



Connect 2045: PlanCheyenne Transportation Update

Recommendation Development Report

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INTRODUCTION

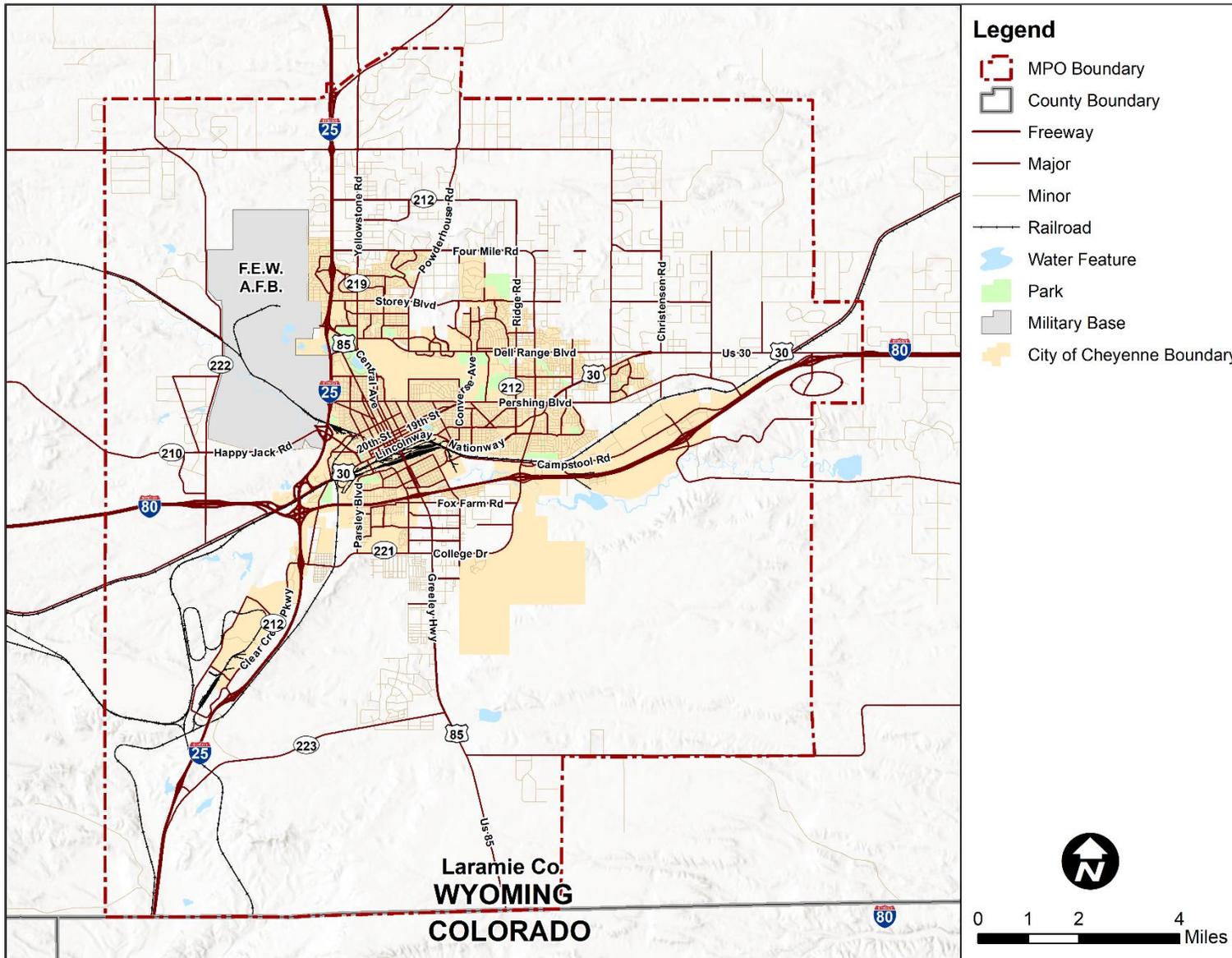
This Recommendation Development Report is a portion of the larger Long-Range Transportation Plan (LRTP), entitled Connect 2045, which defines the Cheyenne, Wyoming region's strategy for enabling a regional transportation system that accommodates the current mobility needs of residents, while also looking to the future. It is a 25-year multimodal plan developed in conjunction with the Cheyenne MPO member jurisdictions, Federal Highway Administration (FHWA), and Wyoming Department of Transportation (WYDOT). The Connect 2045 Plan covers the Cheyenne Metropolitan Planning Organization (MPO) area, which is shown in **Map 1**.

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.

This document builds on the Community Assessment document, which included a comprehensive analysis of existing and forecasted demographics and travel characteristics. The Community Assessment also identified deficiencies in the transportation system for all modes of travel. The Recommendation Development Report develops projects that address the identified transportation deficiencies. This report also provides potential policy guidance to:

- Improve the livability of the Cheyenne region;
- Support interregional travel between Cheyenne and other destinations;
- Improve air quality;
- Accommodate emerging transportation technologies;
- Improve the efficiency of transportation spending; and
- Assist in implementing the transportation projects identified in the Connect 2045 Plan.

Map 1: Cheyenne MPO Region



LONG-RANGE TRANSPORTATION GOALS

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.

Performance-based planning methods help to translate a long-range vision into a set of goals, objectives, and performance criteria that can be used to guide investment decisions. Performance-based planning involves the following steps:

1. **Develop goals and objectives:** Goals are broad statements that describe what will be achieved. Objectives are specific and measurable statements to achieve the goals.
2. **Identify performance measures:** Performance measures are metrics that are used to assess progress towards meeting an objective.
3. **Establish performance targets:** Targets are measures of performance. In this plan, many of the targets involve exceeding the baseline conditions that are experienced today.
4. **Allocate resources:** This step involves determining the specific actions, projects, or initiatives that will be used to achieve the targets.
5. **Measure and report results:** This step involves measuring progress on a regular basis.

Eight goal statements, shown in **Table 1**, have been developed 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.

Goal	Goal Statement
 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.

LIVABILITY PRINCIPLES

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), USDOT, and U.S 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 (CBDG) 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.

LIVABILITY GOALS AND INITIATIVES

Cheyenne is familiar with integrating livability initiatives into transportation investments. The most recent example is 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.

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.

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.

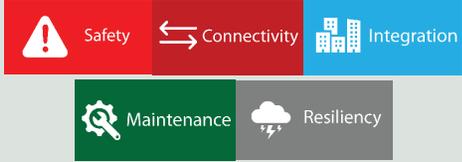
While well-connected street networks and slower streets translate into increased efficiency and livability, roadway safety is perhaps the most important objective of the transportation industry. FHWA recognized the importance of context sensitive and livable design solutions and produced, in partnership 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".

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 2**.

Table 2: Alignment of Connect 2045 Goals and Federal Livability Principles

Federal Livability Principle	Connect 2045 Goal	Example Projects
Provide more transportation choices		<ul style="list-style-type: none"> • 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
Promote equitable, affordable housing		<ul style="list-style-type: none"> • 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
Enhance economic competitiveness		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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.
Value communities and neighborhoods		<ul style="list-style-type: none"> • 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.

ROADWAYS AND INTERCHANGES

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.

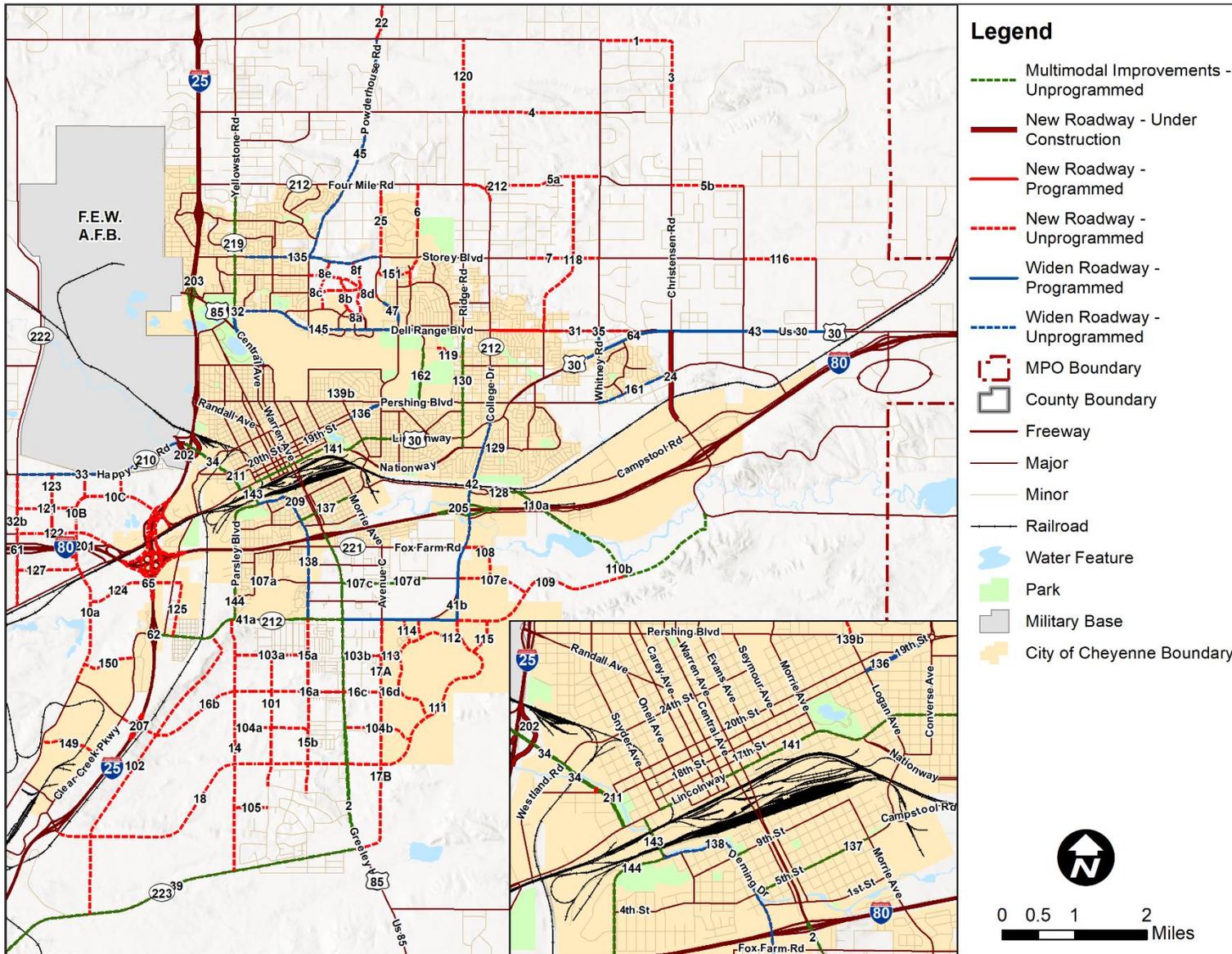
ROADWAY VISION

A robust vision for further developing the roadway system in the Cheyenne region was developed as part of the previous LRTP effort in 2014. This vision will continue to serve as the primary pool of potential roadway projects to address congestion issues and other transportation deficiencies. **Map 2** shows the roadway vision and **Table 3** shows improvements that have been programmed or are under construction since the roadway vision was developed. **Appendix A** provides a detailed view of each potential roadway project.

Table 3: Roadway Vision Projects Programmed or Under Construction

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
8d	Carlson St	Powderhouse Rd to Converse Ave	Construct new rdwy.	1.02	Rural	Partially Programmed
24	Christensen Rd	Commerce Cir to US 30	Construct new rdwy.	1.25	Rural	Under const.
31	Dell Range Blvd	College Dr to US 30	Widen to 5 lanes	2.02	Urban	Partially Programmed
35	Whitney Rd	US 30 to Dell Range Blvd	Widen to 5 lanes	0.24	Urban	Programmed
41b	College Dr	US 85 to Fox Farm Rd	Widen to 5 lanes	2.61	Urban	Programmed
43	US 30	Christensen Rd to Archer Pkwy	Widen to 5 lanes	3.00	Rural	Partially Programmed
44	US 30	Hayes Ave to Christensen Rd	Widen to 5 lanes	1.47	Urban	Programmed
47	Converse Ave	Masonway to Carlson St	Widen to 5 lanes	0.50	Urban	Programmed
64	Dell Range Blvd/ US 30	Intersection	Realign intersection	N/A	Rural	Programmed
202	I-25 at Missile Dr	Interchange	Modify ramps	N/A	Urban	Under Const.

Map 2: Roadway Vision



ONE-WAY STREET CONVERSIONS

Within the Community Assessment, operational analyses were performed on the three one-way couplets in downtown Cheyenne (Warren/Central Avenues, Carey/Pioneer Avenues, 19th/20th Streets) to determine the feasibility of converting them to two-way streets. The analysis determined that it is feasible to convert two of the couplets to two-way streets with minimal negative impacts to traffic operations:

- **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.

Benefits of converting one-way streets to two-way include more direct travel routes, easier navigation for visitors or people unfamiliar with the area, positive impacts to revenues for adjacent retail businesses and property values, and lower travel speeds which increases safety for pedestrians and cyclists.

INTERCHANGE DEFICIENCIES

In the Community Assessment, detailed analyses of operations at 14 interstate interchanges highlighted current or future deficiencies at five locations. 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 (Level of Service (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 Avenue 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 Avenue to avoid potential safety issues.
 - **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 are being constructed at both ramps in Summer 2020 which will substantially improve traffic operations. *Note: this project matches Roadway Vision Project No. 202.*

TRANSIT SYSTEM

The Cheyenne area transit system will need to grow with community needs. Below are recommendations that support the future of transit in Cheyenne by building upon the existing system.

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)/GPS, 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 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.

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.

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.

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.

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.

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.

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.

POSITIONING FOR PREMIUM AND INTER-REGIONAL TRANSIT

As the Cheyenne Region continues to grow, the City, County, and State should continue to coordinate and position itself for premium and inter-regional transit service along the Front Range, connecting Cheyenne to Fort Collins, Denver, Colorado Springs, Pueblo, and eventually to New Mexico. Several studies have already been conducted to define the characteristics and extents of a Front Range regional transit service:

- **Rocky Mtn Rail Authority High Speed Rail Feasibility Study (2010).** The Cheyenne MPO participated in a process led by the Colorado Department of Transportation (CDOT) Division of Transit & Rail and the Federal Railroad Administration (FRA). The initial efforts evaluated the I-25 corridor from Cheyenne to Trinidad, CO and concluded that high-speed transit (HST) is feasible within FRA guidelines on a north-south corridor from Fort Collins to Pueblo. A Cheyenne stop was not considered feasible in the first phase analysis
- **Inter-Regional Connectivity Study (2014).** The State of Colorado's Inter-Regional Connectivity Study (ICS) advanced the HST recommendation from the initial study with the objective to provide preliminary recommendations for HST segments, technologies, and station locations in the Denver metropolitan area that would maximize ridership for the existing and proposed Regional Transportation District (RTD) FasTracks transit system and future HST service.

The study concluded with two broad options of advancing HST technologies which terminate in Fort Collins from Denver along either the US-287/BNSF corridor, or I-25.

- **North I-25 Environmental Impact Study/Record of Decision (2015).** The State of Colorado formalized its position related to both commuter rail and HST. The document officially endorsed commuter rail to terminate in Fort Collins along the US-287/BNSF corridor while HST was identified to terminate in Fort Collins along the I-25 corridor.
- **Front Range Passenger Rail (2019).** The ongoing Front Range Passenger Rail project will build on the many studies that have been conducted in the past along the Front Range to support the development of passenger rail service. The Southwest Chief and Front Range Passenger Rail Commission (Rail Commission) was established and tasked with facilitating development and operation of a passenger rail service along the Front Range. The Rail Commission is now working with CDOT to advance this phase of the Front Range Passenger Rail project. The State of Wyoming and the Cheyenne MPO are actively participating in this initiative. Two alternatives are being carried forward serve the Northern Segment of the alignment that could eventually serve Cheyenne: the I-25 corridor and the BNSF corridor. Factors being considered in this segment include impacts on developed communities, grade separations, train speeds, and planned and desired intraregional transit.

Current analysis has alternative rail alignments terminating in Fort Collins at the South Transit Center South of Harmony Road and Connecting to the MAX BRT. This termination would require a transfer from rail to a Bus Rapid Transit (BRT) to eventually connect to Cheyenne. Extending Rail Service to Cheyenne is challenging as the City of Fort Collins desires the Front Range service connect to South Transit Center and the MAX BRT and not extend on the BNSF Rail Alignment through Downtown Fort Collins.

Options for extending Commuter Rail or BRT north to Cheyenne are being studied and not precluded in determining the preferred alternative.

FUTURE SUPPORT

The options included in the Transit elements of Connect 2045 continue to move the Cheyenne Area towards a more robust and successful transit system. However, 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.

BIKEWAYS AND PEDESTRIAN NETWORK

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.

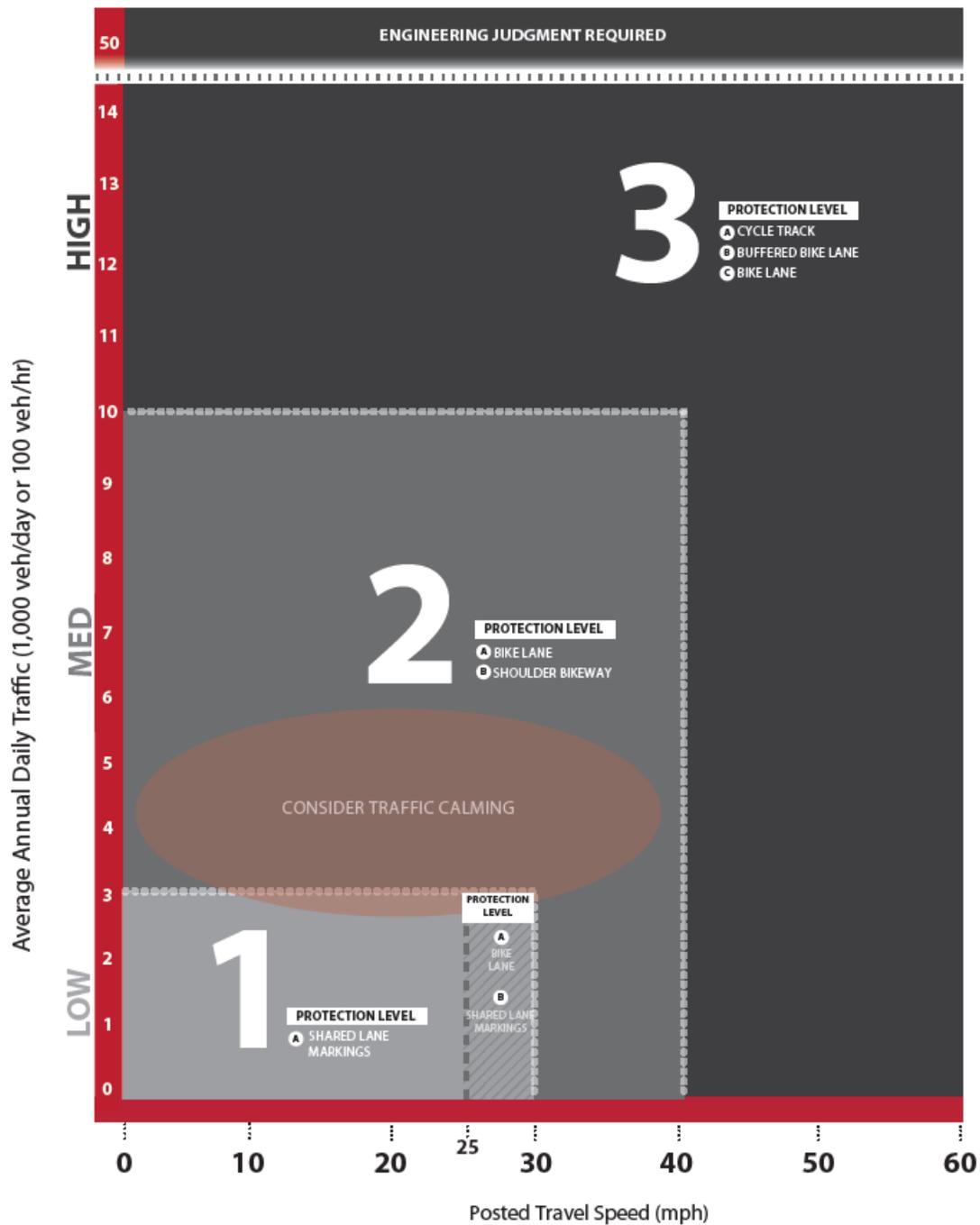
Existing plans including the *2012 Cheyenne On-Street Bicycle Plan and Greenway Plan Update*, *2014 Cheyenne Area Master Plan Transportation Plan*, and *2010 Cheyenne Metropolitan Area Pedestrian Plan* were reviewed and incorporated into the recommended bicycle and pedestrian network.

