


CHAPTER 3 TRANSPORTATION

WHAT YOU WILL FIND IN THIS CHAPTER:

- Condition, trends, and challenges that describe all travel modes in the existing transportation system.
- Transportation goals that establish overarching priorities and policies that lay out specific actions.
- Details on the City's level of service standards.
- Evaluation of financial conditions over the next 20 years and guidance on plan implementation.
- A future transportation vision that introduces a layered network concept that forms the foundation of this plan to accommodate all modes of travel and create a complete transportation network in Ellensburg.

OVERVIEW

Ellensburg is a city rich in history and a premier destination for outdoor adventure. Home to Central Washington University, Ellensburg is a vibrant community with a range of cultural offerings.

This Transportation chapter aims to provide a 20-year vision for Ellensburg's transportation system which respects the community's history and character, supports anticipated growth in the city and Urban Growth Area, and builds on Ellensburg's momentum as an attractive community in which to live, work, and play by supporting safe and comfortable travel by all modes through 2037.

The overall vision for Ellensburg's Transportation chapter is to provide a safe, balanced, and efficient multi-modal transportation system that is consistent with the City's overall vision and adequately serves anticipated growth.

The transportation goals serve as the foundation for this plan: safe for all users, connected and efficient, multimodal, integrate transit, fund maintenance and preservation, and facilitate active partnerships.

BACKGROUND & CONTEXT

The Transportation Element sets a framework for understanding, prioritizing, measuring, and creating a transportation network to help Ellensburg achieve its vision. This element focuses on the City's vision and the projects and programs intended to meet that vision. Technical and supporting information are available in Appendices B-E.

Ellensburg's geography plays a role in the demands put on its transportation system. The transportation network is constrained by railroad crossings, river and creek crossings, and a limited number of connections to Interstate-90.

Ellensburg sits at the crossroads of Interstate-90 and Interstate-82, two important connections across the state, as well as into Oregon and Idaho. This brings travelers from all regions to Ellensburg looking for a variety of activities, including patronizing the highway-oriented services along Canyon Road, outdoor adventures, and downtown events such as the monthly art walk.

Interstate-90 is a major freight corridor for trucks, and Ellensburg sits on a rail corridor that moves more than five million tons of goods each year. This is an important aspect of Ellensburg's economic vitality, but it also poses transportation challenges.

The City must coordinate its transportation planning with a variety of jurisdictions and agencies, including Kittitas County, Central Washington University, and the State of Washington.

ROLE OF THE TRANSPORTATION CHAPTER

The Transportation chapter provides a framework that outlines the goals, policies, and action items necessary to implement the City's vision of future mobility in and throughout the City of Ellensburg. The Transportation Element also describes the financial environment for transportation investments out to 2037.

In essence, the Transportation chapter informs the development of the Capital Improvement Program by identifying the types of projects the City should undertake to support future travel trends. The chapter also evaluates how these projects coincide with the community's values and financial resources.

OTHER PLANS

As part of this planning process, several local, regional, and state plans and documents that influence transportation planning in the City of Ellensburg were reviewed. This section summarizes some of the key regional plans that were examined.

Kittitas County Comprehensive Plan

The City of Ellensburg consulted with Kittitas County as part of their Comprehensive Plan update, and the two entities will continue to work together on transportation projects and road standards, especially in Urban Growth Areas.

Ellensburg Nonmotorized Transportation Plan

The Ellensburg Nonmotorized Transportation Plan (NMTP) 2008, prepared by the City of Ellensburg, lays out the long term goals of the community for nonmotorized transportation.

The Plan identifies 11 goals for transportation in the region:

1. Plan a coordinated, continuous network of nonmotorized transportation facilities that effectively provide access to local and regional destinations.
2. Create a comprehensive system of multi-use off-road trails using alignments along public road rights-of-way, greenway belts, and open space areas, as well as cooperating private properties where appropriate.
3. Create a comprehensive system of marked, on-road bicycle routes for commuter, recreational, and touring enthusiasts using scenic, collector, and local road rights-of-way and alignments through and around Ellensburg.
4. Design a safe, attractive, accessible, and interconnected pedestrian environment.
5. Establish classification and design standards that facilitate safe and pleasant nonmotorized travel.
6. Prioritize nonmotorized transportation projects and identify funding sources for high priority projects.
7. Develop a system for maintenance of nonmotorized facilities.
8. Establish requirements for new developments to include facilities supporting nonmotorized transportation.
9. Promote safe nonmotorized transportation through education and law enforcement.
10. Increase the share of transportation that is nonmotorized through programs that encourage walking and bicycling in lieu of driving.
11. Coordinate implementation of this plan among city departments, county and other government agencies, businesses, and residents.

