Street Networks

Incomplete or disjointed street networks burden traffic operations – causing roadways to increase in size, limit travel options, and restrict land development opportunities. Basic transportation planning principles suggest that a traditional network of connected streets has more capacity than the conventional suburban pattern. Well-connected street networks distribute traffic, enable transportation choices, and increase land use opportunities. Furthermore, properly designed networks provide transportation planners alternative routing options – relieving the pressure to accommodate all traffic movements and modes on a single corridor.

8.1.2.2 Street Design

The quality of the street influences the quality of the built environment. Likewise, the speed of the street influences the quality of the street and its roadside amenities. Therefore, the speed of the street impacts the quality of the built environment.

Livable street design in appropriate areas recognizes all street users and identifies design solutions that balance the needs of all users. In urban areas, speeds of 25-30 mph are more conducive for the creation of livable and multimodal communities. This reasonable speed encourages a variety of successful street-front land uses while enabling pedestrians and bicyclists to share the corridor. As such, urban roadway design solutions should limit corridor speeds to 30 MPH. Higher speeds do not increase street capacity and often compromise the pedestrian-friendliness and the land use compatibility of a corridor.

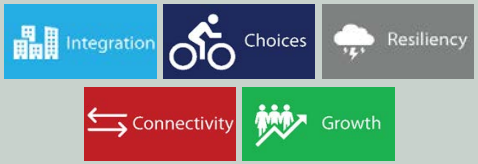
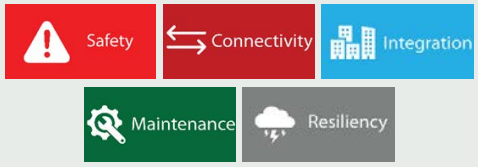
While well-connected street networks and slower streets translate into increased efficiency and livability, roadway safety is perhaps the most important objective of the transportation industry. FHWA recognized the importance of context sensitive and livable design solutions and produced, in partnership with the American Association of State Highway Transportation officials (AASHTO), a guide for “Flexibility in Highway Design”. As stated in that document:

“This guide does not attempt to create new standards. Rather, the guide builds on the flexibility in current laws and regulations to explore opportunities to use flexible design as a tool to help sustain important community interests without compromising safety”.

8.1.2.3 Alignment of Goals with Livability Principles

The goals of the Connect 2045 Transportation Plan already align with the livability principles. The partners in the Cheyenne region should find ways to emphasize the alignment between the Connect 2045 Goals and the Principles by highlighting, promoting, and prioritizing projects that align with the principles and the various funding sources that are offered to advance them. The alignment between goals and principles and examples of projects that could be promoted for federal grant funding through the Partnership for Sustainable Communities are shown in **Table 19**.

Table 19: Alignment of Connect 2045 Goals and Federal Livability Principles

Federal Livability Principle	Connect 2045 Goal	Example Projects
Provide more transportation choices		• Build sidewalks and/or trails to connect communities to each other and to key services and amenities • Develop and implement neighborhood master plans or update the current pedestrian plan where there is a focus on connectivity and walkability • Have developers build neighborhood sidewalks at time of platting rather than as parcels are developed to ensure sidewalk connectivity.
Promote equitable, affordable housing		• Make or align transit investments to support development of mixed-use or affordable housing near transit stops that provides access to community services and amenities • Develop a regional plan that identifies projects, partnerships, and policies to coordinate housing, transportation, and economic development investments across multiple jurisdictions to promote equitable housing investments • Explore alternative street sections that are less costly to construct and maintain but provide sufficient service to reduce the overall cost of developing housing.
Enhance economic competitiveness		• Enhance streetscapes and building façades in commercial districts to promote foot traffic and help to recruit new businesses • Develop a regional economic development plan that identifies strategies to support workforce development and economic resilience in the context of social equity, housing and land use, transportation, and the environment
Support existing communities		• Construct/reconstruct roadways to provide a more context-sensitive design or to provide flooding mitigation/control in existing neighborhoods • Construct a gateway investment for a community that creates a sense of place and unique identity, while also supporting active lifestyles and community gathering
Coordinate policies and leverage investment		• Develop a transportation and land use plan in coordination with the Air Force Base to promote linking of key housing, transportation, economic development and other infrastructure investments to promote social equity, economic opportunity, and health and well-being of the community. • Plan for transit service between Cheyenne and the Colorado Front Range (rail, bus, or van service) either through a new transit agency or by expanding existing transit services.
Value communities and neighborhoods		• Support the organization of Neighborhood Steering Committees to make community-based recommendations on projects that are eligible for CDBG funds, such as bus shelters and bicycle racks; sidewalks; crosswalks; or trails.

8.2 TRAVEL AND TOURISM

This section evaluates the impact of travel and tourism activity on transportation and land use demand in the MPO plan area. Data on existing travel and tourism patterns and trends is compiled including annual visitation levels, growth trends, and seasonal and monthly variations. Also included is an inventory of tourism support facilities (hotel/motels, camping/RV facilities, and retail/restaurant space) and an estimate of the portion of business related to tourism travel for each sector. A projection of travel and tourism growth over the 2020-2045 forecast period is made to help identify the need for additional tourism support facilities. The section concludes with identification of transportation improvement projects that are important to maintaining and growing the tourism economy of the Cheyenne MPO region.

8.2.1 Travel and Tourism Trends

According to the Wyoming office of Tourism, visitors to Laramie County spent an estimated $380 million in 2019, generating $75 million in local earnings and 3,100 jobs. Travel spending in Laramie County has been on an upward trend, increasing from $292 million in 2011, equating to an annual growth rate of 3.3%. The growth in travel impacts is shown in **Table 20**.

Table 20: Laramie County Travel Impacts (2011-2019)

Description	2011	2013	2015	2017	2019	2011-2019		
						Total	Ann. #	Ann. %
Travel Spending ($M)	$292.1	$341.0	$320.1	$346.4	$380.2	$88.1	$11.0	3.3%
Earnings Generated ($M)	$60.1	$64.0	$62.8	$65.4	$75.3	$15.2	$1.9	2.9%
Jobs Generated	3,060	2,800	2,890	2,940	3,100	40	5	0.2%

Source: Wyoming office of Tourism, Dean Runyan Associates; Economic & Planning Systems

Overnight visits to Laramie County followed a similar trend, growing from 2.5 million in 2016 to 2.7 million in 2019, equating to an annual growth rate of 2.6%, as shown in **Table 21**.

Table 21: Laramie County Overnight Visitors (2016-2019)

Description	2016	2017	2018	2019	2016-2019		
					Total	Ann. #	Ann. %
Overnight Visitors	2,504,000	2,624,000	2,677,000	2,706,000	202,000	67,333	2.6%

Source: Wyoming office of Tourism; Economic & Planning Systems

More detailed analyses of the impacts of regional tourism, including seasonal fluctuations and modal impacts are provided in **Appendix C.**

8.2.1.1 Travel and Tourism Forecasts

Data on current travel trends was used as a basis to estimate visitation and travel spending in Cheyenne/Laramie County for the 2020 to 2045 period. Laramie County overnight visits have grown at an annual rate of 2.6% between 2016 and 2019. Projecting this level of growth going forward, overnight visits would reach approximately 3.55 million by 2030 and 5.14 million by 2045, as shown in **Table 15**. Based on an average party size of three persons, room nights would follow the same trajectory increasing from 924,550 in 2020 to 1.18 million in 2030 and 1.71 million in 2045. Based on recent trends, travel spending is expected to grow at a slightly higher annual rate of 3.0%, reaching approximately $526 million by 2030 and $820 million by 2045.

Table 22: Laramie County Travel Forecasts (2020-2045)

Description	2020	2030	2045
Overnight Visits	2,773,650	3,550,506	5,142,192
Room Nights	924,550	1,183,502	1,714,064
Travel Spending ($M)	$391.6	$526.3	$819.9

Source: Wyoming office of Tourism; Economic & Planning Systems

8.2.2 Travel and Tourism Improvements

Based on the above analysis of tourism conditions, the following needs were identified as supportive of the travel and tourism industry in the Cheyenne MPO region.

8.2.2.1 Wayfinding

The Cheyenne MPO and Visit Cheyenne completed the Cheyenne Wayfinding Plan in 2007 that created a conceptual design theme and hierarchy of signage. A second phase of the plan completed in 2010 included further design refinements and identified proposed sign locations within the City, and coordinating with WYDOT, also identified locations within state highway ROWs. In 2011, Visit Cheyenne secured funding to install unique parking signage at the Spiker Parking Structure on West Lincolnway and within downtown. They were also able to fund three of six proposed downtown pedestrian kiosks. In 2016, Visit Cheyenne (with Cheyenne DDA, Cheyenne LEADS, and the Chamber of Commerce) secured additional funding to build and install the remaining signs in the plan for downtown Cheyenne, the Capitol Complex area, and around Frontier Park and Lions Park. It also paid for new entryway signage near Interstates 25 and 80.

The Cheyenne MPO and Visit Cheyenne are in the process of developing a third phase of wayfinding signage that is focused on filling gaps in the current system and on providing direction to locations outside of the central area including the Southern and Eastern Additions to the city. The proposed program would also provide signage to the city's public schools and athletic fields.

The wayfinding signs have been a very cost-effective improvement that improves the visitor experience. The initial wayfinding plan was designed and built for approximately $75,000. The proposed Phase III additions are estimated to cost approximately $20,000 to manufacture the signs which will be installed by the City at no additional costs.

8.2.2.2 Rail Access and Service

Cheyenne is a major rail center with transcontinental rail lines bisecting the City for both Union Pacific (UP) and Burlington Northern Santa Fe (BNSF). Cheyenne Depot Museum located in the Historic Union Pacific Railroad Depot in Downtown Cheyenne chronicles the City's railroad history dating to the 1880s. The Historic Union Pacific Depot is also the focal point for the city's visitor infrastructure. Many of the downtown events organized by the Cheyenne Downtown Development Authority are held in the Depot Plaza which occupies a full city block connecting the depot to Capitol Avenue and the downtown commercial core. In addition to the museum, Cheyenne Trolley Tours operates a historic street trolley from the Depot to other area attractions.

According to Visit Cheyenne, there are additional opportunities to capitalize on the City's railroad industry and heritage. There is local interest in re-starting a sponsored steam train from Denver to Cheyenne during Frontier Days that was suspended in 2018. The UP historic steam engines used for this excursion are stored at the Cheyenne UP Depot. However, the historic passenger cars are reportedly not currently available. Restarting this popular attraction is a priority for the City and Visit Cheyenne.

There may also be an opportunity to operate a shorter tourist train excursion. There are at least 10 successful historic steam train attractions in Colorado that could be used as a model including the Georgetown Loop Railroad, Cumbres and Toltec Scenic Railroad, Durango & Silverton Railroad, Cripple Creek & Victor Narrow

Gauge Railroad, and Leadville Colorado and Southern Railroad. However, each of these tourist-oriented attractions operate on exclusive track not used by existing freight or passenger rail. There is no comparable track available in Cheyenne.

Passenger rail service to the Colorado Front Range is also a long-term goal for the Cheyenne MPO that would enhance tourism travel to the Cheyenne region as noted in the Inter-Regional Transit Section.

8.2.2.3 Air Service

Completing the programmed improvements at the Cheyenne Regional Airport as described in Section 7.1.2, is critical for accommodating commercial air service. Re-establishing commercial air service to nearby air service hubs as well as popular leisure destinations will provide increased accessibility for visitors to the Cheyenne Region.

8.2.2.4 Bicycles, Pedestrians, and Trails

A well-connected bike and trail system and a safe and attractive pedestrian network are as important to visitors as to residents. Tourists are increasingly looking to get out of their cars and experience local community by bike or on foot. The priority projects identified in the Bike and Pedestrian Network Section are therefore also a priority for Travel and Tourism.

8.3 SYSTEM RESILIENCY AND RELIABILITY

Facility maintenance and flooding are both issues that impact the regional transportation system in and around Cheyenne. Improving resiliency to these natural and manmade issues will increase the reliability of travel times within the region and improve the overall quality of the transportation network.

Maintenance of the region's roadways, including pavement, sidewalks, and bridges, has been a long-standing issue resulting from a lack of funding. Pavement conditions from a City pavement inventory performed in 2019 are shown in **Map 28**.

The City of Cheyenne performed a Drainage Master Plan which identified areas where flooding and stormwater management are known issues. **Table 23** and **Map 29** show locations where flooding impacts the functionally classified roadway system.

Table 23: Drainage Master Plan-Identified Impacts to Regional Transportation System

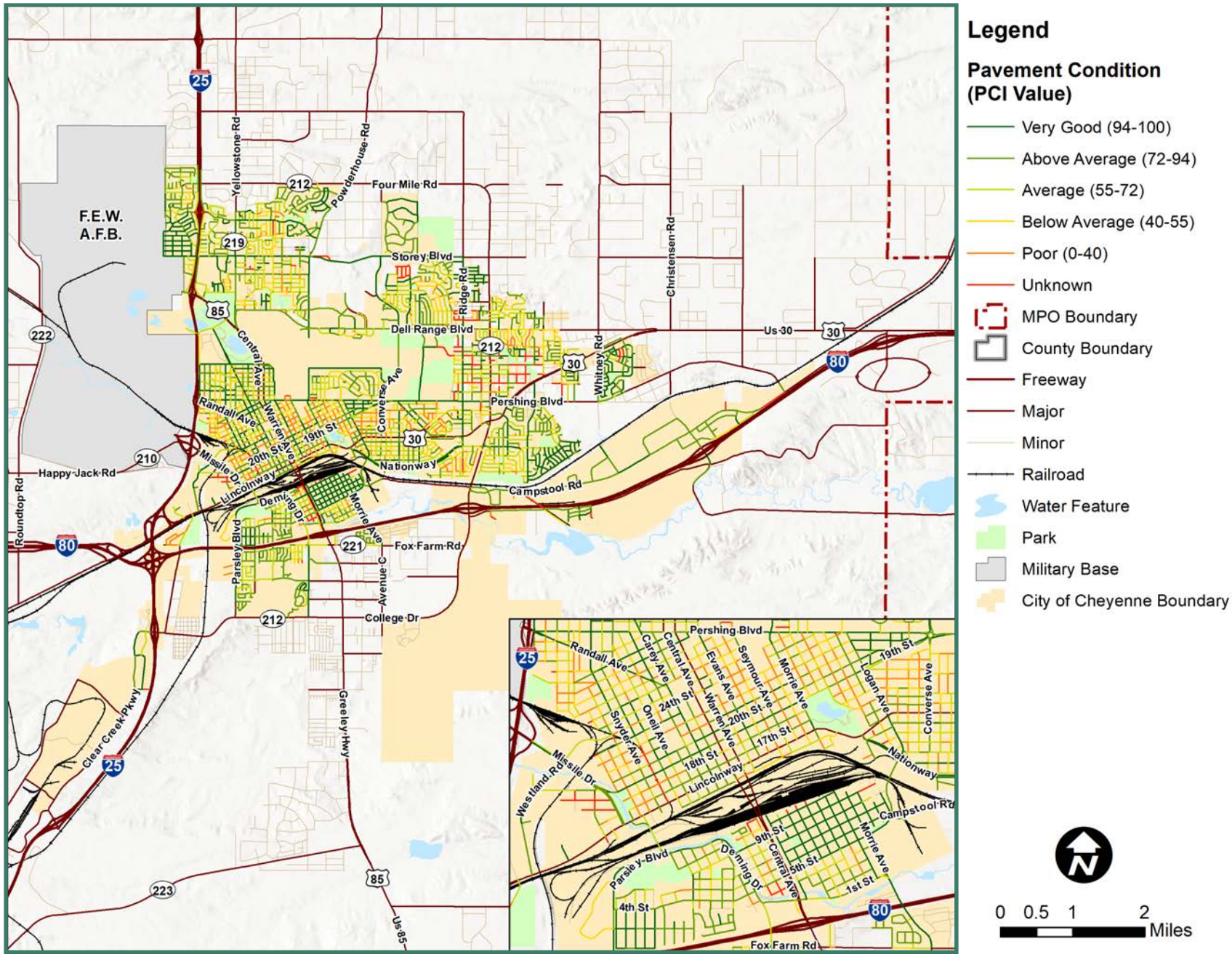
Roadway	Location	Functional Classification	DMP Cost
Ames Ave/Deming Dr	Clear Creek	Minor Arterial	$2,042,400
Parsley Blvd	Clear Creek	Minor Arterial	$1,868,400
Southwest Dr	Clear Creek	Major Collector	$802,800
I-25	Clear Creek	Interstate	$1,146,000
19th St*	Crow Creek	Minor Arterial	$1,760,400
9th St	Crow Creek	Minor Collector	$1,416,000
5th St	Crow Creek	Major Collector	$1,226,400
US 85	Crow Creek	Principal Arterial	$6,289,200
Campstool Rd	Crow Creek	Minor Collector	$957,600
Prairie Ave	Dry Creek	Major Collector	$478,800
Education Dr	Dry Creek	Major Collector	$559,200
Hilltop Ave	Dry Creek	Major Collector	$484,800
Dell Range Blvd	Dry Creek	Principal Arterial	$41,400
Campstool Rd	Dry Creek	Minor Collector	$162,000
Seminoe Rd	Dry Creek	Major Collector	$468,000
Henderson Dr	Nationway to Homestead Ave	Major Collector	$11,649,600
Lincolnway	Henderson Dr	Minor Arterial	$1,456,800

Flooding is also an issue at a handful of greenway underpasses around the region. These locations include:

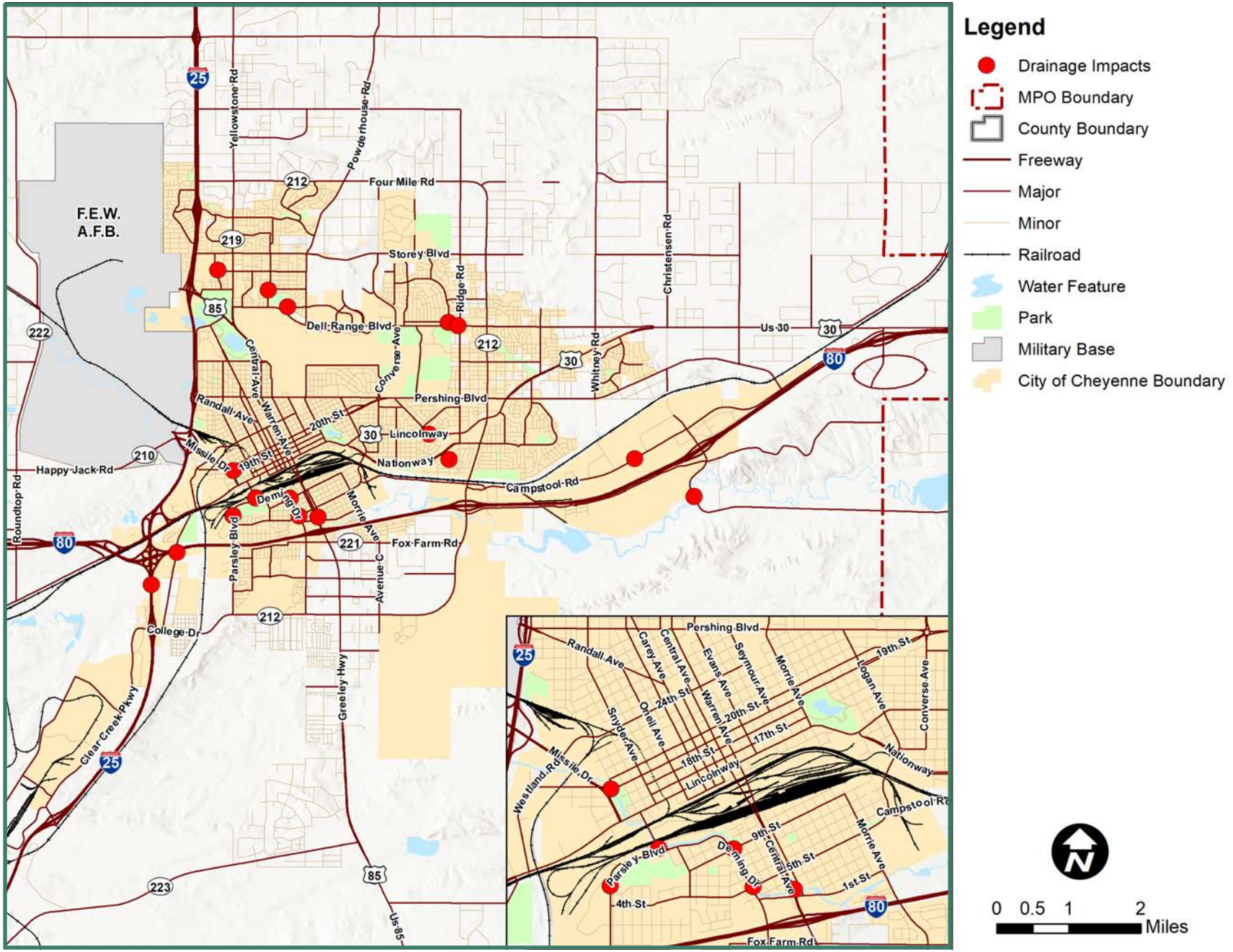
- **Dry Creek Greenway at US 30.** The underpass for the Dry Creek Greenway under US 30 (near the intersection of Polk Avenue) is located close to Dry Creek and experiences flooding issues most of the year. This section of US 30 is anticipated to be reconstructed by WYDOT, including provisions to move the greenway further from the creek bed to address flooding.
- **Dry Creek Greenway at Yellowstone Road.** The underpass for the Dry Creek Greenway under Yellowstone Road (near the intersection of Carlson Street) experiences seasonal flooding issues when the creek is running high. Ice, including large icicles, is a safety hazard during the winter.
- **Allison Draw Greenway at College Drive, Prosser Road, US 85/Greeley Highway, and Avenue C.** The underpasses for the Allison Draw Greenway under several roadways south of downtown all experience seasonal flooding issues when the adjacent drainage facility is running high. There have been issues with silt and mud covering the trail at these locations leading to bicycle crashes.

Addressing the maintenance, drainage, and stormwater issues at these locations factors into the project prioritization process. It is recommended that the pavement condition and drainage impact datasets be collected and updated for all roadways within the region, including roadways maintained by the City of Cheyenne, Laramie County, and WYDOT, to continue to be able to effectively prioritize roadway capital projects.

Map 28: Cheyenne Pavement Condition (2019)



Map 29: Drainage Master Plan-Identified Impacts to Regional Transportation System



8.4 EMERGING TRANSPORTATION TECHNOLOGY

8.4.1 Shared Mobility

Recent technological advances, coupled with changing values of younger generations, has initiated a trend towards a new model of shared mobility that is quickly gaining traction within urban areas. These include car sharing, ridehailing services such as Uber and Lyft, bicycle and scooter sharing, and other on-demand mobility options. Shared mobility options provide an opportunity for public-private partnerships where local governments, such as the City of Cheyenne, could be a key partner in the development of a shared mobility network and participate in the revenues collected through mobility vendors.

An effort to re-evaluate and re-think land use and circulation to accommodate the new travel patterns, such as a curbside management plan or a revised parking plan, will help to make sure there is safe and efficient use of existing curb space while attempting to avoid intermingling with vehicle parking needs and ingress/egress of adjacent properties.

Additionally, regional partners may take proactive steps to help them manage and regulate new shared mobility technologies that are emerging in a manner that best supports public safety, accessibility, and quality of life.

The National Association of City Transportation officials (NACTO) developed its Guidelines for Regulating Shared Micromobility to aggregate and reflect the state of the practice as they relate to regulating and managing shared micromobility. The guidelines outline best practices in topics including insurance, pricing, public outreach, and equality considerations.

of concern to municipalities, based on experiences with emerging shared mobility throughout the country, are recommendations for creating, preserving, and regulating transportation infrastructure as it relates to shared mobility. The following recommendations are identified by NACTO to support agencies in managing shared micromobility parking and crafting and articulating policies on where and how new mobility technologies can operate. The recommendations should be included in agency policies or ordinances that may be pursued related to shared mobility use in a municipality or in the region.

8.4.1.1 Micromobility Parking

Designating locations that users are permitted to drop off shared ‘vehicles’ or devices will help control the start and end location of vehicles and reduce encroachment in the public right-of-way. Best practice recommendations for designating and subsequently regulating these locations include:

- Require development of a parking management plan that describes how the micromobility vendor will designate parking locations, utilize geofencing to support use of designated parking, communicate regulations to the rider, and rectify improperly parked vehicles or overcrowded parking locations. Vendors should also submit plans for recovering and managing micromobility vehicles during inclement weather events.
- Require vendors to have a way to communicate with riders in real-time if a vehicle has been improperly parked
- Require vendors to mark designated parking sites in a way that best informs riders of where vehicles should be parked
- Guidelines for determining parking locations such as clearances from access ways and parking for other modes such as vehicles and bicycles.

8.4.1.2 Shared Mobility Facilities and Infrastructure

Agencies should consider how to best design transportation facilities to safely accommodate all modes, including shared micromobility. Inadequate infrastructure will increase the chances of injuries or promote use of shared devices in undesirable locations (such as the sidewalk). Examples include:

- Direct permit fees from vendors to fund infrastructure projects, such as re-striping a roadway to create a safe place for micromobility riders or providing shared-use paths.
- Revisit roadway design standards to accommodate lower speed micromobility vehicles. Additional standards could be created for shared mobility lanes, flexible curb space utilization, and parking designs for shared vehicles.
- Prioritize non-vehicular transportation facilities that are low-speed and perceived as safe by all potential users.

8.4.1.3 Shared Mobility Restricted Operations and Access

There are likely locations where micromobility is not desired or where there are specific restrictions on the desired operations, such as speed restrictions. Agencies should clearly identify these locations and the type of regulation that is associated.

- Require vendors to comply with requests to prohibit use of vehicles within agency-designated areas through geofencing.
  - Provide vendors with a geographic file of geofenced borders
  - Require vendors to provide in-app explanation of geofencing and consequences of entering a regulated or restricted area
- Require vendors limit vehicle speeds, especially in highly trafficked areas.
  - Designated Slow Zone can require speeds less than 15 mph
  - Non-electric Zones can require speeds up to 3 miles per hour
  - Walk-only Zones can require travelers to walk their vehicles or devices

8.4.1.4 Shared Mobility Data

Agencies should require access to vendor's data to the extent that is needed to allow the agency to effectively regulate the service provider and to make informed decisions about the safety, accessibility, and equity of the agency's transportation network.

- Require vendors to provide trip data at a level of detail that allows the agency to determine vendor compliance and evaluate system performance.
- Agencies should indicate their right to:
  - Select, and subsequently change, the data format as changes in technology occur
  - Request aggregated reports from data
  - Restrict vendors from collecting personal data from users
  - Suspend or revoke permits if the vendor does not comply with data sharing terms
- Require vendors to develop, implement, and share a privacy policy and make available practices regarding data security.
- Require vendors to comply with the terms of data sharing in the contract/permit.
- Require vendors to make real-time vehicle location data available to the public.

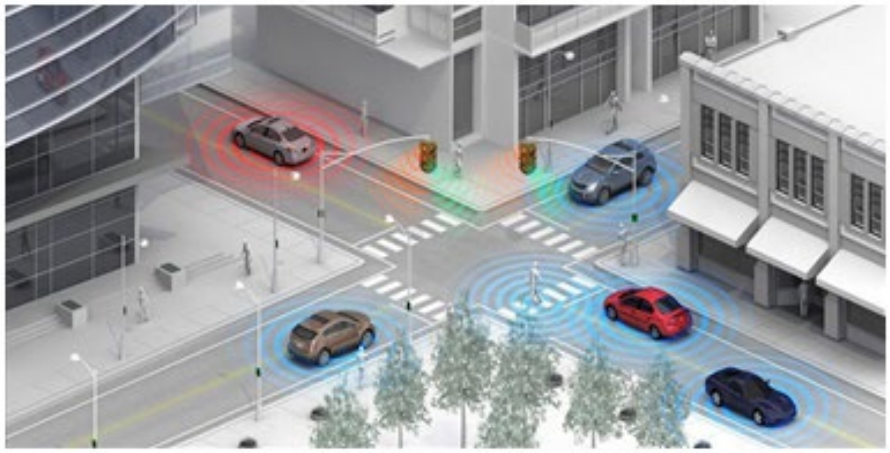
8.4.2 Connected and Automated Vehicles

There is a prominent, yet impending future of connected vehicles (CV), automated or "driverless" vehicles (AV). Many vehicle manufacturers and technology companies are experimenting, testing, and implementing these technologies, although few of these have become widespread in the vehicle market. There is a level of uncertainty related to the role that agencies need to play in the balance of preparing to invest in and/or accommodate these technologies while still preserving the public right-of-way and public realm.

The City of Cheyenne already has in place a small-cell ordinance to take a proactive approach to managing and regulating the roll-out of 5G wireless communications facilities along City right-of-way. This ordinance has helped guide the City during its process of developing franchise agreements with communication utilities and companies who are deploying devices to support next generation technologies and communications, as it enhances the City's ability to regulate what and how infrastructure goes into the right-of-way to ensure the most appropriate, safest and publicly acceptable use.

The City and larger Cheyenne region may consider expanding the reach of this ordinance and their existing franchise agreements to include technologies for connected vehicles, including dedicated short-range communications (DSRC) radios, and subsequently securing a license for DSRC from the Federal Communications Commission (FCC). As the use of DSRC for CVs is an evolving initiative at the federal level, proactively taking these steps will preempt any direction from the USDOT or FCC to accommodate these technologies and give the region time to decide local preferences and priorities for accommodating the technology.