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.

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 1**), 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).

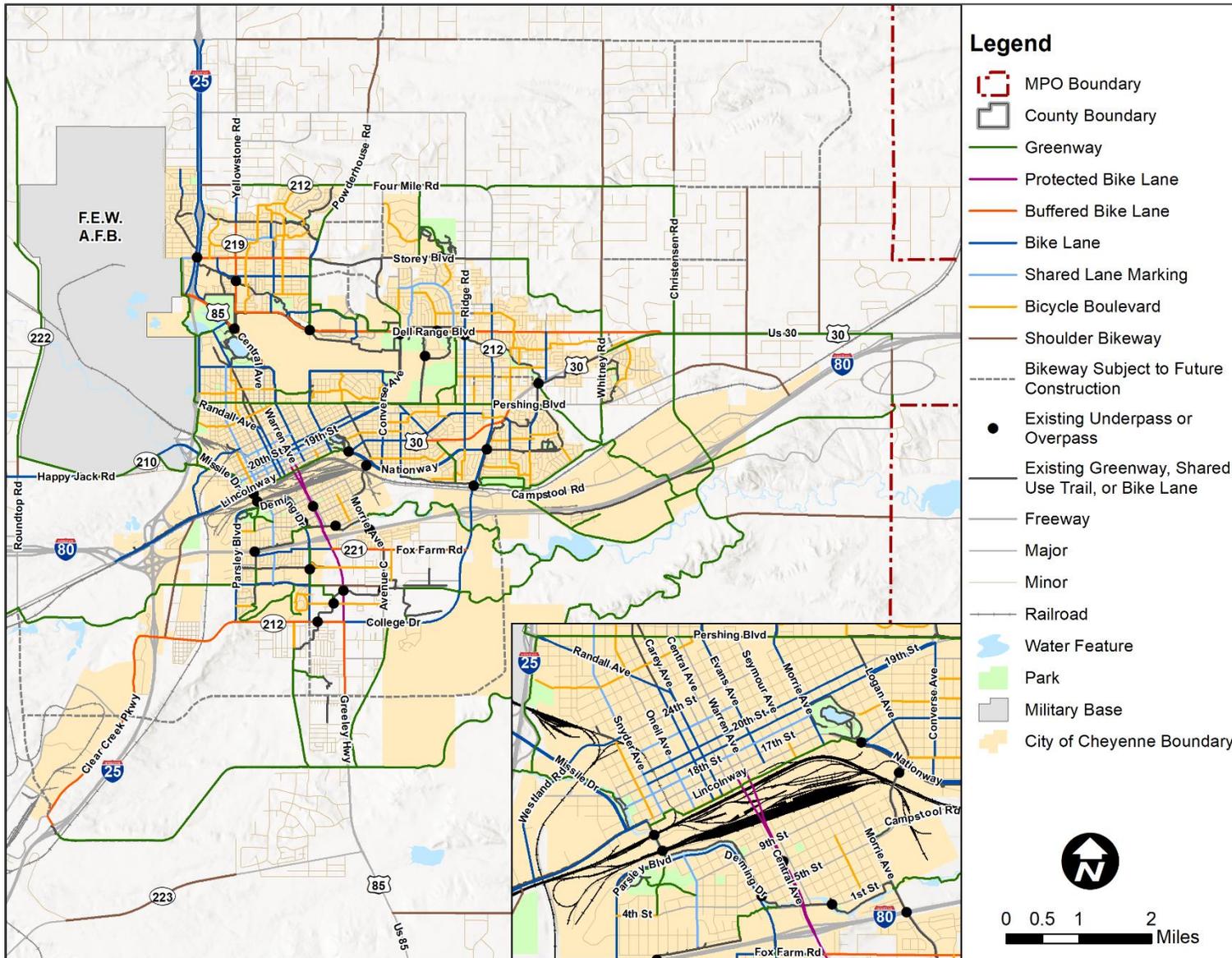
Figure 1: Bicycle Facility Selection Chart



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

Using the facility selection chart, a low-stress network for the Cheyenne region was identified and is depicted in **Map 3**. 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**.

Map 3: Recommended Bikeways and Trails Network Map



Bicycle Network Prioritization

The proposed 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* along with new funding opportunities and priorities identified through public input, focus group meetings with key stakeholders, and community outreach efforts. The network prioritization shown in **Map 4** recognizes that there is limited financial and staff resources to implement the numerous projects identified, however this prioritization allows the City, MPO, and County to tactically approach building out the network. As noted in the *2012 Cheyenne On-street Bicycle Plan and Greenway Plan Update*, a set of criteria is provided which staff can utilize to continue 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.

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

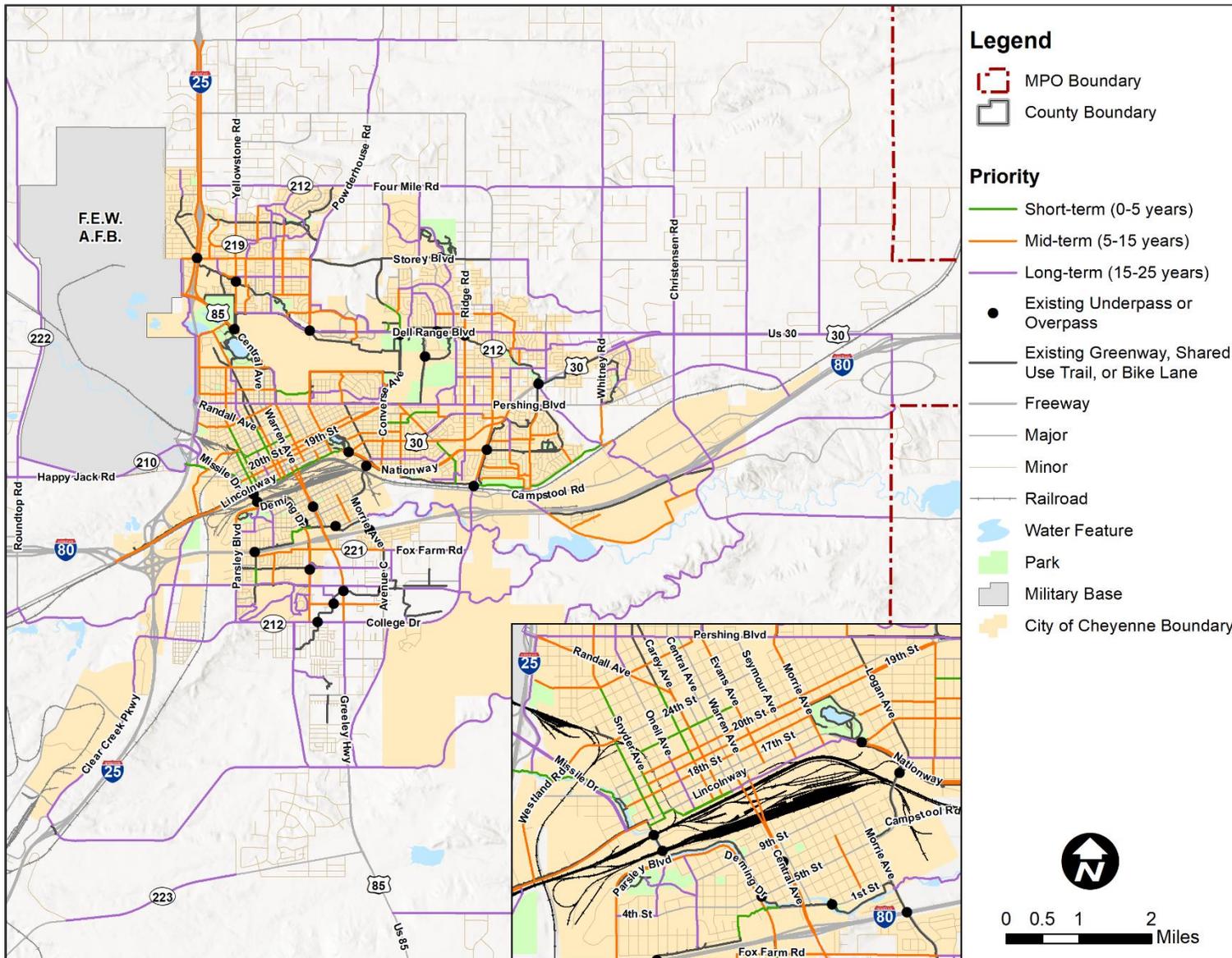
- Short-term (0-5 years)
- Mid-term (5-15 years)
- Long-term (15-25 years)

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, 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.

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.

It is noted that both greenways and on-street bicycle facilities are both critical elements to the development of a comprehensive bicycle network and 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 vision provided in the *2012 Cheyenne On-street Bicycle Plan and Greenway Plan Update* and *2014 Cheyenne Area Master Plan Transportation Plan*.

Map 4: Bikeways and Trails Networks Prioritization



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

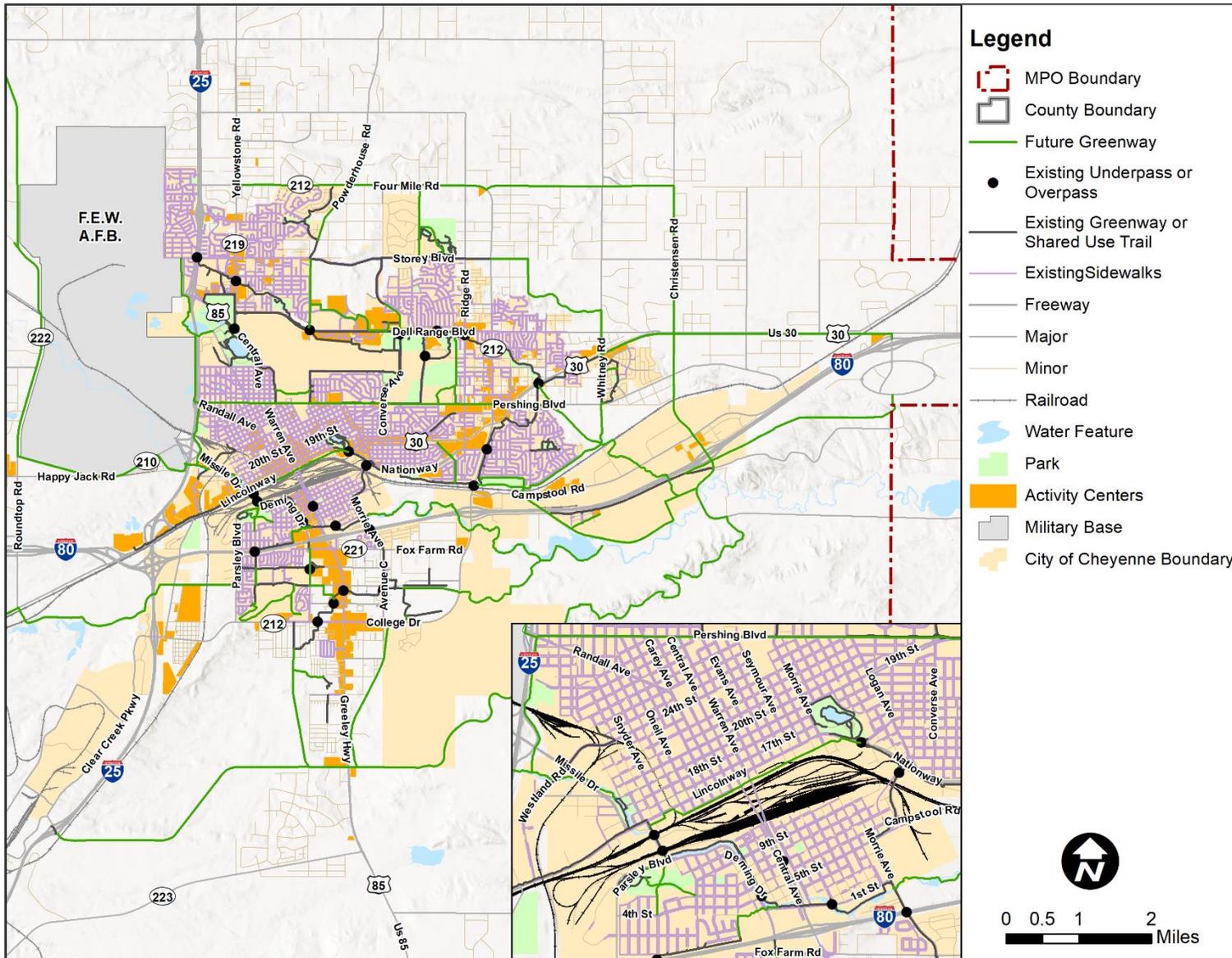
The recommended pedestrian and trails network can address these key issues by implementing geometric elements and operational improvements at priority intersections, priority corridors, and in high-pedestrian activity areas. Priority intersections and corridors are derived from previously identified 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 5**. Example pedestrian facilities and intersection treatments are shown in **Appendix B**.

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 5: Recommended Pedestrian and Trails Network Priority Areas



SAFETY

Providing safe, reliable, and multimodal transportation options to people of all ages and abilities improves the transportation network and community. Transportation safety planning results in strategies and solutions that are targeted to improve safety for all users of the transportation network.

This section provides a summary of the previously completed Cheyenne MPO Transportation Safety Management Plan, provides recommendations regarding an update of that plan, and summarizes safety recommendations from other previously completed plans and studies in the region.

TRANSPORTATION SAFETY MANAGEMENT PLAN (2015) SUMMARY

To develop the Transportation Safety Management Plan (TSMP), the Cheyenne MPO organized a Transportation Safety Advisory Committee (TSAC), which comprised regional safety stakeholders and transportation professionals to engage in a discussion focused on developing solutions to reduce roadway crashes in the region. The TSAC identified emphasis areas based on fatal and injury crash factors in the region where concentrated efforts can make effective positive impacts, including:

- Intersections;
- Distracted Driving;
- Vulnerable Users – bicyclists, pedestrians, and motorcyclists; and
- Safe Driving Policies.

The targets determined by the TSAC as a result of the crash data analysis are for the year 2020. Safety targets for the number of fatalities, serious injury, and other crashes correlate with a percent reduction desired by the TSAC. The long-term vision for Cheyenne is for zero fatalities to occur on roadways.

Safety targets and five specific performance measures were identified as part of the TSMP. Results of the analysis and progress may inform new priorities, strategies, and safety emphasis areas. Strategies were identified to improve safety in Cheyenne.

Recommended strategies included actions such as implementing changes to physical and operational aspects of the transportation system, reviewing, updating, and/or developing policies, integrating other safety improvements/recommendations, and using education or enforcement for increased safety, among others. For each strategy, stakeholders identified one or more implementation steps to be completed along with leaders and potential partners. Strategies that recommend policy changes were also identified. Specific strategies for each emphasis areas are shown in **Table 4**.

Table 4: TSMP Recommended Emphasis Areas and Strategies

Emphasis Area	Strategy
Intersection	Continue addressing high crash locations via infrastructure improvements and education
	Identify and implement best practices for systemic safety applications at intersections
	Identify and implement best practices for pedestrian and bicycle safety at intersections
	Identify and address policy or design standard inconsistencies affecting intersection safety
	Develop mechanisms for implementation of existing codes governing intersection safety
	Conduct education about new infrastructure installations that drivers may find confusing and those for which high levels of violations are observed
Distracted Driving	Conduct outreach on the risks and costs of distracted driving with at-risk populations
Vulnerable Users	Conduct an education campaign about safe practices for Sharing the Road among vehicles, bicyclists, pedestrians, and motorcyclists
	Consistently implement and evaluate installation of pedestrian- and bicycle-friendly infrastructure
	Update administrative code as related to bicycle operation
	Support strengthening of State law and improve public education to increase bicycle and pedestrian safety
	Improve data related to walking and bicycling in Cheyenne
	Research Cheyenne area motorcycle crash statistics and develop appropriate education and enforcement programs
Safe Driving Policies	State-Level Policies and Legislation
	Municipal Ordinances, Policies, and Code Revisions
	Design Standards and Policies that promote best practices for multimodal infrastructure

Recommended Actions for Transportation Safety Management Plan Update

For a plan to be successful and for substantive change to occur, the plan must be implementable. While many strategies were provided, proper implementation, documentation, and accountability is not always clearly identified. For this reason, the following recommended actions as part of a TSMP update are proposed:

- Collect and analyze the latest available crash data to track completion of safety targets and specific performance measures.
 - Analysis may include mapping of hot spots (by corridor, intersection, crash type, user type/mode, etc., where applicable).
 - As recommended in the TSMP, develop a multiyear rolling average for performance measures and overall emphasis area trends.
- Based on updated crash data analysis, identify new priorities, strategies, and safety emphasis areas for planning moving forward, if any.
- Identify strategies where quantifiable data can show progress/improvement (reduction in certain types or severity of crashes, etc.) and start documenting trends and progress.
- Identify strategies where other data will need to be used to track progress (enforcement, education, etc., by number of responding surveys, etc.).
- Update the recommended strategies per emphasis area with those that have been completed since the TSMP has been published.

Specific actions regarding the previously completed TSMP may include:

- Confirm if identified trend of decreasing injuries from intersection crashes by year from previous crash data has continued.
- Confirm if identified trend of decreasing motorcyclist injury by year from previous crash data has continued.
- Confirm if identified downward trend of injuries from distracted driving crashes by year from previous crash data has continued.
- Confirm if identified downward trend of bicycle or pedestrian injuries by year from previous crash data has continued.
- Continue significant enforcement and education efforts to combat impaired driving via the WYDOT Highway Safety Office.
- Continue efforts to improve conditions for bicyclist and pedestrians at intersections as they are the most vulnerable users of the roadway system.

SAFETY RECOMMENDATIONS FROM PREVIOUSLY COMPLETED STUDIES

Recommendations from WYDOT Highway Safety Plan (2020)

- Partner with the Wyoming Highway Safety Behavioral Program, as recorded in the FY2020 Highway Safety Plan, to conduct impaired driving activities and a Traffic Safety Education Program via the Cheyenne Regional Medical Center
 - Activities may include partnering with traffic safety advocates, providing personnel to man safety booths, media to support events, producing educational materials, etc.
- Partner with the Wyoming Highway Safety Behavioral Program, as recorded in the FY2020 Highway Safety Plan, to conduct a DUI Mobile Command Vehicle via the Cheyenne Police Department
 - Activities may include supporting high visibility enforcement of Wyoming DUI laws and include participation in DUI Task Force and educational events locally and statewide.
- Continue to apply for state grants via the Highway Safety Behavioral Grants Office.