This plan was reviewed and key projects are included in the 20 year project list for this Transportation chapter.

Central Washington University Campus Master Plan

Central Washington University's Campus Master Plan guides their 10 year vision for student growth and capital projects. The university is a driving force in the community and changes to campus affect transportation in the whole region. Their current plan was updated in 2013 and provides insight into projected enrollment and changes to their built environment.

CWU did an in-depth parking analysis for their Campus Master Plan. This identifies key areas that are being over or underutilized and that may affect the surrounding neighborhoods. It also emphasizes the need for nonmotorized and transit connections to better serve the campus population.

Ellensburg Transit Feasibility Study

Published in 2016, the City of Ellensburg commissioned a Transit Feasibility Study to assess the options for a formal transit system in Ellensburg.

The Transit Feasibility Study found that there is strong support for transit but mixed opinions on how to fund the new system. It identified potential revenue sources as well as benefits for related projects such as the Nonmotorized Transportation Plan. It outlined gaps in service, new service lines, and capital expenditures that would be needed to make public transit a reality in Ellensburg.

In 2016, city voters approved of a sales tax measure with funds earmarked for transit. As of 2017, the City transitioned transit service in Ellensburg from a community services organization to the City with operations contracted out. Ellensburg is actively considering ways to enhance the service.

Kittitas Valley Event Center Master Plan

The Kittitas Valley Event Center is home to the annual County Fair and Rodeo. It sits on 21 acres in the center of Ellensburg and is jointly owned by Kittitas County and the Ellensburg Rodeo Association. As the number of attendees continues to grow each year it creates challenges for the transportation system. The Master Plan identifies multiple goals and objectives that will impact transportation and land use in the area, and includes the following:

- Update and increase the capacity of Fair and Rodeo facilities to meet current and growing attendance and user needs.
- Improve the north parking lots to increase capacity, provide direct, safe, and convenient access from University Way/Vantage Highway, and improve aesthetics.

Interstate-90 Snoqualmie Pass East Project

The Federal Highway Administration (FHWA) and WSDOT are making improvements to a 15-mile section of Interstate-90 east of Snoqualmie Pass. The corridor project will widen the freeway, build and replace bridges, minimize closures due to avalanches and rockslides, and address wildlife connectivity. Phase 1 addresses the first five miles of the corridor and will be completed in 2018. Phase 2 improves the next two miles and will be completed in 2019, and funding has been secured for the remaining eight-mile section. Completion of the project will result in a six-lane freeway with less avalanche closures, increased safety, and new pavement. The improved corridor will affect traffic coming to and from Ellensburg along Interstate-90.

DOWNTOWN PARKING

Ellensburg's on-street parking supply is currently available on a first-come, first-served basis, with time restrictions in some locations. Expected new growth in the downtown area will increase the demand for parking as this attracts additional employees, visitors, and retail shoppers.

Anticipated development and enrollment growth at CWU may also necessitate more active parking management in the future as demand for parking increases.

Monitoring parking use downtown and around CWU can help manage parking demand.

The City will be conducting a downtown parking study that will include management and zoning code strategies. These strategies will seek to maximize the study area's current parking resources, balance the needs of all users, and emphasize cost effective approaches.

Management strategies will consider elements such as:

- Parking regulations
- Optimization of existing and additional parking supply
- Shared parking agreements
- Advanced parking management technologies
- Communication and wayfinding strategies
- Operational and structural changes

Potential areas of focus for zoning code strategies include:

- Minimum and maximum parking requirements
- Mixed-use or shared parking requirements
- In-lieu parking fee strategies

CONDITIONS AND TRENDS

This chapter describes how people use Ellensburg's transportation network today, as well as how that may change over the next 20 years as the region grows. The way people travel is greatly influenced by the built environment, which includes land use and travel corridors, as well as the key destinations where people live, work, shop, and play. This chapter also describes trends in how people are traveling based on anticipated development patterns and travel mode data.

Land Uses and Key Destinations

The places where people live, work, and play are impacted by how a city and surrounding communities guide where development occurs. The Land Use chapter of this Comprehensive Plan provides the guidance mentioned here. The City of Ellensburg's zoning map guides the types of uses that are allowed in specific areas of the city. This zoning map leads to clustering of like uses, for example shopping and other commercial destinations in downtown and along major roadway corridors, with other areas of the city limited to primarily residential development. Changes to zoning can affect not only the land use, but also use of the surrounding transportation network. The 2017 zoning map for Ellensburg is shown in *Figure 10*. Key destinations in Ellensburg are mapped in *Figure 11* and described below.