Figure 33: Connected Vehicles Concept



Source: https://ops.fhwa.dot.gov/wz/p2p/pmwkshop053013/hayee/hayee.htm

The region should evaluate the state of practice related to connected and automated vehicles and assess local strategies and approaches to investing in, accommodating, and regulating these technologies. Some strategies, by topic area include:

- **Transit**
  - Assess capacity needs of park and ride lots based on last mile solutions.
  - Plan for dynamic bus routing and agility in transit stops in response to real time ridership needs.
- **Roadway**
  - Assess the opportunity for dedicated AV routes/lanes on major arterials.
  - Assess design requirements to enhance detection and controller equipment at traffic signals to collect and broadcast travel speed and safety information.
  - Assess the design impacts to convert on-street parking to drop-off lanes.
- **Communications and Data**
  - Assess bandwidth requirements to accommodate data collection and distribution via DSRC.
  - Assess enhanced security requirements for data sharing.
  - Assess changes in design requirements to reflect technology changes in communication infrastructure.
- **Bicycle/Pedestrian**
  - Assess impacts of greenway crossings and interactions with AV on surface streets.
  - Assess current initiatives related to ADA requirements with respect to AV.

8.5 UNINCORPORATED ENCLAVES

A significant transportation challenge within the Cheyenne MPO boundary is associated with the unincorporated Laramie County enclave properties within the City of Cheyenne. These properties are considered enclaves, or islands, because they are unincorporated areas regulated by Laramie County ordinances, surrounded by land incorporated within and regulated by the City of Cheyenne. A map of unincorporated enclaves is provided in **Map 30**.

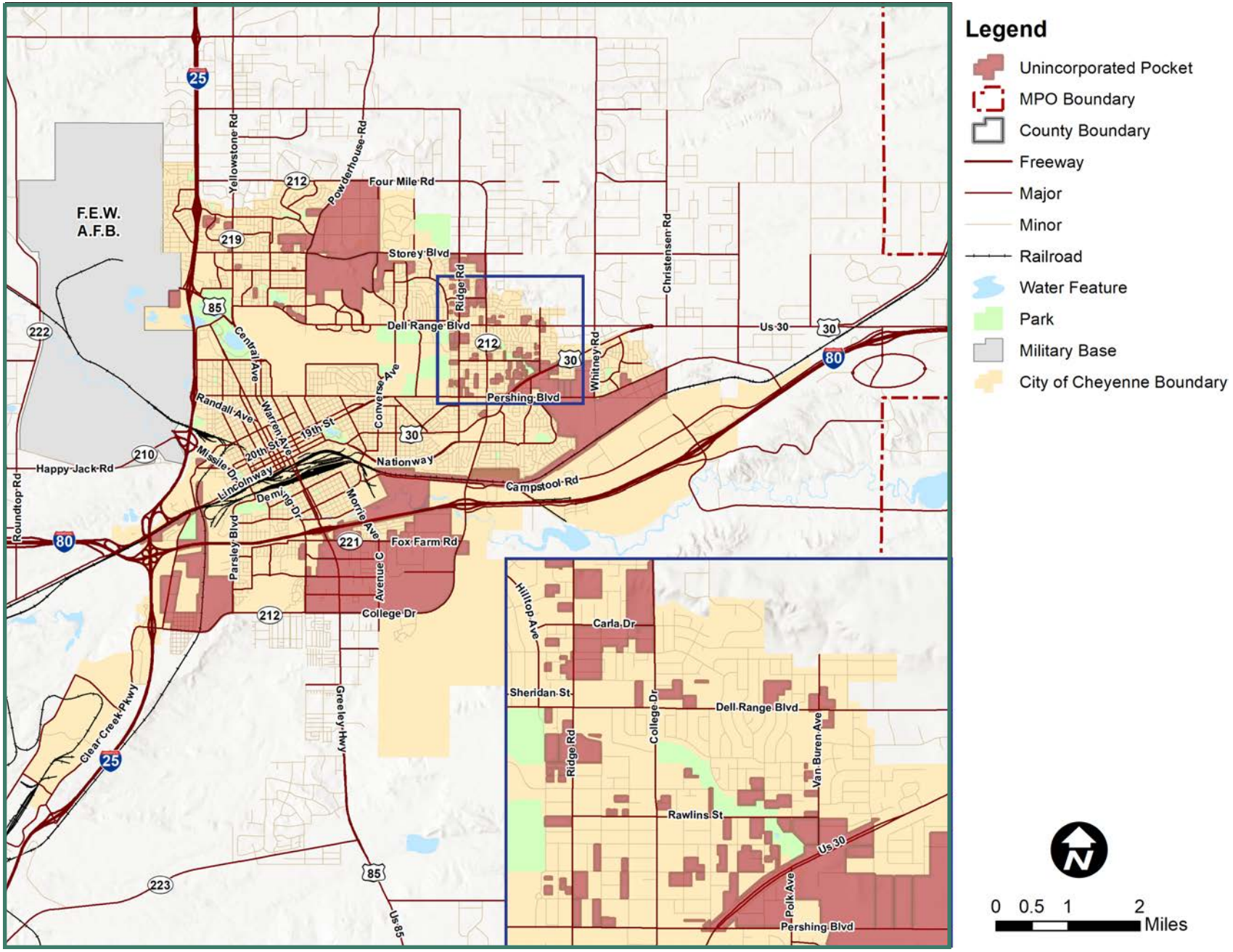
Unincorporated enclave properties are challenging in general for both City and County officials, and in many situations difficult for property owners as well. These isolated parcels are difficult for the County to efficiently provide services. From a City perspective, the unincorporated pockets are often utilizing well water and septic systems which become challenging when higher density development with water and sewer connections begin to surround the properties. Lastly, enclave properties become difficult for property owners because it is confusing on which governmental agency provides services.

The transportation challenges associated with enclave properties are related to the difference between rural and urban roadway design standards. Laramie County, rightfully, maintains rural design standards which do not accommodate urban drainage standards, recognize urban utility requirements (water and sewer), or accommodate urban mobility needs like paved roads and sidewalks. Conversely, Cheyenne's roadway design standards, rightfully, incorporate more urban roadway design standards which include design expectations for urban services and utilities like paving, sidewalks, water, sewer, and urban storm water which require pipes instead of open swales.

Changing roadway standards from rural to urban is an expensive proposition for property owners, the City, or County. This cost is not a significant concern for larger contiguous unincorporated properties outside the City boundaries, but does become problematic for smaller isolated unincorporated, enclaves surrounded by municipal boundaries.

Traditionally, annexations are voluntary. When a property owner wants to develop their property, if they are adjacent to municipal boundaries, they have a choice to stay in the county and develop their property in a rural low-density configuration that can be served by well water and septic, or if the property owner chooses, they could seek an annexation within the City of Cheyenne. If the City agrees, the property owner will be able to develop with higher suburban or urban densities which require municipal water and sewer services.

Map 30: Unincorporated Enclaves/Pockets



When an annexation occurs, it is the responsibility of the property owner to pay for the construction of roadways and extending municipal water and services. This requirement is where the transportation challenge of enclave properties occurs. Larger properties can justify and finance the needed municipal service within an annexation. However, smaller enclave properties typically cannot finance the needed municipal infrastructure. As a result, many of the enclave pockets have gravel roads and disrupt the transportation network as the City of Cheyenne continues to expand.

The recommendation of this plan to address enclave properties' impact on the transportation network is twofold:

1. Encourage the development of street network solutions to be included in corridor studies so that the urbanization and connection cost of adjacent enclave street segments can be eligible for funding through project budgets.
2. Encourage the City and County to develop simplified procedures and incentives for unincorporated enclave properties to be annexed into the City of Cheyenne and consider transportation funding to support the local street improvements concurrent to annexation.

The Cheyenne MPO has encouraged the improvement of roadways in unincorporated pockets through several of its recent corridor-focused studies. These improved connections help support the regional roadway system by:

- Providing strategic connections to local land uses to avoid congestion or safety issues;
- Allow for redundancy in the transportation system to provide detours during crash events; and
- Improve access to transit and non-motorized travel connectivity.

An example of improved connectivity using roadways in unincorporated pockets from the recent East Dell Range Boulevard/US 30 Corridor Study is shown in **Figure 34**.

Figure 34: Example Unincorporated Pocket Network Improvements

8.6 ORDINANCE MODIFICATIONS

Several City of Cheyenne and WYDOT documents were reviewed to verify that existing development regulations, policies, and procedures are generally supportive of the goals and objectives of the Connect 2045 Plan, and not a hindrance to implementation of the Plan. General comments and potential ordinance modifications are discussed below:

- **WYDOT Access Manual/WYDOT Road Design Manual.** These guidelines were reviewed for their general impact on the LRTP. No modifications are recommended at this time.
- **Cheyenne Unified Development Code (UDC) Article 3: Impact Studies.** Article 3 outlines requirements for Transportation Impact Studies (TIS), Transportation Impact Analyses (TIA), and Drainage Impact Studies for many types of large and/or complex development projects within the City. The TIS section has the most direct impact on the LRTP. A TIS is required for any change in land use, proposed zoning change, modification of access points to public streets, and/or development or subdivisions of land. The TIS requirement can be waived or modified to a TIA if projected trip generation impacts are below certain thresholds.

  The TIS/TIA process focuses primarily on traffic impacts and mitigation though traffic controls, intersections, etc. Access for pedestrian, bicycle, transit, and truck are not covered in detail but are acknowledged as critical components of managing transportation systems and included in the process for study.

  - **Possible Modifications.** Supplement the TIS/TIA requirements to include more requirements for pedestrian, bicycle, and transit access.
- **Cheyenne UDC Article 4: Subdivision Regulations.** Article 4 regulates standards for development across large areas, including the creation of new subdivisions. The primary sections within this Article focus on development fees, transportation networks and street design, open space, and other engineering improvements and provisions.

  Generally, Article 4 is in line with best practices for subdivision connectivity and includes “complete streets” typologies addressing provisions for bicycles, pedestrians, and motor vehicles. Required street sections (by context) may include bicycle lanes, detached sidewalks, generally separated by a tree lawn or landscape, protected medians for larger streets, and parallel or angled parking on-street parking. Transit connectivity is not specifically addressed in this section but may fit within some of the standard street typologies.

  - **Possible Modifications.** The City may want to periodically revisit street design typologies to ensure that these standards are in line with current best practices for complete streets to maximize pedestrian, bicycle, and vehicular safety.

    The following elements were not specifically addressed in this section, and the City may want to consider their inclusion in this Article if not addressed elsewhere in the UDC: mobility hubs, dedicated transit lanes, bus stations, protected bicycle lanes, traffic calming devices (bulb-outs, road narrowing, etc.), pedestrian-only or transit-only streets or alleyways. These elements could be included as additional standard roadway cross-sections or as alternatives on existing cross-sections to reduce the overall number cross-sections.
- **Cheyenne UDC Article 5: Zoning Regulations.** Article 5 provides standards for general land use types and densities allowed within each of the City’s zoning districts defined under the Comprehensive Plan. Most zone districts are “Euclidean”, allowing for a single land use type or mix of similar land-use types. However, the Article does include provisions for several types of form-based code districts and special purpose and overlay districts that allow for greater flexibility and mixed-use development.

  Density and set-back requirements in this section appear generally appropriate to encourage walkable neighborhoods and mixed-use development within the appropriate contexts. Minimum parking requirements within the Special Purpose (P District) are waived in favor of shared-use and flexible-use parking, if required by the City; this is appropriate for this context.

  - **Possible Modifications.** No modifications to the base standards for density are recommended; however, the current set-back requirements could be streamlined to be more clear and concise.

    The City should consider making use of a development application waiver process if a mixed-use or high-density project needs to reduce setbacks

(or increase lot coverage allowances) to make the most efficient use of land area, especially for urban infill, redevelopment, adaptive reuse, affordable housing, and projects within proximity to transit.

- **Cheyenne UDC Article 6: Design Regulations.** Article 6 provides more specific standards for developments within each zone district to ensure that all projects are providing certain design criteria and reinforce the desired character for a given district and context. The elements most relevant to the LRTP are the Parking, Lot Access, and Circulation standards as these requirements directly impact neighborhood density, parking provisions, mode choice, and integration with other mobility elements.

  Parking lot circulation and pedestrian circulation elements within Article 6 are reasonable, though pedestrian standards do not address possible incursions into the pedestrian right of way such as the placement of light posts, etc.

  Minimum parking requirements show some amount of flexibility including the use of "parking credits" to help promote desired mobility connections including bicycle parking, public parking, transit access, carpool, etc. The Development Director may also grant a reduction of up to 10% for certain site-specific conditions/constraints, and up to 50% for developments within historic districts. Article 6 also includes some calculations available for mixed-use developments with shared-use parking.

  However, the overall parking standards may be overly restrictive and do not appropriately address reductions for some shared-use parking conditions, urban infill, adaptive reuse, and projects within the downtown context.

  - **Possible Modifications.** Minimum parking requirements may not reflect current industry standards for all land uses and may hinder some types of development. The City may want to update these standards per recommendations from the National Parking Association and Urban Land Institute publications.

    Requirements for parking stall dimensions and layout should be verified against minimum design standards published by National Parking Association (NPA) or similar organizations; excessive parking stall dimensions limit density over time.

    The City should consider extending Development Director authority to including parking reductions of up to 50% in all contexts and up to 100% in the case of conversions and adaptive reuse of historic buildings to allow for more flexible design and reduce development costs for locations with special circumstances where parking demand is anticipated to be lower than typical land uses. Parking studies or analysis will continue to be provided in each case in accordance with the Joint Parking Study.

    Parking Credits which incentivize private developments to help support the goals of the LRTP should be expanded if possible.

    Provisions for electric vehicle (EV) charging should likely be added to Article 6.

    Strengthening the regulations regarding incursions of obstructions, such as light standards, signs, or garbage cans, into sidewalk clear zones is also recommended.

While there is language in place to support the City in pursuing developer-driven public improvements related to transportation infrastructure, there is opportunity for the City to leverage this more to support the buildout of the transportation network. As the City continues to grow and develop, and the demand for development increases, it will be in the City's and region's interest to consult this LRTP and other local transportation planning documents to understand the vision of the transportation network and the role that individual facilities play into that vision. It should be expected of developers that they positively contribute to that vision and support the City through dedicated improvements based on the nature of their development.

8.7 AIR QUALITY

Laramie County is not recognized by the EPA as a non-attainment area, meaning that the Cheyenne area has air emissions levels for criteria pollutants including carbon monoxide, particulate matter, ozone, nitrogen dioxide, and lead below national standards. However, transportation nationwide is now the largest contributor of greenhouse gas emissions. Transportation is also a major contributor to carbon monoxide, nitrogen dioxide, ozone, and particulate matter emissions. There are a variety of ways to help reduce greenhouse gas emissions associated with transportation.

The Air Quality Division (AQD) of the Wyoming Department of Environmental Quality (DEQ) conducts permitting, monitoring, and inspection to help keep air clean and clear and to preserve Wyoming's air. The Wyoming Air Quality Monitoring Network (http://www.wyvisnet.com/) provides real-time air quality conditions from monitoring stations throughout the state. There are over 20 monitoring stations that provide real-time air quality data, meteorological and visibility information, and digital images for anyone to view.

8.7.1 Strategies to Manage Emissions from Transportation

8.7.1.1 Improvements to System Operational Efficiencies

The USDOT lists the following five ways that transportation agencies can reduce traffic-related air pollution and improve air quality :

- Develop cleaner travel options through measures such as expanding public transportation systems, improving public transportation service, and developing or improving bicycling and pedestrian infrastructure.
- Reduce the distance between key destinations required to satisfy daily needs through more efficient land use planning and zoning, making it more attractive and convenient to walk or bicycle instead of using motor vehicles for transportation.
- Create or support clean fueling infrastructure, such as electric vehicle charging and hydrogen fueling stations.
- Manage the transportation system to increase vehicle and system operating efficiency through measures such as anti-idling policies, improved incident response, real-time travel information for public transportation, and congestion management.
- Buy green fleet vehicles and equipment, including equipment with increased fuel efficiency, hybrid electric vehicles, and equipment that runs on clean fuels.

Utilizing existing intelligent transportation system assets and tools is beneficial to monitor weather events, congestion, and other factors that may contribute to increased emissions.

8.7.1.2 Recommendations for Preventing Future Congestion

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) is a federal-aid program of FHWA designed to fund transportation projects and programs that contribute to the attainment or maintenance of National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and particulate matter.

Historically, CMAQ funding in the State of Wyoming includes chemical dust suppression for roadways. While the Cheyenne MPO is currently ineligible for CMAQ funding because the region is within NAAQS, air quality should continue to be monitored and applicable projects should be identified in case this funding becomes available to the region.

Activities recommended as part of the 2010 WYDOT LRTP to help reduce emissions include:

- Aggressively pursue the acquisition of alternative fuel vehicles and related infrastructure for all transportation agencies it supports, including its own fleet
- Materials engineering to allow better adaptation to temperature extremes
- Continuing to explore the feasibility of using recycled materials for pavements
- Reduction of diesel emissions on construction sites
- Truck stop electrification that allows truckers to depend on AC current rather than a running vehicle to provide power during extended stops

8.7.1.3 Land Use Considerations

The connections between transportation and land use should be considered as part of every planning and development activity. Cheyenne MPO should seek to integrate transportation and land use with more efficient land use patterns building upon the information presented in the Community Assessment. Such land use patterns are more conducive to increased public transit and non-motorized transportation trips. Land use drives the demand for transportation. Planning appropriate land use will help enhance accessibility while reducing vehicle travel and its emissions.

8.7.1.4 Strategies to Reduce Vehicle Miles Traveled

The following strategies will aid in reducing vehicle miles traveled (VMT) throughout the region to maintain and improve air quality:

- Increase the number of available, safe, accessible, and efficient mobility options
- Promote alternative travel modes
  - Coordinate efforts to promote alternative travel modes such as walking, bicycling, public transit, ride-sharing, etc.
- Enhance safety and reliability of the transportation system
- Provide new connections to the existing street network
- Improve transit performance
  - Performance metrics can be recorded and tracked to show improvement
  - Metrics may include on-time performance, passengers per hour, and route connectivity, among others
- Develop and implement a Complete Streets Policy
- Continue Safe Routes to School planning and implementation of suggestions
- Coordinate land use and transportation in all planning activities
- Consider telecommuting alternative work scheduling where possible
- Consider recommendations and best practices regarding Shared Mobility and Connected and Automated Vehicles in **Section 8.4.2.**

CHAPTER 9: PROJECT PRIORITIZATION

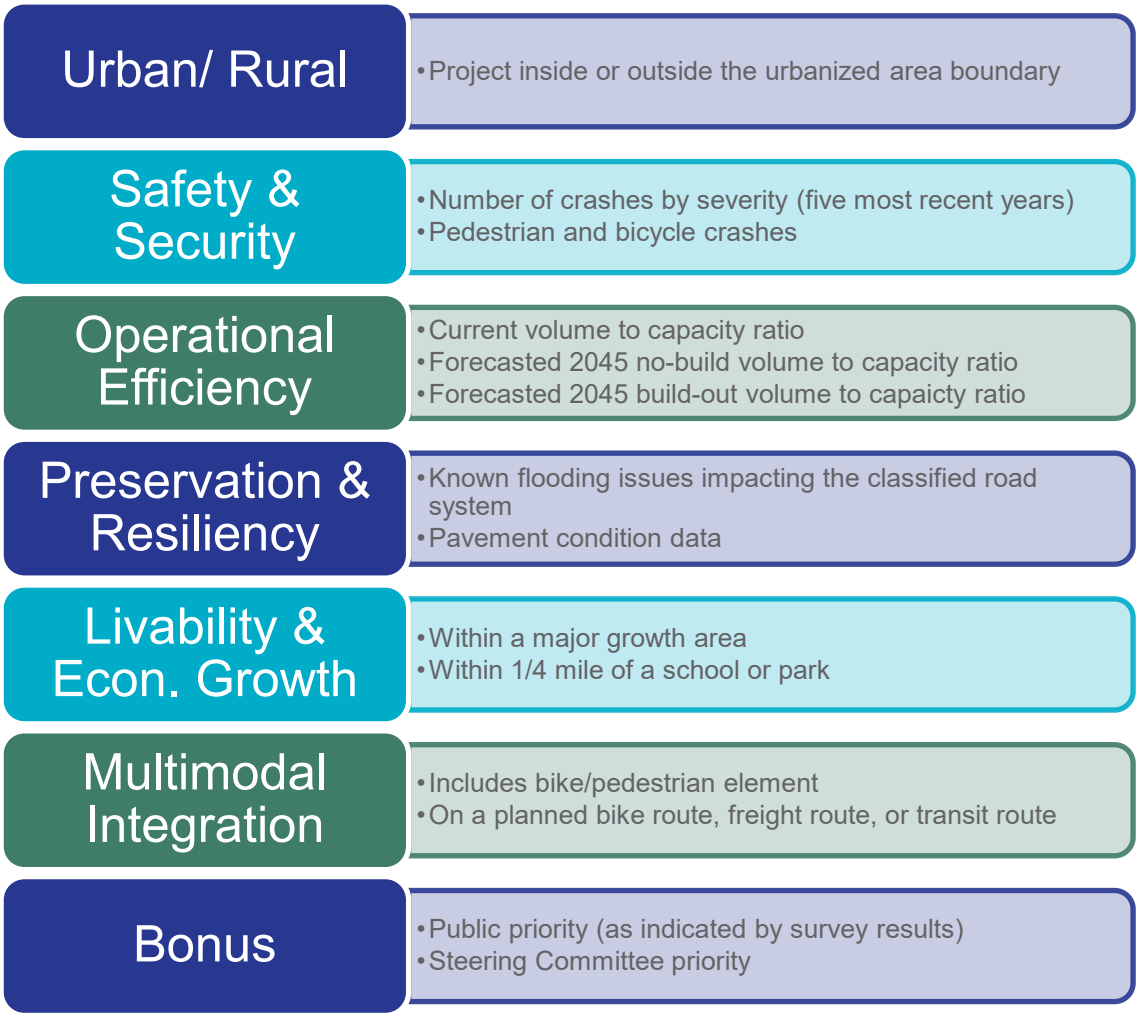
A roadway project prioritization methodology has been developed for this LRTP to quantitatively score recommended transportation projects and help determine which projects will be included in the fiscally-constrained projects list. Other mode-specific projects have their own prioritization processes:

- Transit improvements were prioritized through the TDP developed by the Cheyenne MPO. The TDP is, however, out of date and it is a priority recommendation that the TDP is updated to thoroughly prioritize transit investments and improvements.
- Greenway improvements and expansions are prioritized on an ongoing basis by the Greenway Advisory Committee.
- Aviation improvements are generally the responsibility of the Cheyenne Regional Airport Board and are not programmed through the MPO.

9.1 ROADWAY CAPITAL PRIORITIZATION ELEMENTS

The roadway prioritization process has been designed to provide a comprehensive overview of the impacts of roadway improvements on roadway congestion, safety, accessibility to community assets, and multimodal accommodations. A summary of the prioritization structure is provided in **Figure 35**.

Figure 35: Project Prioritization Elements



One major factor in the prioritization process is whether the project falls within the US Census Bureau-designated urbanized area boundary. Two different weighting schemes have been developed for projects within and outside of this boundary to reflect the different priorities between urban and rural projects. Tailoring the weighting schemes to either rural or urban settings helps avoid favoring either urban or rural projects by having a single prioritization scheme.

9.2 ALIGNMENT WITH CONNECT 2045 GOALS

Each element of the project prioritization process aligns with one or more of the project goals. The weighting percentages are heavily influenced by the goals prioritization results in the MetroQuest survey. The emphasis on safety and maintenance shown in the rural weighting criteria was expressed during the stakeholder interviews. The prioritization weighting and project goal alignment is provided in **Table 24**.

Table 24: Project Prioritization Weighting and Goal Alignment

Metric	Urban Weight	Rural Weight	LRTP Goal Served
Safety & Security	25%	35%	Safety
Operational Efficiency	25%	10%	Efficiency
System Preservation	25%	35%	Resiliency, Maintenance
Livability & Economic Growth	15%	10%	Growth, Connectivity
Multimodal Integration	10%	10%	Integration, Choices
Bonus	+5%	+5%	

9.3 ROADWAY CAPITAL PRIORITIZATION RESULTS

The results of this prioritization process are shown graphically in **Map 31**. General trends observed from the prioritization results include:

- Projects that include a wide scope of work, including pedestrian and bicycle infrastructure or drainage improvements, scored better than purely roadway or capacity improvement projects.
- Improvements to existing roadways in the urbanized center of Cheyenne scored better than new roadway projects on the periphery of the area.
- Roadways that provide connections to the regional interstate system generally scored better than surrounding roadways.

This prioritization process will generally guide the order in which projects are included in the fiscally-constrained project list; meaning high-priority projects have a greater chance of being included in the sooner time periods of the fiscally-constrained project list, and low-priority projects are more likely to not be included in the fiscally-constrained project list and be labeled as a "project of opportunity" to be pursued only if additional funding sources become available or through developer impact fees or direct developer construction.

9.4 BICYCLE NETWORK PRIORITZATON

Bicycle network prioritization is based on previous prioritization efforts from the 2012 Cheyenne On-Street Bicycle Plan and Greenway Plan Update and 2014 Cheyenne Area Master Plan Transportation Plan. Additional sources include public input, focus group meetings with key stakeholders, and community outreach efforts.

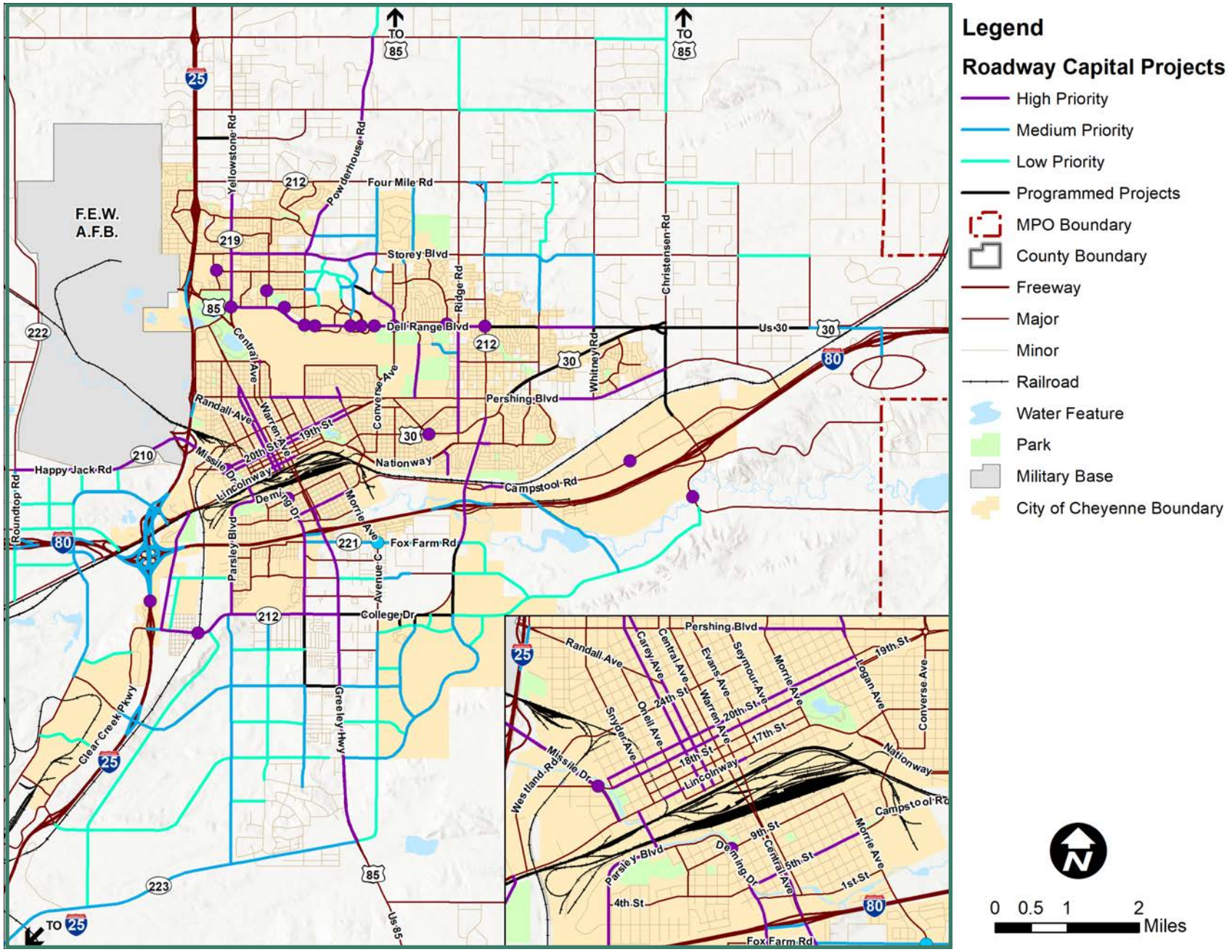
Based on the input received from the community outreach efforts, staff interviews, key stakeholder focus group meetings, and the existing dedicated Sixth Penny sales tax for greenways, this plan update recommends that greenway projects be prioritized separately from on-street bikeway projects, so that key segments of the bicycle network continue to be implemented. On-street bicycle facilities will need to be funded through other sources, likely in coordination with other roadway improvements.

9.5 TRANSIT PRIORITIZATION

The prioritization of transit improvements is currently guided by CTP's TDP, completed by the Cheyenne MPO in 2013. The TDP is in need of an update due to recent technology and branding improvements to the transit system as well as a desire for more aggressive updates to transit routes from CTP management.

The TDP should be updated with a focus on improving the efficiency of the current paratransit program and transit routes to be able to extend the reach of transit services to currently underserved areas. Additionally, the TDP should evaluate alternative services such as express routes for commuters and shoppers, partnerships with major employers, and partnerships with taxi and ridesharing services.

Map 31: Roadway Capital Prioritization Results



9.6 TRANSPORTATION FUNDING SOURCES

Funding for transportation needs can come from a variety of federal, state, and local sources. Leveraging funds from a variety of available sources is an important component of long-range transportation planning. The following subsections look at the different funding sources by mode that can be leveraged during long-range planning efforts.