Recommendations from PlanCheyenne Transportation Plan (2014)

- Update the bicycle gap analysis completed for the Cheyenne Transportation Plan (2014) for connectivity to determine potential projects for network connectivity and improved safety (performed in Community Assessment document).
- Implement design principles for a multimodal transportation system and non-motorized design guidelines for new development as found in the Cheyenne Transportation Plan (2014).

Recommendations from Previously Completed MPO Studies/Plans

Many beneficial plans and studies have been conducted by Cheyenne MPO and others that include elements dealing with the safety of the transportation system. The following previously completed studies have identified many safety improvements that will benefit the transportation network.

- Incorporate safety recommendations as proposed in the previously completed studies/plans:
 - Municipal Complex Pedestrian Routing Plan (2020)
 - East Dell Range Boulevard/US 30 Corridor Study (2019)
 - Parsley Boulevard Corridor Study (2019)
 - Reed Avenue Rail Corridor Master Plan (2018)
 - Cheyenne Frontier Days Traffic Study and Transportation Plan (2017)
 - Converse/Dell Range Intersection Traffic Safety Plan and Converse Avenue 35% Design Plan (2017)

- Storey Boulevard & Van Buren Avenue Plan and Official Mapping (2016)
- Dell Range Boulevard Corridor Study (2016) and Road Safety Audit (RSA)
- High Plains Road Corridor Study (2016)
- Evers Boulevard (2016)
- Downtown Parking Plan (2016)
- Pershing Boulevard Complete Streets (2015)
- Provide multimodal connectivity and safety by building upon implementing recommendations from the following previously completed plans:
 - Southeast Greenway Trail Connector Plan (2018)
 - Archer Trail Connector Plan (2018)
 - Cheyenne Lincolnway Placemaking Conceptual Downtown Pedestrian and Urban Design Plan (2016)

Recommendations to Existing Policies and Plans

- Utilize the Street Enhancement Toolbox (2013) to ensure public safety and comfort are considered in upcoming projects
- Encourage use of the City of Cheyenne Neighborhood Traffic Management Program (2016) to address resident concerns
- Implement near-, medium-, and longer-term projects that increase bicycle safety as proposed in the Cheyenne Area On-Street Bicycle Plan and Greenway Plan Update (2012)
- Update the Design Guidelines and Policy Handbook (2012) (Cheyenne On-Street Bicycle Plan and Greenway Plan Update, Volume II)

ENHANCING 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.

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 grown in travel impacts is shown in **Table 5**.

Table 5: 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 6**.

Table 6: 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.

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 grow at a slightly higher annual rate of 3.0%, reaching approximately \$526 million by 2030 and \$820 million by 2045.

Table 7: 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: Economic & Planning Systems

TRAVEL AND TOURISM IMPROVEMENTS

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

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 have been installed by the City at no additional costs.

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 UP Railroad Depot in Downtown Cheyenne chronicles the City's railroad history dating to the 1880s. The 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 Street 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 a 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 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.

Air Service

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.

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 local 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.

AIR QUALITY

Laramie County is not recognized by the EPA as a non-attainment area, meaning that the Cheyenne area has air quality at or above national standards. However, transportation nationwide is now the largest contributor of greenhouse gas emissions¹. 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.

STRATEGIES TO MANAGE EMISSIONS FROM TRANSPORTATION

Improvements to System Operational Efficiencies

The USDOT lists the following five ways that transportation agencies can reduce traffic-related air pollution and improve air quality²:

- 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.

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.

¹ <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

² <https://www.transportation.gov/mission/health/cleaner-air>

The Cheyenne MPO, in conjunction with the County and cities, should apply (or continue applying) for funding to administer CMAQ projects. Historically, CMAQ funding in the State of Wyoming includes chemical dust suppression for roadways.

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

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.

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 subsequent sections of this report.

SYSTEM RESILIENCY AND RELIABILITY

Facility maintenance and flooding are both issues that impact the regional transportation system in and around Cheyenne. Improve resiliency to these natural and manmade issues will increase the reliability of travel times within the region and improve 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 is shown in **Map 6**.

The City of Cheyenne performed a Drainage Master Plan which identified areas where flooding and stormwater management are known issues. **Table 8. Map 7** shows locations where flooding impacts the functionally classified roadway system.

Table 8: Drainage Master Plan-Identified Impacts to Regional Transportation System

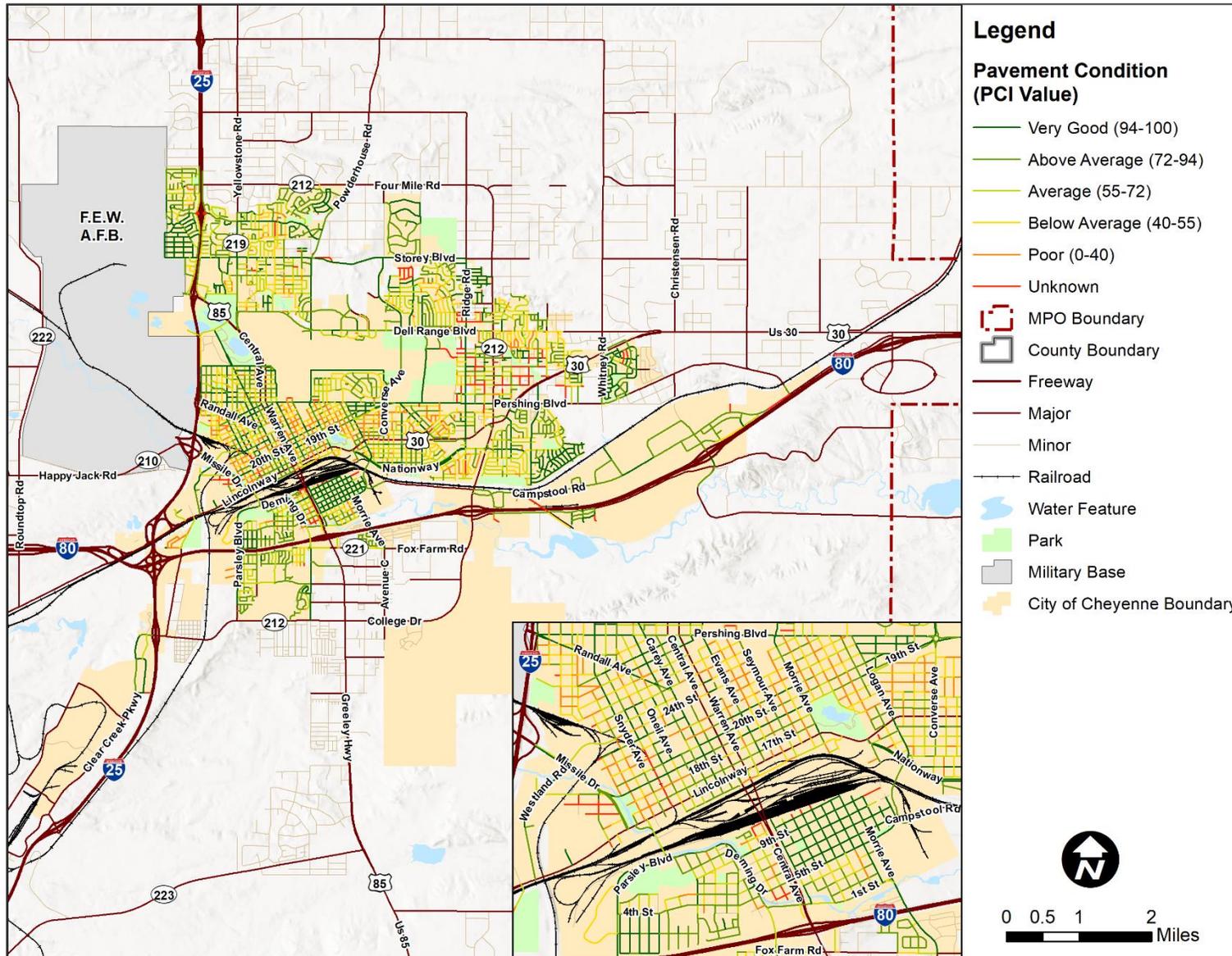
Roadway	Location	Functional Classification	DMP Cost
Ames Ave/Deming Dr	Clear Creek	Minor Arterial	\$2,042,400
Parsley Blvd	Clear Creek	Minor Arterial	\$1,868,400
Southwest Dr	Clear Creek	Major Collector	\$802,800
I-25	Clear Creek	Interstate	\$1,146,000
19 th St*	Crow Creek	Minor Arterial	\$1,760,400
9 th St	Crow Creek	Minor Collector	\$1,416,000
5 th 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
Seminole 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:

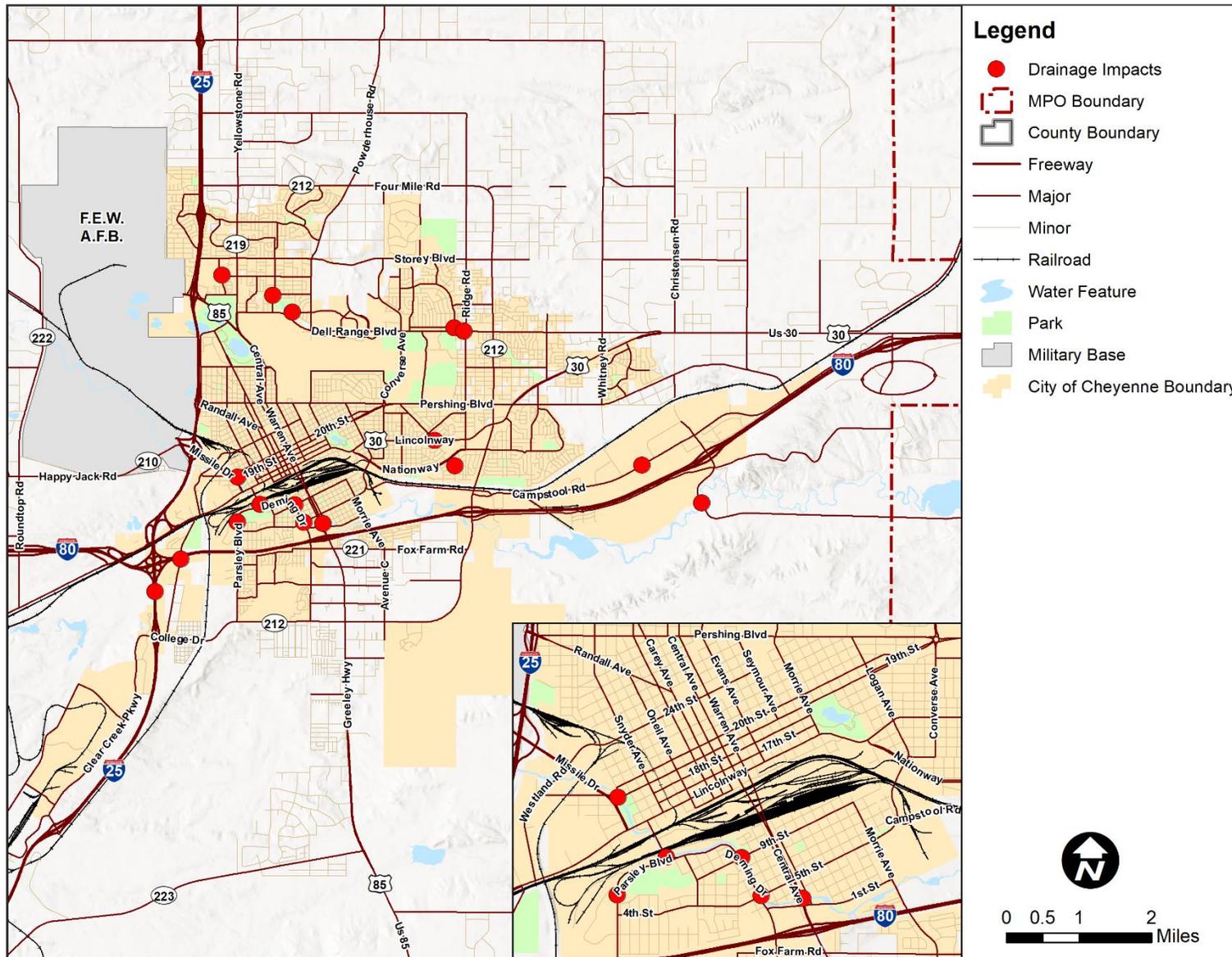
- **Dry Creek Greenway at US 30.** The underpass for the Dry Creek Greenway under US 30 (near the intersection of Polk Avenue) is located close to Dry Creek and experiences flooding issues most of the year. This section of US 30 is anticipated to be reconstructed by WYDOT, including provisions to move 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 will factor into the project prioritization process.

Map 6: Cheyenne Pavement Condition (2019)



Map 7: Drainage Master Plan-Identified Impacts to Regional Transportation System



FREIGHT RECOMMENDATIONS

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.

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 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 2**. 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 2: 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)³. 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 3**.

Figure 3: 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](https://www.idleair.com)

³ <https://www.epa.gov/verified-diesel-tech/learn-about-idling-reduction-technologies-irts-trucks-and-school-buses>

EMERGING TRANSPORTATION TECHNOLOGY

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.

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.

NACTO developed its 'Guidelines for Regulating Shared Micromobility'⁴ 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 ranging from insurance and pricing to parking and public outreach/equity 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.

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.
- Require vendors to have a way to communicate with riders in real-time if a vehicle has been improperly parked
- Require vendors to mark designating 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.

⁴ NACTO Guidelines for Regulating Shared Micromobility - https://nacto.org/wp-content/uploads/2019/09/NACTO_Shared_Micromobility_Guidelines_Web.pdf

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-stripping 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
- Prioritize non-vehicular transportation facilities that are low-speed and perceived as safe by all potential users.

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 vehicle or devices

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

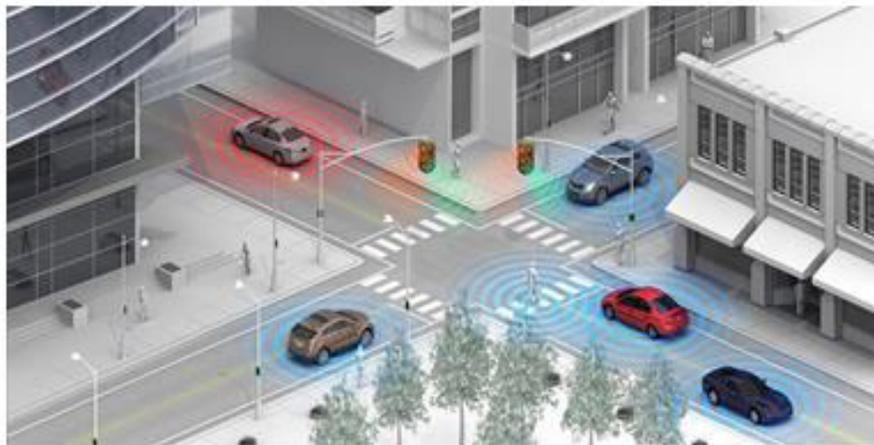
CONNECTED AND AUTOMATED VEHICLES

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 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 4: 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 speed/ 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 greenways crossings and interactions with AV on surface streets.
 - Assess current initiatives related to ADA requirements with respect to AV.

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 8**.

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 challenge 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.

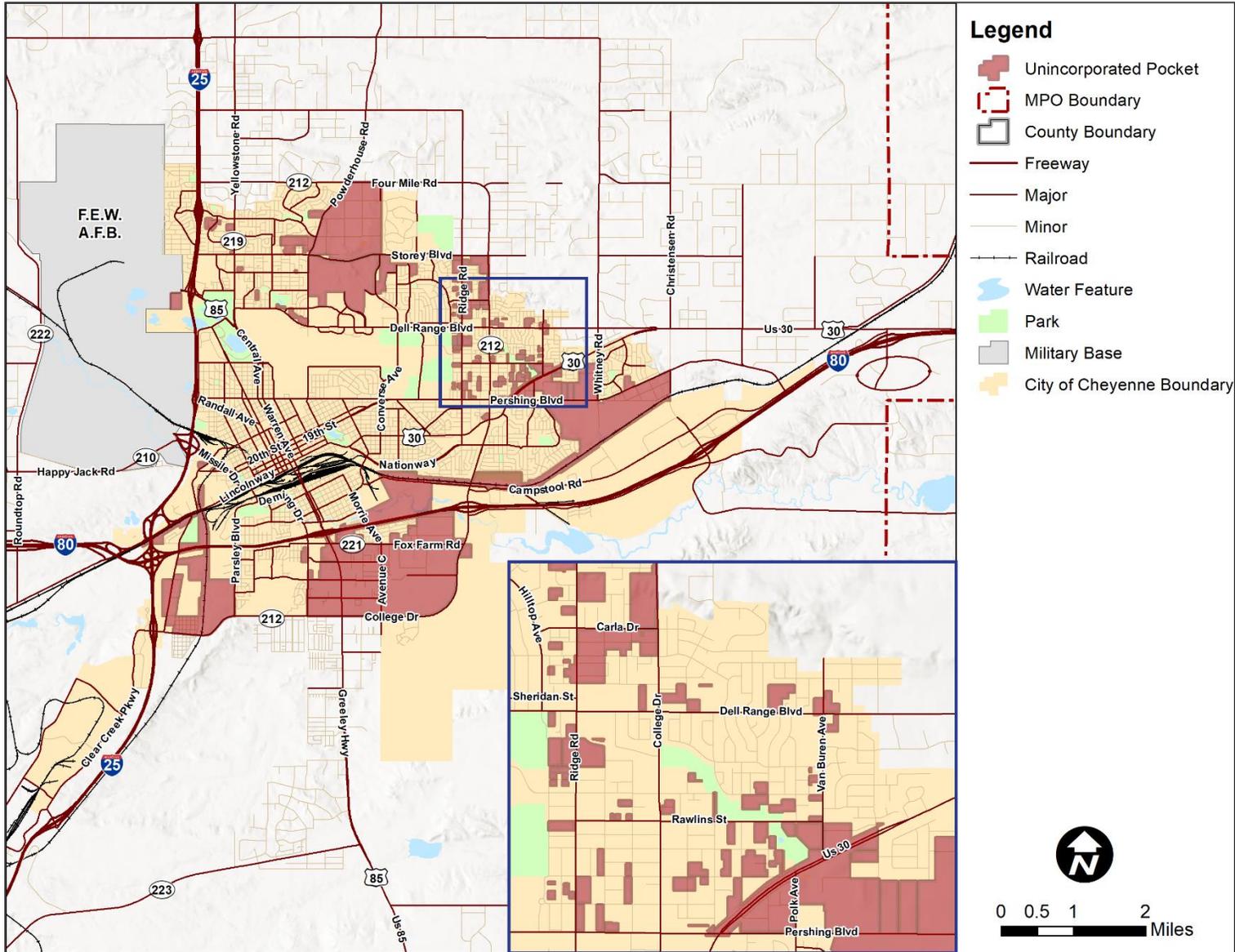
Traditionally, annexations are voluntary. When a property owner wants to develop their property, if they are adjacent to municipal boundaries, they have a choice to stay in the county and develop their property in a rural low-density configuration that can be served by well water and septic, or if the 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.

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.

Map 8: Unincorporated Enclaves/Pockets



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 5**.