The main commercial areas in Ellensburg are the Central Commercial zones, the Commercial Highway zones, and the Commercial Tourist zones. The Central Commercial zone is generally comprised of older buildings in the historic downtown core. Outside of the Central Commercial zone, areas of commercial development are largely auto-oriented with larger buildings and ample off-street parking lots. The Central Commercial II zone includes newer developments, like the Fred Meyer shopping center.

Newer developments are also located in pockets of Commercial Highway zones, mostly centered on Canyon Road near I-90, West University Way, Dolarway Road, and Vantage Highway. Tourist services such as restaurants, coffee shops, lodging, and gas stations are clustered in the Commercial Tourist zones around the two freeway interchanges in Ellensburg.

It is important to consider that areas of commercial, industrial, and dense residential land use tend to have more concentrated trips and can be supportive of alternative modes of travel such as transit, whereas areas of low density residential use tend to have dispersed trip patterns more conducive to trips made by personal vehicle.

Central Washington University

Central Washington University (CWU) is a major destination and sustaining economic driver in Ellensburg. The 380-acre campus is located northeast of historic downtown Ellensburg. The University has over 9,600 students enrolled on campus, of which over 3,000 live on campus. The campus has 16 residence halls and four apartment complexes. In addition to students, there are about 1,400 full-time faculty and staff members. The University has plans for continued growth in enrollment and campus facilities, particularly on the relatively undeveloped areas on the north end of campus. Growth at CWU was considered in future conditions analysis.

The majority of students, faculty and staff access campus via car. In the 2010-2011 academic year (the most recent available data) 5,462 parking permits were sold, including 3,791 student permits. At this time, enrollment was 8,400 students. Most parking for campus is located in the lots shown in *Figure 12*, but many park on-street along roadways bordering campus where parking is not restricted. The large concentration of students, faculty, and staff leads to university-specific transportation issues, such as clustering of arrivals and departures around class schedules, parking availability and pricing concerns, and how to accommodate students without access to personal vehicles.