9.5.1 Roadway Funding

Federal funding dollars can be allocated to roadway projects based on federal eligibility. Projects are only eligible for federal funding if they appear in the state transportation improvement program (STIP). Every state is required to maintain a STIP in order to be eligible for federal roadway funding. Federal funding can only be used for roadway projects that have been identified on federally owned roadways and must undergo extensive review. The federal review process considers impacts to national security, environmental factors, safety, pedestrian and bicycle needs, engineering procedures, and determines that there is consistency between the project and anticipated regional growth and development plans.

9.5.2 Transit Funding

Federal funding for transit needs are distributed through the Federal Transit Administration (FTA). The FTA provides grants to local public transit systems and provides discretionary funding opportunities through a competitive process. FTA funding can be used for a variety of transit systems, including buses, light rail, commuter rail, trolleys, and ferries. There are over 20 grant programs administered by the FTA that can be applied for based on different eligibility or applicability guidelines. These programs are a mix of competitive and formula driven grants and funding amounts vary.

CTP faces ongoing challenges in receiving the committed local match in a consistent manner to be able to obligate federal funds and proactively budget for the future. This challenge is a major constraint in CTP's ability to plan ahead and improve services.

9.5.3 Bicycle and Pedestrian Funding

The USDOT provides a selection of funding opportunities for pedestrian and bicycle projects under other surface transportation programs. These funds are distributed through the USDOT Transit, Highway, and Safety Funds and are awarded based on eligibility and need through an application process.

9.5.4 Aviation Funding

The Federal Aviation Administration (FAA) is the branch of the USDOT that governs civil aviation in the U.S. States are allocated funding through the FAA to maintain airports that are included within the National Plan of Integrated Airport System (NPIAS). States receive both entitlement and discretionary funding on an annual basis through the Airport Improvement Program (AIP) for NPIAS airport improvement and maintenance needs.

9.5.5 Federal Transportation Grants

Better Utilizing Investments to Leverage Development (BUILD) Grant. BUILD is a discretionary program through the USDOT that funds planning and capital investments in surface transportation infrastructure that is awarded on a competitive basis for projects that will have a significant local or regional impact. The maximum grant award has historically been $25M per project with no more than $100M per state in a year. Over recent years, the total funding for the program nationwide has been around $1B.

Example project: High Plains Road extension

Infrastructure for Rebuilding America (INFRA) Grant. INFRA is also a discretionary program through the USDOT that can fund up to 60% of surface transportation projects (another 20% can come from other federal grants or assistance). INFRA grants are typically utilized for larger transportation projects with costs in excess of $100M, and a minimum grant award of $25M.

Example project: I-25/I-80 interchange replacement

Transportation Infrastructure Finance and Innovation Act (TIFIA). TIFIA financing includes direct loans, loan guarantees, and standby lines of credit to projects of national or regional significance. Minimum project costs include $10M for transit-oriented development, local, and rural projects, $15M for ITS projects, and $50M for all other surface transportation projects and can finance up to 33% of total project costs.

Example projects: intercity transit along the Front Range, implementation of ITS improvements along the I-80 corridor

Consolidated Rail Infrastructure and Safety Improvements Program (CRISI). CRISI is a grant program through the Federal Railroad Administration to improve safety and efficiency of the nation's rail system.

Example project: grade separating the BNSF railroad crossing on South College Drive

Grants for Buses and Bus Facilities Program. Competitive grant to replace, rehabilitate, and purchase buses, vans, and related equipment, and to construct bus-related facilities.

Example project: replacement of the downtown bus transfer facility

9.5.6 Alternative Funding Sources

Traditional funding sources will not sufficiently fund long-term transportation needs identified in Connect 2045, and it is therefore important to understand some of the alternative funding sources that may be available for transportation related projects.

9.5.6.1 Impact Fees

While most commonly used for water and wastewater system connections, or police and fire protection services, impact fees have occasionally been used to fund roadway projects where increased traffic due to specific activities or nearby developments causes unprecedent usage of connection roadways. Impact fees transfer the cost of new developments directly to developers advocating for the development, and therefore remove some obligation from taxpayers who may not directly benefit from the developments. However, impact fees may not be possible in certain regions due to legislative restrictions.

9.5.6.2 Transportation Bonds

The use of transportation bonds can be an effective alternative funding source for local roadways and non-motorized travel if voters in impacted communities regularly approve the use of bonds in the region. Historically, projects related to road extensions, sidewalks, new road construction, and streetscape enhancements have received some funding from transportation bonds.

9.5.6.3 Developer Contributions

Similar to impact fees, developer contributions look to the developer for a portion of funding under specific circumstances. In some cases, developers may be expected to assist in the construction of transportation improvements for new collector streets. Collector streets support increased traffic associated with local development, so the developer may be asked to provide support for maintaining or improving the collector streets that are connected to the new development. The City of Cheyenne is already successfully using developer contributions to develop the roadways system in new development areas; however, this method of funding is anticipated to be used to a greater extent in the forecasted major growth areas.

9.5.6.4 Oversize Agreement

An oversize agreement allows for the cost of a collector street to be shared between a city/county and the developer. In these circumstances, the city/county provides additional funding to the developer to upgrade a local street, that the developer was obligated to construct, to a collector street. The collector street, funded in part by the developer and the city/county, is wider than a local road and can therefore accommodate bike lanes as well.

9.5.6.5 Grant Anticipation Revenue Vehicles (GARVEE) Bonds

GARVEE bonds can be a helpful tool to implement a project more quickly because these bonds are let with the anticipation that state or federal funding will be forthcoming. The use of GARVEE bonds means that the community pays for the project up front and is then reimbursed by the state once the grant comes through.

9.5.6.6 Tax Increment Financing

Tax Increment Financing (TIF) anticipates future revenues expected from current improvements and uses those anticipated revenue levels to fund the project. TIFs can be especially helpful for regions that do not have the funding up front to cover the cost of improvements but are confident that the improvement will produce higher tax revenues for the region, therefore allowing the region to pay back the cost of the project with future revenues.

9.5.6.7 Public-Private Partnerships

Public-private partnerships are a unique way to fund public infrastructure improvements that rely on a relationship between public and private sectors. In a public-private partnership, the public sector retains ownership of the public asset and sets the terms for the contract, but the private sector involved in the partnership gets to benefit from the use of the public infrastructure asset. In this way, the public and private sectors are sharing the risks and rewards of the development or improvement.

9.5.6.8 Surface Transportation Program (STP) Set-Aside Grants

STP Set-Aside grants (formerly Transportation Alternatives Program) were established by Congress as a part of the FAST Act, which combines the Transportation Alternatives program into one competitive funding source. STP Set-Aside grants can be great alternatives for additional funding for projects that focus on bicycle and pedestrian facilities, and other non-road building improvements.

9.5.6.9 Tolling

Collecting user fees from drivers on toll roads is a common form of generating revenues that can be reinvested into roadway projects and improvements, however Wyoming does not have any toll roads within the state.

9.5.6.10 Sales Taxes

The Cheyenne region has a long history of utilizing sales taxes to fund transportation improvements. The region has continually voted in favor of collecting both the 5th and 6th Penny sales taxes, which are each 1% sales taxes layered on top of Wyoming's standard 4% sales tax rate.

The 5th Penny sales tax funds roadway capital, maintenance, and multimodal improvement projects county-wide. The 6th Penny sales tax primarily funds greenway projects throughout the region. Both of these taxes have been assumed to continue through the horizon year of this plan.

9.5.6.11 State Infrastructure Bank

Participating in the State Infrastructure Bank (SIB) program can increase the number of transportation projects completed in the state that may not otherwise be possible due to limitations of traditional financing. SIB funding availability is dependent on SIB activity and loan repayment, and there is no set limit and 100% financing is available for any highway or transit project eligible under Code of Federal Regulations' Title 23. Financing terms are 2 to 10 years with interest rate determined at the time of financing.

9.7 FORECASTED TRANSPORTATION FUNDING

Transportation funding forecasts were based on several recent Cheyenne MPO Transportation Improvement Program (TIP) cycle funding levels. The TIP is a federally required document that includes all projects funded with federal transportation sources over a five-year period. The Cheyenne MPO's TIP also elects to include projects funded by state and local sources as well.

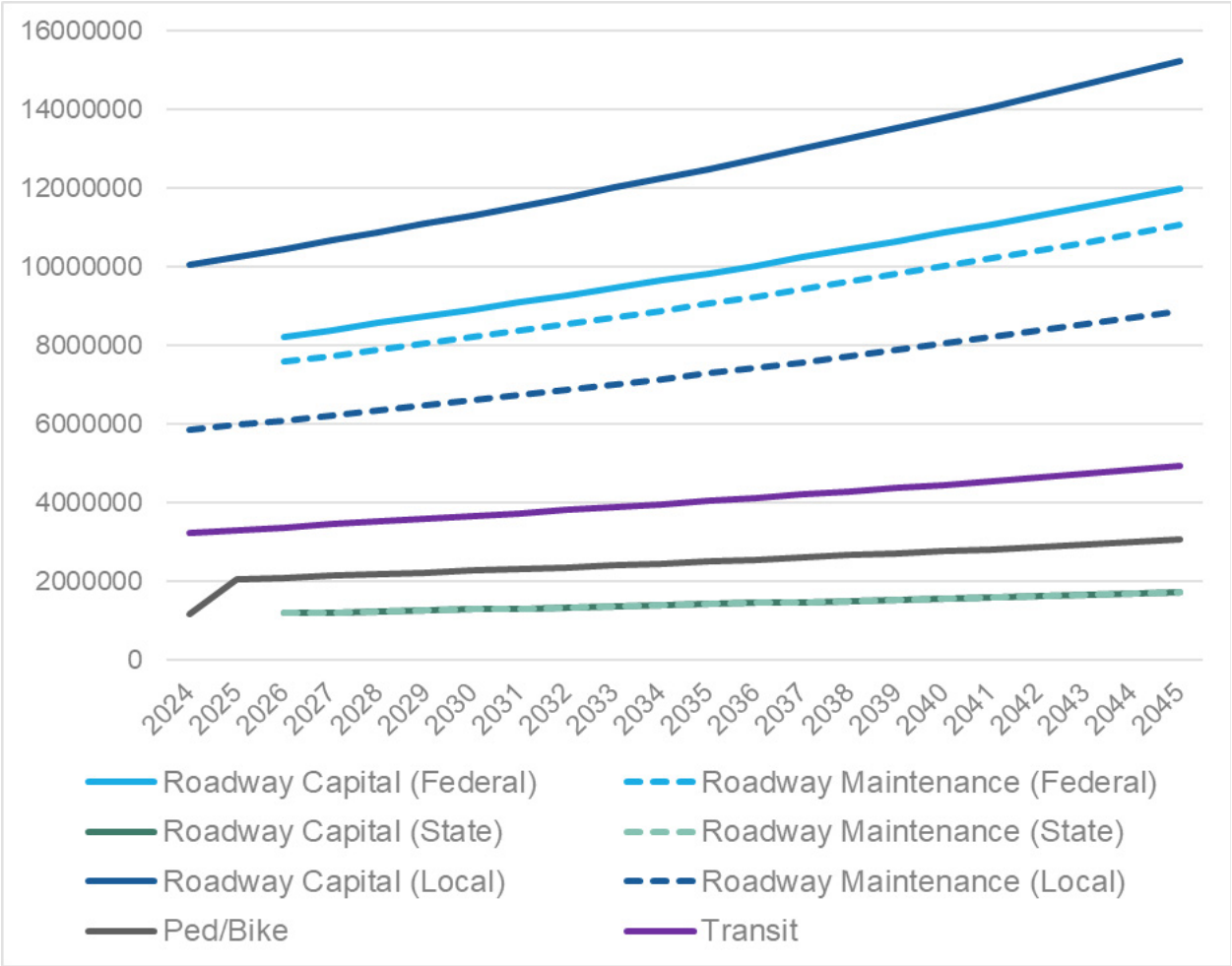
The funding levels from past TIPs was extrapolated to forecast transportation revenues for the years 2024 (the year after the current TIP expires) and 2045, using a 2% inflation rate. Roadway capital funding is forecasted separately for federal funding, state funding, and local funding as different types of projects must be funded through different revenue sources. Additionally, roadway funding has been forecasted separately for capital and maintenance. The forecasted transportation revenues are provided in **Figure 36**.

Forecasted roadway capital revenues were divided into four cost bands, or "tiers", by fiscal year (FY):

- Tier 1 – FY 2024 through FY 2025
- Tier 2 – FY 2026 through FY 2030
- Tier 3 – FY 2031 through FY 2035
- Tier 4 – FY 2036 through FY 2045

By design, these tiers are not equal in size. Since the current TIP ends in FY 2023, the first tier is only two years in length. Tier 4 is ten years in length, which follows the suggested FHWA practice of leaving the final funding tier longer than earlier tiers to reflect that the potential revenues and projects are less predictable and to allow for greater flexibility in future project programming.

Figure 36: Forecasted Transportation Revenues



9.6.1 Roadway Capital Funding

WYDOT has programmed projects through FY 2025 in the current STIP; therefore, the forecasts for federal and state funds are $0 for FY 2024 and FY 2025 and no federal or state-funded projects have been included in Tier 1. The forecasted revenue totals by tier are shown for roadway capital funding in **Figure 37**.

Over the next 25 years, additional minor adjustments to the transportation system to address safety and traffic operations will arise that cannot be predicted in advance. To account for these needs, 10% of the local capital funding 2.5% of state funding, and 2.5% of federal funding has been set aside for currently undefined safety and operations project funding. The safety and operations funding by tier is shown in **Figure 38**. This funding amount has been removed from the available local capital funding for the fiscally constrained roadway projects.

Figure 37: Roadway Capital Revenues by Tier

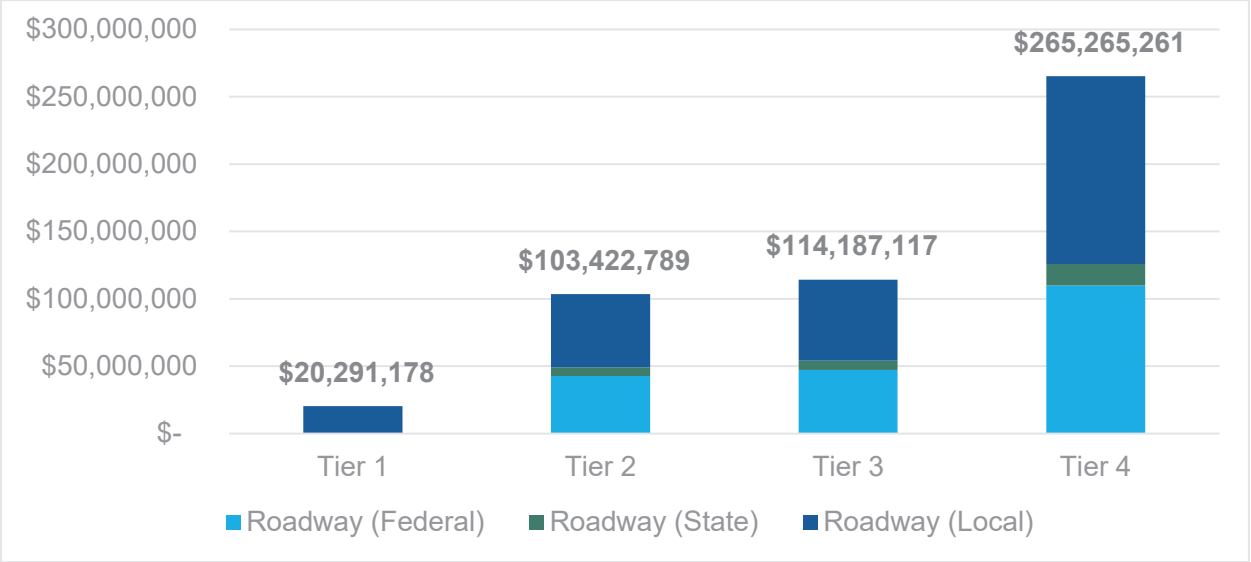
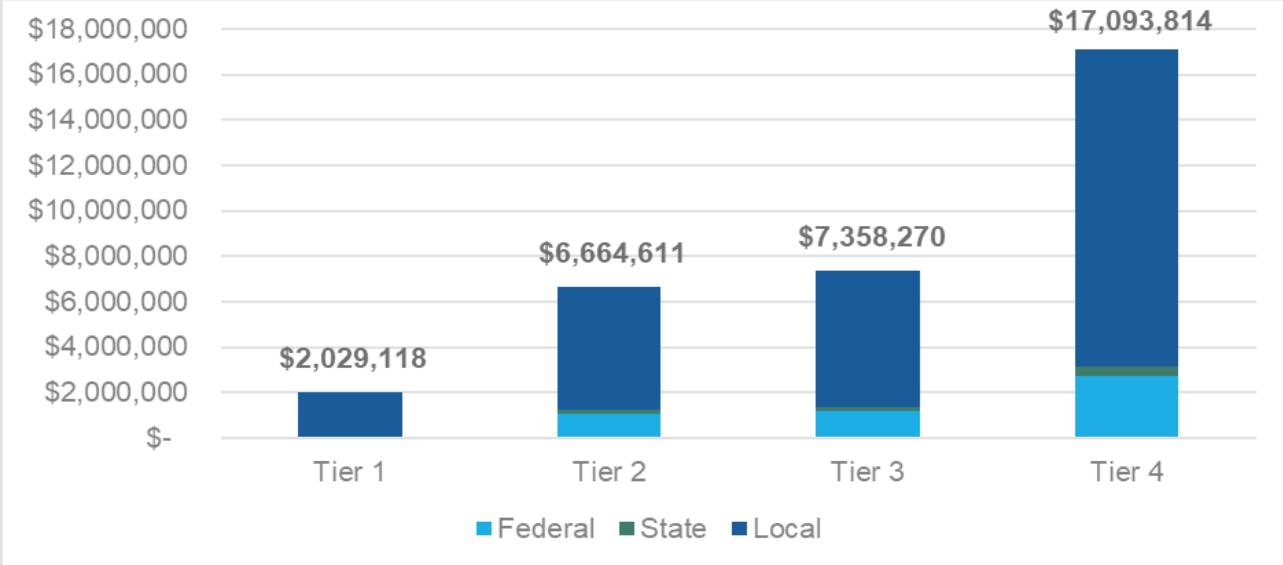


Figure 38: Safety and Operations Revenues by Tier

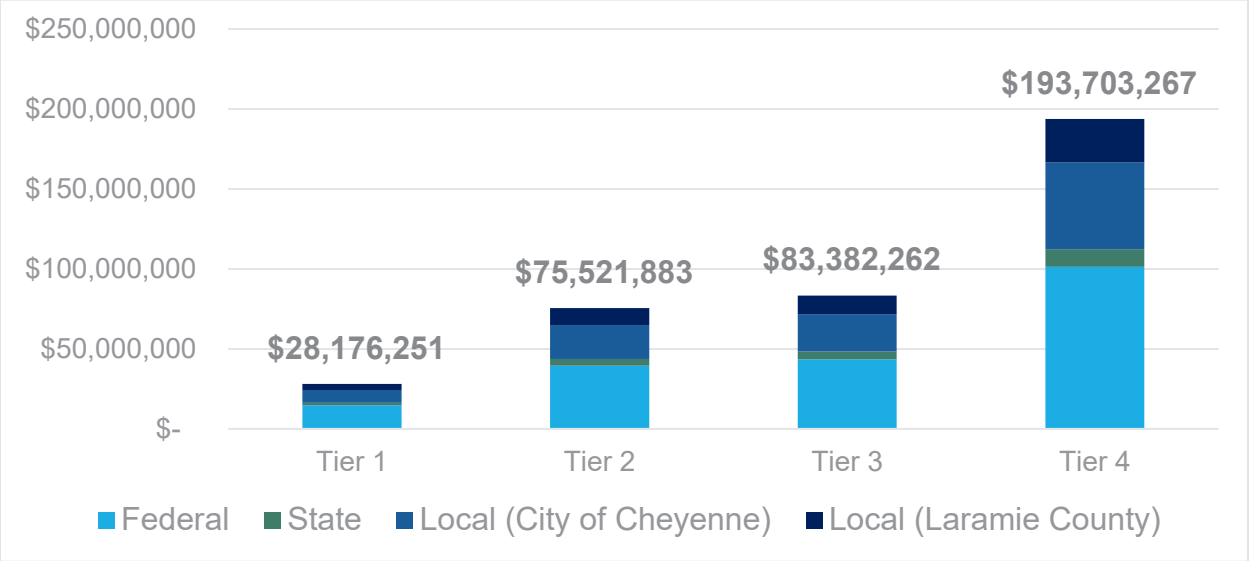


9.6.2 Forecasted Roadway Maintenance Funding

Forecasted roadway maintenance funding followed the same process as capital funding. It is forecasted separately for federal, state, and local maintenance funding based on historic TIP values and grown at a 2% inflation rate.

within the local roadway maintenance funding forecast, the 5th Penny tax was broken down between City of Cheyenne and Laramie County funds based on current distribution levels. Two thirds of local maintenance dollars are allocated to the City of Cheyenne and the remaining third has been allocated to Laramie County. The forecasted maintenance funds by funding tier are shown in **Figure 39**.

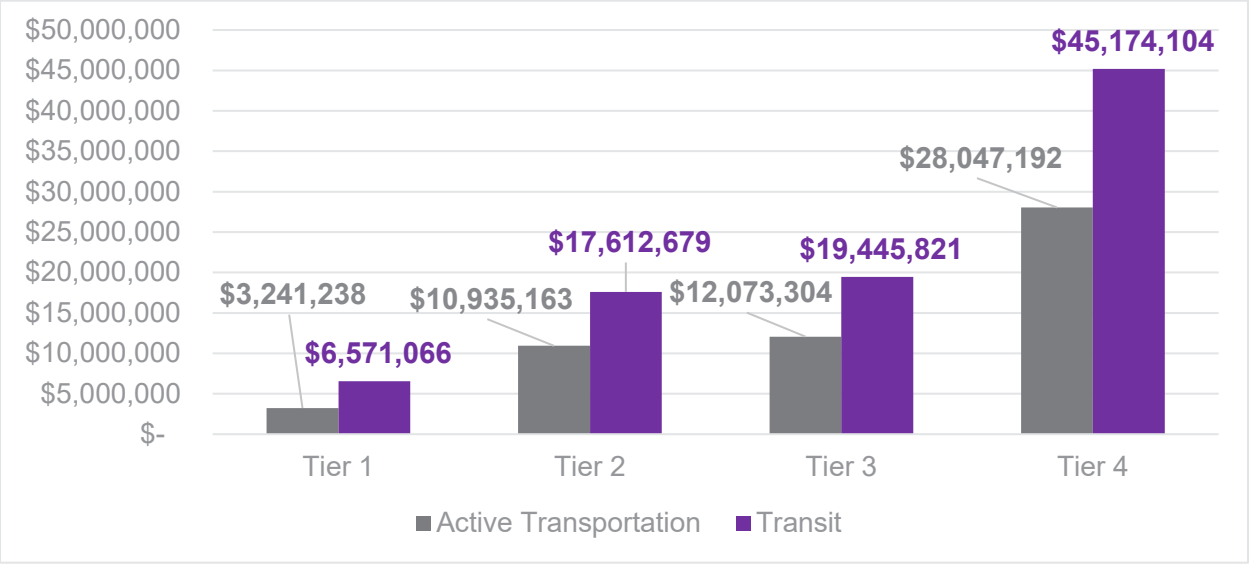
Figure 39: Roadway Maintenance Funding by Tier



9.6.3 Forecasted Active Transportation and Transit Funding

Active transportation (pedestrian and bicycle) and transit funding has been forecasted with the same methodology as roadway funding, based on historic TIP levels and grown at an inflation rate of 2%. Active transportation funding is a combination of 5th Penny active transportation funding levels and 6th Penny tax revenues. The active transportation and transit funding is shown by funding tier in **Figure 40**.

Figure 40: Active Transportation and Transit Funding by Tier



CHAPTER 10: IMPLEMENTATION PLAN

This Implementation Plan outlines a plan for the Cheyenne region to pursue recommended transportation investments for all travel modes through 2045. The recommended investments include capital projects as well as recommended operational enhancements, policies, and studies.

10.1 ROADWAY CAPITAL PROJECTS

This final list of recommended roadway capital projects is prioritized and recommended for implementation based on the current and projected funding that is projected to be available. All project costs are shown in year-of-expenditure (YOE) dollars, meaning the project costs have been inflated at a rate of 3.3% from current year dollars to values at the time the project is anticipated to be constructed. The rate of inflation for project costs is higher than the inflation rate for transportation revenues (2.0%) to reflect the trend in recent years of construction costs rising at a rate faster than inflation.

The results of the fiscal constraint exercise are shown in **Map 32**. The full listing of roadway capital projects and their funding status is provided in **Appendix D.**

In addition to the fiscally constrained projects, this exercise assumed that the projects currently programmed in the Cheyenne MPO's TIP will be completed by the end of FY 2023. Additionally, WYDOT has programmed projects through FY 2025 in its current STIP, which overlaps with the first funding tier. Committed projects are listed in **Table 25**, with the projects programmed by WYDOT in FY 2024 and FY 2025 noted.

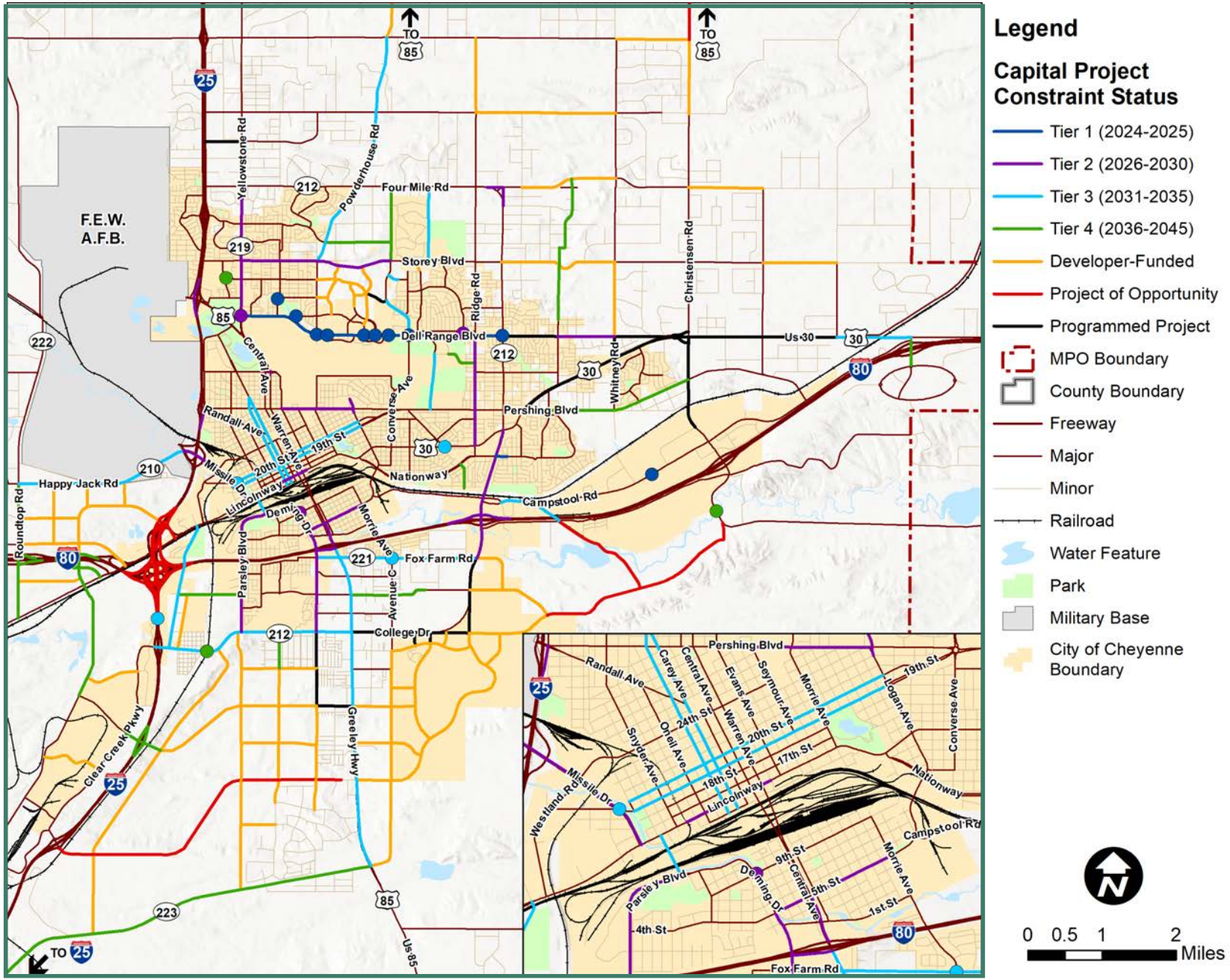
Table 25: Programmed (Committed) Roadway Capital Projects

Primary Route	From	To	Description
Christensen Rd	Commerce Cir	US 30	New roadway and railroad overpass
Dell Range Blvd	College Dr	Van Buren Ave	Widen to 5 lanes, new signal at Van Buren
Dell Range Blvd	Whitney Rd	US 30	Widen to 5 lanes and realign intersection with US 30
Whitney Rd	US 30	Dell Range Blvd	Widen and improve roadway
Pershing Blvd	Choke Cherry Rd	I-80 Service Rd	Remove roadway and overpass
Carlson St	Converse Ave	0.33 mi west	New roadway
20th St	Snyder Ave	Pioneer Ave	Narrow to 2 lanes to increase parking
Parsley Dr	I-80	I-80	Overpass replacement
5th St	Crow Creek	Crow Creek	Bridge replacement
Converse Ave	Dell Range Blvd	Masonway	Reconstruct roadway
Evers Ave	Bishop Blvd	Vandehei Ave	Reconstruct roadway
Prairie Ave	Frontier Mall Dr	Frontier Mall Dr	Improve intersection
Walterscheid Blvd	Fox Farm Rd	Deming Dr	Signalize intersections
Yellowstone Rd	Dell Range Blvd	Dell Range Blvd	Improve intersection
College Dr	Southwest Dr	Southwest Dr	Signalize intersection
US 30*	Pershing Blvd	Railroad Rd	Widen to 5 lanes, reconstruct greenway underpass at Dry Creek
College Dr*	US 85/S Greeley Hwy	Fox Farm Rd	Widen to 5 lanes, realign curve to standard intersection
Division Ave*	College Dr	Wallick Rd	Construct new roadway
Wallick Rd*	Division Ave	US 85	Construct new roadway