Figure 5: Example Unincorporated Pocket Network Improvements



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:

- **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 through 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.

- **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.
- 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 increased floor area ratio

(FAR)) 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. 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.

- **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.

PUBLIC ENGAGEMENT PHASE 2 SUMMARY

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 to obtain similar input to a full-day public open house and charrette. A total of 84 respondents completed the survey.

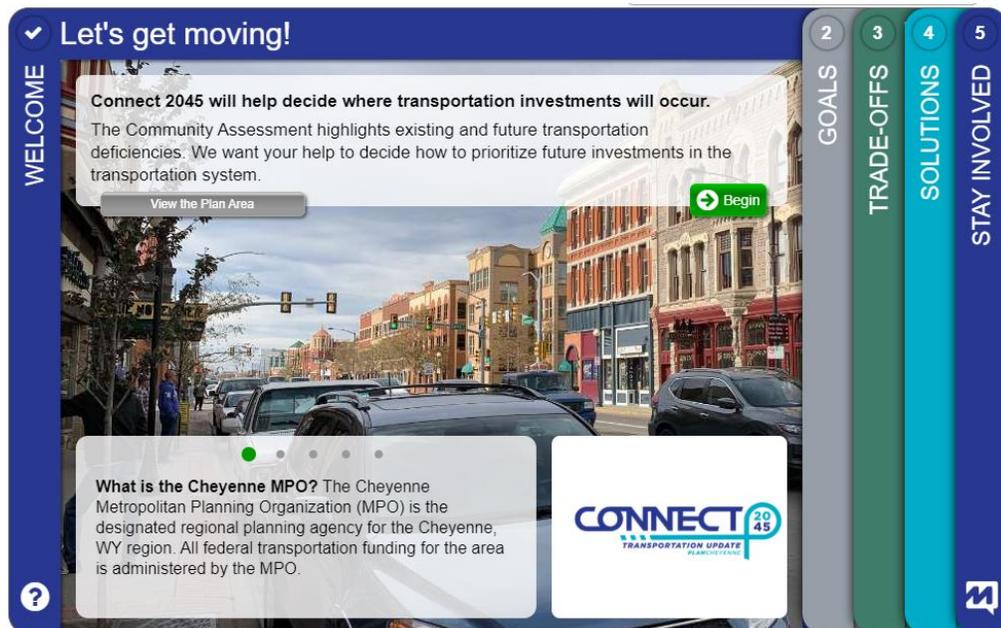
The Cheyenne MPO's Connect 2045 project website was the landing page to guide the public and stakeholders through this second engagement process. First, a video presentation provided a brief overview of the findings from the Community Assessment and identified transportation deficiencies. The draft Community 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; a detail of each page and the results are provided below:

SURVEY PAGE 1: WELCOME

Figure 6: MetroQuest Welcome Page



Purpose. Provides an overview of the survey, the Cheyenne MPO, and the LRTP process.

Figure 7: MetroQuest Goals Page



Purpose. Allows 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.

Figure 8: Project Goals Prioritization MetroQuest Results

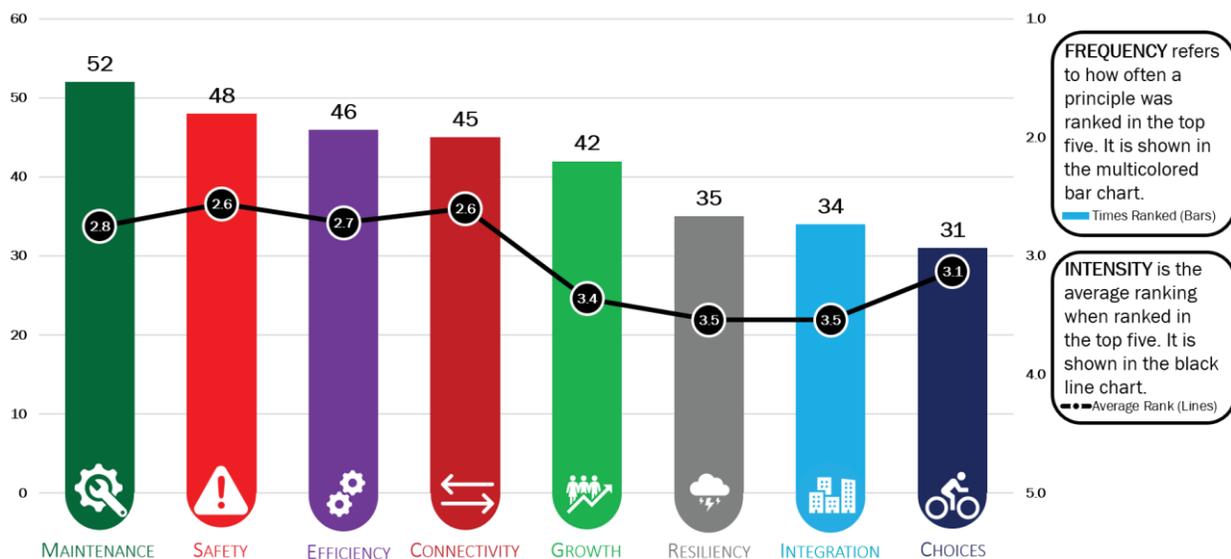
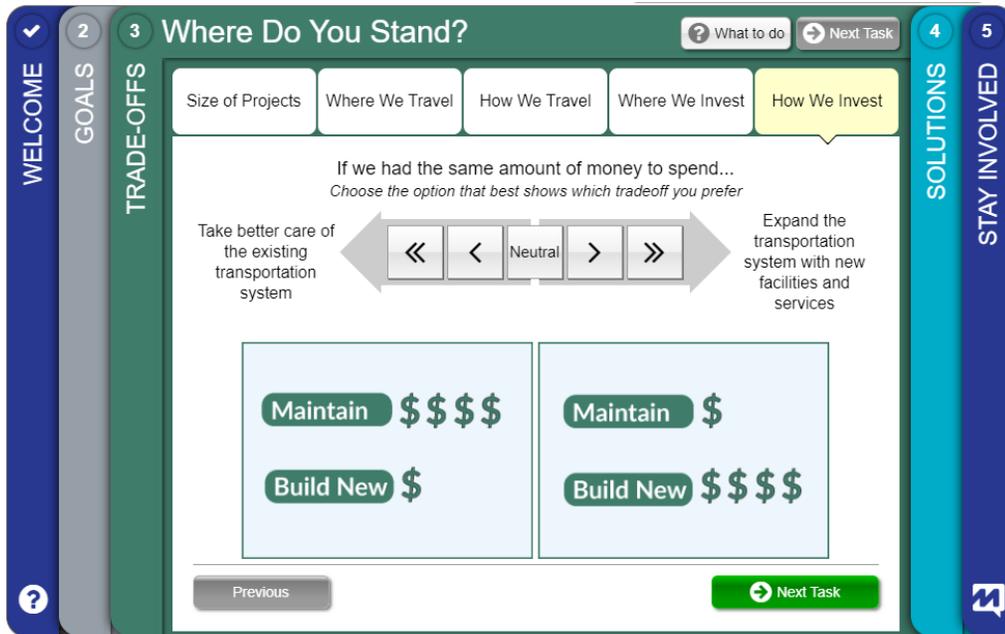


Figure 9: MetroQuest Trade-Offs Page



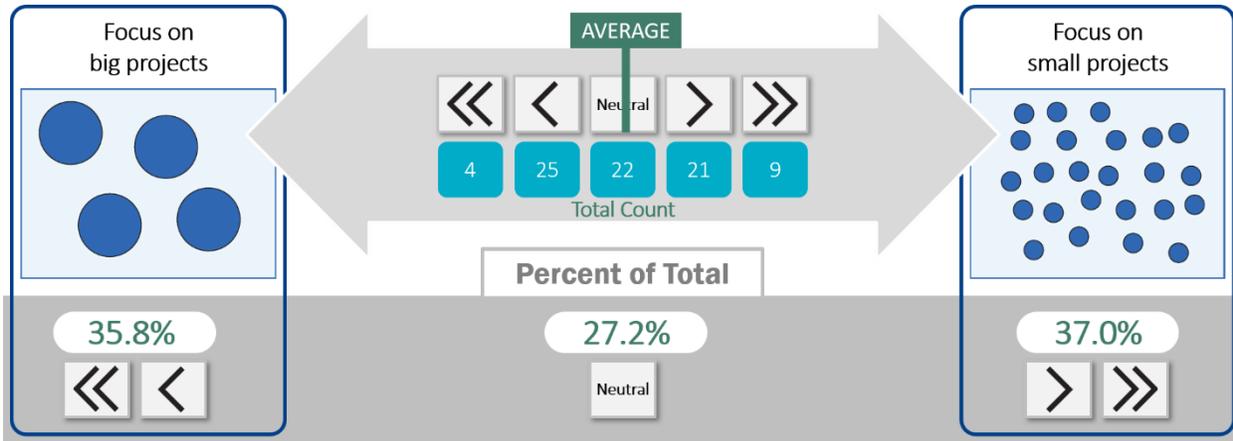
Purpose. Allows respondents to indicate how transportation money should be allocated between different types of projects:

- **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:

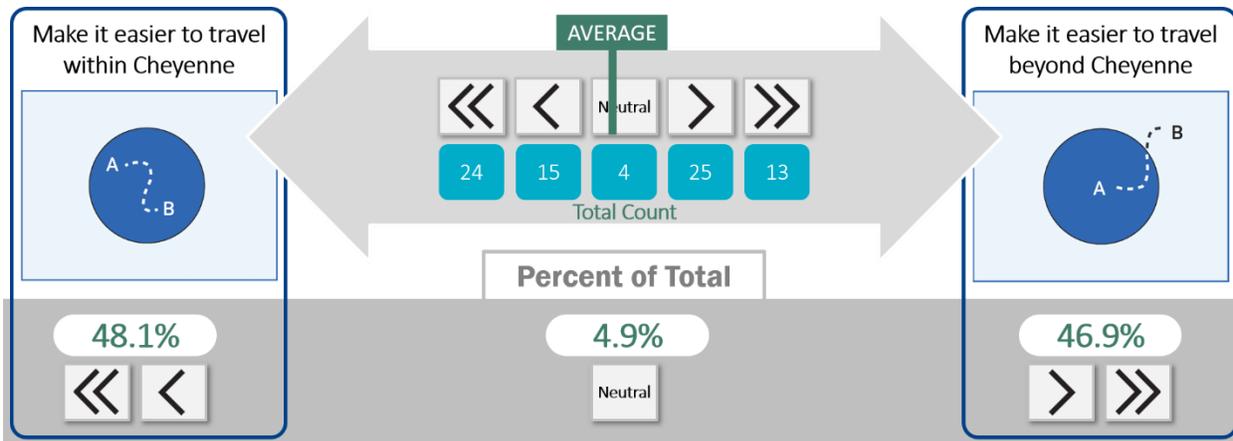
- **Size of Projects.** Survey respondents were largely balanced on allocating investments based on project size, with the average score showing a slight preference for a focus on small projects.

Figure 10: Size of Projects MetroQuest Results



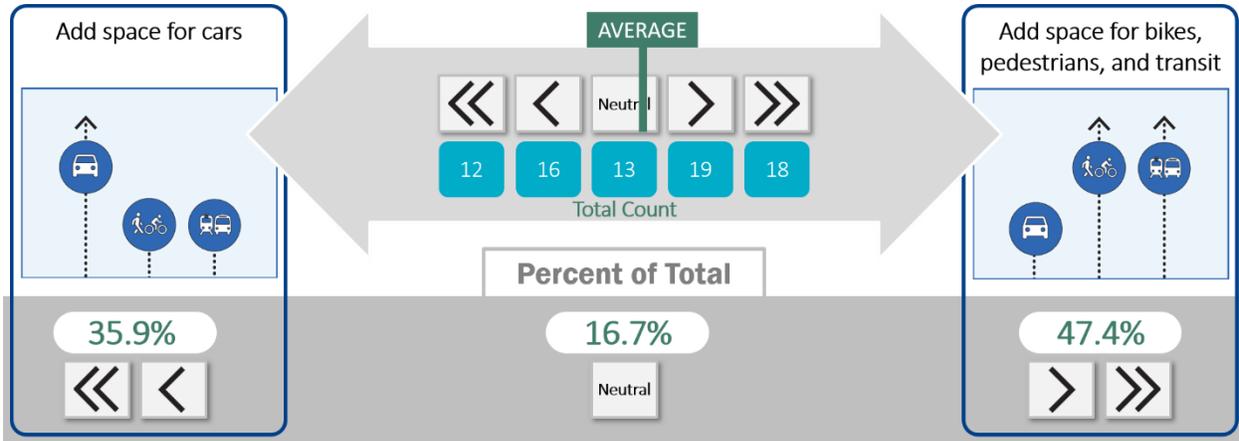
- **Where We Travel.** Survey respondents generally wanted to make it easier to travel within Cheyenne rather than into and out of Cheyenne.

Figure 11: Where We Travel MetroQuest Results



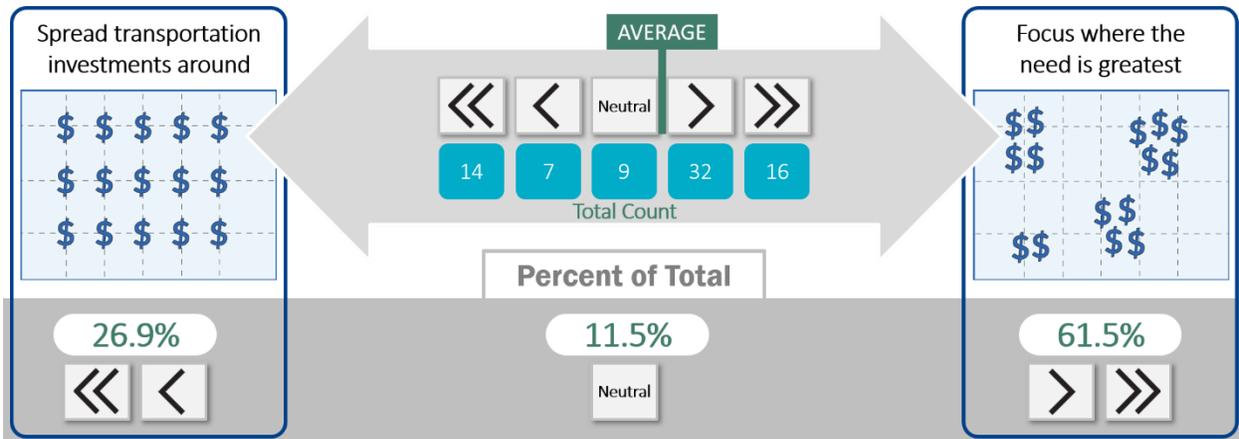
- **How We Travel.** Survey respondents were relatively balanced on which modes transportation investments should be focused.

Figure 12: How We Travel MetroQuest Results



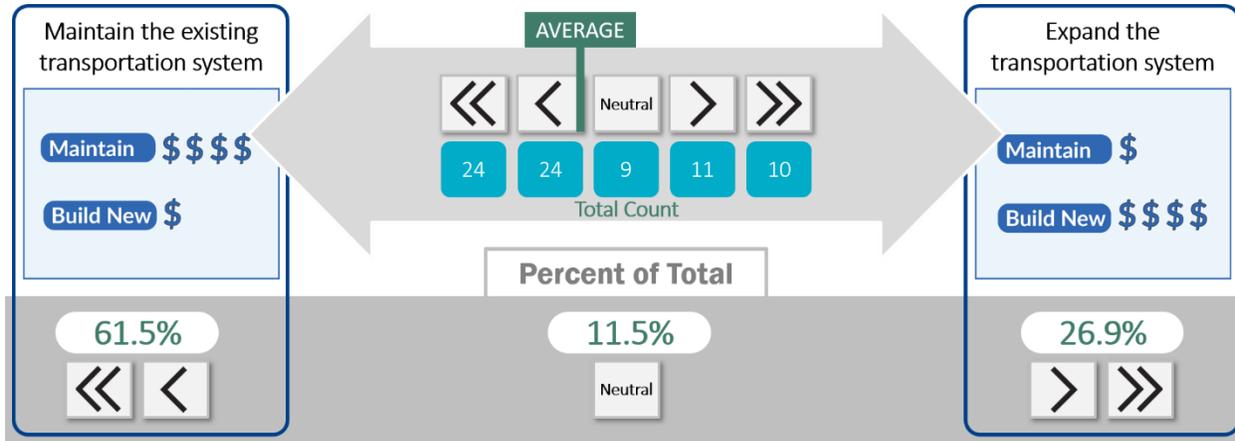
- **Where We Invest.** Survey respondents were slightly more in favor of concentrating transportation investments in areas of the greatest need over spreading investments evenly across the region.

Figure 13: Where We Invest MetroQuest Results



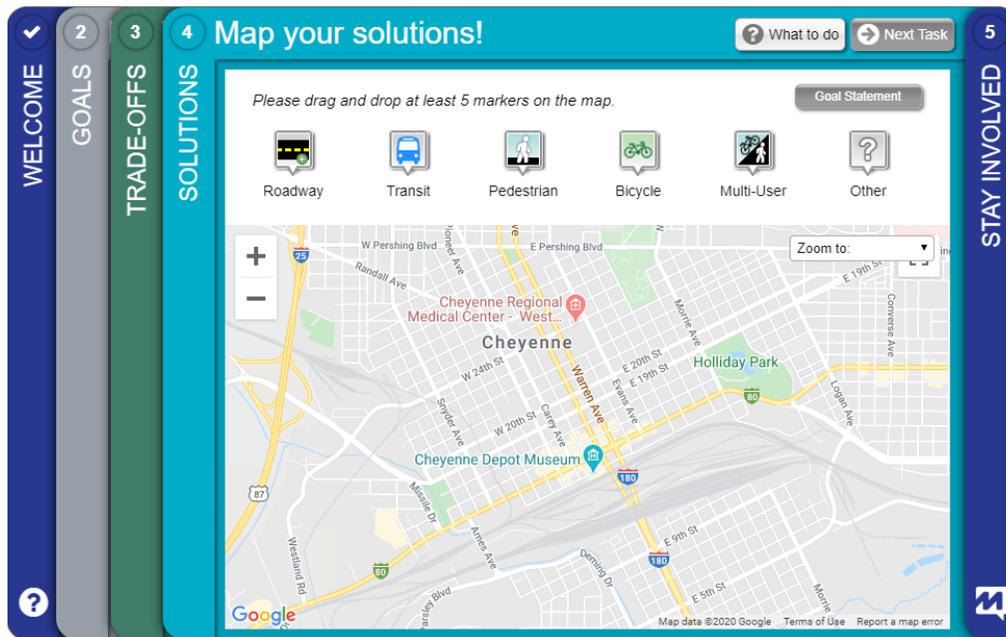
- **How We Invest.** Survey respondents favored maintaining existing infrastructure over expanding the transportation system.

Figure 14: How We Invest MetroQuest Results



SURVEY PAGE 4: SOLUTIONS

Figure 15: MetroQuest Solutions Page

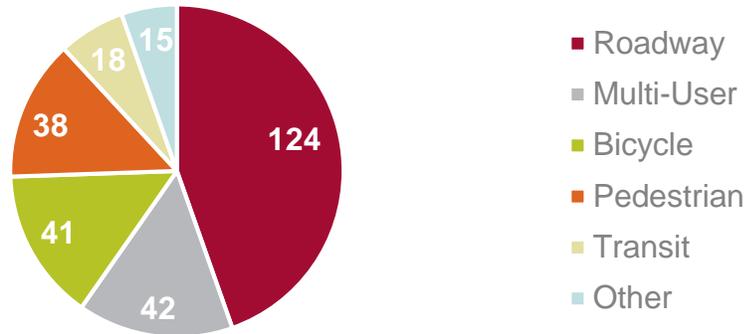


Purpose. Allows respondent to place markers on a map where they would like to see transportation improvements made. The respondent could indicate the type of project, the goal statement it most supports, and write a description of the suggested project.