Figure 10. 2017 Zoning Map

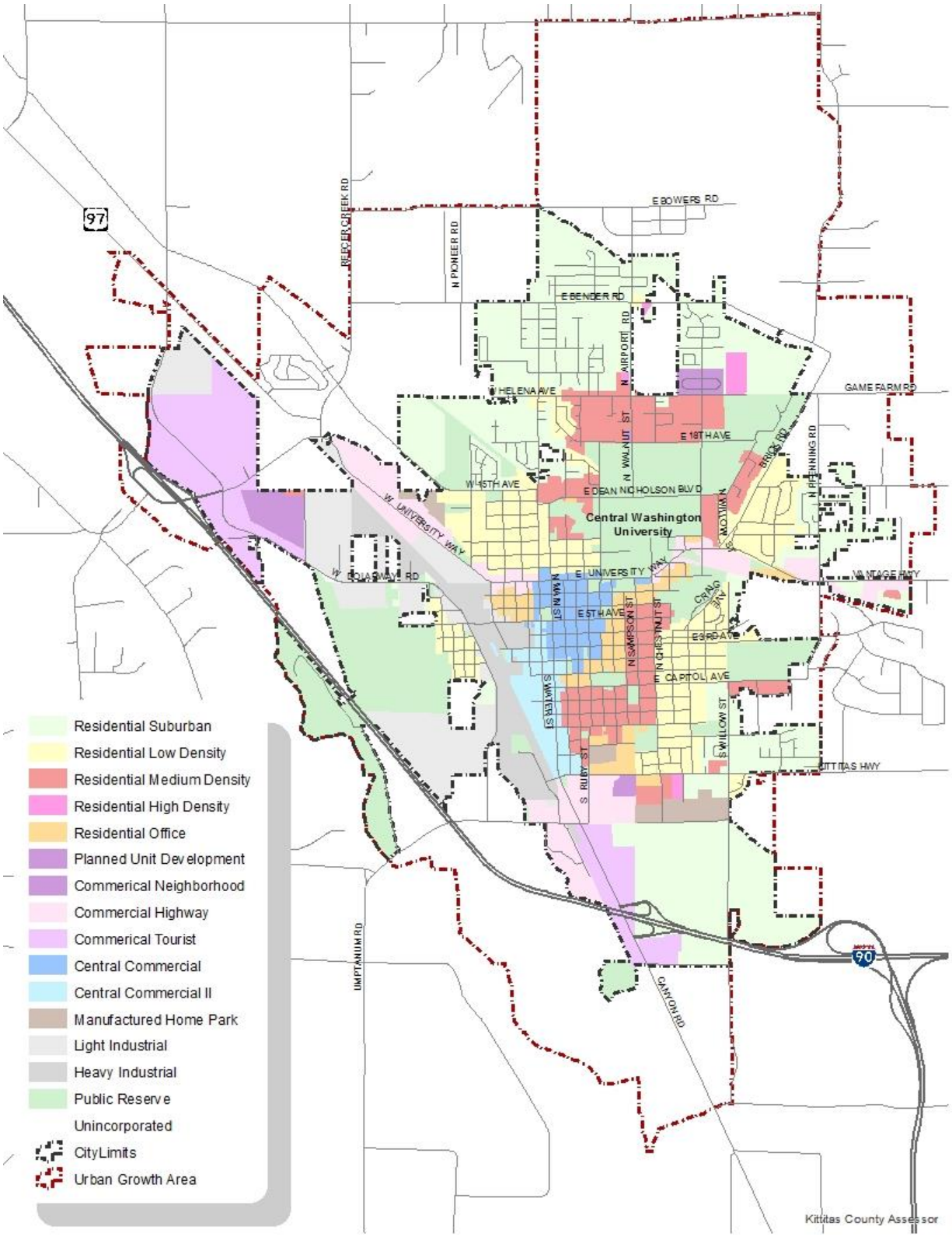
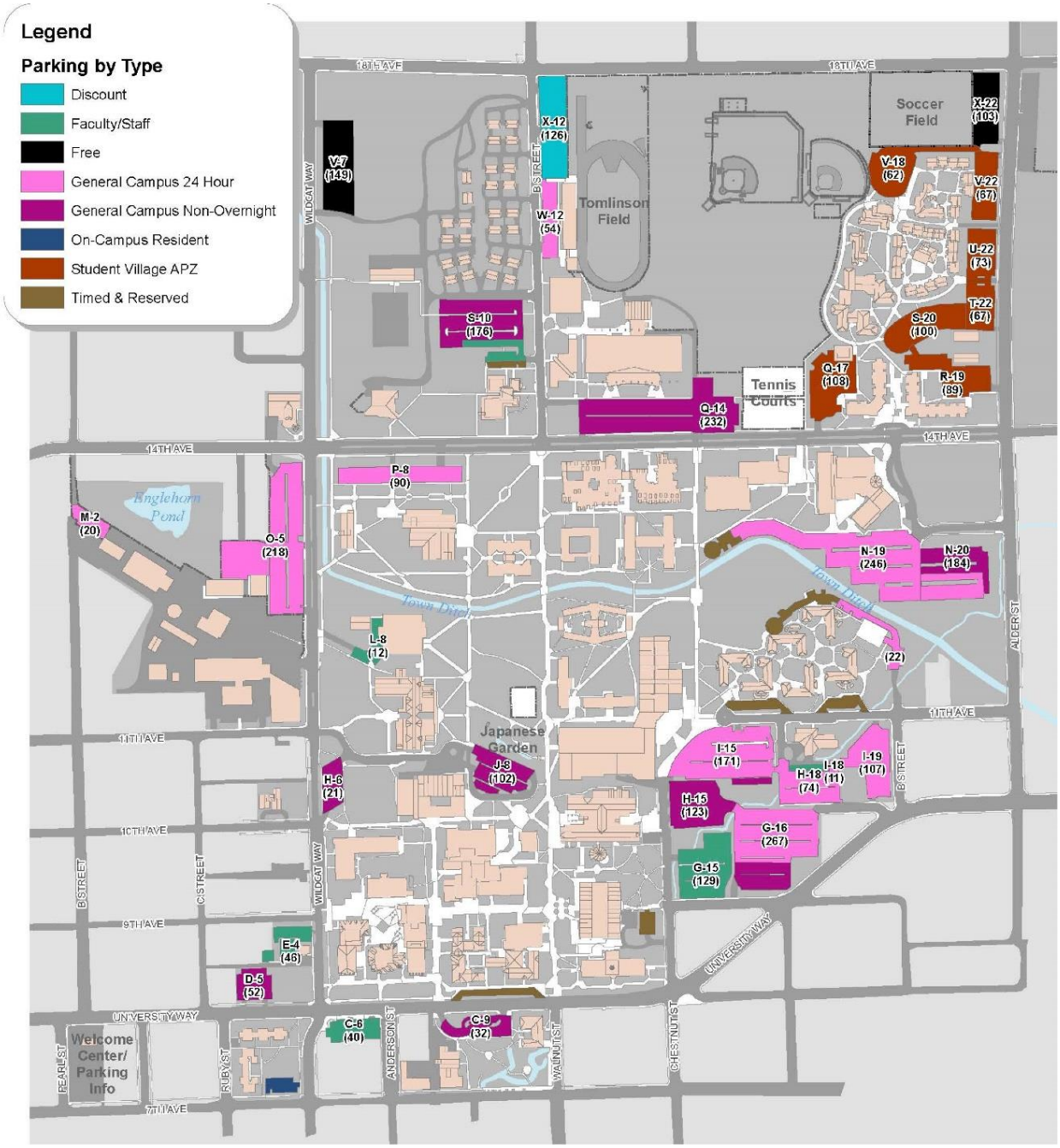