**Programmed in the WYDOT STIP in FY 2024 or FY 2025*

Additionally, some roadway capital projects are assumed to be constructed by developers of large subdivisions. These projects are provided in more detail in **Section 10.1.5**

Map 32: Fiscally Constrained Project Status



10.1.1 Tier 1 (FY 2024-2025) Fiscally Constrained Projects

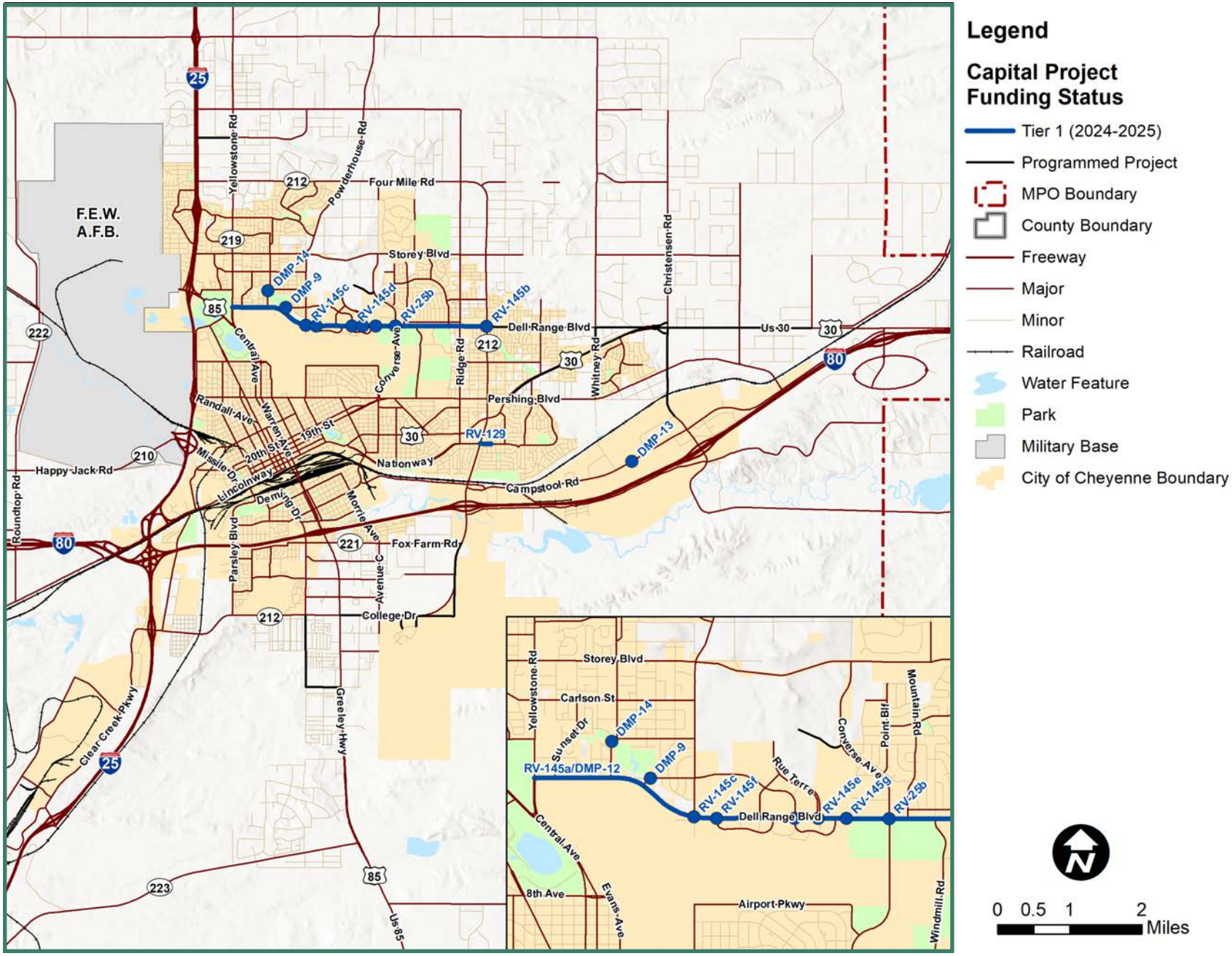
Nine projects, provided in **Table 26** and **Map 33**, have been included in the Tier 1 fiscally constrained projects, which includes the two-year span from FY 2024 through FY 2025. Programmed projects from the WYDOT STIP for FY 2024 and FY 2025 have also been included for reference.

Table 26: Tier 1 Fiscally Constrained Roadway Capital Projects

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
DMP-9	Prairie Ave	Dell Range Blvd	Circle Dr	Mitigate drainage issues	Major Collector	High	$500,000	$579,000	Local	City of Cheyenne
RV-129	12th St	College Dr	Adams Ave	Widen to 5 lanes	Major Collector	High	$850,000	$984,000	Local	City of Cheyenne
DMP-13	Campstool Rd	Dry Creek	Dry Creek	Mitigate drainage issues, add greenway underpass	Minor Collector	High	$150,000	$174,000	Local	City of Cheyenne
DMP-14	Seminoe Rd	Dell Range Blvd	Weaver Rd	Mitigate drainage issues	Major Collector	High	$450,000	$521,000	Local	City of Cheyenne
RV-25b	Converse Ave	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity	Principal Arterial	High	$5,000,000	$5,787,000	Local	City of Cheyenne
RV-145a/ DMP-12	Dell Range Blvd	Yellowstone Rd	College Dr	Spot safety improvements	Principal Arterial	High	$6,550,000	$7,580,000	Local	City of Cheyenne
RV-145b	Dell Range Blvd	College Dr	College Dr	Improve intersection capacity	Principal Arterial	High	$500,000	$579,000	Local	City of Cheyenne
RV-145c	Dell Range Blvd	Powderhouse Rd	Powderhouse Rd	Improve intersection capacity	Principal Arterial	High	$300,000	$347,000	Local	City of Cheyenne
RV-145d	Dell Range Blvd	Prairie Ave	Prairie Ave	Improve intersection capacity	Principal Arterial	High	$300,000	$347,000	Local	City of Cheyenne
RV-145e	Dell Range Blvd	Rue Terre	Rue Terre	Improve intersection capacity	Principal Arterial	High	$300,000	$347,000	Local	City of Cheyenne
RV-145f	Dell Range Blvd	Stillwater Ave	Stillwater Ave	Improve intersection capacity	Principal Arterial	High	$300,000	$347,000	Local	City of Cheyenne
RV-145g	Dell Range Blvd	Walmart	Walmart	Improve intersection capacity	Principal Arterial	High	$300,000	$347,000	Local	City of Cheyenne
-	US 30	Pershing Blvd	Railroad Rd	Widen to 5 lanes	Principal Arterial	-	-	$14,024,000	Federal/ State	WYDOT
-	College Dr	US 85	Fox Farm Rd	Widen to 5 lanes, realign curve	Principal Arterial	-	-	$20,027,000	Federal/ State	WYDOT
-	Division Ave	College Dr	Wallick Rd	Construct new roadway	Major Collector	-	-	$4,000,000	Federal/ State	WYDOT
-	Wallick Rd	Division Ave	US 85	Construct new roadway	Major Collector	-	-	$1,681,000	Federal/ State	WYDOT

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
-				Regionwide Safety and Operations Projects				$2,029,037	Local	City of Cheyenne/ Laramie County
							Local Tier 1 Revenue	**$20,291,178**		
							Local Tier 1 YOE Expenditures	**$19,968,118**		
							Local Tier 1 Balance	**$323,060**		

Map 33: Tier 1 Fiscally Constrained Roadway Capital Projects



10.1.2 Tier 2 (FY 2026-2030) Fiscally Constrained Projects

31 projects, provided in **Table 27** and **Map 34**, have been included in the Tier 2 fiscally constrained projects, which covers the five-year span from FY 2026 through FY 2030.

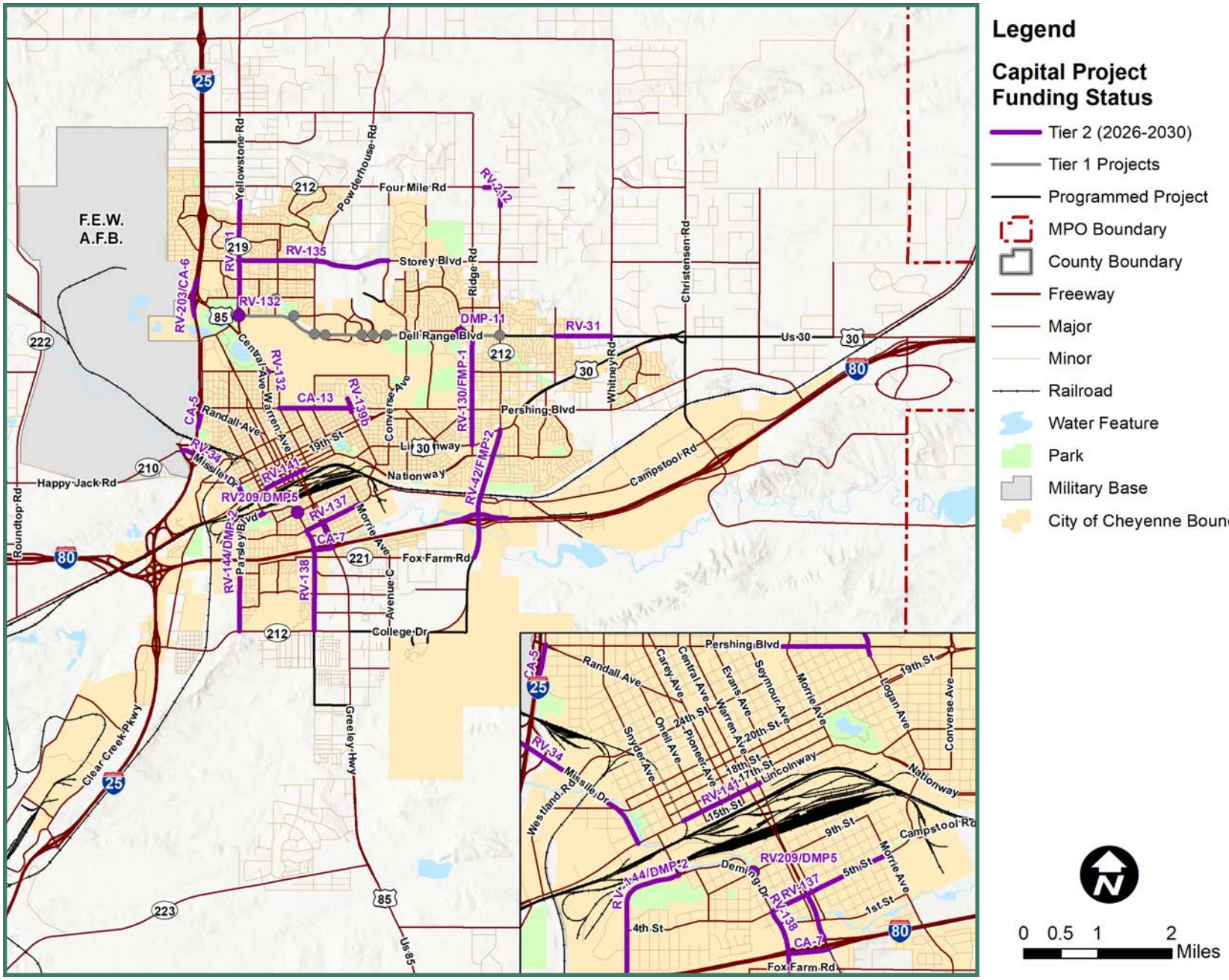
Table 27: Tier 2 Fiscally Constrained Roadway Capital Projects

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
DMP-7/ FMP-3	US 85	I-80	5th St	Mitigate drainage issues, improve 5th St intersection	Interstate	High	$6,610,000	$8,570,000	Federal	WYDOT
RV-144/ DMP-2	Parsley Blvd	College Dr	Ames Ave	Improve as minor arterial, mitigate drainage issues, add greenway	Minor Arterial	High	$5,750,000	$7,455,000	Local	City of Cheyenne
RV-132	Yellowstone Rd	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity	Principal Arterial	High	$500,000	$648,000	Federal	WYDOT
RV-138	Walterscheid Blvd	College Dr	5th St	Widen roadway to 5 lanes	Minor Arterial	High	$4,350,000	$5,640,000	Local	City of Cheyenne
RV-135	Storey Blvd	Yellowstone Rd	Converse Ave	Widen to 5 lanes, add trail	Minor Arterial	High	$2,150,000	$2,788,000	Local	City of Cheyenne
RV-209/ DMP-5	9th St	Crow Creek	Crow Creek	Reconstruct bridge, greenway, mitigate drainage issues	Minor Collector	High	$4,750,000	$6,159,000	Local	City of Cheyenne
RV-130/ FMP-1	Ridge Rd	Lincolnway	Dell Range Blvd	Improve as arterial, add trail	Minor Arterial	High	$2,570,000	$3,332,000	Local	City of Cheyenne
RV-139b	Pershing Blvd	Concord Rd	Logan Ave	Realign intersection	Principal Arterial	High	$2,150,000	$2,788,000	Local	City of Cheyenne
RV-42/ FMP-2	College Dr	Fox Farm Rd	Lincolnway	Widen roadway to 7 lanes	Principal Arterial	High	$8,900,000	$11,540,000	Federal	WYDOT
RV-31	Dell Range Blvd	Van Buren Ave	Whitney Rd	Widen roadway to 5 lanes	Principal Arterial	High	$2,650,000	$3,436,000	Local	City of Cheyenne
RV-141	Lincolnway	Reed Ave	House St	Streetscape, ped/ bike enhancements	Principal Arterial	High	$8,000,000	$10,373,000	Federal	WYDOT
RV-34	Missile Dr	Lincolnway	I-25	Streetscape, ped/ bike enhancements, greenway underpass	Minor Arterial	High	$4,500,000	$5,835,000	State	WYDOT
CA-7	I-80	US 85	US 85	Add right-turn lane to EB off-ramp	Interstate	Medium	$230,000	$298,000	Federal	WYDOT

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-203/ CA-6	I-25	Central Ave	Central Ave	Signalize SB ramps/ Central Ave	Interstate	Medium	$600,000	$778,000	Federal	WYDOT
RV-205/ CA-8	I-80	College Dr	College Dr	Signalize WB ramps/ College Dr	Interstate	Medium	$600,000	$778,000	Federal	WYDOT
CA-5	I-25	Randall Ave	Randall Ave	Widen NB off-ramp to 4 lanes	Interstate	Medium	$160,000	$207,000	Federal	WYDOT
RV-212	College Dr	Four Mile Rd	Four Mile Rd	Realign intersection	Principal Arterial	Medium	$1,100,000	$1,426,000	Federal	WYDOT
DMP-11	Hilltop Ave	Dell Range Blvd	Sheridan St	Mitigate drainage issues, add trail	Major Collector	High	$500,000	$648,000	Local	City of Cheyenne
RV-137	5th St	Deming Dr	Morrie Ave	Improve as collector	Major Collector	High	$3,775,000	$4,895,000	Local	City of Cheyenne
RV-131	Yellowstone Rd	Dell Range Blvd	Four Mile Rd	Ped/bike enhancements	Principal Arterial	High	$4,100,000	$5,316,000	Federal	WYDOT
CA-13	Pershing Blvd	Evans Ave	Logan Ave	Ped/bike enhancements	Principal Arterial	High	$5,000,000	$6,483,000	Local	City of Cheyenne
-				Regionwide Safety and Operations Projects				$5,438,772	Local	City of Cheyenne/ Laramie County
-				Regionwide Safety and Operations Projects				$1,070,892	Federal	WYDOT
-				Regionwide Safety and Operations Projects				$154,997	State	WYDOT

Federal Tier 2 Revenue	**$42,835,672**
Federal Tier 2 Expenditures	**$41,004,892**
Federal Tier 2 Balance	**$1,830,780**
State Tier 2 Revenue	**$6,199,895**
State Tier 2 Expenditures	**$5,989,997**
State Tier 2 Balance	**$209,898**
Local Tier 2 Revenue	**$54,710,282**
Local Tier 1 Balance	**$323,060**
Local Tier 2 YOE Expenditures	**$49,062,772**
Local Tier 2 Balance	**$5,970,620**

Map 34: Tier 2 Fiscally Constrained Roadway Capital Projects



Legend

Capital Project Funding Status

- Tier 2 (2026-2030)
- Tier 1 Projects
- Programmed Project
- MPO Boundary
- County Boundary
- Freeway
- Major
- Minor
- Railroad
- Water Feature
- Park
- Military Base
- City of Cheyenne Boundary

10.1.3 Tier 3 (FY 2031-2035) Fiscally Constrained Projects

18 projects, provided in **Table 28** and **Map 35**, have been included in the Tier 3 fiscally constrained projects, which covers the five-year span from FY 2031 through FY 2035.

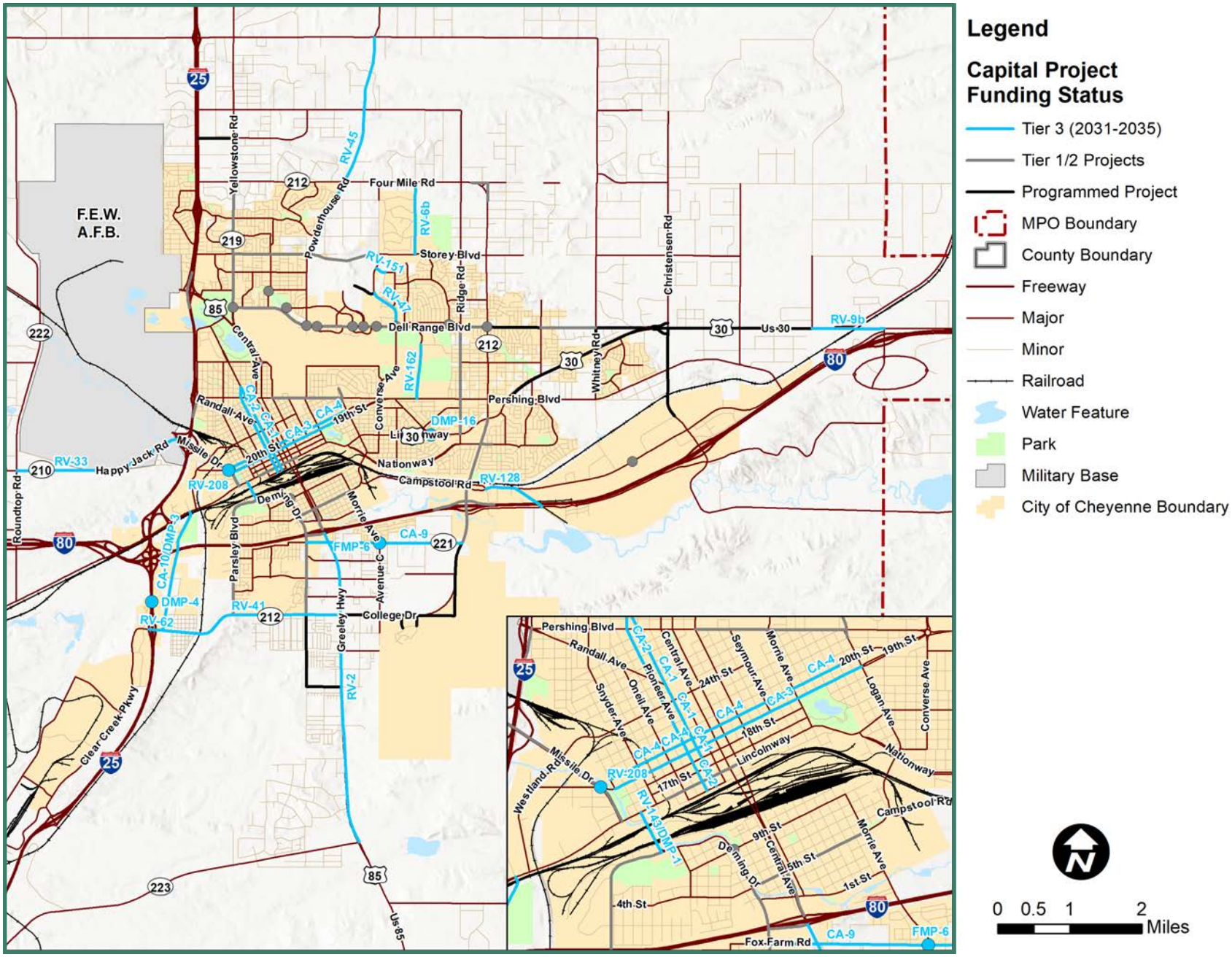
Table 28: Tier 3 Fiscally Constrained Roadway Capital Projects

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-143/ DMP-1	Ames Ave	Parsley Blvd	Lincolnway	Improve as minor arterial, mitigate drainage issues	Minor Arterial	High	$3,950,000	$6,024,000	Local	City of Cheyenne
RV-2	US 85	Terry Ranch Rd	I-80	Access control, ped/bike enhancements	Principal Arterial	High	$2,150,000	$3,279,000	Federal	WYDOT
CA-10/ DMP-3	Southwest Dr	College Dr	Lincolnway	Improve as collector, mitigate drainage issues	Major Collector	High	$4,760,000	$7,260,000	Local	City of Cheyenne
RV-162	Windmill Rd	Pershing Blvd	Rock Springs St	Reconstruct roadway and trail	Major Collector	High	$1,600,000	$2,440,000	Local	City of Cheyenne
RV-128	Campstool Rd	Livingston Rd	Burlington Trl	Improve as minor arterial	Minor Arterial	High	$1,100,000	$1,678,000	Local	City of Cheyenne
CA-3	19th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High	$1,260,000	$1,922,000	Local	City of Cheyenne
RV-41	College Dr	I-25	US 85	Access control, ped/ bike enhancements	Principal Arterial	High	$8,650,000	$13,192,000	Federal	WYDOT
CA-4	20th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High	$1,260,000	$1,922,000	Local	City of Cheyenne
CA-1	Carey Ave	15th St	2nd Ave	Convert to two-way street	Minor Arterial	High	$920,000	$1,403,000	Local	City of Cheyenne
RV-45	Powder-house Rd	Storey Blvd	Iron Mountain Rd	Widen roadway to 3 lanes	Minor Arterial	High	$2,250,000	$3,432,000	Local	City of Cheyenne
CA-2	Pioneer Ave	15th St	2nd Ave	Convert to two-way street	Minor Arterial	High	$940,000	$1,434,000	Local	City of Cheyenne
RV-33	Happy Jack Rd	Roundtop Rd	I-25	Widen roadway to 3 lanes and add greenway	Minor Arterial	High	$5,400,000	$8,236,000	Federal	WYDOT
RV-208	Old Happy Jack Rd/19th St	Stinson Ave	Dey Ave	Realign intersection with Missile Dr	Principal Arterial	High	$8,000,000	$12,201,000	Local	City of Cheyenne
CA-9	Fox Farm Rd	Walterscheid Blvd	College Dr	Improve as collector, widen to 3 lanes	Minor Arterial	Medium	$4,980,000	$7,595,000	Federal	WYDOT
RV-110a/ FMP-5	Burlington Trl	Industrial Rd/ HR Ranch Rd	Campstool Rd	Reconstruct roadway, improve intersections, add greenway	Major Collector	Medium	$3,030,000	$4,621,000	Local	City of Cheyenne

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-6b	Chief Washakie Ave	Storey Blvd	Four Mile Rd	Construct new roadway, add greenway	Minor Collector	Medium	$3,050,000	$4,652,000	Local	City of Cheyenne
RV-62	I-25	College Dr	College Dr	Widen DDI to 4 lanes	Principal Arterial	Medium	$6,950,000	$10,600,000	Federal	WYDOT
FMP-6	Fox Farm Rd	Morrie Ave/ Ave C	Morrie Ave/ Ave C	Reconstruct intersection, improve ped/bike accommodations	Minor Arterial	Medium	$350,000	$534,000	State	WYDOT
RV-151	Crane Bluff Rd	Converse Ave	Ogden Rd	Construct new roadway	Minor Collector	Medium	$2,050,000	$3,126,000	Local	City of Cheyenne
RV-9b	US 30	Westedt Rd	Archer Pkwy	Widen roadway to 3 lanes	Principal Arterial	Medium	$2,320,000	$3,538,000	State	WYDOT
DMP-16	Lincolnway	Henderson Dr	Ridge Rd	Mitigate drainage issues, add greenway underpass	Minor Arterial	High	$1,500,000	$2,288,000	Federal	WYDOT
DMP-4	I-25	College Dr	I-80	Mitigate drainage issues	Interstate	High	$1,150,000	$1,754,000	Federal	WYDOT
RV-47	Converse Ave	Dell Range Blvd	Carlson St	Improve as minor arterial	Minor Arterial	High	$1,300,000	$1,983,000	Local	City of Cheyenne
-				Regionwide Safety and Operations Projects				$6,004,789	Local	City of Cheyenne/ Laramie County
-				Primary Route: Regionwide Safety and Operations Projects				$1,182,351	Federal	WYDOT
-				Regionwide Safety and Operations Projects				$171,130	State	WYDOT

Federal Tier 3 Revenue	**$49,123,297**
Federal Tier 2 Balance	**$1,830,781**
Federal Tier 3 Expenditures	**$48,124,824**
Federal Tier 3 Balance	**$2,829,254**
State Tier 3 Revenue	**$7,055,083**
State Tier 2 Balance	**$209,898**
State Tier 3 Expenditures	**$4,243,130**
State Tier 3 Balance	**$3,021,851**
Local Tier 3 Revenue	**$66,018,508**
Local Tier 2 Balance	**$5,970,620**
Local Tier 3 YOE Expenditures	**$60,102,789**
Local Tier 2 Balance	**$11,886,340**

Map 35: Tier 3 Fiscally Constrained Roadway Capital Projects



10.1.4 Tier 4 (FY 2036-2045) Fiscally Constrained Projects

21 projects, provided in **Table 29** and **Map 36**, have been included in the Tier 4 fiscally constrained projects, which covers the 10-year span from FY 2036 through FY 2045.