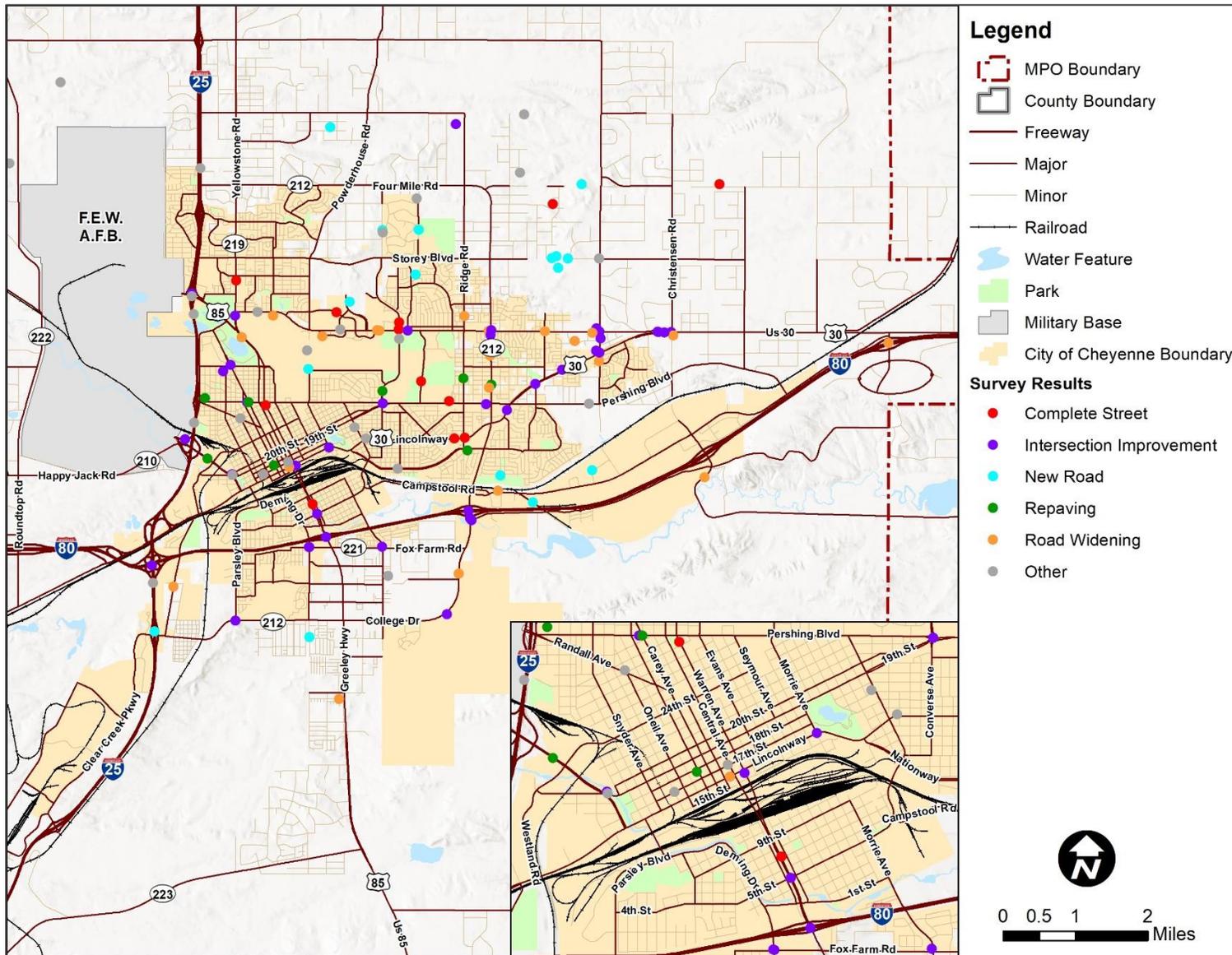
Results:

278 total markers were dropped in this page, and **Figure 16** shows the breakdown of markers by type. Analysis results were grouped together by roadway, transit, and active transportation modes. **Map 9** through **Map 14** show the results for each mode by type of improvement as well as show heat maps to identify hot spots for requested improvements for each mode around the region.

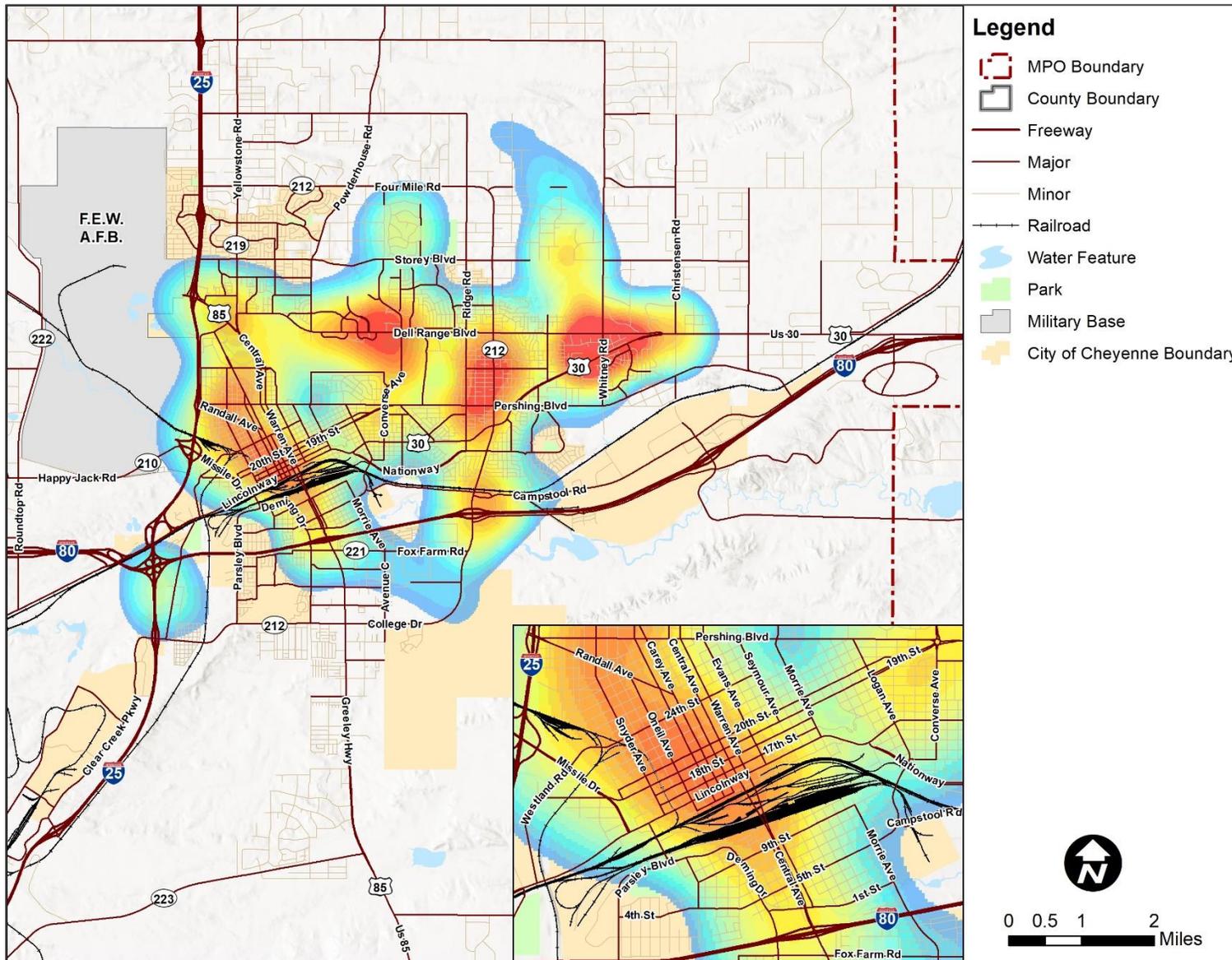
Figure 16: Improvement Markers by Type



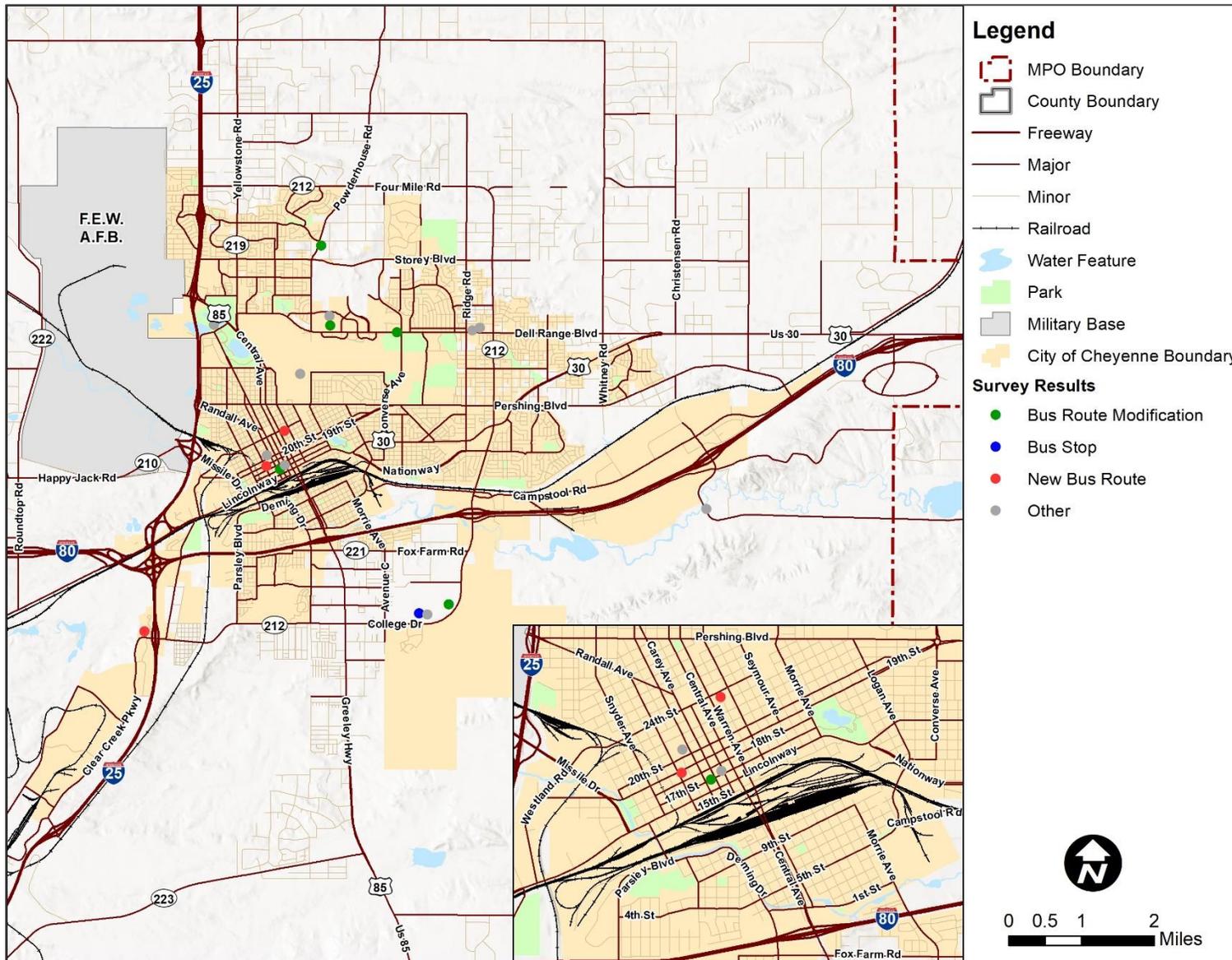
Map 9: MetroQuest Survey Roadway Improvements by Type



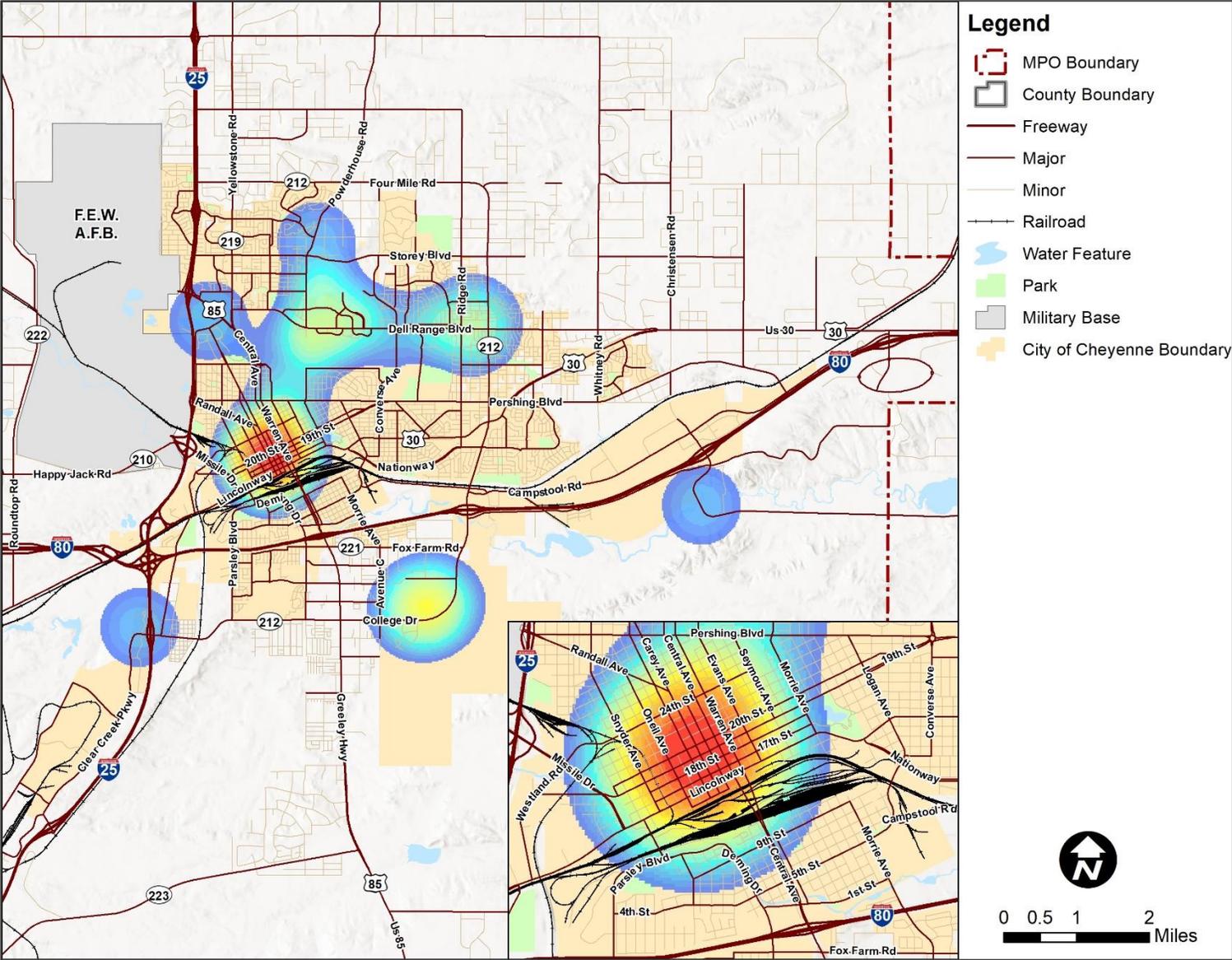
Map 10: MetroQuest Survey Roadway Improvement Heatmap



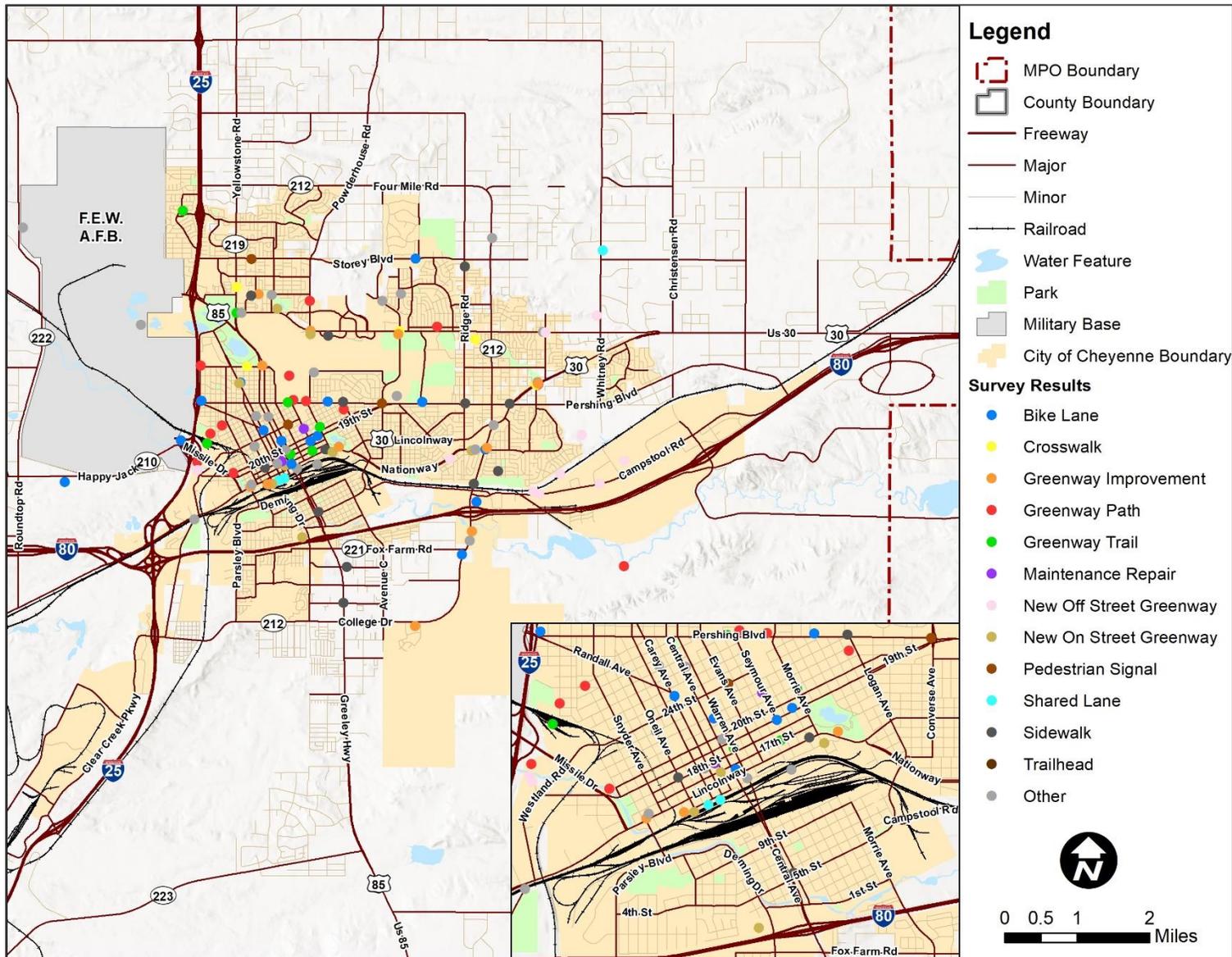
Map 11: MetroQuest Survey Transit Improvements by Type