Figure 11. Key Destinations

*CWU is a key destination with many access points, See *Figure 12* for CWU parking lots

Figure 12. CWU Parking Lots



Schools

The Ellensburg School District serves almost 3,300 students (as of May 2016) and operates five K-12 schools that serve the community:

- Valley View Elementary
- Mount Stuart Elementary
- Lincoln Elementary
- Morgan Middle School
- Ellensburg High School

In addition to these public schools, Ellensburg Christian School is a private Kindergarten through Eighth grade school in the City. There are also several preschools and daycares throughout Ellensburg.

Transportation networks surrounding schools can become congested at start and end times each day. Students can arrive at school via walking, biking, being dropped off, driving a personal vehicle for older students, or via school bus. The combination of the various modes during a compressed timeframe can lead to safety concerns.

The City and school district work together to provide Safe Routes to School (SRTS) through engineering, and education. The goals of the program are to reduce injury and increase activity levels in children. Ellensburg has been successful in obtaining an SRTS grant to provide pedestrian improvements on Capitol Avenue adjacent to Lincoln Elementary School. Curb extensions were added to shorten crosswalk distance, increase pedestrian visibility, and prevent cars from parking in the crosswalk.

Parks and Recreation Areas

The City's park system includes 18 parks and five special use areas. These include athletic fields, walking trails, ponds, picnic shelters, playgrounds, a boat launch, a pool, a skate park, a youth center, access to the Yakima River, and more. Parks attract active transportation users such as walkers, bikers, and skateboarders. They also attract younger users, so safety in the transportation network surrounding parks is important.

Hospital

Kittitas Valley Healthcare Hospital serves Ellensburg and the surrounding areas. The hospital is a 25-bed inpatient facility, although outpatients make up 85 percent of the total usage. The hospital employs approximately 600 people in addition to other medical clinics on the same campus. The hospital is working on a new campus master plan that will potentially expand the footprint of the campus. The hospital currently has issues with parking availability during busier times and requires easy access for ambulances and other emergency medical needs.

Kittitas Valley Event Center

The Kittitas Valley Event Center is located in Central Ellensburg approximately bounded by East 8th Avenue (north), Poplar Street (west), East 5th Avenue (south), and Reed Park (east). The Event Center is a major draw on Labor Day weekend coinciding with the Kittitas County Fair and Rodeo, but is used throughout the year providing service to community organizations, trade shows, expositions, equestrian and livestock events, and other special events.

Retirement Communities

Ellensburg has a number of retirement communities, mostly located south of Mountain View Avenue. The retirement communities include Briarwood Commons Apartments, Pacifica Senior Living, Hearthstone Cottage, Meadows Place, Mountain View Meadows, and Rosewood Adult Living. Retirement communities often provide transportation services for those unable to drive, although some residents continue to drive. ADA accessible pedestrian infrastructure surrounding retirement communities should be in place for those that wish to walk.

Transportation Network Overview

Ellensburg's transportation network accommodates many modes of travel, including walking, bicycling, public transit, freight transport, and driving. Vehicular travel is the primary choice for most travelers in and around Ellensburg. City streets form the foundation of the transportation framework with roadways shaping how residents and visitors experience Ellensburg. The main travel corridors in Ellensburg are roadways with sidewalks. In addition, there are some off road trails, such as the Iron Horse Trail.

Auto and Freight Network Overview

The majority of Ellensburg is laid out on a grid system that is nominally oriented North-South and East-West. However, some newer areas of the city are not laid out on a grid and lack connectivity due to cul-de-sacs, dead ends, and other missing links.

Ellensburg's roadways are classified into principal and minor arterials, collectors, and local streets, as shown in *Figure 13* and *Table 12*. Examples of each roadway type are described in *Table 12*.