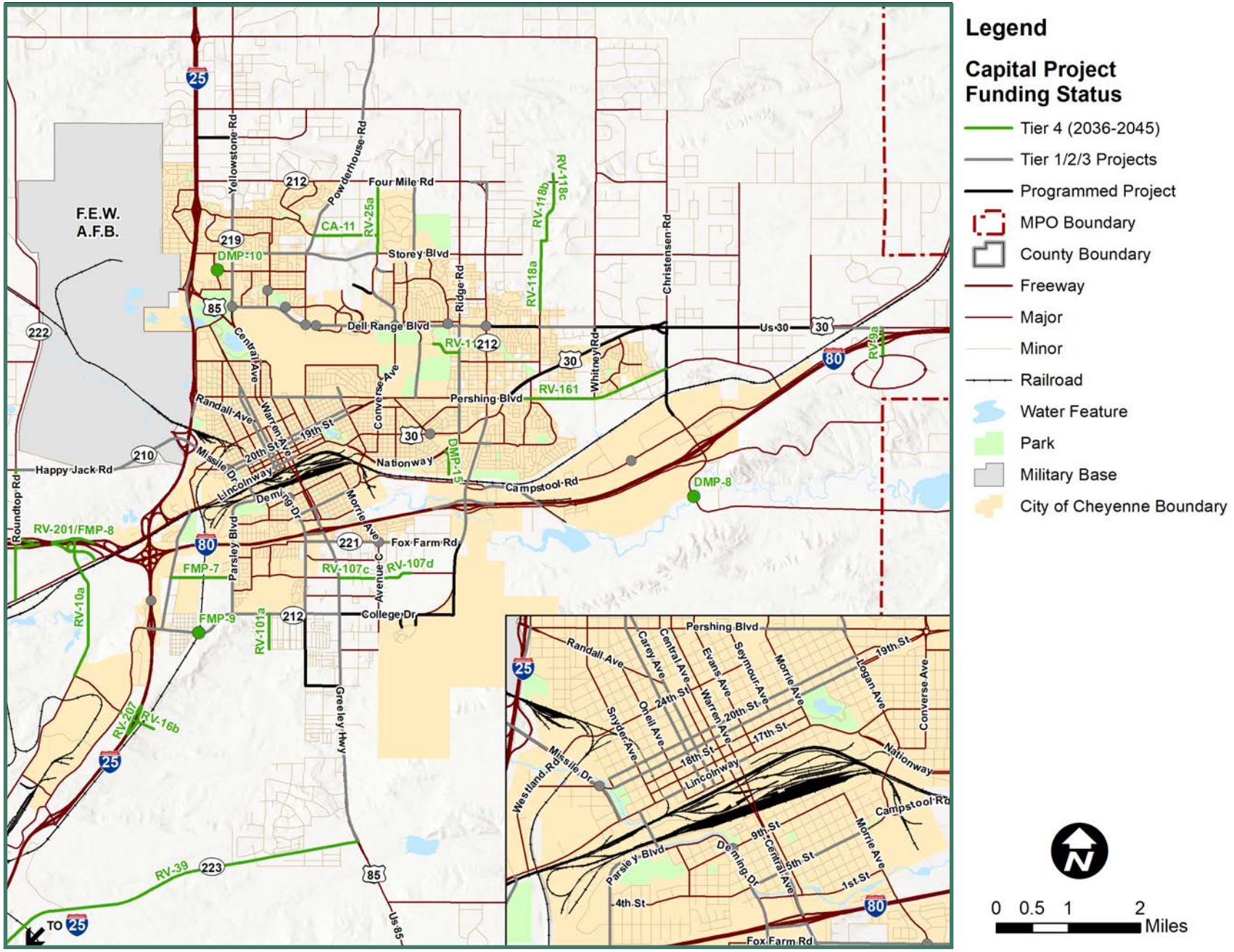
Table 29: Tier 4 Fiscally Constrained Roadway Capital Projects

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-161	Pershing Blvd	US 30	Christensen Rd	Widen roadway to 5 lanes	Minor Arterial	High	$2,330,000	$4,460,000	Local	City of Cheyenne
FMP-9	College Dr	BNSF Railroad	BNSF Railroad	Grade separate railroad crossing	Principal Arterial	High	$10,000,000	$19,143,000	Federal	WYDOT
RV-207	I-25	Wallick Rd	Wallick Rd	Construct new interchange	Minor Arterial	Medium	$27,100,000	$51,877,000	Federal	WYDOT
RV-32b	Roundtop Rd	Horizon Dr	Happy Jack Rd	Widen roadway to 5 lanes	Minor Arterial	Medium	$1,940,000	$3,714,000	Local	City of Cheyenne
RV-32c	Roundtop Rd	I-80	Horizon Dr	Widen roadway to 5 lanes	Minor Arterial	Medium	$760,000	$1,455,000	Local	City of Cheyenne
RV-107d	Allison Rd	Ave C	Energy Dr	Construct new roadway	Major Collector	Medium	$2,250,000	$4,307,000	Local	City of Cheyenne
RV-61/ RV-206	I-80	Roundtop Rd	Roundtop Rd	Improve interchange, widen underpass to 5 lanes	Minor Arterial	Medium	$18,000,000	$34,457,000	Federal	WYDOT
RV-39	Terry Ranch Rd	I-25	US 85	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Medium	$3,800,000	$7,274,000	Federal	WYDOT
RV-10a	Berwick Dr	Wallick Rd	I-80	Construct new roadway and railroad overpass	Minor Arterial	Medium	$18,400,000	$35,223,000	Local	City of Cheyenne
DMP-10	Education Dr	Manewal Dr	Carlson St	Mitigate drainage issues	Major Collector	High	$550,000	$1,053,000	Local	City of Cheyenne
DMP-8	Campstool Rd	Burlington Trl	HR Ranch Rd	Mitigate drainage issues	Minor Arterial	High	$950,000	$1,819,000	Local	City of Cheyenne
RV-16b	Wallick Rd	Clear Creek Pkwy	New Collector	Construct new roadway	Minor Arterial	Medium	$6,300,000	$12,060,000	Local	City of Cheyenne
RV-118b	Van Buren Ave	Storey Blvd	Four Mile Rd	Construct new roadway	Major Collector	Low	$2,750,000	$5,264,000	Local	City of Cheyenne
RV-9a	Archer Pkwy	Prairie Center Cir	US 30/I-80 Service Rd	Widen roadway to 5 lanes	Minor Arterial	Medium	$9,170,000	$17,554,000	State	WYDOT

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-32a	Roundtop Rd	Otto Rd	I-80	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Low	$1,600,000	$3,063,000	Local	City of Cheyenne
RV-22b	Powder-house Rd	Rising Star	Lodgepole Creek	Construct new roadway	Major Collector	Low	$720,000	$1,378,000	Local	City of Cheyenne
RV-22c	Powder-house Rd	Lodgepole Creek	Lodgepole Creek	Construct new bridge	Major Collector	Low	$720,000	$1,378,000	Local	City of Cheyenne
RV-22e	Powder-house Rd	Ford Rd	US 85	Improve as collector	Major Collector	Low	$720,000	$1,378,000	Local	City of Cheyenne
FMP-7	New Collector	Southwest Dr	Parsley Blvd	Construct new roadway	Major Collector	Low	$4,700,000	$8,997,000	Local	City of Cheyenne
CA-11	Tranquility Rd	Powder-house Rd	Converse Ave	Improve as collector	Minor Collector	Medium	$1,420,000	$2,718,000	Local	City of Cheyenne
RV-119	Rock Springs St	Ridge Rd	Moran Ave	Construct new roadway	Minor Collector	Medium	$1,100,000	$2,106,000	Local	City of Cheyenne
RV-107c	Allison Rd	US 85	Ave C	Reconstruct roadway	Major Collector	Low	$2,150,000	$4,116,000	Local	City of Cheyenne
RV-101a	York Ave	College Dr	Apple St	Construct new roadway	Minor Collector	Medium	$2,175,000	$4,164,000	Local	City of Cheyenne
RV-118c	Van Buren Ave	Child Creek	Four Mile Rd	Construct new roadway and bridge	Major Collector	Low	$500,000	$957,000	Local	City of Cheyenne
DMP-15	Henderson Dr	Nationway	Homestead Ave	Mitigate drainage issues	Major Collector	Medium	$11,650,000	$22,301,000	Local	City of Cheyenne
-	Regionwide Safety and Operations Projects							$13,949,576	Local	City of Cheyenne/ Laramie County
-	Primary Route: Regionwide Safety and Operations Projects							$2,746,691	Federal	WYDOT
-	Regionwide Safety and Operations Projects							$397,547	State	WYDOT
							Federal Tier 4 Revenue	**$112,696,875**		
							Federal Tier 3 Balance	**$2,829,254**		
							Federal Tier 4 Expenditures	**$115,497,691**		
							Federal Tier 4 Balance	**$28,438**		

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost	YOE Cost	Fund Source	Lead Agency
							State Tier 4 Revenue	$16,574,587		
							State Tier 3 Balance	$3,021,851		
							State Tier 4 Expenditures	$17,951,547		
							State Tier 4 Balance	$1,644,891		
							Local Tier 4 Revenue	$151,382,100		
							Local Tier 3 Balance	$11,886,340		
							Local Tier 4 YOE Expenditures	$135,860,576		
							Local Tier 4 Balance	$27,407,864		

Map 36: Tier 4 Fiscally Constrained Roadway Capital Projects



10.1.5 Assumed Developer-Funded Projects

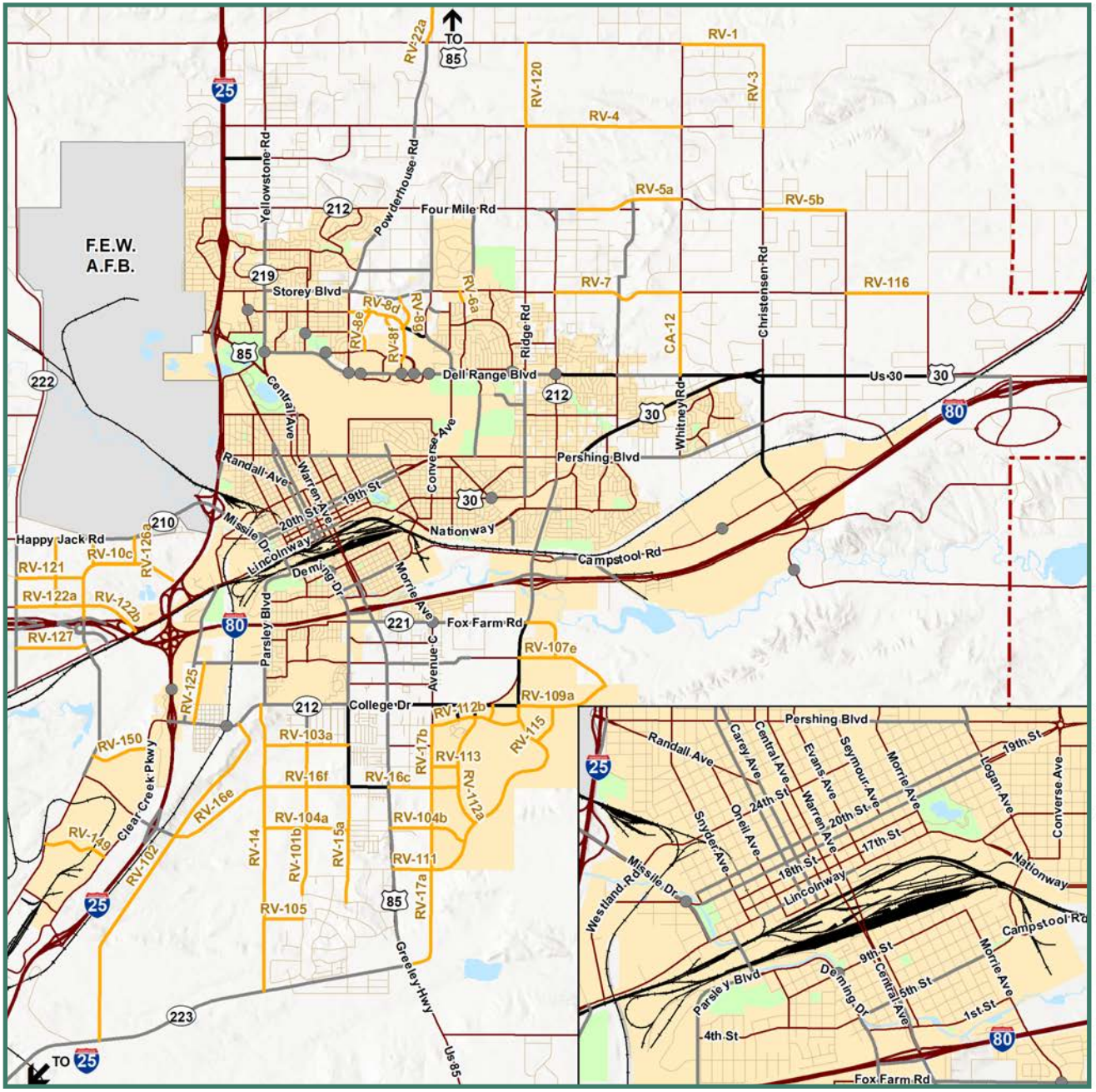
18 projects, provided in **Table 30** and **Map 37**, are assumed to be constructed by developers as their associated major subdivisions are built out. While these roadways are assumed to be constructed by 2045, there are no more specific timeframes assumed for these projects as they are purely development driven.

Table 30: Assumed Developer-Funded Roadway Capital Projects

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost
RV-1	Iron Mountain Rd	Whitney Rd	Christensen Rd	Construct new roadway	Major Collector	Low	$1,100,000
RV-3	Christensen Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway	Major Collector	Low	$1,100,000
RV-4	Riding Club Rd	Ridge Rd	Whitney Rd	Construct new roadway	Major Collector	Low	$4,000,000
RV-5a	Four Mile Rd	Braehill Rd	Whitney Rd	Construct new roadway	Major Collector	Low	$2,800,000
RV-5b	Four Mile Rd	Christensen Rd	Reese Rd	Construct new roadway	Major Collector	Low	$2,150,000
RV-6a	Mountain Rd	Wild Bluff	Storey Blvd	Construct new roadway	Major Collector	Medium	$1,220,000
RV-7	Summit Dr/Storey Blvd	College Dr	Whitney Rd	Construct new roadway	Major Collector	Medium	$3,250,000
RV-8a	Cutoff Rd	Frontier Mall Dr	Rue Terre	Realign roadway	Minor Arterial	Medium	$1,100,000
RV-8b	Rue Terre	Current Dead End	Carlson St	Construct new roadway	Major Collector	Low	$2,250,000
RV-8c	Melton St	Powderhouse Rd	Fort Laramie Trl	Construct new roadway	Minor Collector	Medium	$400,000
RV-8d	Carlson St	Powderhouse Rd	Melton St	Construct new roadway	Major Collector	Low	$2,250,000
RV-8e	Fort Laramie Trl	Prairie Ave	Storey Blvd	Construct new roadway	Minor Collector	Low	$3,050,000
RV-8f	Cutoff Rd	Rue Terre	Carlson St	Construct new roadway	Major Collector	Medium	$1,950,000
RV-8g	Cutoff Rd	Carlson St	Storey Blvd	Construct new roadway	Major Collector	Low	$980,000
RV-8h	Melton St	Rue Terre	Carlson St	Construct new roadway	Major Collector	Medium	$430,000
RV-10b	Berwick Dr	I-80	Veta Dr	Construct new roadway	Minor Arterial	Low	$3,250,000
RV-10c	Berwick Dr	Veta Dr	I-25	Construct new roadway	Minor Arterial	Medium	$1,625,000
RV-14	Parsley Blvd	Terry Ranch Rd	College Dr	Construct new roadway	Minor Arterial	Medium	$7,600,000
RV-15a	Division Ave	Dayshia Ln	Wallick Rd	Construct new roadway	Major Collector	Medium	$2,150,000
RV-16c	Wallick Rd	US 85	Ave C	Construct new roadway	Minor Arterial	Medium	$1,600,000
RV-16d	Wallick Rd	Ave C	Sweetgrass Dr	Construct new roadway	Major Collector	Medium	$550,000
RV-16e	Wallick Rd	New Collector	Parsley Blvd	Construct new roadway	Minor Arterial	Medium	$2,550,000
RV-16f	Wallick Rd	Parsley Blvd	Division Ave	Construct new roadway	Minor Arterial	Medium	$2,000,000
RV-17a	Ave C	US 85	Wallick Rd	Construct new roadway	Major Collector	Low	$3,250,000
RV-17b	Ave C	Wallick Rd	Murray Rd	Construct new roadway	Major Collector	Medium	$2,150,000
RV-22a	Powderhouse Rd	Iron Mountain Rd	US 85	Construct new roadway	Major Collector	Low	$1,150,000
RV-22d	Powderhouse Rd	Lodgepole Creek	Ford Rd	Construct new roadway	Major Collector	Low	$520,000
RV-101b	York Ave	Dayshia Ln	Apple St	Improve as collector	Minor Collector	Low	$2,175,000
RV-102	New Collector	Terry Ranch Rd	College Dr	Construct new roadway	Major Collector	Low	$9,000,000
RV-103a	Apple St	Parsley Blvd	Division Ave	Construct new roadway	Minor Collector	Low	$2,150,000
RV-104a	Julianna Rd	Parsley Blvd	Division Ave	Construct new roadway	Major Collector	Low	$3,250,000

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost
RV-104b	Julianna Rd	US 85	High Plains Rd	Construct new roadway	Major Collector	Low	$2,150,000
RV-105	Remington Way	Parsley Blvd	Troyer Dr	Construct new roadway	Minor Collector	Low	$1,100,000
RV-107e	Allison Rd	College Dr	Lummis Dr	Construct new roadway	Major Collector	Low	$2,150,000
RV-108	Fox Farm Rd	College Dr	Allison Rd	Construct new roadway	Minor Arterial	Low	$3,150,000
RV-109a	Lummis Dr	College Dr	Allison Rd	Construct new roadway	Minor Arterial	Low	$5,425,000
RV-111	High Plains Rd	US 85	College/Lummis Dr	Construct new roadway	Minor Arterial	Medium	$7,600,000
RV-112a	Sweetgrass Dr	High Plains Rd	Murray Rd	Construct new roadway	Minor Arterial	Medium	$2,550,000
RV-112b	Murray Rd	Ave C	High Plains Rd	Construct new roadway	Major Collector	Low	$2,000,000
RV-113	Nation Rd	Sweetgrass Dr	Ave C	Construct new roadway	Minor Collector	Low	$1,100,000
RV-114	Cirrus Dr	College Dr	Murray Rd	Construct new roadway	Minor Collector	Low	$1,100,000
RV-115	New Collector	High Plains Rd	College Dr	Construct new roadway	Minor Collector	Low	$2,150,000
RV-116	Beckle Rd	Reese Rd	Westedt Rd	Construct new roadway	Major Collector	Low	$1,100,000
RV-118a	Van Buren Ave	Carmel Dr	Storey Blvd	Construct new roadway	Major Collector	Medium	$5,000,000
RV-120	Ridge Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway	Major Collector	Low	$2,150,000
RV-121	Veta Dr	Roundtop Rd	Berwick Rd	Construct new roadway	Major Collector	Low	$1,750,000
RV-122a	Horizon Dr	Roundtop Rd	Berwick Rd	Construct new roadway	Major Collector	Low	$2,700,000
RV-122b	Horizon Dr	Berwick Dr	Lincolnway	Construct new roadway	Major Collector	Low	$2,700,000
RV-123	New Collectors	Happy Jack Rd	Horizon/Berwick Dr	Construct new roadways	Minor Collector	Low	$3,450,000
RV-125	Broken Arrow Rd	College Dr	Swan Ranch Rd	Construct new roadway	Minor Collector	Low	$1,600,000
RV-126a	New Collector (East)	Happy Jack Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	$800,000
RV-126b	New Collector (West)	Happy Jack Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	$800,000
RV-127	New Collector	Roundtop Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	$1,850,000
RV-149	Bridger Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway	Major Collector	Low	$1,500,000
RV-150	Gannett Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway	Major Collector	Low	$3,150,000
CA-12	Whitney Rd	Dell Range Blvd	Storey Blvd	Widen to 3 lanes	Major Collector	Medium	$1,000,000
						Total Cost (2020$)	**$133,025,000**

Map 37: Assumed Developer-Funded Roadway Capital Projects



Legend

Capital Project Funding Status

- Developer-Funded
- Fiscally Constrained Project
- Programmed Project
- MPO Boundary
- County Boundary
- Freeway
- Major
- Minor
- Railroad
- Water Feature
- Park
- Military Base
- City of Cheyenne Boundary

N

0 0.5 1 2 Miles

10.1.6 Projects of Opportunity

31 projects, provided in **Table 31** and **Map 38**, are not anticipated to be funded through the assumed funding sources that have been forecasted through FY 2045. These projects will need to be funded through other mechanisms, such as federal or state grants or by developers, if they rise in priority by 2045.

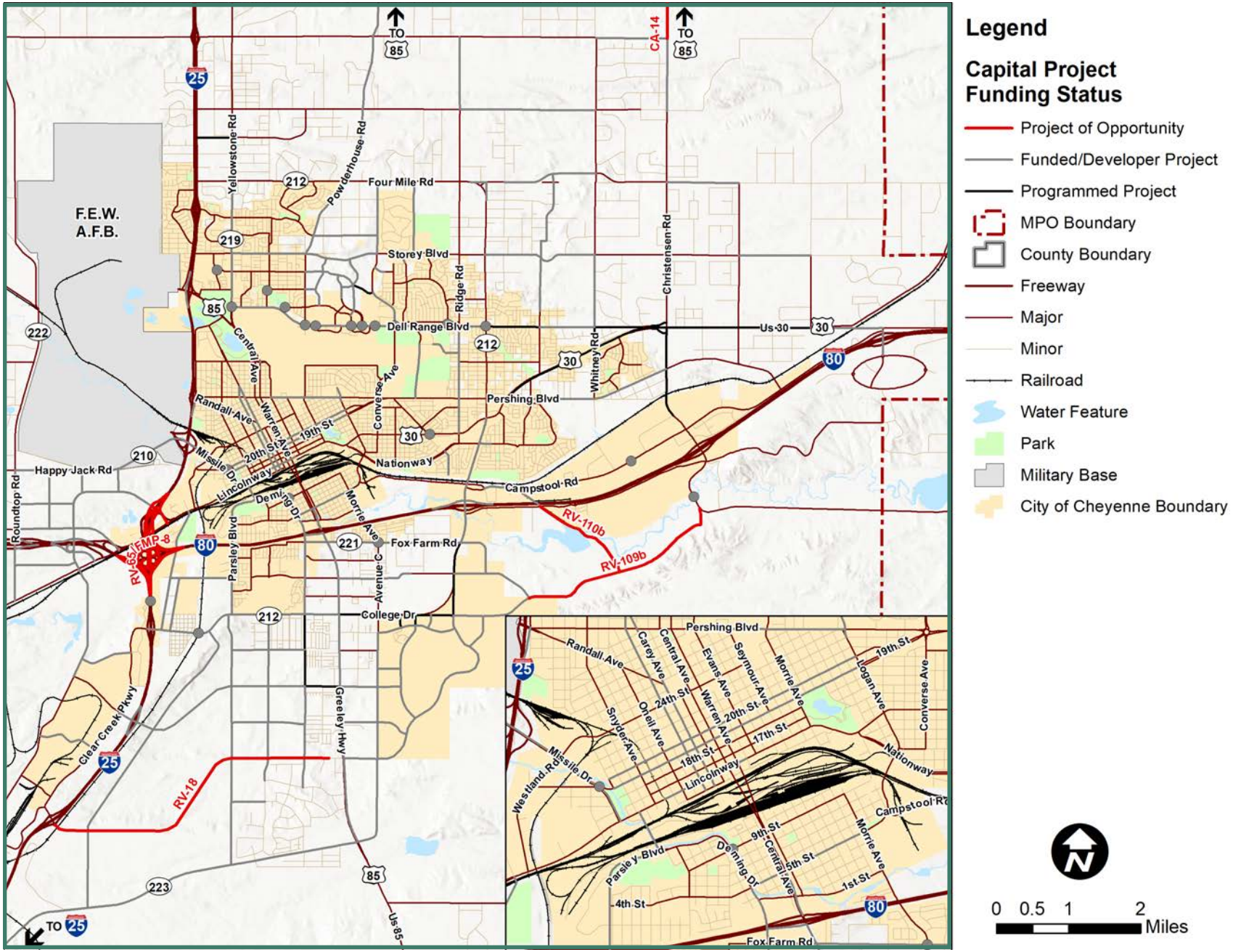
Table 31: Roadway Capital Projects of Opportunity

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	2020 Cost
RV-18	High Plains Rd	I-25	US 85	Construct new roadway	Minor Arterial	Low	$30,000,000
RV-65/ FMP-8	I-80	I-25	I-25	Reconstruct interchange	Interstate	Medium	$310,700,000
RV-109b	Lummis Dr	Allison Rd	Campstool Rd	Construct new roadway	Minor Arterial	Low	$7,925,000
RV-110b	Burlington Trl	Lummis Dr	HR Ranch Rd	Construct new roadway	Major Collector	Medium	$5,650,000
CA-14	Christensen Rd	Iron Mountain Rd	US 85	Construct new roadway	Major Collector	Low	$6,610,000
						Total Cost (2020$)	**$360,885,000**

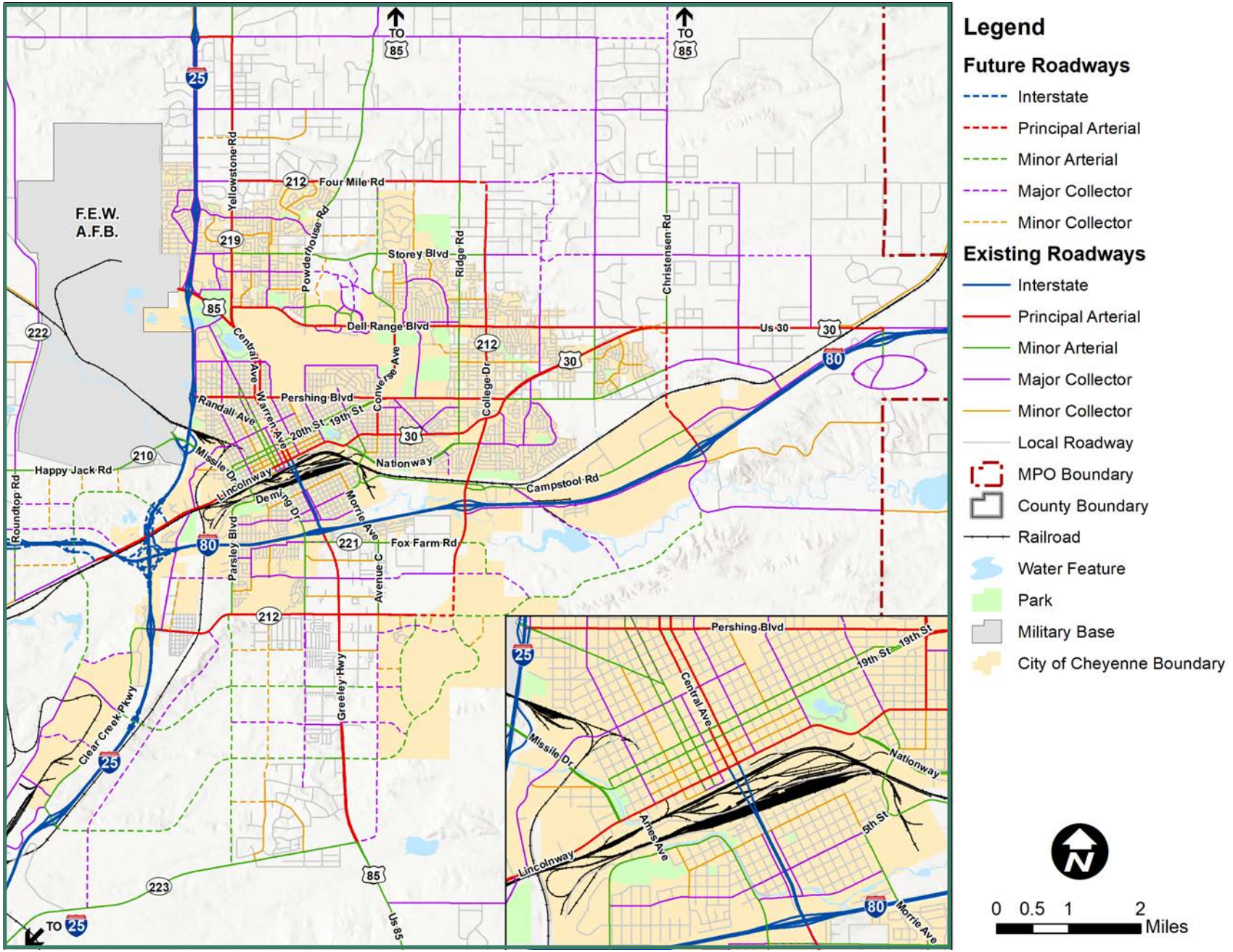
10.1.7 Metropolitan Transportation Plan Map

The final map of all existing and planned roadways by functional classification is provided in **Map 39**. This map is intended for use by the Cheyenne MPO and its member agencies to guide development dedications and roadway design characteristics as land development or redevelopment occurs.

Map 38: Roadway Capital Projects of Opportunity



Map 39: Metropolitan Transportation Plan Map



10.2 TRANSIT PROJECTS

The last update to the Five-Year Transit Development Plan was in 2013 and given the significant changes that the region and the transit system have experienced, an update to the TDP is warranted and is recommended. One specific item that should be a catalyst for updating the plan is the current efforts related to relocating the transit center. Cheyenne is in the planning process for constructing a new transit center by submitting a grant application through WYDOT for $1,300,000. It will move the transit center from the current location in the Downtown Parking Garage to east of downtown at the corner of Lincolnway and Crook Avenue. Other improvements for the system include new bus branding and an updated dispatch system. These significant changes impact the recommendations provided by the 2013 TDP, and present opportunity for CTP that could be furthered by an updated plan.

Other priority transit projects that may be pursued for implementation in the Cheyenne area include:

- Improve the efficiency of paratransit

The Cheyenne area paratransit system is significantly costlier than peer agency systems, so the City should explore frequent origins and destinations that could be served by the existing fixed route service and incentivize paratransit riders to use the fixed route option. This could potentially improve service span and frequency for users and reduce costs.

- Evaluate the feasibility of express service

Cheyenne could offer express service to most frequently used stops at times with high potential for ridership. In 2019 the highest ridership stops, outside of the transfer station, were North Walmart, East Albertsons, East Walmart, and Safeway. Cheyenne could create a retail or shopping route which directly serves a few retail centers such as the Frontier Mall and the East Walmart, shuttling riders from the downtown center to these destinations quicker than what the current system can.

- Evaluate service expansion to current gaps and future growth areas

CTP should investigate opportunities to expand routes that cover areas with high population and economic growth. Future employment growth suggests that Southwest Cheyenne and East Cheyenne have significant job growth potential. The Southeast has the greatest potential for population growth.

The periphery of the existing service area has populations with high ridership potential, and existing service gaps could be filled by extending routes:

  - The northwest corner of the city has the highest concentration of persons 65 and older. Expanding the reach of the West or Northwest route could cover residential areas that have many seniors.
  - Areas along the periphery of the city lack transit coverage for low-wage jobs. Additionally, low income areas are effectively covered except for the manufactured homes south of the city, the apartments in the northeast portion of the City, and the area directly west of the West route.

- Identify ways to limit transfers downtown to streamline trips

CTP could explore combining or inter-lining the five routes that visit downtown by combining pairs of routes and making them 120-minute loops that stop twice at the transit center, instead of 60-minute routes that may begin and end there. Riders that are traveling across town would no longer need to transfer buses, potentially providing better service and comfort.

CTP may explore the possibility of a route that would circle the outer section of the city to provide further connection to current routes, while removing the necessity to travel downtown to transfer. This could provide expanded access for areas without service on the periphery of the city and add some efficiency for riders.

- Positioning for Inter-Regional Transit

Continued regional participation, and potentially financial contribution, in the Front Range Passenger Rail Study can best determine how inter-regional transit service can connect to Cheyenne. Continuing to quantify the number of commuters and tourists traveling from the Front Range area of Colorado will help establish the purpose and need for a future extension to Cheyenne.

10.3 PEDESTRIAN/BICYCLE-ONLY PROJECTS

While many pedestrian and bicycle improvements occur within the right-of-way of roadways and are often included as parts of larger roadway projects, some active transportation projects will occur independent of roadway improvements. Cheyenne's Greenway system is a prime example of these types of projects.