Map 12: MetroQuest Survey Transit Improvement Heatmap



Map 13: MetroQuest Survey Active Transportation Improvements by Type



Map 14: MetroQuest Survey Active Transportation Improvement Heatmap

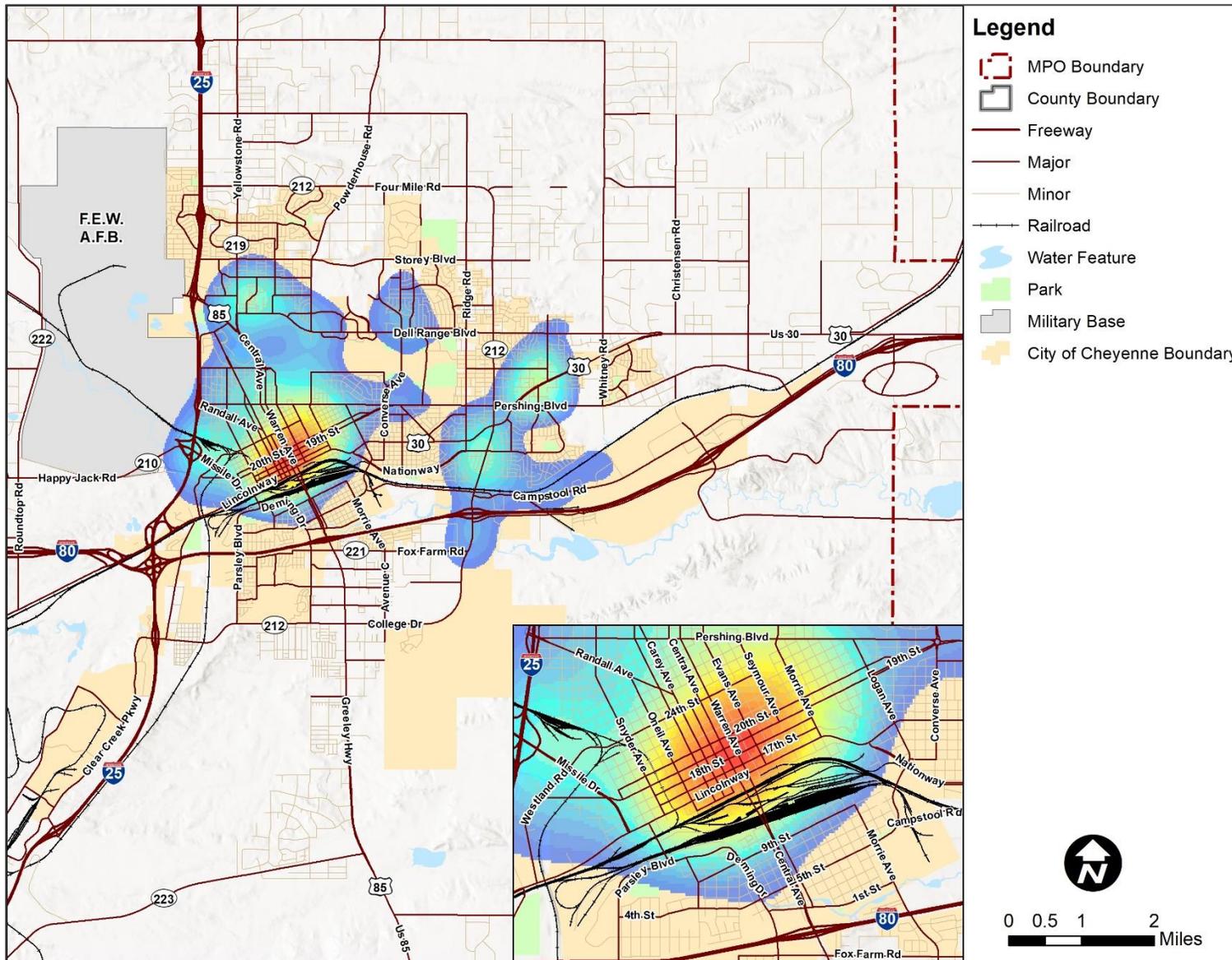
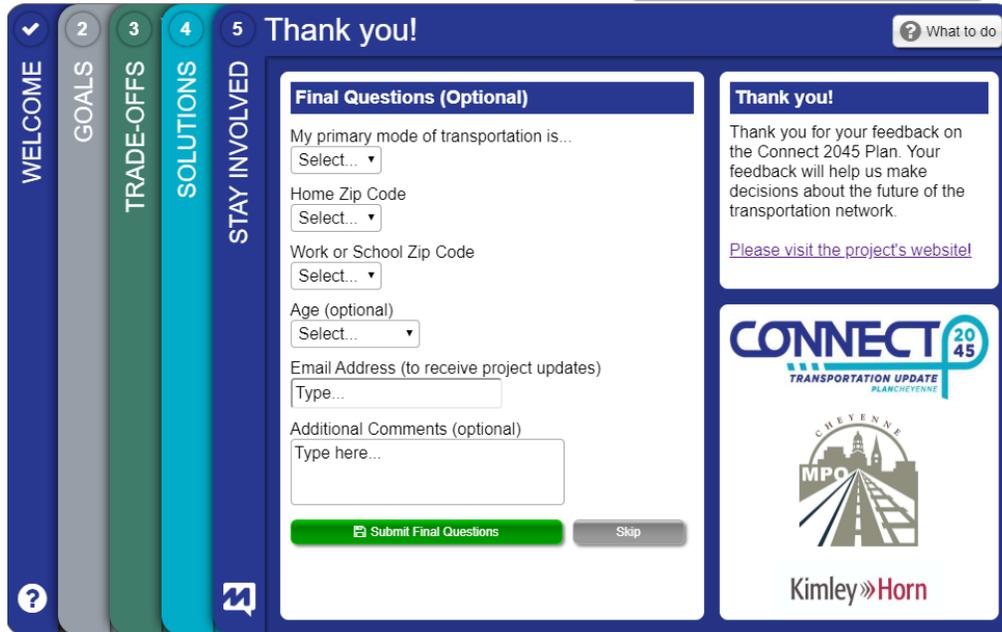


Figure 17: MetroQuest Stay Involved Page



Purpose. Allow respondents to provide some demographic information if they choose, as well as provide their contact information for future updates of the project.

Results:

Over 75% of survey respondents were between the ages of 26 and 60. Driving was the primary mode of travel for over 95% of respondents. The bulk of respondents live and work in the 82001 and 82009 zip codes.

Figure 18: Age of Respondents to MetroQuest Survey Respondents

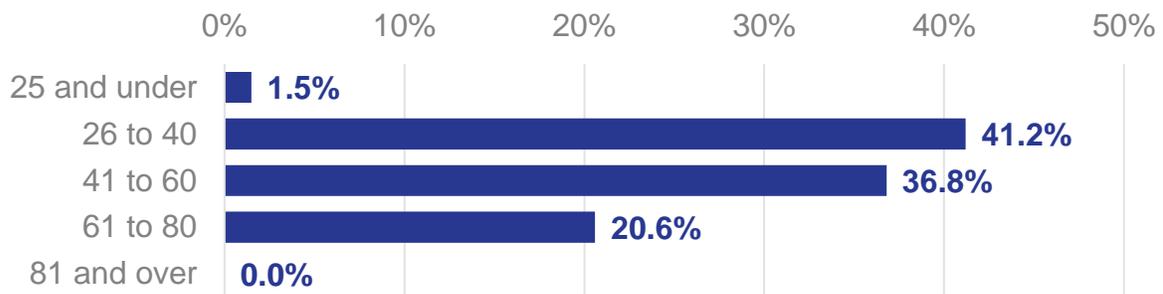


Figure 19: Primary Travel Mode of MetroQuest Survey Respondents

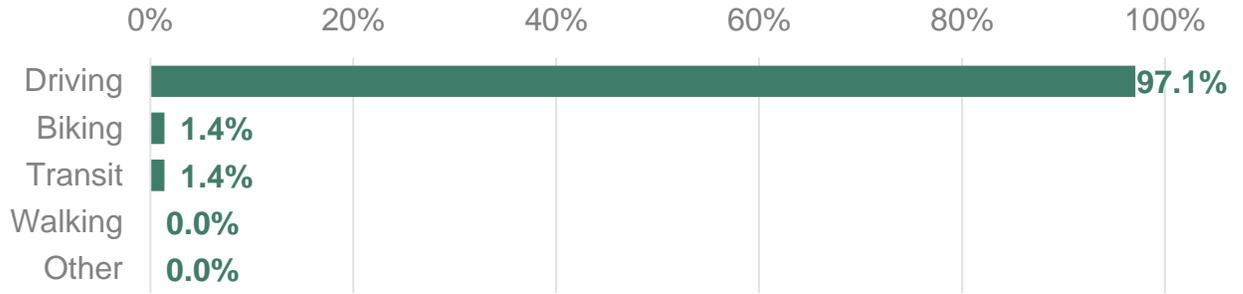
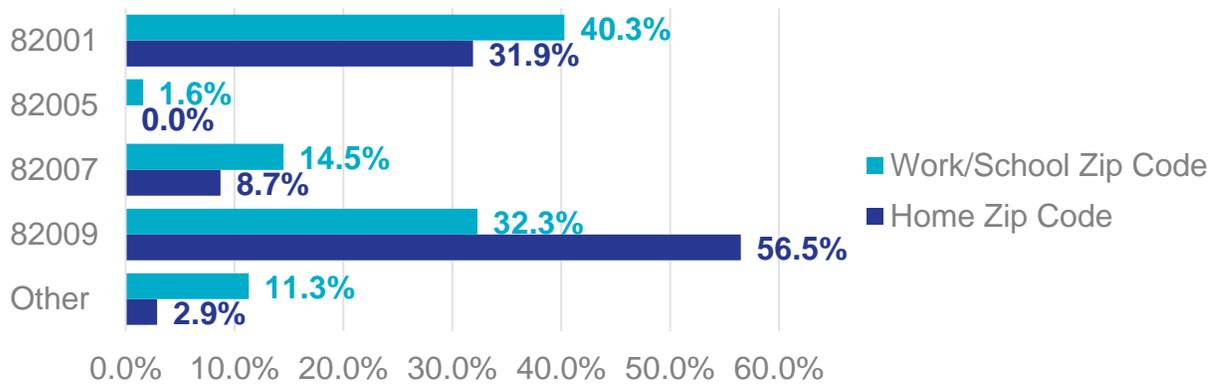


Figure 20: Home and Work Zip Codes of MetroQuest Survey Respondents



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 Transit Development Plan developed by the Cheyenne MPO.
- 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.

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 21**.

Figure 21: 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.

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 prioritization weighting and project goal alignment is provided in **Table 9**.

Table 9: 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%		

PROJECTS, POLICIES, AND FUTURE STUDIES

This section summarizes the projects, policies, and future study needs identified throughout the Recommendation Development Report.

CAPITAL PROJECTS

Roadway Projects

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 10**.

***Note:** Additional information will be added to **Table 10** as the project prioritization process is finalized, the financial plan is completed, and funding sources are identified.*

Transit Projects

The Cheyenne Transit Program is currently pursuing moving their main transit center and transfer point from the Downtown Parking Garage to a property on East Lincolnway. This project will continue to be the main focus for transit investments in the short-term but will necessitate changes to the transit alignments that require further study.

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.

Greenway projects are typically funded through the Sixth Penny Sales Tax, which is a voter approved sales tax that is used to fund transportation investments in the region. Because greenways are typically off-street facilities and thus function independently of the roadway system, which is the focus of the Connect 2045 Plan, 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 4**.

Table 10: Roadway Improvement Matrix

Proj. No.*	Primary Route	From	To	Project Desc.	Func. Class	L RTP Priority	L RTP Status	Proj. Year	2020 Cost	Proj. Yr. Cost	Fund Source	Lead Agency
RV-1	Iron Mountain Rd	Whitney Rd	Christensen Rd	Construct new roadway	Major Collector	Low			\$1,100,000			
RV-2	US 85	Terry Ranch Rd	I-80	Access control, ped/bike enhancements	Principal Arterial	High			\$2,150,000			
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	Plainview Rd	Storey Blvd	Construct new roadway	Minor Collector	Medium			\$1,220,000			
RV-6b	Chief Washakie Ave	Storey Blvd	Four Mile Rd	Construct new roadway	Minor Collector	Medium			\$3,050,000			
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-9a	Archer Pkwy	Prairie Center Cir	US 30/I-80 Service Rd	Widen roadway to 5 lanes	Minor Arterial	Medium			\$9,170,000			
RV-9b	US 30	Westedt Rd	Archer Pkwy	Widen roadway to 3 lanes	Principal Arterial	Medium			\$2,320,000			
RV-10a	Berwick Dr	Wallick Rd	I-80	Construct new roadway and RR overpass	Minor Arterial	Medium			\$18,400,000			
RV-10b	Berwick Dr	I-80	Veta Dr	Construct new roadway	Minor Arterial	Low			\$3,250,000			
RV-10c	Berwick Dr	Veta Dr	Lincolnway	Construct new roadway	Minor Arterial	Medium			\$3,250,000			
RV-14	Parsley Blvd	Terry Ranch Rd	College Dr	Construct new roadway	Minor Arterial	Low			\$7,600,000			
RV-15a	Division Ave	Dayshia Ln	Wallick Rd	Construct new roadway	Major Collector	Medium			\$2,150,000			
RV-15b	Division Ave	Wallick Rd	College Dr	Construct new roadway	Major Collector	Medium			\$1,950,000			
RV-16a	Wallick Rd	Division Ave	US 85	Construct new roadway	Minor Arterial	Medium			\$1,350,000			
RV-16b	Wallick Rd	Clear Creek Pwky	Division Ave	Construct new roadway	Minor Arterial	Medium			\$10,850,000			
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-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-18	High Plains Rd	I-25	US 85	Construct new roadway	Minor Arterial	Low			\$10,850,000			
RV-22	Powderhouse Rd	Iron Mountain Rd	US 85	Construct new roadway	Major Collector	Low			\$2,150,000			
RV-25	Converse Ave	Storey Blvd	Four Mile Rd	Construct new roadway	Minor Arterial	Medium			\$2,700,000			
RV-31	Dell Range Blvd	Van Buren Ave	US 30	Widen roadway to 5 lanes	Principal Arterial	High			\$7,150,000			
RV-32a	Roundtop Rd	Otto Rd	I-80	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Low			\$1,600,000			
RV-32b	Roundtop Rd	Horizon Dr	Happy Jack Rd	Widen roadway to 5 lanes	Minor Arterial	Medium			\$1,940,000			
RV-32c	Roundtop Rd	I-80	Horizon Dr	Widen roadway to 5 lanes	Minor Arterial	Medium			\$760,000			
RV-33	Happy Jack Rd	Roundtop Rd	I-25	Widen roadway to 3 lanes	Minor Arterial	High			\$5,400,000			
RV-34	Missile Dr	Lincolnway	I-25	Streetscape, ped/bike enhancements	Minor Arterial	High			\$4,500,000			
RV-39	Terry Ranch Rd	I-25	US 85	Improve as minor arterial, ped/bike enhancements	Minor Arterial	Medium			\$3,800,000			
RV-41	College Dr	I-25	US 85	Access control, ped/bike enhancements	Principal Arterial	High			\$8,650,000			
RV-42/FMP-2	College Dr	Fox Farm Rd	Lincolnway	Widen to 7 lanes, improve Industrial Dr intersect.	Principal Arterial	High			\$8,900,000			
RV-45	Powderhouse Rd	Storey Blvd	Iron Mountain Rd	Widen roadway to 3 lanes	Minor Arterial	High			\$2,250,000			
RV-61/RV-206	I-80	Roundtop Rd	Roundtop Rd	Improve interchange, widen underpass to 5 lanes	Minor Arterial	Medium			\$18,400,000			
RV-62	I-25	College Dr	College Dr	Widen DDI to 4 lanes	Principal Arterial	Medium			\$6,950,000			
RV-65/FMP-8	I-80	I-25	I-25	Reconstruct interchange	Interstate	Medium			\$310,700,000			
RV-101	York Ave	College Dr	Dayshia Ln	Construct new roadway	Minor Collector	Low			\$4,350,000			
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	LRTP Status	Proj. Year	2020 Cost	Proj. Yr. Cost	Fund Source	Lead Agency
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-107a	Allison Rd	Cribbon Ave	Snyder Ave	Ped/bike enhancements	Major Collector	High			\$550,000			
RV-107c	Allison Rd	US 85/Greeley Hwy	Ave C	Reconstruct roadway	Major Collector	Low			\$2,150,000			
RV-107d	Allison Rd	Ave C	Energy Dr	Construct new roadway	Major Collector	Medium			\$2,250,000			
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	Major Collector	Low			\$3,150,000			
RV-109	Lummis Dr	College Dr	Campstool Rd	Construct new roadway	Minor Arterial	Low			\$10,850,000			
RV-110a/FMP-5	Burlington Trl	Industrial Rd	Campstool Rd	Reconstruct roadway, improve intersections	Major Collector	Medium			\$3,030,000			
RV-110b	Burlington Trl	College Dr	Industrial/HR Ranch Rd	Reconstruct roadway	Major Collector	Medium			\$5,650,000			
RV-111	High Plains Rd	US 85	College Dr/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-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/Stewart Rd	Construct new roadway	Major Collector	Low			\$1,100,000			
RV-118	Van Buren Ave	Dell Range Blvd	Four Mile Rd	Construct new roadway	Major Collector	Low			\$5,000,000			
RV-119	Rock Springs St	Ridge Rd	Moran Ave	Construct new roadway	Minor Collector	Medium			\$1,100,000			
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 Dr	Construct new roadway	Major Collector	Low			\$1,750,000			
RV-122	Horizon Dr	Roundtop Rd	Lincolnway	Construct new roadway	Major Collector	Low			\$5,400,000			
RV-123	New Collectors	Happy Jack Rd	Horizon Dr, Berwick Dr	Construct new roadways	Minor Collector	Low			\$3,450,000			
RV-124	Swan Ranch Rd	Berwick Dr	Broken Arrow Rd	Construct new roadway	Major Collector	Low			\$5,750,000			
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-128	Campstool Rd	Livingston Ave	Burlington Trl	Improve as minor arterial	Minor Arterial	High			\$1,100,000			
RV-129	12 th St	College Dr	Adams Ave	Widen to 5 lanes	Major Collector	High			\$850,000			
RV-130/FMP-1	Ridge Rd	Lincolnway	Dell Range Blvd	Improve as arterial, add turn lanes at Dell Range	Minor Arterial	High			\$2,570,000			
RV-131	Yellowstone Rd	Dell Range Blvd	Four Mile Rd	Ped/bike enhancements	Principal Arterial	High			\$4,100,000			
RV-132	Central/Yellowstone	8 th Ave	Dell Range Blvd	Widen to 6 lanes	Principal Arterial	High			\$3,250,000			
RV-135	Storey Blvd	Yellowstone Rd	Converse Ave	Widen to 5 lanes	Minor Arterial	High			\$2,150,000			
RV-137/DMP-6	5 th St	Deming Dr	Morrie Ave	Imp collector, reconstruct bridge/mitigate drainage	Major Collector	High			\$5,000,000			
RV-138	Walterscheid/Demming	College Dr	5 th St	Widen to 5 lanes	Minor Arterial	High			\$4,350,000			
RV-139b	Pershing Blvd	Concord Rd	Logan Ave	Realign Intersection	Principal Arterial	High			\$2,150,000			
RV-141	Lincolnway	Snyder Ave	Omaha Rd	Streetscape, ped/bike enhancements	Principal Arterial	High			\$2,150,000			
RV-143/DMP-1	Ames Ave	Parsley Blvd	Lincolnway	Improve as minor arterial/mitigate drainage issues	Minor Arterial	High			\$3,950,000			
RV-144/DMP-2	Parsley Blvd	College Dr	Ames Ave	Improve as minor arterial/mitigate drainage issues	Minor Arterial	High			\$5,750,000			
RV-145/DMP-12	Dell Range Blvd	Yellowstone Rd	College Dr	Widen to 7 lanes, enhance ped/bike/drainage	Principal Arterial	High			\$6,550,000			
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			
RV-151	Crane Bluff Rd	Converse Ave	Ogden Rd	Construct new roadway	Minor Collector	Medium			\$2,050,000			
RV-161	Pershing Blvd	US 30	Christensen Rd	Widen to 5 lanes	Minor Arterial	High			\$2,330,000			
RV-162	Windmill Rd	Pershing Blvd	Rock Springs St	Reconstruct roadway	Major Collector	High			\$1,600,000			
RV-201/FMP-8	I-80	Berwick Dr	Berwick Dr	Construct new interchange	Minor Arterial	Medium			\$23,800,000			
RV-203/CA-6	I-25	Central Ave	Central Ave	Signalize SB ramps/Central Ave intersection	Principal Arterial	Medium			\$600,000			
RV-205/CA-8	I-80	College Dr	College Dr	Signalize WB ramps/College Dr intersection	Principal Arterial	Medium			\$600,000			
RV-207	I-25	Wallick Rd	Wallick Rd	Construct new interchange	Minor Arterial	Medium			\$27,100,000			
RV-208/RV-211	Old Happy Jack/19 th St	Stinson Ave	Dey Ave	Realign intersection with Missile Dr	Principal Arterial	High			\$8,000,000			
RV-209/DMP-5	9 th St	Crow Creek	Crow Creek	Reconstruct bridge/greenway/mitigate drainage	Minor Collector	High			\$4,750,000			
RV-212	College Dr	Four Mile Rd	Four Mile Rd	Realign intersection	Principal Arterial	Medium			\$1,100,000			
CA-1	Carey Ave	15 th St	2 nd Ave	Convert to two-way street	Minor Arterial	High			\$920,000			