In recent years, grants have funded several safety and roadway improvement enhancements to Ellensburg's transportation network. These include updating all 21 of Ellensburg's traffic signals with new controllers, road widening and street improvements on Mountain View Avenue and Dolarway Road, widening a small section of 3rd Avenue to provide parking and a middle turn lane as well as extending the road to eliminate a dead end and to provide a more complete collector road system, signalization of the intersection of Vantage Highway and Pfenning Road, LED street light illumination replacement, and asphalt overlay grants for projects that also improved ADA accessibility.

Table 12. Classification of Roadways

Roadway Type	Description / Purpose	Example	Photo
Interstate	Interstates primarily serve long distance travel between cities and carry high volumes. They provide only limited access via grade separation and access ramps.	**I-90**	
Principal Arterial	Principal arterials tend to carry the highest non-interstate volumes. They can potentially serve regional trips and connect Ellensburg with the rest of the region.	**University Way** **Canyon Road**	
Minor Arterial	Minor arterials are designed for higher volumes, but tend not to be major regional travel ways. Minor arterial streets provide inter-neighborhood connections.	**Dolarway Road** **5th Avenue**	
Collectors	Collectors distribute trips between local streets and arterials and serve as transition roadways to or from commercial and residential areas. Collectors have lower volumes than arterials, and must balance the needs of all modes.	**3rd Avenue** **Ruby Street**	
Local Streets	Local streets are the lowest functional classification, providing circulation and access within residential neighborhoods.	**Maple Street** **Pine Street**	

Figure 13. Roadway Functional Classifications

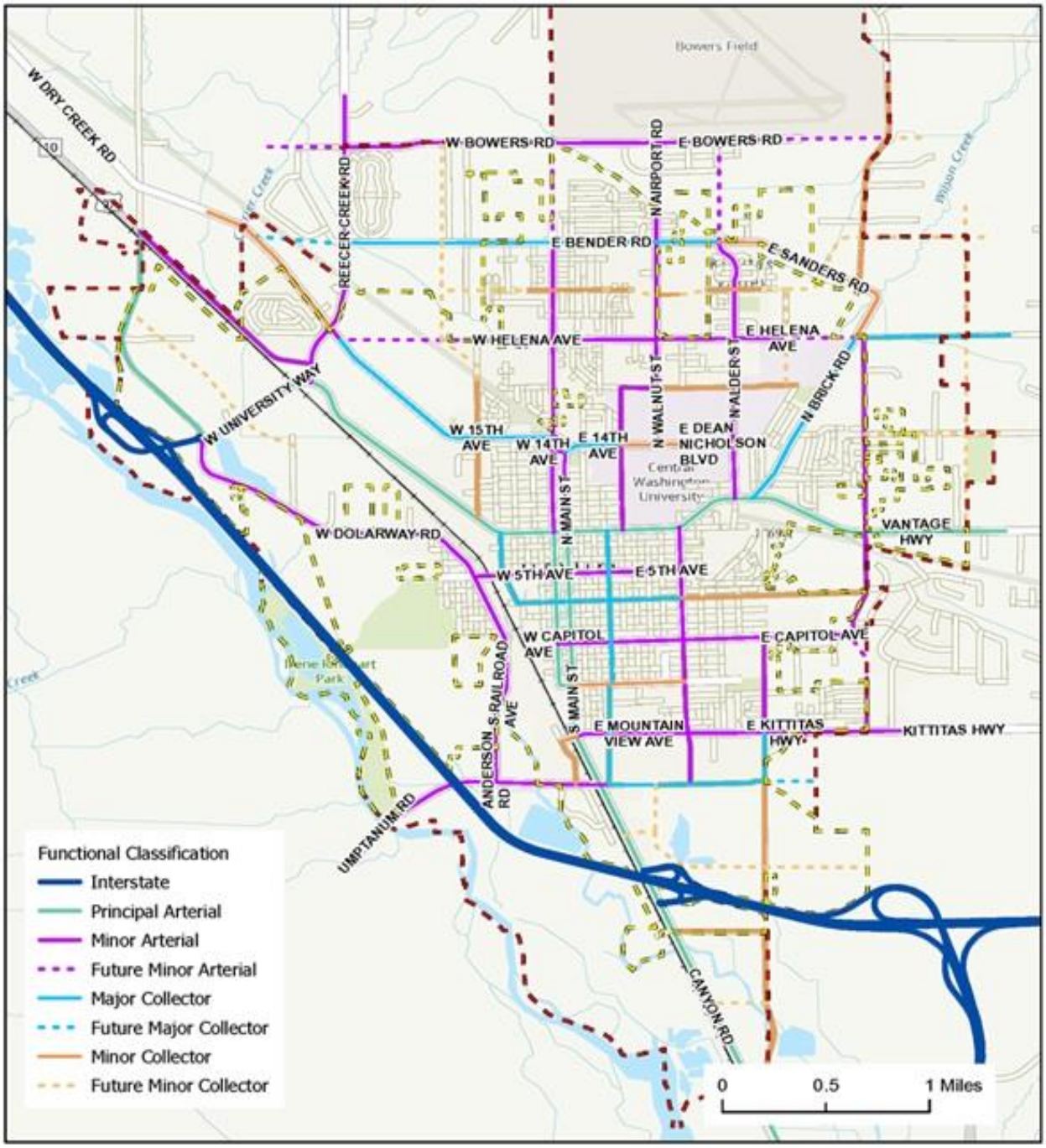
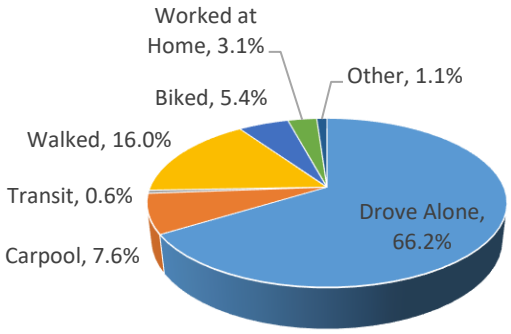