The proposed bicycle network consists of approximately 250 individual projects that have been prioritized using the following timeframes:

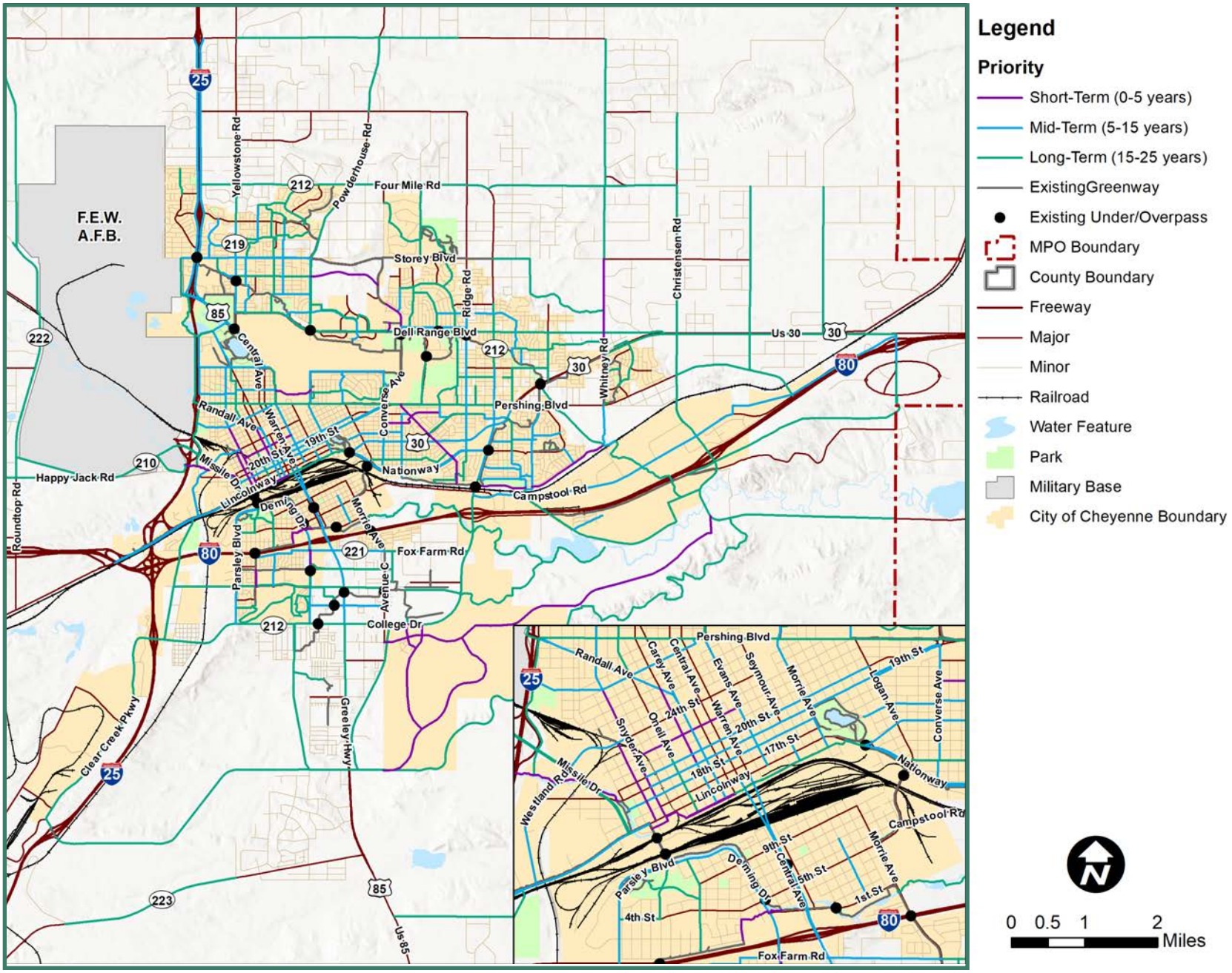
- Short-term (0-5 years)
- Mid-term (5-15 years)
- Long-term (15-25 years)

Both greenways and on-street bicycle facilities are both critical elements to the development of a comprehensive bicycle network. Because greenways are typically off-street facilities and thus function independently of the roadway system, project priorities for Greenways are largely determined by the Greenway Advisory Committee. However, it is recommended that the buildout of the Greenway system follow the relative prioritization shown in **Map 43**.

Providing additional on-street bicycle facilities throughout the region was a common theme identified by several groups during the first phase of community outreach. However, many on-street bicycle facilities may require the removal of a parking or travel lanes to accommodate a safe and comfortable facility. Due to funding shortfalls, implementing on-street bicycle facilities will likely require additional community outreach and a longer timeframe. Therefore, many of the projects identified for near-term implementation will likely push into the medium or long-term timeframe.

The MPO, City, and County should continue to apply available funding to the highest priority greenway and on-street bicycle projects to reach the overall vison provided in the 2012 Cheyenne On-street Bicycle Plan and Greenway Plan Update and 2014 Cheyenne Area Master Plan Transportation Plan. This prioritization creates a tactical approach to building out the network, using a set of criteria to rank the relative benefits of each project. This process is intended to help develop a bicycle network that is cohesive and allows people to travel by bicycle throughout the MPO planning region.

Map 40: Bikeways and Trails Networks Prioritization



10.4 POLICIES

There are several opportunities to improve the transportation system and overall quality of life in the Cheyenne region through changes to policy, in addition to capital improvement projects. Policy changes identified through the LRTP process include:

- Develop a Complete Streets policy for the City of Cheyenne and Laramie County to ensure all modes of travel are safe and convenient for all ages and abilities.
- Develop policies or ordinances to regulate micromobility services as described in the 'Shared Mobility' section.
- Expand the existing Cheyenne 5G ordinance to include DSRC radios and licensure with the FCC as described in the 'Connected and Automated Vehicles' section.
- The TIS/TIA section of Article 3 in the Cheyenne UDC should be supplemented to include more requirements for pedestrian, bicycle, and transit access.
- Supplement Article 4 of the Cheyenne UDC to include provisions for mobility hubs, dedicated transit lanes, bus stations, protected bicycle lanes, traffic calming devices (bulb-outs, road narrowing, etc.), pedestrian-only or transit-only streets or alleyways
- Update Article 5 of the Cheyenne UDC to make use a of a development application waiver process if a mixed-use or high-density project needs to reduce setbacks (or increase maximum lot coverages) to make the most efficient use of land area, especially for urban infill, redevelopment, adaptive reuse, affordable housing, and projects within proximity to transit.
- Amend Article 6 of the Cheyenne UDC to implement current best practices for minimum parking standards, parking dimension requirements, parking reduction authority, parking credits, and provisions for electric vehicles as described in the 'Ordinance Modifications' section.
- Adopt policies for the City of Cheyenne to encourage unincorporated areas that are completely or largely surrounded by the city to incorporate as described in the 'Unincorporated Pockets' section.

10.5 FUTURE STUDIES

Through this process of developing project alternatives, several needs for future studies were identified that are recommended to be performed by the Cheyenne MPO, City of Cheyenne, Laramie County, WYDOT, or a combination of entities within the region. Potential future studies include:

- **Bicycle and Pedestrian Plan Update.** The Cheyenne MPO last performed a bicycle and pedestrian plan in 2012. Quite a few changes have occurred in the multimodal transportation system around the region since that time. Additionally, new guidance has been provided by FHWA, NACTO, and other active transportation advocacy groups that would impact future recommendations.
- **Regional Safety Plan Update.** The MPO's previous safety plan was completed in 2015. An updated plan should reflect the major changes to the regional transportation system that have occurred since this time, newer safety-oriented infrastructure, vehicle technological enhancements, and the latest funding options for safety projects. An updated safety plan should also focus on identifying high-crash locations and develop project scenarios with benefit/cost impacts to be able to efficiently pursue federal and state safety funding.
- **Freight-Oriented Corridor/Intersection Plans.** The Freight Mobility Plan recommends performing studies to better accommodate freight at the following locations:
  - Campstool Way/Campstool Road between College Drive and the major freight generators
  - Industrial Road and College Drive
  - US 85 and 5th Street
  - Fox Farm Road and Morrie Avenue/Avenue C
- **Truck Parking Study.** Perform a study to identify appropriate investments in truck parking along the interstate corridors to be able to handle surges in demand during weather-related closures of local interstates.
- **Transloading Study.** Perform a market assessment to determine whether investments should be made to improve freight transloading within the region between trucks, rail, and cargo airplane.
- **Curbside Management Plan.** Perform a study to identify current stresses on curb lanes in Downtown Cheyenne and other high-activity areas and identify a framework to prioritize the various uses throughout the day, by location, and by intended use.

CHAPTER 11: SYSTEM PERFORMANCE REPORT

11.1 FEDERAL PERFORMANCE REPORTING REQUIREMENTS

In 2010, MAP-21 legislation transformed the transportation federal aid program by establishing new requirements for performance management and performance-based planning and programming, designed to ensure the most efficient investment of federal transportation funds. The FAST Act, which replaced MAP-21 in 2015, continued the performance management and performance-based planning and programming requirements of MAP-21 with minor changes. Pursuant to this legislation, state DOTs and MPOs must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. These requirements outline a systematic and objectives-driven approach to transportation decision-making that supports national goals for the federal-aid highway and public transportation programs. The five national priorities include:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure condition – To maintain the highway infrastructure asset system in a state of good repair.
- Congestion Reduction – To achieve a significant reduction in congestion on the National Highway System.
- System Reliability – To improve the efficiency of the surface transportation system
- Freight Movement – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development

On May 27, 2016, FHWA and the FTA issued the Final Rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning (The Planning Rule). This regulation requires states and MPOs to adhere to the planning and transportation performance management provisions of MAP-21 and the FAST Act.

There are four main priority areas that the Cheyenne MPO Policy Committee approved in 2018 that the Cheyenne Urban Area will track – Safety, Infrastructure Condition (pavement and bridge), Congestion Reduction (travel time and freight reliability) and Transit Asset Management. For each priority, there are specific performance measures for which a target has been set. The Cheyenne MPO has the option to establish their own performance measures and targets or adopt the statewide measures and targets set by WYDOT. System Performance Report presents the current condition and performance of the transportation system with respect to these performance measures and targets.

11.2 ROLE OF THE SYSTEM PERFORMANCE REPORT

The System Performance Report is an important component of the Transportation Performance Management (TPM) approach set forth by FHWA and FTA. Maintaining a systematic and representative performance management approach allows the Cheyenne MPO to evaluate how well its transportation system addresses current needs and prepare itself to meet future opportunities and challenges. Funding for transportation projects is limited: it is important that the right projects and programs are being implemented in order to meet the current and projected needs of the community.

This initial report is intended to serve as a baseline document which the MPO will update with each successive long-range plan update.

11.3 CHEYENNE MPO CURRENT PERFORMANCE

The system performance report evaluates the condition and performance of the transportation system with respect to the four priority areas. A summary of the performance report is found in **Table 36** at the end of the section.

11.3.1 Safety

The five safety performance measures relate to the reduction of fatal and serious injury crashes including non-motorized crashes. The Cheyenne MPO has agreed to adopt WYDOT's targets for this priority area. A target and the current conditions for each of these measures is shown in **Table 32**.

Table 32: Safety Performance Measures and Targets

Measure	1-Year Target	Current Condition (2017)
Number of fatalities	130	123
Rate of fatalities	1400	1264
Number of serious injuries	471	382
Rate of serious injuries	5440	3925
Number of non-motorized fatalities and number of non-motorized serious injuries	30	28

The Connect 2045 LRTP Update applied a detailed safety analysis across modes and considered safety and security as an evaluation criterion in the project prioritization process. The safety criterion was assigned the highest weighting percentage among criterion for both urban and rural projects. As such, projects that address facilities with known safety challenges were likely to pass through into the fiscally constrained project list – of the 10 projects with the highest weighted safety scores, nine of them are included in the fiscally constrained project list recommended for implementation.

Successful implementation of these nine projects by 2045 would result in almost $30 million in current dollars for projects that address safety concerns. Types of projects that address safety challenges include access control, bike enhancements, roadway widening, converting one-way streets to two-way streets, bridge reconstruction, construction of new roadways, and intersection realignment.

The Cheyenne MPO will continue to coordinate with State and safety stakeholders to place an emphasis on maintaining and improving the safety of the transportation system for motorized and non-motorized users by continually implementing the goals and objectives related to safety outlined in the plan, and directing investments toward projects that have the potential to reduce crash rates, improve pedestrian safety, reduce speeds, enhance safety design, and incorporate security improvements.

11.3.2 Infrastructure Condition

There are six performance measures relating to infrastructure condition – four for pavement condition and two for bridge condition. There is a consideration for condition on both Interstate Highway and non-interstate National Highway System (NHS) facilities. The Cheyenne MPO adopted its own targets, rather than adopting those of WYDOT, for the infrastructure condition metrics; the targets and current conditions are shown in **Table 33**.

Table 33: Infrastructure Condition Performance Measures and Targets

Measure	4-Year Target	Current Condition (2017)
Percent of Interstate pavements in good condition	10%	21.4%
Percent of Interstate pavements in poor condition	25%	0.5%
Percent of non-Interstate NHS pavements in good condition	5%	12.0%
Percent of non-Interstate NHS pavements in poor condition	65%	17.4%
Percentage of NHS bridges in good condition	30%	14.9%
Percentage of NHS bridges in poor condition	8%	4.6%

Connect 2045 emphasizes the importance of maintaining infrastructure in the region in good condition as part of the Preservation and Resiliency goal for the LRTP. A Preservation criterion, which focused on pavement condition and flooding impacts, was assigned the highest weighting percentage among criterion for both urban and rural projects. As such, projects that address facilities with known pavement and flooding challenges were likely to pass through into the fiscally constrained project list.

There were five projects where available data on pavement condition indicated that existing pavement was in a condition less than 'Satisfactory' (defined by a PCI under 70). of those five projects, four of them were recommended for inclusion in the fiscally constrained project list. Implementation of these four projects by 2045 would equate to an investment of $13,750,000 in current dollars to support the region in addressing priorities related to infrastructure condition. These five projects included those reconstructing or widening roadways or specifically mitigating drainage issues on the roadway.

Because there are few bridges owned and maintained by agencies other than WYDOT, there is less of a proclivity towards specific projects that address bridge condition. However, there are two projects that do involve bridge reconstruction, both of which are included in the fiscally constrained project list recommended for implementation. Implementation of these projects would result in regional investment of almost $10 million over the next 20 years, which would support bridge condition improvements.

11.3.3 Congestion Reduction

This includes three performance measures and targets related to reliability of travel within the Cheyenne MPO area – two of these measures are related to all travel, while one is specific to truck travel. The Level of Travel Time Reliability (LOTTR) metric describes the ratio of 80th percentile to 50th percentile travel time (with overall system performance then normalized for length, volume, and vehicle occupancy). An acceptable LOTTR is considered >1.5.

For the truck-specific measure, Truck Travel Time Reliability (TTTR) is the ratio of the 95th percentile to the 50th percentile travel time (weighted by segment lengths). The Cheyenne MPO chose to adopt their own targets for this priority area, which are shown in **Table 34** along with the current condition.

Table 34: Congestion Reduction Performance Measures and Targets

Measure	4-Year Target	Current Condition (2017)
Percentage of person-miles traveled on the Interstate system that are reliable (LOTTR > 1.5)	94%	99.8%
Percentage of person-miles traveled on the non- Interstate NHS system that are reliable (LOTTR > 1.5)	85%	90.7%
Truck Travel Time Reliability Index	1.44	1.24

The Connect 2045 LRTP considered congestion performance as part of the Operational Efficiency goal for the plan. The criteria related to operational efficiency was assigned the highest weighting percentage among criterion for urban area projects. Operational efficiency was analyzed using a V/C ratio for current, future, and build-out conditions to understand the near- and long-term landscape of vehicular congestion in the region.

A V/C ratio of 1.0 indicates the existing capacity of the roadway is sufficient to accommodate the existing traffic volumes experienced by the roadway; a ratio above 1.0 indicates that the existing capacity is insufficient to accommodate volumes.

From 2019 data, there was one project identified that looked to address a location with a V/C > 1.0; this project was included in the recommended project list for implementation as a high priority project. By 2045, based on projected growth in vehicular traffic in Cheyenne, there are five projects that address roadway segments where the V/C > 1.0. All five of these projects were recommended for implementation as part of the region's transportation investments by 2045, which would equate to about $27.5 million. Projects identified to help address current or future congestion include elevating the functional classification of some roadways to a higher use (i.e. elevating a roadway from a collector to an arterial), widening roadways, and improving intersections.

There are also 23 projects identified in the fiscally constrained list that involve constructing new roadways to support improved vehicular movement, in addition to projects that involve converting one-way streets to two-way streets, reconstructing roadways and intersections to support more efficient vehicular movement, and construction of new interchanges.

In terms of freight mobility, the Connect 2045 Plan incorporated freight considerations as part of the Multimodal Integration goal. The key metric used during project prioritization was whether the route was identified as a freight route. 28 projects that were identified in the plan are on a designated freight route in the region, and of those 28 projects, 26 of them are recommended for implementation. Similar to those projects that support general vehicular congestion mitigation, the projects that are identified on designated freight routes include those that would support improved freight movement in the Cheyenne area, such as roadway widening, construction of new roadways, reconstruction of roadways and intersections, signalization of intersections, and access control improvements. All of these types of projects would provide direct benefit to freight movement, as they improve or provide new roadway capacity or increase efficiency of the current roadways, in the case of improvements of intersection geometry and signal timing.

11.3.4 Transit Asset Management

Transit Asset Management (TAM) is a business model that uses the condition of assets to guide investments to keep the transit network in a State of Good Repair. Consequences of not being in good repair include: safety risks, decreased system reliability, higher maintenance costs, and lower system performance. The Cheyenne MPO has agreed to adopt WYDOT's targets as shown in **Table 35**.

Table 35: Transit Asset Management Performance Measures and Targets

Measure	4-Year Target	Current Condition (2017)
Rolling Stock Performance – Percentage of vehicles meeting or exceeding useful life benchmark for mileage	50%	68.8%
Facilities Performance – Percentage of assets with condition rating at or above 3.0 on the FTA TERM scale	100%	100%

The Connect 2045 LRTP update includes transit mobility as part of its overarching goals within the Multimodal Integration goal. The prioritization methodology for the recommended project list includes a criterion on whether or not a project is located on a roadway that is an existing transit route. Additionally, the Plan includes and moves forward with all of the recommended projects that are identified in the CTP's TDP that provides recommendations and system improvements to address transit demand and challenges with the existing system.

As part of the TDP, a set of performance measures and standards have been identified along with a performance-measurement system that is sensitive to customer and community issues. Through alignment with the TDP and the close coordination with the CTP, this LRTP will address and further the transit goals and opportunities for the region.

11.3.5 Public Transportation Agency Safety Plan

Certain operations of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants must develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). CTP receives these funds, and is therefore required to complete a Public Transportation Agency Safety Plan (PTASP). The plan must include safety performance targets and be updated and certified by CTP annually.

WYDOT is currently developing this plan on behalf of CTP. The Cheyenne MPO, as the regional MPO, must include these measures in our performance targets. However, since the PTASP has not yet been adopted, the targets are not included in this document; future updates or amendments will include these targets.

11.3.6 Federal System Performance Report Summary

A summary of all performance measures and targets adopted by the Cheyenne MPO is provided in **Table 36**.

Table 36: Cheyenne MPO Performance Measures and Targets Summary

Priority Area	Measure	Target	Current Condition (2017)	Connect 2045 Investments Contributing to Target
Safety	Number of fatalities	130	123	Types of projects that address safety challenges include access control, bike enhancements, roadway widening, converting one-way streets to two-way streets, bridge reconstruction, construction of new roadways, and intersection realignment. Implementation of nine projects that are located on roadways with biggest safety concerns would be investment of approx. $30 million in current dollars.
	Rate of fatalities	1400	1264	
	Number of serious injuries	471	382	
	Rate of serious injuries	5440	3925	
	Number of non-motorized fatalities and number of non-motorized serious injuries	30	28	
Infrastructure Condition	Percent of Interstate pavements in good condition	10%	21.4%	Implementation of four projects equating to $13,750,000 in current dollars would support the region in addressing priorities related to infrastructure condition. Projects include those to reconstruct or widen roadways or specifically mitigate drainage issues on the roadway.
	Percent of Interstate pavements in poor condition	25%	0.5%	
	Percent of non-Interstate NHS pavements in good condition	5%	12.0%	
	Percent of non-Interstate NHS pavements in poor condition	65%	17.4%	
	Percentage of NHS bridges in good condition	30%	14.9%	2 bridge reconstruction projects would result in regional investment of almost $10 million over the next 20 years, which would support bridge condition improvements.
	Percentage of NHS bridges in poor condition	8%	4.6%	
Congestion Reduction	Percentage of person-miles traveled on the Interstate system that are reliable (LOTTR > 1.5)	94%	99.8%	5 projects located on roadways that have existing congestion challenges would equate to about $27.5 million. Projects identified to help address current or future congestion include elevating the functional classification of some roadways to a higher use (i.e. elevating a roadway from a collector to an arterial), widening roadways, and improving intersections. 22 projects involve constructing new roadways, 4 projects that involve converting one-way streets to two-way streets
	Percentage of person-miles traveled on the non- Interstate NHS system that are reliable (LOTTR > 1.5)	85%	90.7%	
	Truck Travel Time Reliability Index	1.44	1.24	
Transit Asset Management	Rolling Stock Performance – Percentage of vehicles meeting or exceeding useful life benchmark for mileage	50%	68.8%	Through alignment with the TDP and the close coordination with the Cheyenne Transit Program, this LRTP will address and further the transit goals and opportunities for the region.
	Facilities Performance – Percentage of assets with condition rating at or above 3.0 on the FTA TERM scale	100%	100%	

APPENDIX A: PUBLIC ENGAGEMENT RESULTS

ROUND 1

Public Open House SWOT Analyses

Figure 41: Walking SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Good connectivity exists on both the Greenway system and in the downtown area • Adequate funding exists for the continued development of the Greenway System • There has been continued development of Greenway system • The size of the City and downtown development patterns make Cheyenne walkable	• Car-centric community and mindset • Incomplete network of walking facilities • Gaps in sidewalk connections • Decaying sidewalk conditions • Light poles in walking path • Poor facilities for people with mobility challenges • Poor enforcement of people crossing the street against the traffic light	• Enhance crosswalks and improve signage along major street crossings • Encourage foot traffic downtown • Educate residents about safe walking routes • Require quality sidewalks with new development • Consider subsidies to encourage residential maintenance of sidewalks • Encourage walking for transportation, not just recreation or exercise	• Weather • Poor maintenance of walking facilities • Culture; people want to drive rather than walk • City regulations • Residential sidewalk maintenance is the homeowner responsibility. This is a challenge for people who do not have the means to maintain the facility.

Figure 42: Biking SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Expansive Greenway system • Safety improvements; underpasses and green pavement treatments • Reasonably sized city for biking • There is a quality shoulder facility on Riding Club • Central and Warren are both better roads to ride a bike than Pioneer and Carey	• Crossing at traffic signals is not practical because the signal does not recognize/ detect a waiting bike • Confusing signage • Impractical bike racks • Bike paths that do not connect to other dedicated facilities • Lack of bike lane on Dell Range for school kids • Incomplete network of facilities • Bike lanes are not maintained– lack of street sweeping, lack of snow removal, existing pot holes, pavement markings are not maintained, poor pavement quality • The greenway signage is confusing as to who has the right-of-way	• Educate roadway users how to interact with each other (bikes, cars, pedestrians) • Add more enhanced bikeway treatments (buffered bike lanes) • Deploy a bike safety education campaign • Provide more buffer space between bike lanes and moving traffic • Provide more bike racks especially near businesses • Use Strava data to find where people are already riding	• Driving culture • Lack of awareness of people riding bikes and rules of the road (i.e. 3-foot passing) • Disrespect for bike facilities and bikes on the road • The Pershing/Carey intersection is very dangerous • Whitney Road has many hills and is a posted speed limit of 45 mph

Figure 43: Transit SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Modern, clean, affordable	• Lack of awareness – people do not know about the transit services, hours of operation, routes, stops, cost, etc. • Limited frequency of service (1-hour headways) • Limited and inefficient routes • Cash only, no mobile app or passes	• Educate people about the transit system as a transportation option • Make people feel safe on public transit • Expand the service area and extend hours of operation • A growing population will support additional transit service • Make transit more accessible for all users	• Poor accessibility for the aging population, mobility impaired users, and those who are visually impaired • Weather as it relates to people waiting at transit stops and walking to/from destinations from transit stops

Figure 44: Driving SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• No “rush hour” • Not many “fru-fru” elements built on the road to slow traffic	• Poor maintenance – lack of snow removal • Poor access to parking downtown • Too many one-way streets downtown • Too much construction/ too many detours • Vehicle traffic discourages foot traffic downtown	• More four way stops in residential areas • More roundabouts • Be better prepared to maintain the roads during inclement weather • Enforce sight distance triangle ordinances – overgrown vegetation • Connecting Beckle Road to Summit Drive would help reduce congestion on Dell Range and Hwy. 30	• Distracted drivers • Lack of courtesy on the road • Congested streets during peak times – poorly timed traffic signals, traffic backs up at roundabouts

Holiday Craft Fair Pop-Up Event SWOT analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Plenty of sidewalks • Good pedestrian lighting at night • Nice Greenway system	• Streets need maintenance; repair potholes • No weekend transit service • Need additional stop light at the new Air Force main gate entrance on Happy Jack • Snow removal needs improvements • Need more street lighting, especially along Storey Blvd	• Educate drivers how to navigate a roundabout • Enforce red light violations • Reduce school zone speed limit to 15 mph • Increase capacity for cars on Dell Range • Encourage driver awareness at intersections • Education on and enforce use of blinkers when driving • Improve access to information about transit stops, schedules, and routes • Need to install 4-way stops in residential areas	• Increasing population is causing more traffic and increasing travel times • Speeding cars on Whitney Road

La Rosa Pop-Up Event SWOT Analysis

S Strengths	W Weaknesses	O Opportunities	T Threats
• Feels safe around La Rosa • Destinations are close, drives are short	• Bus stops are not easily found; need additional signing and lighting • Headways between buses are too long • Information about bus stop locations, routes, and schedules is not easy to find • Riding bikes feels dangerous • Inefficient timing of the traffic lights on Hwy 30	• None provided	• None provided

Public Survey Response Trends

Note: The percentages reported below are calculated individually based on the number of responses received for each question.

- **Walking**
  - 45% of respondents most often walk to trails/greenways; 36% of respondents most often walk to parks/recreation facilities.
  - 35% of respondents 'strongly agree' and 34% 'agree' that most of the neighborhood streets have sidewalks.
  - 25% of respondents agree that their neighborhood sidewalks are safe and well maintained.
  - 40% of respondents 'disagree' and 18% 'strongly disagree' that neighborhood traffic makes it difficult or unpleasant to walk.
  - 32% of respondents 'agree' and 41% 'strongly agree' that the distance to their destinations deters walking as a mode of transportation; their destination is typically too far to walk.
- **Biking**
  - When asked about their experience biking in Cheyenne, 59% of respondents indicated that they do not ride a bike to any local destinations.
  - 33% of respondents indicated that they agree with the statement, "I feel safe and comfortable while biking in their own neighborhood".
  - 60% of responses listed weather as the number one reason preventing people from biking or walking more often, followed by destinations being too far (56% of responses).
- **Transit**
  - 95% of respondents indicated that they do not take transit/bus (286 responses).
  - 43% of respondents indicated that the lack of a direct route to their destination was the largest barrier to taking transit/bus.
  - Other barriers include:
    - The length of the ride (29% of responses).
    - Pick up and/or drop off times (26% of responses).

    - Several respondents wrote their own answer for what prevents them from taking transit/bus. Many explained that it is easier or more convenient to drive themselves to their destination as opposed to taking transit.
- **Driving**
    - Respondents drive to most destinations in Cheyenne
    - 1% of respondents indicated that they do not drive.
    - 68% of respondents strongly agree that driving is the fastest way to travel.
    - 17% of respondents agree that roads are well-maintained.
        - Conversely, 31% strongly disagree that roads are well maintained.
    - 44% respondents indicated that they would feel safer driving if bikes had their own lane or separated pathway.
    - 42% of respondents would feel safer driving if speed limits were enforced.
    - When asked, “What improvements would make you feel safer when driving or riding in a personal vehicle?” Other answers included fixing the potholes, enforcing of red lights and enforcing of driving hands-free, installing more roundabout and less traffic signals, installing protected left turn at signalized intersections.
- Other
    - Respondents are most interested in electric cars (33% of responses) and the least interested in autonomous or self-driving buses. (12% of responses)
    - 40% of respondents wrote-in their own answer, many of which indicated that they are not interested in any new transportation modes or technologies.
    - When asked which factors are most important for the city to consider when prioritizing transportation projects and funding the top three answers were:
        - Providing a balanced network that provides connectivity and comfort for all modes of travel.
        - Increase safety and reduce serious injury crashes for all transportation users.
        - Improve traffic flow and reduce traffic congestion/delay on main roads.

Online Community Input Map

within the **traffic operations and signals category**, most comments related to:

- A change of signal timings at specific traffic signals;
- Requests for roundabouts and traffic signals at increasingly busy intersections; and
- Requests to add in left turn signals at specific intersections.

The comments regarding **safety** expressed concerns about:

- Speeding issues;
- Vehicles not yielding at crosswalks; and
- An increased need for safe spaces for pedestrians and bicyclists such as sidewalks and bike lanes.

Comments regarding **sidewalk/bike lane/greenway improvements** included:

- A need for greenway signage improvements
- Improved maintenance of sidewalks and crosswalks; and
- A need for bike lanes and sidewalks to receive plowing just like the roadways.

The most common comments related to new **facility connections** mentioned a desire for more connections to the greenway system. Respondents expressed how they enjoy the greenways, but they feel it is not always convenient or accessible, especially to cross certain streets and access parks.

Maintenance of the mobility system was another theme frequently noted on the Online Community Input Map. Lack of snow removal, deteriorating asphalt, and overall wear and tear of pavement markings, were just examples of maintenance issues related to sidewalks, greenways, and the roadway network.