Proj. No.*	Primary Route	From	To	Project Desc.	Func. Class	LRTP Priority	LRTP Status	Proj. Year	2020 Cost	Proj. Yr. Cost	Fund Source	Lead Agency
CA-2	Pioneer Ave	15 th St	2 nd Ave	Convert to two-way street	Minor Arterial	High			\$940,000			
CA-3	19 th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High			\$1,260,000			
CA-4	20 th St	Dey Ave	Logan Ave	Convert to two-way street	Minor Arterial	High			\$1,260,000			
CA-5	I-25	Randall Ave	Randall Ave	Widen northbound off-ramp to 4 lanes	Principal Arterial	Medium			\$160,000			
CA-7	I-80	US 85	US 85	Add right-turn lane to EB off-ramp	Principal Arterial	High			\$230,000			
CA-9	Fox Farm Rd	Walterscheid Blvd	College Dr	Improve as collector, widen to 3 lanes	Minor Arterial	Medium			\$4,980,000			
CA-10/DMP-3	Southwest Dr	Swan Ranch Rd	I-80	Improve as collector, mitigate drainage issues	Major Collector	High			\$4,760,000			
DMP-4	I-25	College Dr	I-80	Mitigate drainage issues	Interstate	High			\$1,150,000			
DMP-7/FMP-3	US 85	I-80	5 th St	Mitigate drainage issues, improve 5 th St intersect.	Principal Arterial	High			\$6,610,000			
DMP-8	Campstool Rd	Burlington Trl	HR Ranch Rd	Mitigate drainage issues	Minor Collector	High			\$950,000			
DMP-9	Prairie Ave	Dell Range Blvd	Circle Dr	Mitigate drainage issues	Major Collector	High			\$500,000			
DMP-10	Education Dr	Manewal Dr	Carlson St	Mitigate drainage issues	Major Collector	High			\$550,000			
DMP-11	Hilltop Ave	Dell Range Blvd	Sheridan St	Mitigate drainage issues	Major Collector	High			\$500,000			
DMP-13	Campstool Rd	Whitney Rd	Commerce Cir	Mitigate drainage issues	Minor Collector	High			\$150,000			
DMP-14	Seminole Rd	Dell Range Blvd	Weaver Rd	Mitigate drainage issues	Major Collector	High			\$450,000			
DMP-15	Henderson Dr	Nationway	Homestead Ave	Mitigate drainage issues	Major Collector	Medium			\$11,650,000			
DMP-16	Lincolnway	Henderson Dr	Ridge Rd	Mitigate drainage issues	Minor Arterial	High			\$1,500,000			
FMP-4	Converse Ave	Dell Range Blvd	Dell Range Blvd	Construct geometric improvements	Minor Arterial	High			\$170,000			
FMP-6	Fox Farm Rd	Morrie Ave/Ave C	Morrie Ave/Ave C	Reconstruct intersection	Minor Arterial	Medium			\$350,000			
FMP-7	New Collector	Parsley Blvd	Southwest Dr	Construct new roadway	Major Collector	Low			\$4,700,000			
FMP-9	College Dr	BNSF Railroad	BNSF Railroad	Grade separate railroad crossing	Principal Arterial	High			\$10,000,000			

*Project numbers are organized by their source plan:

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

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 of a development application waiver process if a mixed-use or high-density project needs to reduce setbacks (or increase FAR) 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.

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:

- **Transit Development Plan Update.** The Cheyenne MPO Transit Development Plan (TDP) was completed in 2013. Since that time, the Cheyenne Transit Program has undergone significant changes related to the use of technology to improve customer experience and convenience. Program leadership has also changed and has a desire to make more substantial modifications to the current route alignments to increase trip directness and limit transfers exists. If the main transfer point for the bus routes is moved from the Downtown Parking Garage to East Lincolnway, there will be a more critical need to reevaluate the transit alignments.
- **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.

APPENDIX A. ROADWAY VISION PROJECTS

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
1	Iron Mountain Rd	Whitney Rd to Christensen Rd	Construct new rwy.	0.98	Rural	
2	US 85	I-80 to Terry Ranch Rd	Access control, ped/bike enhancements	6.00	Urban	
3	Christensen Rd	Riding Club Rd to Iron Mountain Rd	Construct new rwy.	1.00	Rural	
4	Riding Club Rd	Ridge Rd to Whitney Rd	Construct new rwy.	2.00	Rural	
7	Summit Dr	College Dr to Whitney Rd	Construct new rwy.	1.50	Rural	
5a	Four Mile Rd	Braehill Rd to Whitney Rd	Construct new rwy.	1.29	Rural	
5b	Four Mile Rd	Christensen Rd to Reese Rd	Construct new rwy.	1.00	Rural	
6	Mountain Rd/Chief Washakie	Plain View Rd to Four Mile Rd	Construct new rwy.	2.20	Rural	
8a	Prairie Ave	Frontier Mall Dr to Rue Terre	Realign rwy.	0.22	Urban	
8b	Prairie Ave	Rue Terre to Carlson St	Construct new rwy.	0.65	Rural	
8c	Melton St	Powderhouse Rd to Carlson St	Construct new rwy.	0.75	Rural	
8d	Carlson St	Powderhouse Rd to Converse Ave	Construct new rwy.	1.02	Rural	Partially Programmed
8e	Ft. Laramie Trl	Prairie Ave to Storey Blvd	Construct new rwy.	0.70	Rural	
8f	Rue Terre	Prairie Ave to Storey Blvd	Construct new rwy.	0.83	Rural	
10a	Berwick Dr	Wallick Rd to I-80	Construct new rwy. and RR overpass	1.99	Rural	
10b	Berwick Dr	I-80 to Veta Dr	Construct new rwy.	0.49	Rural	
10c	Berwick Dr	Veta Dr to Lincolnway	Construct new rwy.	1.21	Rural	
14	Parsley Blvd	Terry Ranch Rd to College Dr	Construct new rwy.	3.50	Rural	
15a	Division Ave	High Plains Rd to Wallick Rd	Construct new rwy.	1.00	Urban	
15b	Division Ave	Wallick Rd to College Dr	Construct new rwy.	1.02	Urban	
16a	Wallick Rd	Division Ave to US 85	Construct new rwy.	0.50	Urban	
16b	Wallick Rd	Clear Creek Pkwy to Division Ave	Construct new rwy.	2.82	Rural	
16c	Wallick Rd	US 85 to Ave C	Construct new rwy.	0.50	Urban	

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
16d	Wallick Rd	Ave C to Sweetgrass Inner Loop	Construct new rwy.	0.25	Rural	
17a	Ave C	US 85 to Wallick Rd	Construct new rwy.	2.30	Rural	
17b	Ave C	Wallick Rd to College Dr	Construct new rwy.	1.00	Urban	
18	High Plains Rd	I-25 to US 85	Construct new rwy.	4.50	Rural	
22	Powderhouse Rd	Iron Mountain Rd to Torrington Hwy	Construct new rwy.	2.20	Rural	
24	Christensen Rd	Commerce Cir to US 30	Construct new rwy.	1.25	Rural	Under const.
25	Converse Ave	Storey Blvd to Four Mile Rd	Construct new rwy.	1.00	Rural	
31	Dell Range Blvd	College Dr to US 30	Widen to 5 lanes	2.02	Urban	Partially Programmed
32a	Roundtop Rd	Otto Rd to I-80	Improve as minor arterial	0.73	Rural	
32b	Roundtop Rd	I-80 to Happy Jack Rd	Widen to 5 lanes	0.96	Rural	
33	Happy Jack Rd	Roundtop Rd to I-25	Widen to 5 lanes	2.33	Urban	
34	Missile Dr	Lincolnway to I-25	Streetscape and ped/bike enhancements	2.01	Urban	
35	Whitney Rd	US 30 to Dell Range Blvd	Widen to 5 lanes	0.24	Urban	Programmed
39	Terry Ranch Rd	I-25 to US 85	Improve as minor arterial	5.71	Rural	
41a	College Dr	I-25 to US 85	Access control, ped/bike enhancements	2.66	Urban	
41b	College Dr	US 85 to Fox Farm Rd	Widen to 5 lanes	2.61	Urban	Programmed
42	College Dr	Fox Farm Rd to Lincolnway	Widen to 7 lanes	1.78	Urban	
43	US 30	Christensen Rd to Archer Pkwy	Widen to 5 lanes	3.00	Rural	Programmed
44	US 30	Hayes Ave to Christensen Rd	Widen to 5 lanes	1.47	Urban	Programmed
45	Powderhouse Rd	Storey Blvd to Iron Mountain Rd	Widen to 5 lanes	3.22	Urban	
47	Converse Ave	Masonway to Carlson St	Widen to 5 lanes	0.50	Urban	Programmed
61/206	I-80 at Roundtop Rd	Interchange	Widen to 5 lanes (impacts underpass)	N/A	Rural	
62	I-25 and College Dr	Interchange	Widen DDI to 4 lanes	N/A	Urban	
64	Dell Range Blvd/ US 30	Intersection	Realign intersection	N/A	Rural	Programmed
65	I-80 and I-25	Interchange	Reconstruct interchange	N/A	Urban	
101	York Ave	College Dr to Dayshia Ln	Construct new rwy.	2.31	Rural	

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
102	New Collector	Terry Ranch Rd to College Dr	Construct new rwy.	4.48	Rural	
103a	Artesian Rd	Parsley Blvd to Division Ave	Construct new rwy.	1.00	Rural	
104a	Julianna Rd	Parsley Blvd to US 85	Construct new rwy.	1.55	Rural	
104b	Julianna Rd	US 85 to High Plains Rd	Construct new rwy.	0.96	Rural	
105	Remington Dr	Parsley Blvd to Troyer Dr	Construct new rwy.	0.47	Rural	
107a	Allison Rd	Cribbon Ave to Snyder Ave	Ped/bike enhancements	0.25	Urban	
107c	Allison Rd	US 85 to Ave C	Rwy. reconstruction	0.56	Urban	
107d	Allison Rd	Ave C to Energy Dr	Construct new rwy.	0.50	Urban	
107e	Allison Rd	College Dr to College Dr Ext.	Construct new rwy.	1.00	Rural	
108	Fox Farm Rd	College Dr to Allison Rd	Construct new rwy.	0.73	Rural	
109	College Dr Ext	College Dr to Campstool Rd	Construct new rwy.	4.19	Rural	
110a	Burlington Trl	Industrial Rd to Campstool Rd	Reconstruct rwy.	0.43	Rural	
110b	Burlington Trl	College Dr to Industrial Rd	Reconstruct rwy.	1.30	Rural	
111	High Plains Rd	US 85 to College Dr	Construct new rwy.	3.36	Rural	
112	Sweetgrass Inner Loop	High Plains Rd to High Plains Rd	Construct new rwy.	2.09	Rural	
113	Artesian Dr	Sweetgrass Inner Loop to Ave C	Construct new rwy.	0.26	Rural	
114	New Collectors	Sweetgrass Inner Loop to College Dr	Construct new rwys.	0.58	Rural	
115	New Collector	High Plains Rd to College Dr	Construct new rwy.	0.50	Rural	
116	Beckle Rd	Reese Rd to Westedt Rd	Construct new rwy.	1.00	Rural	
118	Van Buren Ave	Dell Range Blvd to Four Mile Rd	Construct new rwy.	2.30	Rural	
119	Rock Springs St	Ridge Rd to Moran Ave	Construct new rwy.	0.42	Urban	
120	Ridge Rd	Riding Club Rd to Iron Mountain Rd	Construct new rwy.	1.00	Rural	
121	Veta Dr	Roundtop Rd to Berwick Dr	Construct new rwy.	0.81	Rural	
122	Horizon Dr	Roundtop Rd to Lincolnway	Construct new rwy.	1.34	Rural	
123	New Collectors	Between Horizon Dr, Happy Jack Rd, and Berwick Dr	Construct new rwys.	0.80	Rural	
124	Swan Ranch Rd	Berwick Dr to Broken Arrow Rd	Construct new rwy.	1.33	Rural	

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
125	Broken Arrow Rd	College Dr to Swan Ranch Rd	Construct new rwy.	0.74	Urban	
126	New Collectors	Happy Jack Rd to Berwick Dr	Construct new rwys.	0.64	Rural	
127	New Collector	Roundtop Rd to Berwick Dr	Construct new rwy.	0.85	Rural	
128	Campstool Rd	Livingston Ave to Burlington Trl	Improve as minor arterial	0.41	Urban	
129	12 th St	College Dr to Cleveland Ave	Widen to 5 lanes	0.34	Urban	
130	Ridge Rd	12 th St to Dell Range Blvd	Improve as arterial	1.63	Urban	
131	Yellowstone Rd	Dell Range Blvd to Four Mile Rd	Ped/bike enhancements	1.95	Urban	
132	Central Ave/ Yellowstone Rd	8 th Ave to Dell Range Blvd	Widen to 6 lanes	1.48	Urban	
135	Storey Blvd	Yellowstone Rd to Converse Ave	Widen to 5 lanes	2.04	Urban	
136	19 th St	Logan Ave to Converse Ave	Widen to 4 lanes	0.41	Urban	
137/ 210	5 th St	Deming Dr to Morrie Ave	Improve as collector, reconstruct bridge	0.72	Urban	
138	Walterscheid Blvd/ Demming Dr	College Dr to Ames Ave	Widen to 5 lanes	2.16	Urban	
139b	Logan Ave and Pershing Blvd	Intersection	Realign intersection	N/A	Urban	
141	Lincolnway	Snyder Ave to Omaha Rd	Pedestrian safety and streetscape enhancements	2.49	Urban	
143	Ames Ave	Parsley Blvd to Lincolnway	Improve as minor arterial, drainage	0.29	Urban	
144	Parsley Blvd	College Dr to Ames Ave	Improve as minor arterial	1.81	Urban	
145	Dell Range Blvd	Yellowstone Rd to College Dr	Widen to 7 lanes, ped/bike enhancements	3.59	Urban	
149	Bridger Peak Dr	Clear Creek Pkwy to Berwick Dr	Construct new rwy.	0.80	Rural	
150	Gannett Peak Dr	Clear Creek Pkwy to Berwick Dr	Construct new rwy.	0.72	Rural	
151	Crane Bluff Rd	Converse Ave to Mountain Rd	Construct new rwy.	0.48	Urban	
161	Pershing Blvd	Whitney Rd to Christensen Rd	Widen to 5 lanes	1.09	Urban	
162	Windmill Rd	Pershing Blvd to Rock Springs St	Reconstruct rwy.	0.59	Urban	
201/ 213	I-80 at Berwick Dr	Roundtop Rd to Otto Rd/Lincolnway	Construct new interchange	N/A	Rural	
202	I-25 at Missile Dr	Interchange	Modify ramps	N/A	Urban	Under Const.

No.	Roadway	Limits	Improvements	Length (mi)	Urban/Rural	Status
203	I-25 at Central Ave	Interchange	Improve operations	N/A	Urban	
205	I-80 at College Dr	Interchange	Improve operations	N/A	Urban	
207	I-25 at Wallick Rd	Interchange	Construct new interchange	N/A	Rural	
208/ 211	19 th St/20 th St	Crow Creek Bridge, Missile Dr Intersection	Reconstruct bridge and intersection	N/A	Urban	Programmed
209	9 th St	Crow Creek Bridge	Reconstruct bridge/greenway	N/A	Urban	
212	College Dr at Four Mile Rd	Intersection	Realign intersection	N/A	Urban	

APPENDIX B. EXAMPLE BICYCLE AND PEDESTRIAN FACILITIES

BICYCLE FACILITIES

- **Greenway.** Greenways are physically separated from vehicle traffic by an open space or a barrier and typically have exclusive right-of-way with minimal car crossings. Greenways can be used by bicyclists, pedestrians, other non-motorized users, and some agencies allow electric vehicles. Cheyenne has an extensive greenway network consisting of 37 miles of existing trails.
- **Shared Use Path.** Shared-use paths may be designated on wide sidewalks or trails on exclusive right-of-way. Shared-use paths can be used by bicyclists, pedestrians, and other non-motorized users. Often, shared-use paths are designated to create a connected bicycle network where bike lanes or greenways are not yet feasible.
- **Bicycle Boulevard.** Bicycle Boulevards are streets with low volumes of vehicle traffic and slower speeds, designed to give bicycles travel priority. Bicycle Boulevards use signs, pavement markings, and speed and volume management measures to discourage through trips by cars and create safe, convenient crossings of arterial streets.
- **Bicycle Lane.** Bicycle Lanes are defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Currently, Cheyenne has almost seven centerline miles of bicycle lanes.
- **Buffered Bicycle Lane.** Buffered bike lanes are similar to regular bike lanes, but also include a marked buffer between the bike lane and adjacent travel lanes or parking lane. The buffer is marked with white chevrons to indicate that no vehicles are allowed to travel in the buffered area. Buffers should be at least two feet wide, preferably three, ideally with a six- to seven-foot bicycle lane. They are designed to increase the space between the bicycle lane and the travel lane on roads with higher traffic speeds and volumes, on-street parking, and/or higher volumes of trucks and other oversized vehicles.
- **Shoulder Bikeway.** Shoulder Bikeways are used to provide adequate width for bicycling (minimum of four-feet) on non-urban streets that typically do not have a curb and gutter. The white fog line is used to delineate the separation between the travel lane and the shoulder, but no white bicyclist symbol/stencil is used to mark the lane.