***Figure 13 (above) depicts the general location and connections of future roadways. The exact locations of future roadways will be determined based on topography, environmental conditions, and future development needs.*

Pedestrian and Bicycle Network

Figure 14. How Ellensburg Residents Travel Today (survey results)



Since every trip includes a segment that is made on foot or by bike, facilities for walking and biking are a critical component of the overall transportation network. The American Community Survey Travel to Work data, shown in *Figure 14*, indicates that 16 percent of Ellensburg residents walk to work, and 5 percent bike to work. The combined 21 percent of workers who use active transportation modes to travel to work, rely on safe sidewalks, pedestrian paths, and bicycle infrastructure. It is also important to note that Travel to Work Data historically undercounts the overall demand for walking and biking, since it does not consider how the network is also used by school children and recreational users. Ellensburg's current bicycle and sidewalk network is shown in *Figure 15*.

According to City of Ellensburg GIS data, the City has 8.3 miles of bike lanes, 1.3 miles of bike boulevards, 2.3 miles of shared use paths (serving both bicyclists and pedestrians), and 22.4 miles of designated bike routes without bike infrastructure. Another 2.1 miles are planned for future addition to the bike network.

Ellensburg has undertaken efforts to improve their bicycle facilities. The City is currently designated as a Silver-Level Bicycle Friendly Community by the League of American Bicyclists (LAB). According to the Report Card from LAB, 47 percent of arterial streets in Ellensburg have bike lanes and 27 percent of the total road network mileage also has bicycle infrastructure. The City has undertaken several projects to provide multi-use paths, bike lanes, and sharrows. Moreover, Ellensburg has set a goal of becoming a Gold-Level through a combination of engineering, enforcement, education, and encouragement.

The LAB report card for Ellensburg included several suggestions for attaining a Gold-Level designation:

- Implement a bicycle wayfinding system
- Maintain off-street infrastructure and address potholes and other hazards more swiftly
- Promote cycling with community events
- Celebrate Bike to Work Day
- Encourage CWU to become a LAB Bicycle Friendly University