Additionally, benefits of roundabouts, an assessment of multimodal facilities, and leveraging local students to create artwork in intersections were a few opportunities mentioned by Online Community Input Map respondents.

In addition to common themes discussed above, there were also trends identified relating to the study area geography:

- A concentration of opportunities pertaining to **vehicular travel efficiency and roadway capacity** were noted south of Downtown and the railyards.
- Comments posted in Downtown Cheyenne were mostly about the need to **improve the pedestrian experience;** including slowing vehicles and improving sidewalk and crosswalk maintenance.
- In the neighborhoods surrounding downtown, comments articulated a need to **develop a more robust sidewalk network.**
- The comments posted north of Downtown were the most diverse. They articulated issues with greenway and bridge maintenance, requested improved wayfinding along greenway routes, and many would like to see walking and riding bikes as a means of transportation, not only for recreation. Other comments in this area were concerned with the **limited capacity of roadways** specifically during school drop off/pick up times and expressed a desire for **more roundabouts** to more efficiently manage traffic.

ROUND 2

The Cheyenne MPO's Connect 2045 project website was the landing page to guide the public and stakeholders through this second engagement process. First, a video presentation provided a brief overview of the findings from the Community Assessment and identified transportation deficiencies. The draft Community Assessment was provided as a link from the Connect 2045 website for the public to review the in-depth analyses into transportation deficiencies.

The primary tool to gather feedback from the public was a survey linked from the Connect 2045 website using the MetroQuest platform. This survey was intended to gather feedback on the public's general attitudes on where and how to allocate transportation funding as well as allow respondents to develop their own suggested transportation solutions using a mapping tool.

The MetroQuest survey is divided into five pages as shown below:

Figure 45: MetroQuest Welcome Page

Figure 46: MetroQuest Goals Page

Figure 47: MetroQuest Trade-offs Page

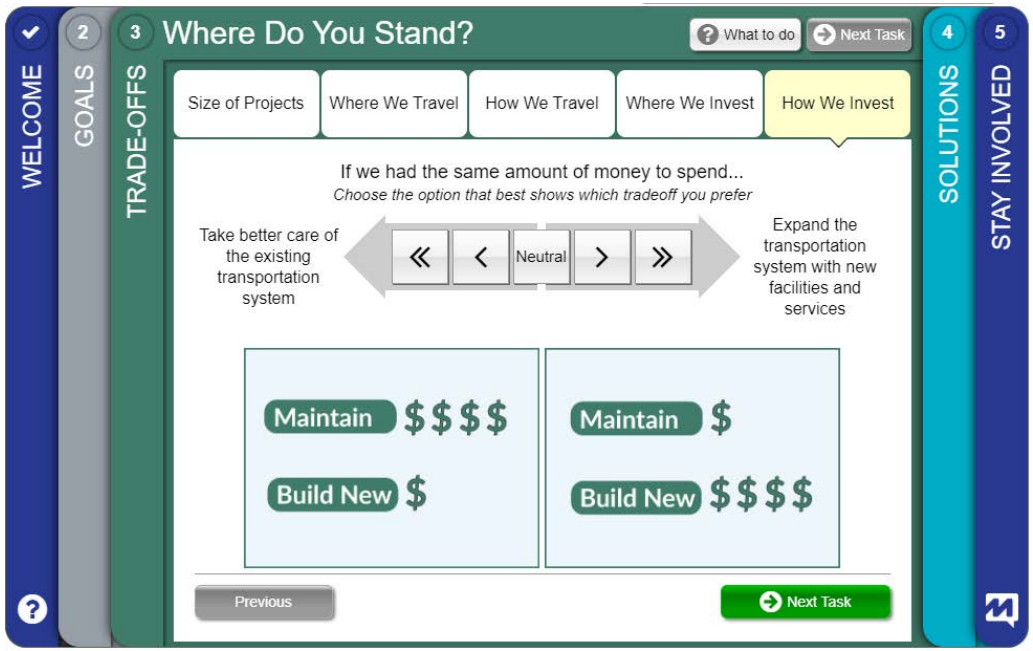


Figure 48: Size of Projects MetroQuest Results

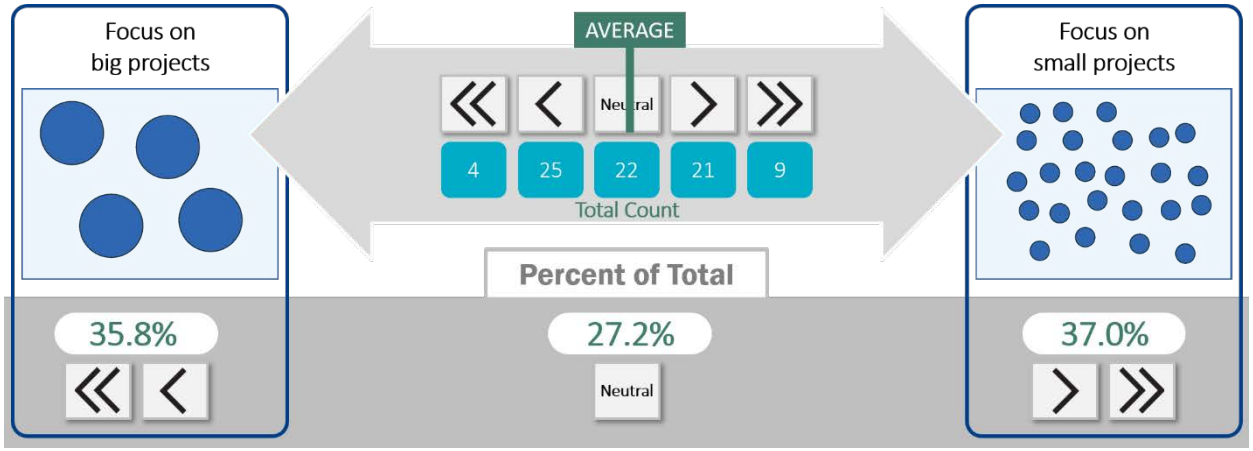


Figure 49: Where We Travel MetroQuest Results

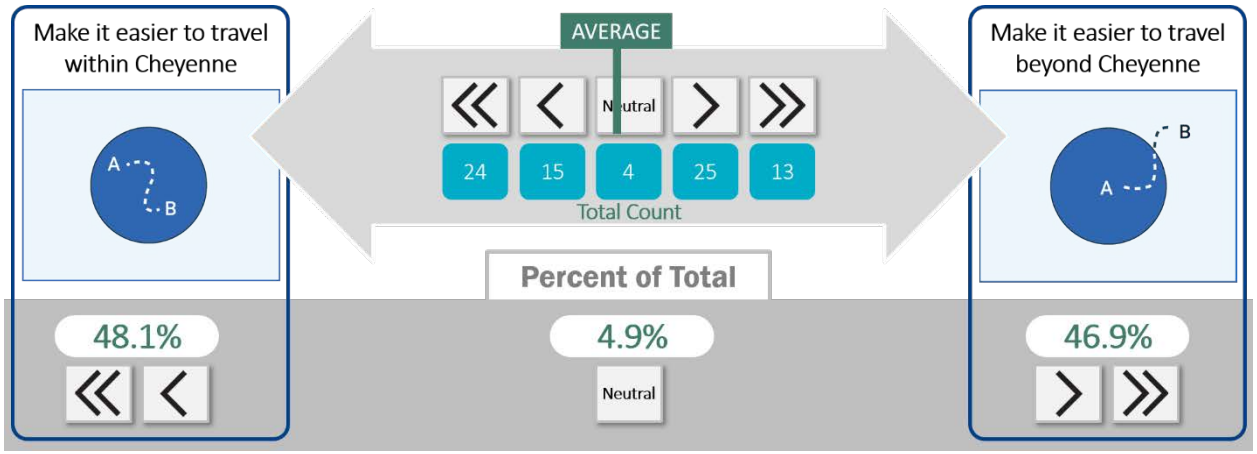


Figure 50: How We Travel MetroQuest Results

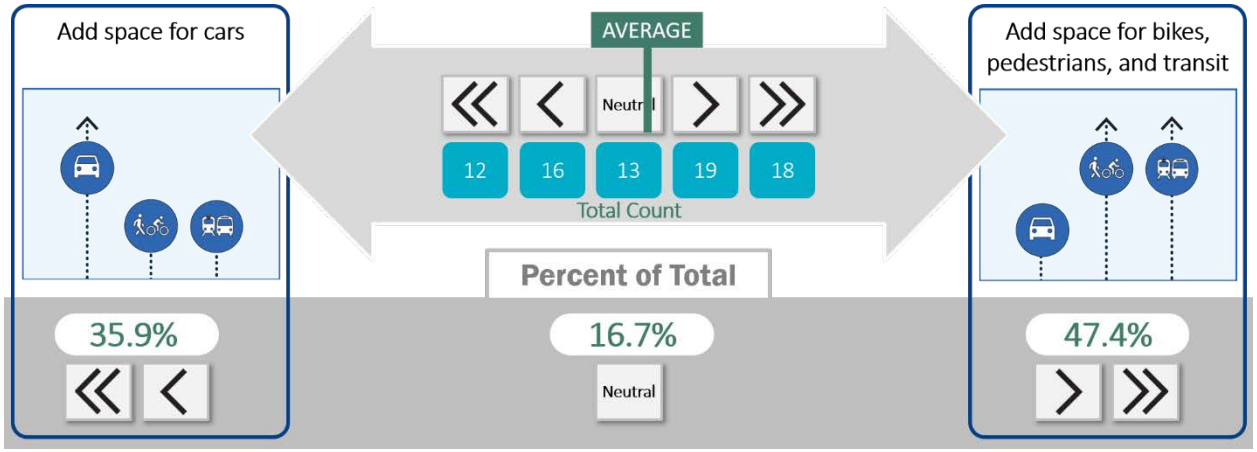


Figure 51: Where We Invest MetroQuest Results

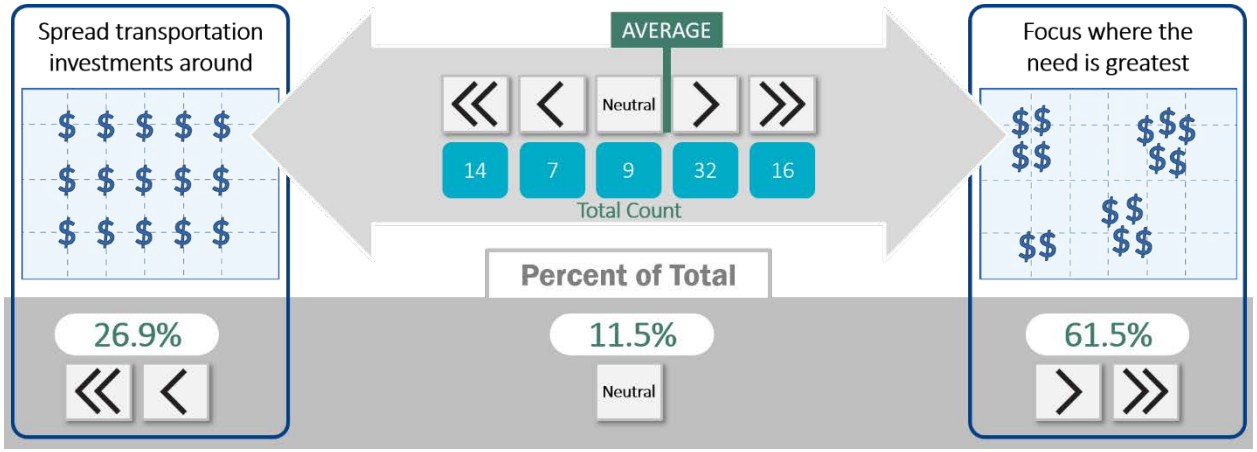


Figure 52: How We Invest MetroQuest Results

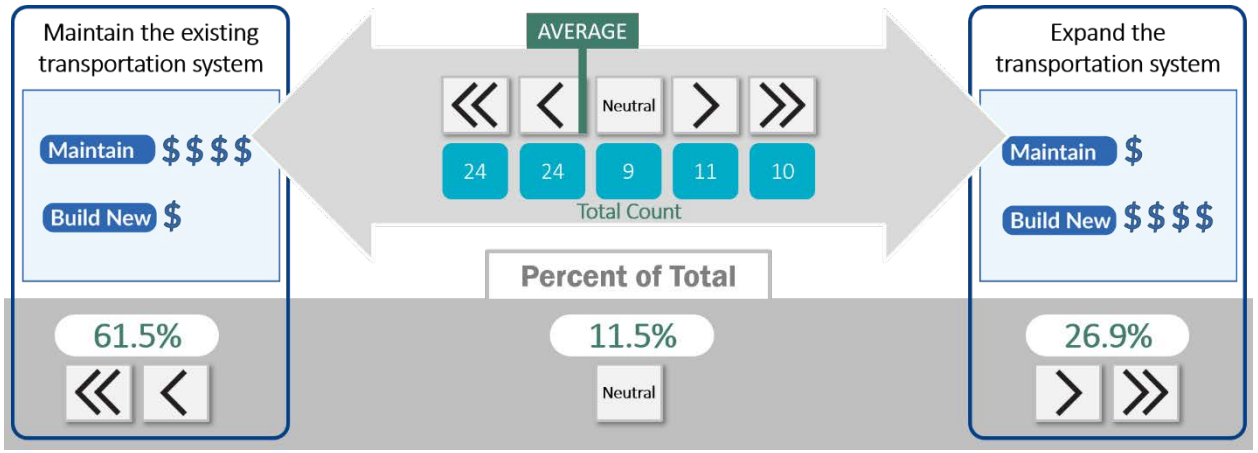


Figure 53: MetroQuest Solutions Page

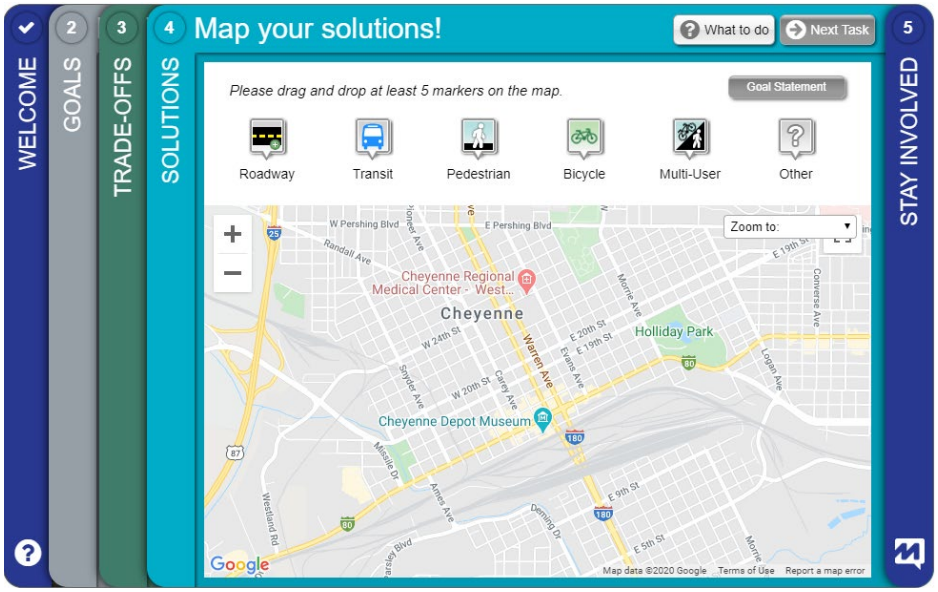
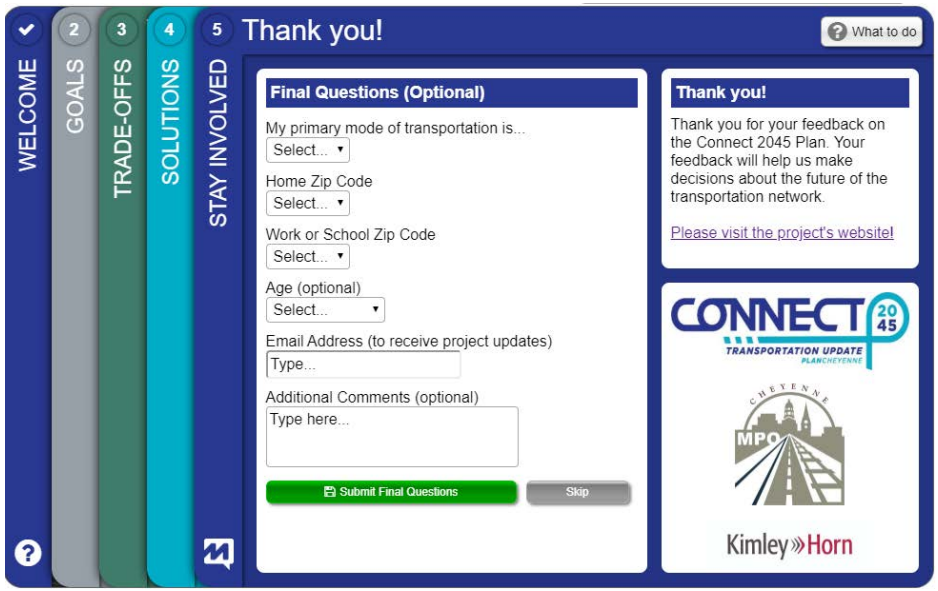


Figure 54: MetroQuest Stay Involved Page



Figures 55 though 57 show the responses to the demographic questions asked on the final page of the survey.

Figure 55: Age of MetroQuest Survey Respondents

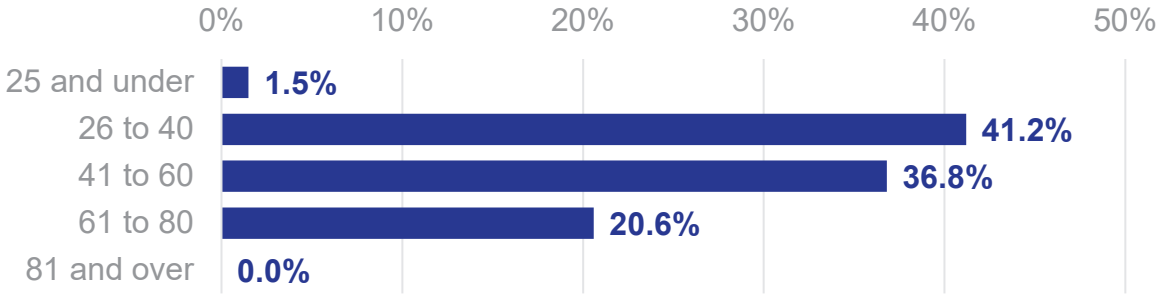


Figure 56: Primary Travel Mode of MetroQuest Survey Respondents

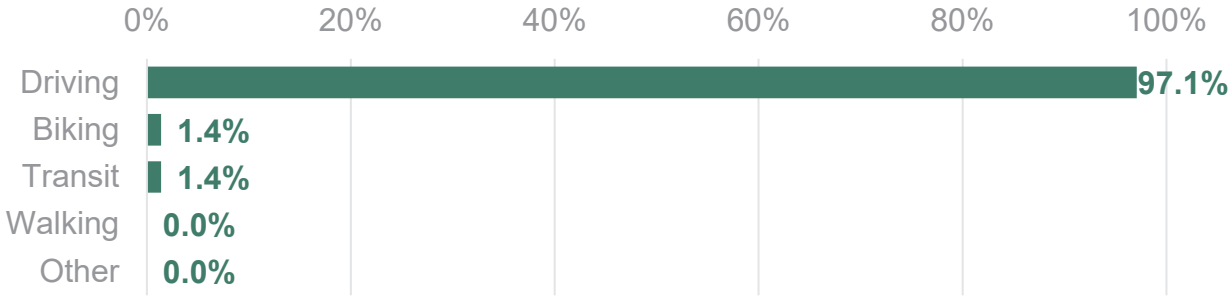
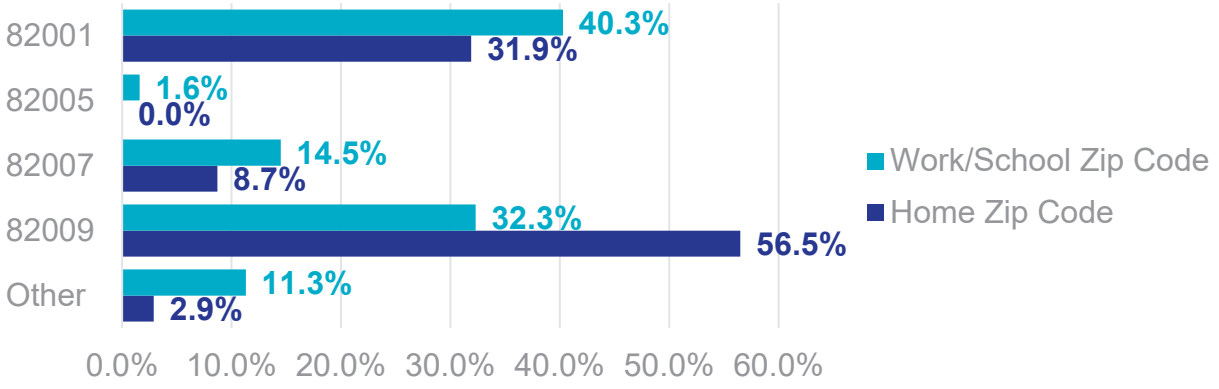


Figure 57: Home and Work Zip Codes of MetroQuest Survey Respondents



APPENDIX B: DEMOGRAPHIC CHARACTERISTICS

Table 37: Laramie County Population by Age (2000-2017)

Description	2000	2010	2017	2010-2017			2000-2017		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
Less than 15	17,367	18,847	19,440	593	85	0.4%	2,073	122	0.7%
15 to 65	54,899	61,386	63,698	2,312	330	0.5%	8,799	518	0.9%
65 and Older	9,351	11,505	15,322	3,817	545	4.2%	5,971	351	2.9%
Total	**81,617**	**91,738**	**98,460**	**6,722**	**960**	**1.0%**	**16,843**	**991**	**1.1%**
Pop. 15 to 64 years	54,899	61,386	63,698	2,312	330	0.5%	8,799	518	0.9%
Pop. <15 and 65+	26,718	30,352	34,762	4,410	630	2.0%	8,044	473	1.6%
% of Pop.									
Pop. 15 to 64 years	67.3%	66.9%	64.7%	-	-	-	-	-	-
Pop. <15 and 65+	32.7%	33.1%	35.3%	-	-	-	-	-	-

Source: U.S. Census; American Community Survey; Economic & Planning Systems

Table 38: Laramie County Households (2000-2017)

Description	2000	2010	2017	2010-2017			2000-2017		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
Households									
Owner-Occupied	22,054	25,533	28,002	2,469	353	1.33%	5,948	350	1.41%
Renter-Occupied	9,873	12,043	11,052	-991	-142	-1.22%	1,179	69	0.67%
Total	**31,927**	**37,576**	**39,054**	**1,478**	**211**	**0.55%**	**7,127**	**419**	**1.19%**
Avg. Household Size									
Owner-Occupied	2.54	2.47	-	-	-	-	-	-	-
Renter-Occupied	2.25	2.24	-	-	-	-	-	-	-
Total	**2.45**	**2.40**	**2.47**	**0.07**	**0.01**	**0.43%**	**0.02**	**0.00**	**0.04%**
Housing Units	34,213	40,462	43,345	2,883	412	0.99%	9,132	537	1.40%
Vacant Units	2,286	2,886	4,291	1,405	201	5.83%	2,005	118	3.77%
Vacancy Rate	6.7%	7.1%	9.9%	-	-	-	-	-	-

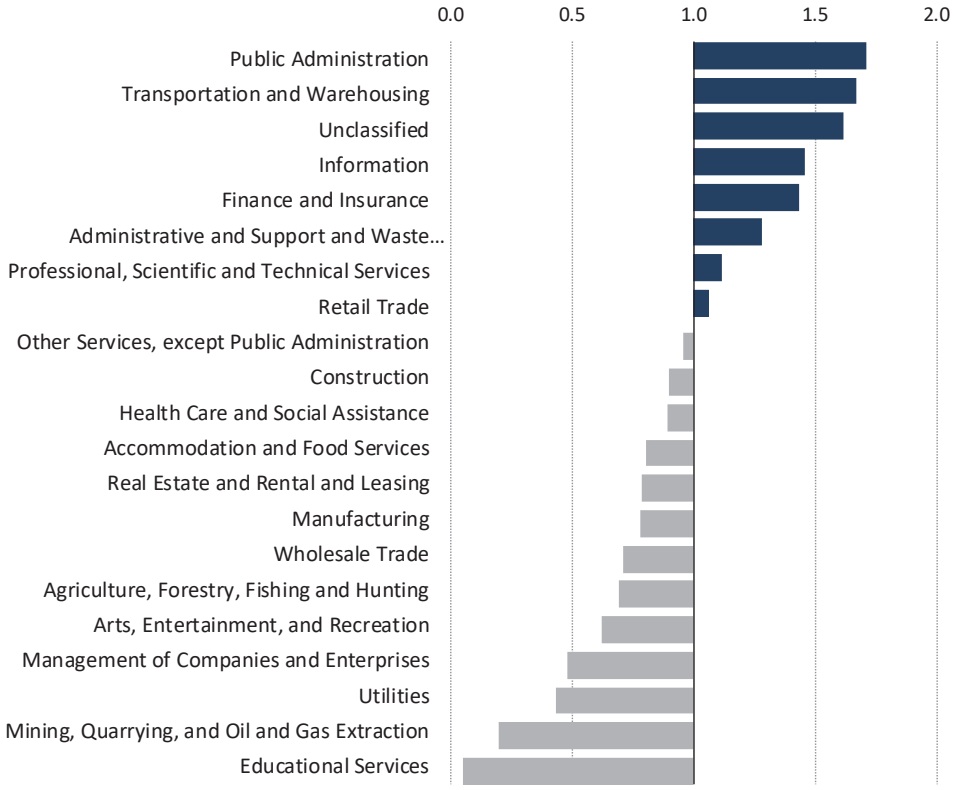
Source: U.S. Census; American Community Survey; Economic & Planning Systems

Table 39: Laramie County Employment by Industry (2000-2018)

Description	2000	2010	2018	2010-2018			2000-2018		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
Wage and Salary Emp.									
Agriculture, Forestry, Fishing, and Hunting	165	279	325	47	6	1.9%	161	9	3.9%
Mining, Quarrying, and Oil and Gas Extraction	79	56	693	638	80	37.0%	614	34	12.8%
Utilities	54	150	194	44	6	3.3%	140	8	7.4%
Construction	2,224	2,621	3,082	461	58	2.0%	858	48	1.8%
Manufacturing	1,652	1,419	1.,281	-138	-17	-1.3%	-371	-21	-1.4%
Wholesale Trade	668	809	989	180	22	2.5%	321	18	2.2%
Retail Trade	5,465	5,259	5,278	18	2	0.0%	-187	-10	-0.2%
Transportation and Warehousing	1,462	2,433	3,134	701	88	3.2%	1,672	93	4.3%
Information	1,038	1,086	1,012	-74	-9	-0.9%	-26	-1	-0.1%
Finance and Insurance	1,347	1,647	1,681	34	4	0.3%	334	19	1.2%
Real Estate and Rental and Leasing	453	502	560	59	7	1.4%	108	6	1.2%
Professional, Scientific and Technical Services	1,149	1,563	1,768	205	26	1.5%	619	34	2.4%
Mgmt. of Companies and Enterprises	268	76	70	-7	-1	-1.1%	-198	-11	-7.2%
Admin., Support, Waste Mgmt., and Rem. Srvcs.	1,361	1,638	1,886	248	31	1.8%	525	29	1.8%
Educational Services	91	226	190	-36	-4	-2.1%	99	5	4.2%
Health Care and Social Assistance	2,557	4,481	5,324	843	105	2.2%	2,767	154	4.2%
Arts, Entertainment, and Recreation	363	317	473	156	20	5.1%	110	6	1.5%
Accommodation and Food Services	3,535	4,004	4,444	439	55	1.3%	909	51	1.3%
Other Services, except Public Administration	1,985	1,227	1,228	1	0	0.0%	-756	-42	-2.6%
Public Administration	6,032	6,975	6,725	-250	-31	-0.5%	693	39	0.6%
Unclassified	0	0	2	2	0	-	2	0	-
Total Employment	**36,512**	**42,432**	**45,996**	**3,564**	**445**	**1.0%**	**9,484**	**527**	**1.3%**
GBSD Industries	12,094	13,665	13,868	202	25	0.2%	1,773	99	0.8%

Source: Bureau of Labor Statistics; Economic & Planning Services

Figure 58: Laramie County and State Location Quotient (2018)



Source: Bureau of Labor Statistics; Economic & Planning Systems

Table 40: Laramie County Employment Growth Forecast by Industry (2020-2045)