- **Shared Lane Marking.** Shared lane markings (also known as “sharrows”) are high-visibility pavement markings that heighten the awareness of cyclists and motor vehicles that lane sharing is expected. These lane markings are strategically placed in the travel lane to encourage cyclists to ride in a straight line, so their movements are predictable to motorists, and at an appropriate distance to avoid getting “doored” by adjacent parked cars. Sharrows can also be used along bicycle boulevards, both to heighten awareness of the street’s function as a bicycle route, and to serve as a bicyclist wayfinding tool.



PEDESTRIAN OPERATIONS (SIGNALS)

- **Pedestrian Countdown Signal.** Pedestrian countdown signals give pedestrians “Walk” and “Don’t Walk” signals and inform them how long they must cross the street.
- **Pedestrian Scramble (or Barnes Dance).** Pedestrians usually must cross two streets to get from one corner to the opposite corner. A pedestrian scramble, also known as “Barnes Dance” is a type of traffic signal movement that temporarily stops all vehicular traffic, thereby allowing pedestrians to cross an intersection in every direction, including diagonally, at the same time.
- **Short Cycle Lengths.** Short cycle lengths of 60–90 seconds are ideal for urban areas and permit frequent gaps and consistent crossing opportunities, creating a more permeable network for pedestrians. The length of a pedestrian crossing should be taken into account when using shorter cycle lengths.
- **Leading Pedestrian Intervals.** A leading pedestrian interval gives pedestrians the opportunity to enter an intersection a few seconds before through-vehicles are given the green indication. By allowing pedestrians to get a head start into the crosswalk, it can reduce conflicts between pedestrians and turning vehicles.
- **Pedestrian Recall.** Traffic signals can be put in pedestrian recall, giving pedestrians a “Walk” signal at every cycle. No push-button or detection is necessary because a “Walk” signal will always be provided. Pedestrian recalls are useful in areas with high levels of pedestrian activity, such as in Downtown Cheyenne. They establish that an intersection is meant to serve both vehicles and pedestrians equally.



PEDESTRIAN GEOMETRIC ELEMENTS

- **Pedestrian Safety Island (or Median).** Pedestrian safety islands are located in the center of streets, separating traffic of opposite directions to facilitate crossings. They reduce the exposure time experienced by a pedestrian who is crossing the street. Pedestrian safety islands provide the opportunity for pedestrians to cross the street in two stages.
- **Curb Extension.** Curb extensions visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians and making pedestrians more visible to traffic. Curb extensions have multiple applications and may be segmented into various sub-categories, ranging from traffic calming to midblock crossings.
- **Raised Crosswalk.** Raised crosswalks are speed tables (flat-topped speed humps), that have crosswalk markings and signage, providing pedestrians with a level street crossing. Vehicle operating speeds for streets with



raised crosswalks are typically slower. They also make pedestrians more visible to approaching vehicles.

- **Traffic Calming.** Traffic calming encompasses a variety of volume control and speed control measures (including both horizontal and vertical devices). Traffic calming is intended to increase safety for all street users by reducing traffic speeds and in some cases volumes.

APPENDIX C: TRAVEL AND TOURISM ANALYSES

Tourist spending by sector is summarized in **Table 11** below. Food Service captured a plurality of all travel spending, capturing \$84.2 million or 22%, while Accommodations and Retail sales both captured \$57.6 million or 15% of total spending. Local Transport was also a major source of spending, capturing \$53.2 million or 14% of total spending.

Table 11: Laramie County Travel Spending by Sector (2019)

Sector	Spending (\$M)	% of Total
Accommodations	\$57.6	15.1%
Food Service	\$84.2	22.1%
Food Stores	\$21.1	5.5%
Local Transport	\$53.2	14.0%
Arts, Entertainment, Rec.	\$42.0	11.0%
Retail Sales	\$57.6	15.1%
Visitor Air Transport	\$1.7	0.4%
Other/Not Categorized	\$62.8	16.5%
Total	\$380.2	100%

Source: Wyoming Office of Tourism; Economic & Planning Systems

Travel and tourism are major contributors to local government revenues. Sales tax revenues comprise approximately 17% of the County's budget and 37% of the City's budget. The total sales tax rate in Laramie County is 6.0%, which is comprised of a 4.0% State sales tax and 2.0% local sales tax (which includes a 1.0% general fund sales tax and an optional 1.0% 'sixth-penny' sales tax). The sixth penny sales tax is an important source of funding for local capital improvements. In 2017, Laramie County, in cooperation with the City of Cheyenne approved \$82 million for six projects to be paid for the optional additional 1.0% sales tax.

Laramie County generated \$135 million in total sales tax revenue, \$90 million of which accrued to the State and \$45 million to Laramie County, as shown in **Table 12**. While sales tax revenue in Laramie County fluctuated between 2014 and 2019, it reached a five-year peak in 2019, increasing by \$17 million over 2014 and equating to an annual growth rate of 2.8%.

A significant portion of sales tax revenue comes from the Retail Trade sector, which generated approximately \$56.5 million or 42% of total sales tax revenue in 2019, while Leisure and Hospitality generated \$16.6 million or 12% of total sales tax revenue, as shown in **Table 12**. Collectively, these two sectors accounted for most of the total sales tax revenue in Laramie County in every year between 2014 and 2019.

Table 12: Laramie County Sales Tax Revenue by NAICS Sector (2019)

Sector	2019 Revenue (\$M)	% of Total
Arg., Forestry, Fishing, & Hunting	\$0.03	0.02%
Mining	\$12.71	9.4%
Utilities	\$9.62	7.1%
Construction	\$2.40	1.8%
Manufacturing	\$2.52	1.9%
Wholesale Trade	\$7.27	5.4%

Sector	2019 Revenue (\$M)	% of Total
Retail Trade	\$56.47	41.8%
Transportation & Warehousing	\$0.32	0.2%
Information	\$3.12	2.3%
Financial Activities	\$6.19	4.6%
Professional & Health Services	\$0.94	0.7%
Educational & Health Services	\$0.03	0.02%
Leisure & Hospitality	\$16.60	12.3%
Other Services	\$6.46	4.8%
Public Administration	\$10.32	7.6%
Total	\$135.0	100.0%

Source: Wyoming Department of Information; Economic & Planning Systems

Travel spending comprises a sizeable portion of sales tax revenue in Laramie County, totaling \$22 million in 2019 and accounting for one-sixth (16%) of total revenue, as shown in **Table 13**. In addition to sales tax, travel to Laramie County generates revenue through a 4% lodging tax. This tax generated approximately \$2 million in revenue in 2019, equating to a \$0.4 million increase over 2014 and an annual growth rate of 4.1%.

Table 13: Laramie County Sales and Lodging Tax Collections (2014-2019)

Description	2014	2015	2016	2017	2018	2019	2014-2019		
							Total	Ann. #	Ann. %
Total Sales Tax Collections (\$M)	117.8	128.7	110.8	105.2	113.6	135.0	17.2	3.4	2.8%
Retail Trade Acc., Food Service Tax	62.9	64.5	62.8	60.4	64.2	72.5	9.6	1.9	2.9%
% of Total	53%	50%	57%	57%	57%	54%			
Revenue from Travel Spending	16.6	18.5	18.6	19.9	21.4	22.1	5.5	1.1	5.9%
% of Total	14%	14%	17%	19%	19%	16%			
Local Sales Tax Collections (\$M)	39.4	43.1	37.2	33.4	32.9	45.2	5.8	1.2	2.8%
State Sales Tax Collections (\$M)	78.3	85.6	73.7	71.8	80.7	89.8	11.4	2.3	2.8%
Lodging Tax Collections (\$M)	1.67	1.97	1.72	1.77	1.95	2.05	0.4	0.1	4.1%

Source: Wyoming Department of Information; Economic & Planning Systems

Frontier Days

The largest tourism attraction in Cheyenne is Frontier Days, a two-week event in July that advertises itself as ‘The World’s Largest Rodeo and Western Celebration’. Around since 1897, Frontier Days has evolved into a major regional event that hosts rodeos, concerts, western heritage activities, and a carnival. Drawing over 140,000 visitors each year, it is one of the largest tourist attractions in the state behind Yellowstone National Park, Grand Teton National Park, and Jackson. As such, Frontier Days has a significant economic impact on Cheyenne. According to the Wyoming Tourism Council study, Frontier Days attracted 142,000 unique visitors in 2018, 75% of whom were from outside of Laramie County, as shown in **Table 14**.

This produced an estimated \$27.1 million in visitor spending, comprising 7.1% of total annual visitor spending in Laramie County. Additionally, the event supported an estimated 302 jobs and generated approximately \$1.3 million in total tax revenue.

Table 14: Frontier Days Economic Impact (2015 and 2018)

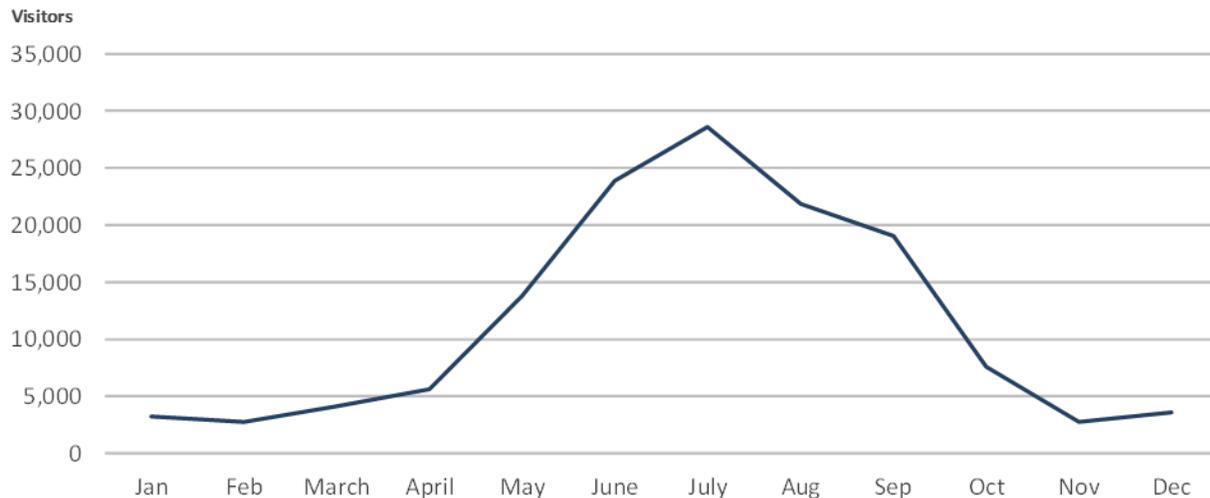
Description	2015	2018
Direct Visitor Spending	\$28,000,000	\$27,100,000
<i>% of Annual Spending</i>	8.7%	7.1%
Unique Attendees	149,300	142,000
<i>From Outside Laramie County</i>	125,397	105,689
Jobs Supported	300	302
Tax Revenue		
<i>Local</i>	\$549,000	\$633,000
<i>State</i>	\$649,000	\$683,000

Source: Dean Runyon Associates; Economic & Planning Systems

Hotel and Visitor Center Seasonality

The monthly visitation numbers at the Southeast Wyoming Welcome Center on I-25 (five miles north of the Wyoming-Colorado border) are one indicator of Cheyenne’s seasonality. As shown in **Figure 22**, visitor center numbers start to increase in April, reaching a peak of 28,500 visitors in July (the month of Frontier Days) and gradually decreasing to a low of 2,700 visitors in November. With over ten times the number of visitors as the winter months, July stands out as the peak month for road travel to Cheyenne.

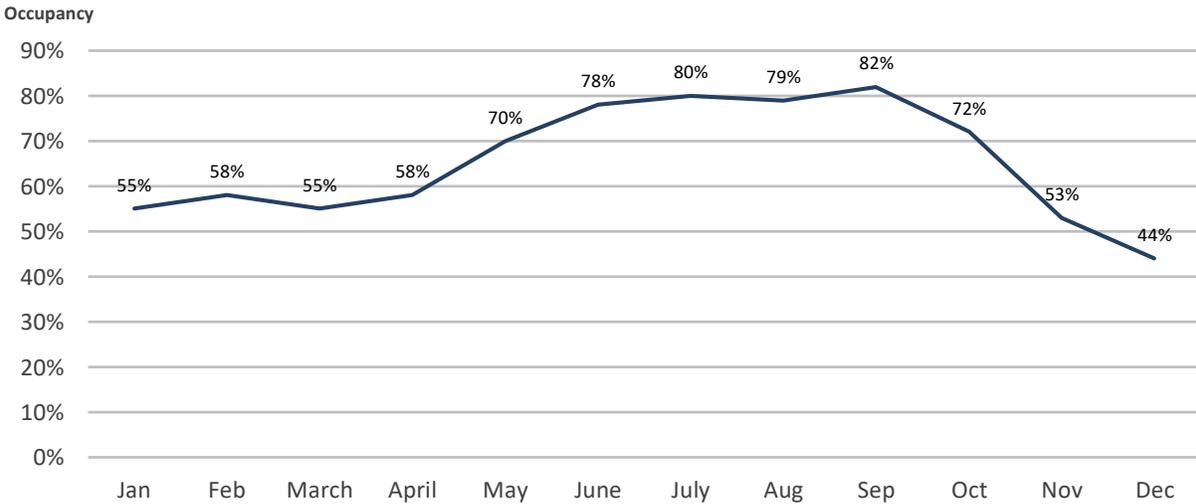
Figure 22: Visitors at Southeast Wyoming Welcome Center (2019)



Source: Wyoming State Tourism Office; Economic & Planning Systems

Hotel occupancy rates are another measure of seasonality and show a similar pattern regarding Cheyenne’s seasonality. In 2019, hotel occupancy was highest between June and September when rates hovered around 80%, as shown in **Figure 23**. By comparison, the winter and early spring months faced much lower occupancy rates of around 55%, bottoming out at 44% in December, almost half of the occupancy rate in the peak summer season.

Figure 23: Cheyenne Hotel Occupancy (2019)



Source: STR; Economic & Planning Systems

Air Travel

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 and its impacts on air travel. 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 15**.

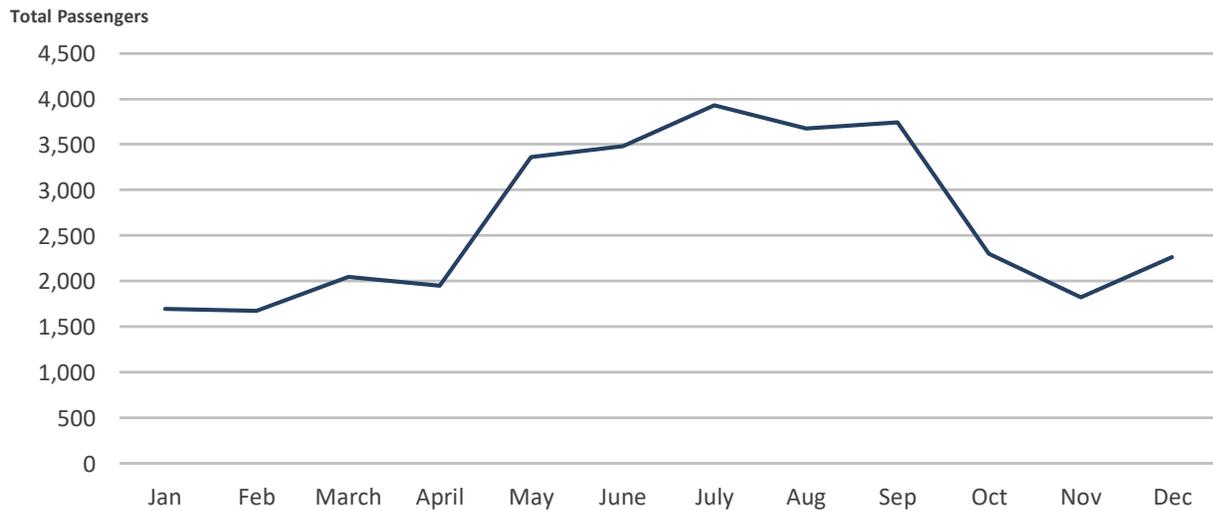
Table 15: Passengers at Cheyenne Regional Airport (2014-2019)

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 24: Monthly Passengers at Cheyenne Regional Airport (2019)



Source: WYDOT Aeronautics Division; Economic & Planning Systems

WYDOT Highway Trends

Average daily traffic (ADT) counts were compiled by month for four major intersections in Cheyenne as shown in **Table 16**. Three of the four intersections show July as the peak travel month. I-25 at Central Avenue sees the most traffic in July with an average 22,547 cars daily, compared a low of 14,288 cars in November. Similarly, I-80 South of the Riner Viaduct, a major thoroughfare into downtown Cheyenne reaches peak average daily traffic in July with a daily average of 21,672 cars compared to a low of 17,031 cars in November.

Table 16: Average Daily Traffic by Month (2019)

Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
I-25 at Central Ave	14,529	14,416	15,297	17,204	18,693	21,085	22,547	20,517	19,045	17,023	14,288	14,839
US 30 East of Christensen	5,894	5,991	5,847	6,354	6,568	6,844	7,159	8,001	7,095	6,800	5,825	5,935
US 85 North of 22 nd St	8,494	8,703	8,729	9,092	9,234	9,390	9,643	8,789	8,380	N/A	N/A	N/A
I-180 South of Riner Viaduct	18,379	19,052	19,046	19,897	20,773	21,479	21,672	20,757	20,522	19,578	17,031	17,229

Source: WYDOT; Economic & Planning Systems

Average daily traffic trends at these locations in July of 2019 show especially high volumes during Frontier Days. In the final two weeks of July, which align with the events of Frontier Days, average daily traffic was higher on all four roads than their averages for July as a whole. At I-25 and Central Avenue, for example, average daily traffic in the week of July 17th-24th was 23,438; 891 cars more than the monthly average, as shown in Table 13. Daily Traffic at this location peaked at 27,283 cars on July 26th.

Table 17: Average Daily Traffic by Week (July 2019)

Description	July 1 st -8 th	July 9 th -16 th	July 17 th -24 th	July 25 th -31 st
I-25 at Central Ave	21,405	22,207	23,438	23,425
US 30 East of Christiansen Rd	6,552	7,044	7,682	7,562
US 85 North of 22 nd St	8,708	9,877	10,382	9,999
I-180 South of Riner Viaduct	20,159	21,946	22,865	22,285

Source: WYDOT; Economic & Planning Systems

Travel Inventory

A summary of tourism-supporting facilities is provided in **Table 18**. The Cheyenne area has 35 hotels/motels with a total of 2,375 keys. Other area visitor accommodations include, 9 camping/RV parks with 750 total campsites, and 181 short-term rentals (as listed by Airbnb or VRBO). In addition, Laramie County has approximately 264,000 square feet of restaurant and bar space, and approximately 4,827,000 square feet of total retail space.

Table 18: Inventory of Tourism Supporting Facilities

Description	Total
Hotels/Motels	35
<i>Rooms</i>	2,375
Camping/RV Facilities	9
<i>Campsites</i>	750
Short-Term Rental Listings	181
Restaurant/Bar Space	263,670 sq. ft.
Total Retail Space	4,827,087 sq. ft.

Source: Economic & Planning Systems