Description	2020	2030	2045	2020-2045		
				Total	Ann. #	Ann. %
Low-Growth Forecast						
Agriculture, Forestry, Fishing, and Hunting	432	465	505	73	3	0.63%
Mining	921	992	1,077	156	6	0.63%
Utilities	258	278	302	44	2	0.63%
Construction	4,156	4,639	5,253	1,097	44	0.94%
Manufacturing	1,664	1,694	1,730	65	3	0.15%
Wholesale Trade	1,314	1,410	1,532	218	9	0.62%
Retail Trade	6,908	7,168	7,471	563	23	0.31%
Transportation and Warehousing	4,289	4,935	5,823	1,534	61	1.23%
Information	1,315	1,338	1,366	51	2	0.15%
Finance and Insurance	2,233	2,404	2,611	378	15	0.63%
Real Estate and Rental and Leasing	745	801	871	126	5	0.63%
Professional and Technical Services	2,419	2,784	3,284	865	35	1.23%
Management of Companies and Enterprises	91	92	94	4	0	0.16%
Administrative and Waste Services	2,543	2,839	3,214	671	27	0.94%
Educational Services	253	272	295	43	2	0.63%
Health Care and Social Assistance	7,286	8,384	9,891	2,605	104	1.23%
Arts, Entertainment, and Recreation	619	642	669	50	2	0.31%
Accommodation and Food Services	5,904	6,355	6,904	1,000	40	0.63%
Other Services, except Public Administration	1,596	1,625	1,660	64	3	0.16%
Public Administration	8,737	8,900	9,087	349	14	0.16%
Other	3	3	3	0	0	0.00%
Total Employment	**53,684**	**58,018**	**63,641**	**9,957**	**398**	**0.68%**
High-Growth Forecast						
Agriculture, Forestry, Fishing, and Hunting	432	465	505	73	3	0.63%
Mining	977	1,216	1,558	581	23	1.88%
Utilities	258	278	302	44	2	0.63%
Construction	4,280	5,138	6,316	2,036	81	1.57%
Manufacturing	1,727	1,920	2,173	446	18	0.92%
Wholesale Trade	1,353	1,557	1,837	446	18	0.92%
Retail Trade	6,908	7,168	7,471	563	23	0.31%
Transportation and Warehousing	4,481	5,721	7,632	3,151	126	2.15%
Information	1,344	1,443	1,567	223	9	0.62%
Finance and Insurance	2,233	2,404	2,611	378	15	0.63%
Real Estate and Rental and Leasing	745	801	871	126	5	0.63%

Description	2020	2030	2045	2020-2045		
				Total	Ann. #	Ann. %
Professional and Technical Services	2,419	2,784	3,284	865	35	1.23%
Management of Companies and Enterprises	91	92	94	4	0	0.16%
Administrative and Waste Services	2,543	2,839	3,214	671	27	0.94%
Educational Services	268	333	427	159	6	1.88%
Health Care and Social Assistance	7,612	9,719	12,965	5,353	214	2.15%
Arts, Entertainment, and Recreation	628	676	734	106	4	0.63%
Accommodation and Food Services	5,992	6,690	7,574	1,582	63	0.94%
Other Services, except Public Administration	1,596	1,625	1,660	64	3	0.16%
Public Administration	8,803	9,133	9,520	717	29	0.31%
Other	3	3	3	0	0	0.00%
Total Employment	**54,765**	**62,293**	**72,970**	**18,206**	**728**	**1.15%**

Source: Economic & Planning Systems

Table 41: Population and Household Growth Forecast (2020-2045)

Description	2020	2030	2045	2020-2045		
				Total	Ann. #	Ann. %
Low-Growth Forecast						
Laramie County						
Total Population	100,736	113,074	126,800	26,064	1,043	0.92%
Total Households	40,148	45,375	51,381	11,233	449	0.99%
Total Housing Units	44,375	49,574	55,308	10,933	437	0.88%
Cheyenne Planning Area						
Total Population	88,734	99,289	111,030	22,295	892	0.90%
Total Households	35,274	39,742	44,876	9,602	384	0.97%
Total Housing Units	38,988	43,419	48,306	9,318	373	0.86%
High-Growth Forecast						
Laramie County						
Total Population	101,981	118,706	139,162	37,182	1,487	1.25%
Total Households	40,653	47,676	56,481	15,827	633	1.32%
Total Housing Units	44,933	52,089	60,797	15,864	635	1.22%
Cheyenne Planning Area						
Total Population	89,799	104,107	121,605	31,806	1,272	1.22%
Total Households	35,706	41,710	49,239	13,532	541	1.29%
Total Housing Units	39,465	45,570	53,002	13,536	541	1.19%

Assumes all group quarter population is inside the Cheyenne Planning Area
Source: Economic & Planning Systems

Table 42: Laramie County Commute Patterns (2000-2017)

Description	2000	2010	2017	2010-2017			2000-2017		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
In-Commuters	3,415	9,696	9,831	135	19	0.2%	6,416	377	6.0%
Out-Commuters	4,874	6,471	7,965	1,494	213	3.0%	3,091	182	3.0%
Total Employment	**36,512**	**43,402**	**45,778**	**2,376**	**339**	**0.8%**	**9,266**	**545**	**1.0%**

Source: U.S. Census Longitudinal Employee-Household Dynamics; Economic & Planning Systems

APPENDIX C: ONE-WAY STREET ANALYSIS

WARREN AVENUE AND CENTRAL AVENUE

The LOS is acceptable at all study area intersections in the existing 2020 one-way scenario. An immediate conversion to two-way corridors would cause LOS E at Warren Avenue and Lincolnway. **Map 40** and **Map 41** summarize the 2020 LOS for Central Avenue and Warren Avenue as one-way couplets and separate two-way corridors, respectively.

Map 40: Warren Avenue and Central Avenue 2020 One-Way Couplet

Map 41: Warren Avenue and Central Avenue 2020 Two-Way Concept

Intersections are anticipated to operate at acceptable LOS in the 2045 horizon year, with the exception of Warren Avenue/Pershing Boulevard and Central Avenue/ Lincolnway both at LOS E. Converting Central Avenue and Warren Avenue to two-way streets is anticipated to create LOS F at four study area intersections: the two previously LOS E intersections, Warren Avenue/Pershing Boulevard and Central Avenue/Lincolnway, and two intersections that operate at LOS D as one-way streets, Central Avenue/ Pershing Boulevard and Warren Avenue/Lincolnway. **Map 42** and **Map 43** summarize the 2045 LOS for Central Avenue and Warren Avenue as one-way couplets and separate two-way corridors, respectively.

Map 42: Warren Avenue and Central Avenue 2045 One-Way Couplet

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	LRTP Status	Proj. Year	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-1	Iron Mountain Rd	Whitney Rd	Christensen Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-2	US 85	Terry Ranch Rd	I-80	Access control, ped/bike ennhancements	Principal Arterial	High	Tier 2	2026-2030	$2,150,000	$2,788,000	Federal	WYDOT
RV-3	Christensen Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-4	Riding Club Rd	Ridge Rd	Whitney Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$4,000,000	-	-	-
RV-5a	Four Mile Rd	Braehill Rd	Whitney Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,800,000	-	-	-
RV-5b	Four Mile Rd	Christensen Rd	Reese Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-6a	Mountain Rd	Plainview Rd	Storey Blvd	Construct new roadway	Major Collector	Medium	Developer Funded	-	$1,220,000	-	-	-
RV-6b	Chief Washakie Ave	Storey Blvd	Four Mile Rd	Construct new roadway	Minor Collector	Medium	Tier 3	2031-2035	$3,050,000	$4,652,000	Local	City of Cheyenne
RV-7	Summit Dr/Storey Blvd	College Dr	Whitney Rd	Construct new roadway	Major Collector	Medium	Developer Funded	-	$3,250,000	-	-	-
RV-8a	Cutoff Rd	Frontier Mall Dr	Rue Terre	Realign roadway	Minor Arterial	Medium	Developer Funded	-	$1,100,000	-	-	-
RV-8b	Rue Terre	Current Dead End	Carlson St	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,250,000	-	-	-
RV-8c	Melton St	Powderhouse Rd	Fort Laramie Trl	Construct new roadway	Minor Collector	Medium	Developer Funded	-	$400,000	-	-	-
RV-8d	Carlson St	Powderhouse Rd	Melton St	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,250,000	-	-	-
RV-8e	Fort Laramie Trl	Prairie Ave	Storey Blvd	Construct new roadway	Minor Collector	Low	Developer Funded	-	$3,050,000	-	-	-
RV-8f	Cutoff Rd	Rue Terre	Carlson St	Construct new roadway	Major Collector	Medium	Developer Funded	-	$1,950,000	-	-	-
RV-8g	Cutoff Rd	Carlson St	Storey Blvd	Construct new roadway	Major Collector	Low	Developer Funded	-	$980,000	-	-	-
RV-8h	Melton St	Rue Terre	Carlson St	Construct new roadway	Major Collector	Medium	Developer Funded	-	$430,000	-	-	-
RV-9a	Archer Pkwy	Prairie Center Cir	US 30/I-80 Service Rd	Widen roadway to 5 lanes	Minor Arterial	Medium	Tier 4	2036-2045	$9,170,000	$17,554,000	State	WYDOT
RV-9b	US 30	Westedt Rd	Archer Pkwy	Widen roadway to 3 lanes	Principal Arterial	Medium	Tier 3	2031-2035	$2,320,000	$3,538,000	State	WYDOT
RV-10a	Berwick Dr	Wallick Rd	I-80	Construct new roadway and RR overpass	Minor Arterial	Medium	Tier 4	2036-2045	$18,400,000	$35,223,000	Local	City of Cheyenne
RV-10b	Berwick Dr	I-80	Veta Dr	Construct new roadway	Minor Arterial	Low	Developer Funded	-	$3,250,000	-	-	-
RV-10c	Berwick Dr	Veta Dr	I-25	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$3,250,000	-	-	-
RV-14	Parsley Blvd	Terry Ranch Rd	College Dr	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$7,600,000	-	-	-
RV-15b	Division Ave	Dayshia Ln	Wallick Rd	Construct new roadway	Major Collector	Medium	Developer Funded	-	$2,150,000	-	-	-
RV-16b	Wallick Rd	Clear Creek Pwky	New Collector	Construct new roadway	Minor Arterial	Medium	Tier 4	2036-2045	$6,300,000	$12,060,000	Local	City of Cheyenne
RV-16c	Wallick Rd	US 85	Ave C	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$1,600,000	-	-	-
RV-16d	Wallick Rd	Ave C	Sweetgrass Dr	Construct new roadway	Major Collector	Medium	Developer Funded	-	$550,000	-	-	-
RV-16e	Wallick Rd	New Collector	Parsley Blvd	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$2,550,000	-	-	-
RV-16f	Wallick Rd	Parsley Blvd	Division Ave	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$2,000,000	-	-	-
RV-17a	Ave C	US 85	Wallick Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$3,250,000	-	-	-
RV-17b	Ave C	Wallick Rd	Murray Rd	Construct new roadway	Major Collector	Medium	Developer Funded	-	$2,150,000	-	-	-
RV-18	High Plains Rd	I-25	US 85	Construct new roadway	Minor Arterial	Low	Unconstrained	-	$30,000,000	-	-	-
RV-22a	Powderhouse Rd	Iron Mountain Rd	Rising Star	Improve as collector	Major Collector	Low	Developer Funded	-	$1,150,000	-	-	-
RV-22b	Powderhouse Rd	Rising Star	Lodgepole Creek	Construct new roadway	Major Collector	Low	Tier 4	2036-2045	$720,000	$1,378,000	Local	City of Cheyenne
RV-22c	Powderhouse Rd	Lodgepole Creek	Lodgepole Creek	Construct new bridge	Major Collector	Low	Tier 4	2036-2045	$720,000	$1,378,000	Local	City of Cheyenne
RV-22d	Powderhouse Rd	Lodgepole Creek	Ford Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$520,000	-	-	-
RV-22e	Powderhouse Rd	Ford Rd	US 85	Improve as collector	Major Collector	Low	Tier 4	2036-2045	$720,000	$1,378,000	Local	City of Cheyenne
RV-25a	Converse Ave	Storey Blvd	Four Mile Rd	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$2,700,000	-	-	-
RV-25b	Converse Ave	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$5,000,000	$5,787,000	Local	City of Cheyenne
RV-31	Dell Range Blvd	Van Buren Ave	US 30	Widen roadway to 5 lanes	Principal Arterial	High	Tier 2	2026-2030	$7,150,000	$9,271,000	Local	City of Cheyenne
RV-32a	Roundtop Rd	Otto Rd	I-80	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Low	Tier 4	2036-2045	$1,600,000	$3,063,000	Local	City of Cheyenne
RV-32b	Roundtop Rd	Horizon Dr	Happy Jack Rd	Widen roadway to 5 lanes	Minor Arterial	Medium	Tier 4	2036-2045	$1,940,000	$3,714,000	Local	City of Cheyenne
RV-32c	Roundtop Rd	I-80	Horizon Dr	Widen roadway to 5 lanes	Minor Arterial	Medium	Tier 4	2036-2045	$760,000	$1,455,000	Local	City of Cheyenne
RV-33	Happy Jack Rd	Roundtop Rd	I-25	Widen roadway to 3 lanes	Minor Arterial	High	Tier 3	2031-2035	$5,400,000	$8,236,000	Federal	WYDOT
RV-34	Missile Dr	Lincolnway	I-25	Streetscape, ped/bike enhancements	Minor Arterial	High	Tier 2	2026-2030	$4,500,000	$5,835,000	State	WYDOT
RV-39	Terry Ranch Rd	I-25	US 85	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Medium	Tier 4	2036-2045	$3,800,000	$7,274,000	Federal	WYDOT
RV-41	College Dr	I-25	US 85	Access control, ped/bike enhancements	Principal Arterial	High	Tier 3	2031-2035	$8,650,000	$13,192,000	Federal	WYDOT
RV-42/FMP-2	College Dr	Fox Farm Rd	Lincolnway	Widen roadway to 7 lanes	Principal Arterial	High	Tier 2	2026-2030	$8,900,000	$11,540,000	Federal	WYDOT
RV-45	Powderhouse Rd	Storey Blvd	Iron Mountain Rd	Widen roadway to 3 lanes	Minor Arterial	High	Tier 3	2031-2035	$2,250,000	$3,432,000	Local	City of Cheyenne

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	LRTP Status	Proj. Year	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-47	Converse Ave	Dell Range Blvd	Carlson St	Improve as minor arterial	Minor Arterial	High	Tier 3	2031-2035	$1,300,000	$1,983,000	Local	City of Cheyenne
RV-61/RV-206	I-80	Roundtop Rd	Roundtop Rd	Improve interchange, widen underpass to 5 lanes	Minor Arterial	Medium	Tier 4	2036-2045	$18,000,000	$34,457,000	Federal	WYDOT
RV-62	I-25	College Dr	College Dr	Widen DDI to 4 lanes	Principal Arterial	Medium	Tier 3	2031-2035	$6,950,000	$10,600,000	Federal	WYDOT
RV-65/FMP-8	I-80	I-25	I-25	Reconstruct interchange	Interstate	Medium	Unconstrained	-	$310,700,000	-	-	-
RV-101a	York Ave	Apple St	College Dr	Improve as minor collector	Minor Collector	Medium	Tier 4	2036-2045	$2,175,000	$4,164,000	Local	City of Cheyenne
RV-101b	York Ave	Dayshia Ln	Apple St	Construct new roadway	Minor Collector	Low	Developer Funded	-	$4,350,000	-	-	-
RV-102	New Collector	Terry Ranch Rd	College Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$9,000,000	-	-	-
RV-103a	Apple St	Parsley Blvd	Division Ave	Construct new roadway	Minor Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-104a	Julianna Rd	Parsley Blvd	Division Ave	Construct new roadway	Major Collector	Low	Developer Funded	-	$3,250,000	-	-	-
RV-104b	Julianna Rd	US 85	High Plains Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-105	Remington Way	Parsley Blvd	Troyer Dr	Construct new roadway	Minor Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-107c	Allison Rd	US 85/Greeley Hwy	Ave C	Reconstruct roadway	Major Collector	Low	Tier 4	2036-2045	$2,150,000	$4,116,000	Local	City of Cheyenne
RV-107d	Allison Rd	Ave C	Energy Dr	Construct new roadway	Major Collector	Medium	Tier 4	2036-2045	$2,250,000	$4,307,000	Local	City of Cheyenne
RV-107e	Allison Rd	College Dr	Lummis Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-108	Fox Farm Rd	College Dr	Allison Rd	Construct new roadway	Minor Arterial	Low	Developer Funded	-	$3,150,000	-	-	-
RV-109a	Lummis Dr	College Dr	Allison Rd	Construct new roadway	Minor Arterial	Low	Developer Funded	-	$2,925,000	-	-	-
RV-109b	Lummis Dr	Allison Rd	Campstool Rd	Construct new roadway	Minor Arterial	Low	Unconstrained	-	$7,925,000	-	-	-
RV-110a/FMP-5	Burlington Trl	Industrial/HR Ranch	Campstool Rd	Reconstruct roadway, improve intersections	Major Collector	Medium	Tier 3	2031-2035	$3,030,000	$4,621,000	Local	City of Cheyenne
RV-110b	Burlington Trl	Lummis Dr	Industrial/HR Ranch	Reconstruct roadway	Major Collector	Medium	Unconstrained	-	$5,650,000	-	-	-
RV-111	High Plains Rd	US 85	College Dr/Lummis Dr	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$7,600,000	-	-	-
RV-112a	Sweetgrass Dr	High Plains Rd	Murray Rd	Construct new roadway	Minor Arterial	Medium	Developer Funded	-	$2,550,000	-	-	-
RV-112b	Murray Rd	Ave C	High Plains Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,000,000	-	-	-
RV-113	Nation Rd	Sweetgrass Dr	Ave C	Construct new roadway	Minor Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-114	Cirrus Dr	College Dr	Murray Rd	Construct new roadway	Minor Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-115	New Collector	High Plains Rd	College Dr	Construct new roadway	Minor Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-116	Beckle Rd	Reese Rd	Westedt/Stewart Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$1,100,000	-	-	-
RV-118a	Van Buren Ave	Carmel Dr	Storey Blvd	Construct new roadway	Major Collector	Medium	Developer Funded	-	$5,000,000	-	-	-
RV-118b	Van Buren Ave	Storey Blvd	Child Creek	Construct new roadway	Major Collector	Low	Tier 4	2036-2045	$2,750,000	$5,264,000	Local	City of Cheyenne
RV-118c	Van Buren Ave	Child Creek	Four Mile Rd	Construct new roadway and bridge	Major Collector	Low	Tier 4	2036-2045	$500,000	$957,000	Local	City of Cheyenne
RV-119	Rock Springs St	Ridge Rd	Moran Ave	Construct new roadway	Minor Collector	Medium	Tier 4	2036-2045	$1,100,000	$2,106,000	Local	City of Cheyenne
RV-120	Ridge Rd	Riding Club Rd	Iron Mountain Rd	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,150,000	-	-	-
RV-121	Veta Dr	Roundtop Rd	Berwick Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$1,750,000	-	-	-
RV-122a	Horizon Dr	Roundtop Rd	Berwick Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,700,000	-	-	-
RV-122b	Horizon Dr	Berwick Dr	Lincolnway	Construct new roadway	Major Collector	Low	Developer Funded	-	$2,700,000	-	-	-
RV-123	New Collectors	Happy Jack Rd	Horizon Dr, Berwick Dr	Construct new roadways	Minor Collector	Low	Developer Funded	-	$3,450,000	-	-	-
RV-125	Broken Arrow Rd	College Dr	Swan Ranch Rd	Construct new roadway	Minor Collector	Low	Developer Funded	-	$1,600,000	-	-	-
RV-126a	New Collector (East)	Happy Jack Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	Developer Funded	-	$800,000	-	-	-
RV-126b	New Collector (West)	Happy Jack Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	Developer Funded	-	$800,000	-	-	-
RV-127	New Collector	Roundtop Rd	Berwick Dr	Construct new roadway	Minor Collector	Low	Developer Funded	-	$1,850,000	-	-	-
RV-128	Campstool Rd	Livingston Ave	Burlington Trl	Improve as minor arterial	Minor Arterial	High	Tier 3	2031-2035	$1,100,000	$1,678,000	Local	City of Cheyenne
RV-129	12th St	College Dr	Adams Ave	Widen roadway to 5 lanes	Major Collector	High	Tier 1	2024-2025	$850,000	$984,000	Local	City of Cheyenne
RV-130/FMP-1	Ridge Rd	Lincolnway	Dell Range Blvd	Improve as arterial, add turn lanes at Dell Range	Minor Arterial	High	Tier 2	2026-2030	$2,570,000	$3,332,000	Local	City of Cheyenne
RV-131	Yellowstone Rd	Dell Range Blvd	Four Mile Rd	Ped/bike enhancements	Principal Arterial	High	Tier 2	2026-2030	$4,100,000	$5,316,000	Federal	WYDOT
RV-132	Yellowstone Rd	Dell Range Blvd	Dell Range Blvd	Improve intersection capacity	Principal Arterial	High	Tier 2	2026-2030	$500,000	$648,000	Federal	WYDOT
RV-135	Storey Blvd	Yellowstone Rd	Converse Ave	Widen roadway to 5 lanes	Minor Arterial	High	Tier 2	2026-2030	$2,150,000	$2,788,000	Local	City of Cheyenne
RV-137	5th St	Deming Dr	Morrie Ave	Improve as collector	Major Collector	High	Tier 2	2026-2030	$3,775,000	$4,895,000	Local	City of Cheyenne
RV-138	Walterscheid/Deming	College Dr	5th St	Widen roadway to 5 lanes	Minor Arterial	High	Tier 2	2026-2030	$4,350,000	$5,640,000	Local	City of Cheyenne
RV-139b	Pershing Blvd	Concord Rd	Logan Ave	Realign Intersection	Principal Arterial	High	Tier 2	2026-2030	$2,150,000	$2,788,000	Local	City of Cheyenne
RV-141	Lincolnway	Reed Ave	House St	Streetscape, ped/bike enhancements	Principal Arterial	High	Tier 2	2026-2030	$8,000,000	$10,373,000	Federal	WYDOT
RV-143/DMP-1	Ames Ave	Parsley Blvd	Lincolnway	Improve as minor arterial/mitigate drainage issues	Minor Arterial	High	Tier 3	2031-2035	$3,950,000	$6,024,000	Local	City of Cheyenne
RV-144/DMP-2	Parsley Blvd	College Dr	Ames Ave	Improve as minor arterial/mitigate drainage issues	Minor Arterial	High	Tier 2	2026-2030	$5,750,000	$7,455,000	Local	City of Cheyenne

Proj. No.	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	LRTP Status	Proj. Year	2020 Cost	YOE Cost	Fund Source	Lead Agency
RV-145a/DMP-12	Dell Range Blvd	Yellowstone Rd	College Dr	Enhance ped/bike/drainage	Principal Arterial	High	Tier 1	2024-2025	$6,550,000	$7,580,000	Local	City of Cheyenne
RV-145b	Dell Range Blvd	College Dr	College Dr	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$500,000	$579,000	Local	City of Cheyenne
RV-145c	Dell Range Blvd	Powderhouse Rd	Powderhouse Rd	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$300,000	$347,000	Local	City of Cheyenne
RV-145d	Dell Range Blvd	Prairie Ave	Prairie Ave	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$300,000	$347,000	Local	City of Cheyenne
RV-145e	Dell Range Blvd	Rue Terre	Rue Terre	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$300,000	$347,000	Local	City of Cheyenne
RV-145f	Dell Range Blvd	Stillwater Ave	Stillwater Ave	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$300,000	$347,000	Local	City of Cheyenne
RV-145g	Dell Range Blvd	Walmart	Walmart	Improve intersection capacity	Principal Arterial	High	Tier 1	2024-2025	$300,000	$347,000	Local	City of Cheyenne
RV-149	Bridger Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$1,500,000	-	-	-
RV-150	Gannett Peak Dr	Clear Creek Pkwy	Berwick Dr	Construct new roadway	Major Collector	Low	Developer Funded	-	$3,150,000	-	-	-
RV-151	Crane Bluff Rd	Converse Ave	Ogden Rd	Construct new roadway	Minor Collector	Medium	Tier 3	2031-2035	$2,050,000	$3,126,000	Local	City of Cheyenne
RV-161	Pershing Blvd	US 30	Christensen Rd	Widen roadway to 5 lanes	Minor Arterial	High	Tier 4	2036-2045	$2,330,000	$4,460,000	Local	City of Cheyenne
RV-162	Windmill Rd	Pershing Blvd	Rock Springs St	Reconstruct roadway	Major Collector	High	Tier 3	2031-2035	$1,600,000	$2,440,000	Local	City of Cheyenne
RV-201/FMP-8	I-80	Berwick Dr	Berwick Dr	Construct new interchange	Minor Arterial	Medium	Developer Funded	-	$23,810,000	-	-	-
RV-203/CA-6	I-25	Central Ave	Central Ave	Signalize SB ramps/Central Ave intersection	Principal Arterial	Medium	Tier 2	2026-2030	$600,000	$778,000	Federal	WYDOT
RV-205/CA-8	I-80	College Dr	College Dr	Signalize WB ramps/College Dr intersection	Principal Arterial	Medium	Tier 2	2026-2030	$600,000	$778,000	Federal	WYDOT
RV-207	I-25	Wallick Rd	Wallick Rd	Construct new interchange	Minor Arterial	Medium	Tier 4	2036-2045	$27,100,000	$51,877,000	Federal	WYDOT
RV-208	Old Happy Jack/19th St	Stinson Ave	Dey Ave	Realign intersection with Missile Dr	Principal Arterial	High	Tier 3	2031-2035	$8,000,000	$12,201,000	Local	City of Cheyenne
RV-209/DMP-5	9th St	Crow Creek	Crow Creek	Reconstruct bridge/greenway/mitigate drainage	Minor Collector	High	Tier 2	2026-2030	$4,750,000	$6,159,000	Local	City of Cheyenne
RV-212	College Dr	Four Mile Rd	Four Mile Rd	Realign intersection	Principal Arterial	Medium	Tier 2	2026-2030	$1,100,000	$1,426,000	Federal	WYDOT
CA-1	Carey Ave	15th St	2nd Ave	Convert to two-way street	Minor Arterial	High	Tier 3	2031-2035	$920,000	$1,403,000	Local	City of Cheyenne
CA-2	Pioneer Ave	15th St	2nd Ave	Convert to two-way street	Minor Arterial	High	Tier 3	2031-2035	$940,000	$1,434,000	Local	City of Cheyenne
CA-3	19th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High	Tier 3	2031-2035	$1,260,000	$1,922,000	Local	City of Cheyenne
CA-4	20th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High	Tier 3	2031-2035	$1,260,000	$1,922,000	Local	City of Cheyenne
CA-5	I-25	Randall Ave	Randall Ave	Widen northbound off-ramp to 4 lanes	Principal Arterial	Medium	Tier 2	2026-2030	$160,000	$207,000	Federal	WYDOT
CA-7	I-80	US 85	US 85	Add right-turn lane to EB off-ramp	Principal Arterial	Medium	Tier 2	2026-2030	$230,000	$298,000	Federal	WYDOT
CA-9	Fox Farm Rd	Walterscheid Blvd	College Dr	Improve as collector, widen to 3 lanes	Minor Arterial	Medium	Tier 3	2031-2035	$4,980,000	$7,595,000	Federal	WYDOT
CA-10/DMP-3	Southwest Dr	College Dr	Lincolnway	Improve as collector, mitigate drainage issues	Major Collector	High	Tier 3	2031-2035	$4,760,000	$7,260,000	Local	City of Cheyenne
CA-11	Tranquility Rd	Powderhouse Rd	Converse Ave	Improve as minor collector	Minor Collector	Medium	Tier 4	2036-2045	$1,420,000	$2,718,000	Local	City of Cheyenne
CA-12	Whitney Rd	Dell Range Blvd	Storey Blvd	Widen to 3 lanes	Major Collector	Medium	Developer Funded	-	$1,000,000	-	-	-
CA-13	Pershing Blvd	Evans Ave	Logan Ave	Ped/bike enhancements	Principal Arterial	High	Tier 2	2026-2030	$5,000,000	$6,483,000	Local	City of Cheyenne
DMP-4	I-25	College Dr	I-80	Mitigate drainage issues	Interstate	High	Tier 3	2031-2035	$1,150,000	$1,754,000	Federal	WYDOT
DMP-7/FMP-3	US 85	I-80	5th St	Mitigate drainage issues, improve 5th St intersect.	Principal Arterial	High	Tier 2	2026-2030	$6,610,000	$8,570,000	Federal	WYDOT
DMP-8	Campstool Rd	Burlington Trl	HR Ranch Rd	Mitigate drainage issues	Minor Collector	High	Tier 4	2036-2045	$950,000	$1,819,000	Local	City of Cheyenne
DMP-9	Prairie Ave	Dry Creek	Dry Creek	Mitigate drainage issues	Major Collector	High	Tier 1	2024-2025	$500,000	$579,000	Local	City of Cheyenne
DMP-10	Education Dr	Dry Creek	Dry Creek	Mitigate drainage issues	Major Collector	High	Tier 4	2036-2045	$550,000	$1,053,000	Local	City of Cheyenne
DMP-11	Hilltop Ave	Dry Creek	Dry Creek	Mitigate drainage issues	Major Collector	High	Tier 2	2026-2030	$500,000	$648,000	Local	City of Cheyenne
DMP-13	Campstool Rd	Dry Creek	Dry Creek	Mitigate drainage issues	Minor Collector	High	Tier 1	2024-2025	$150,000	$174,000	Local	City of Cheyenne
DMP-14	Seminoe Rd	Dry Creek	Dry Creek	Mitigate drainage issues	Major Collector	High	Tier 1	2024-2025	$450,000	$521,000	Local	City of Cheyenne
DMP-15	Henderson Dr	Nationway	Homestead Ave	Mitigate drainage issues	Major Collector	Medium	Tier 4	2036-2045	$11,650,000	$22,304,000	Local	City of Cheyenne
DMP-16	Lincolnway	Henderson Dr	Ridge Rd	Mitigate drainage issues	Minor Arterial	High	Tier 3	2031-2035	$1,500,000	$2,288,000	Federal	WYDOT
FMP-6	Fox Farm Rd	Morrie Ave/Ave C	Morrie Ave/Ave C	Reconstruct intersection	Minor Arterial	Medium	Tier 3	2031-2035	$350,000	$534,000	State	WYDOT
FMP-7	New Collector	Southwest Dr	Parsley Blvd	Construct new roadway	Major Collector	Low	Tier 4	2036-2045	$4,700,000	$8,997,000	Local	City of Cheyenne
FMP-9	College Dr	BNSF Railroad	BNSF Railroad	Grade separate railroad crossing	Principal Arterial	High	Tier 4	2036-2045	$10,000,000	$19,143,000	Federal	WYDOT