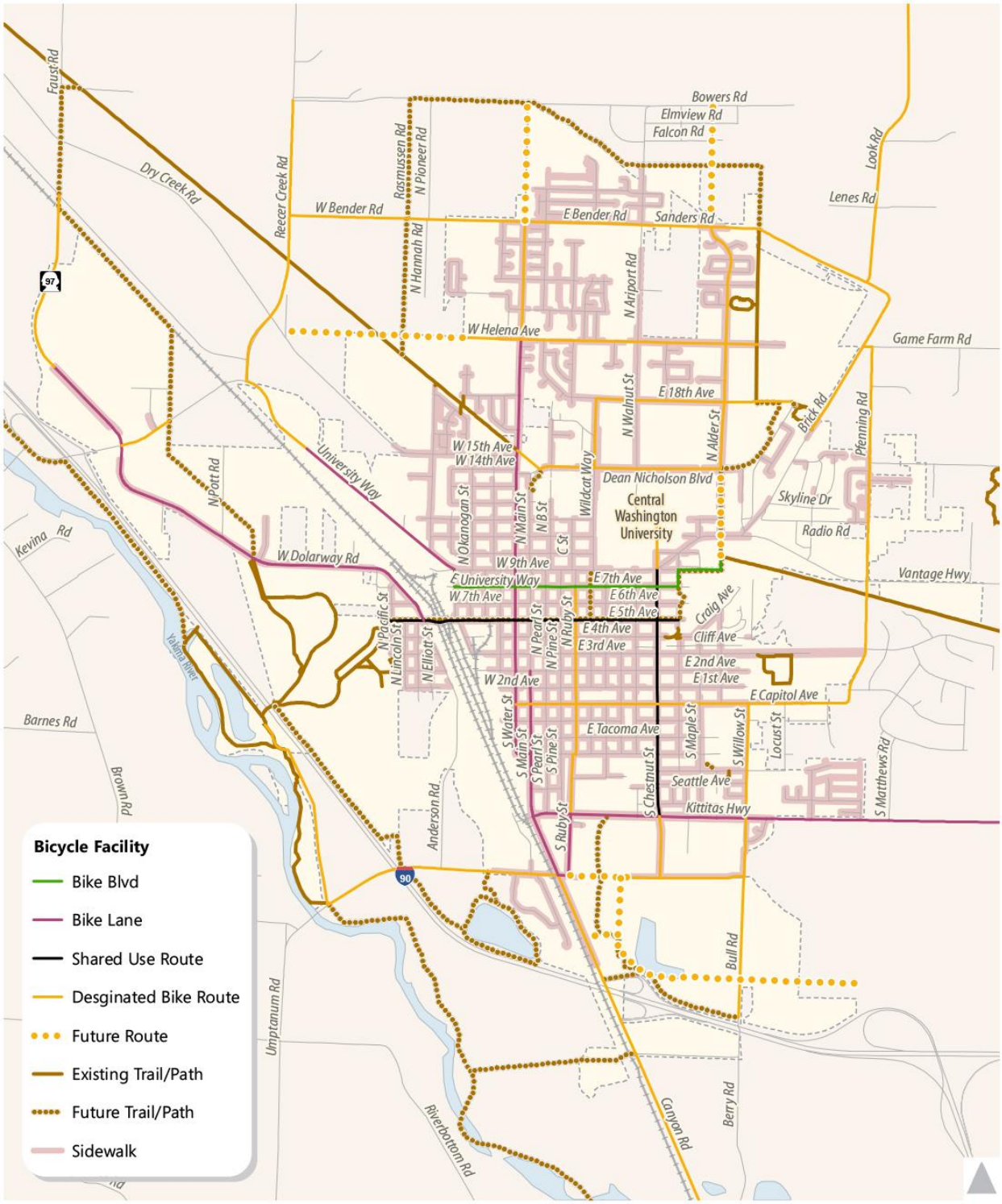
- Update the 2008 Nonmotorized Transportation Plan (NMTP) and include new forms of bicycle infrastructure as well as developing a vision statement and ambitious but attainable goals

- Offer bicycle skills training opportunities for adults

Ellensburg has recently made or planned several pedestrian and bike improvement projects using grant funding. These improvements include filling a missing sidewalk link on 5th Avenue in West Ellensburg, completion of the 7th Avenue bike boulevard, Interstate-90 trail undercrossing enhancements between Rotary Park and Irene Rinehart Riverfront Park, and continuing to build sections of the John Wayne Trail reconnection project. Since 2006, 6.9 miles of sidewalk and 5.2 miles of bike lanes have been installed.

As part of Ellensburg's continued efforts to improve infrastructure for all users, the City has several projects listed in the 2008 NMTP to improve the pedestrian and bicycling infrastructure. These existing, but not yet built, projects are included in the project list evaluated as part of this Comprehensive Plan Update.

Figure 15. Existing and Proposed Pedestrian and Bicycle Facilities



Transit Network

Ellensburg recently voted for a transit sales tax measure that partially funds transit service in the city. The existing Central Transit public transit service is a collaboration between the City, CWU, and HopeSource, a Community Action Agency in Ellensburg. With the new sales tax, Ellensburg has hired a full time transit manager and will continue to improve existing service. Route 1 and Route 2 are operated along the same route, but in opposite directions. The time between buses on each routes are currently one hour. Approximately 54,000 transit trips are taken annually on Central Transit. *Figure 16* shows existing transit routes in the City's transit network.

In addition to the Central Transit service, Ellensburg is also served by the Yakima-Ellensburg Commuter, operated by Yakima Transit through a financial agreement. The route does not provide local service but connects to Yakima and offers three stops in Ellensburg: at Super 1 Foods, Safeway, and CWU (*Figure 17*). There are a total of seven weekday trips in each direction (Yakima to Ellensburg and vice versa), and no weekend or holiday service.

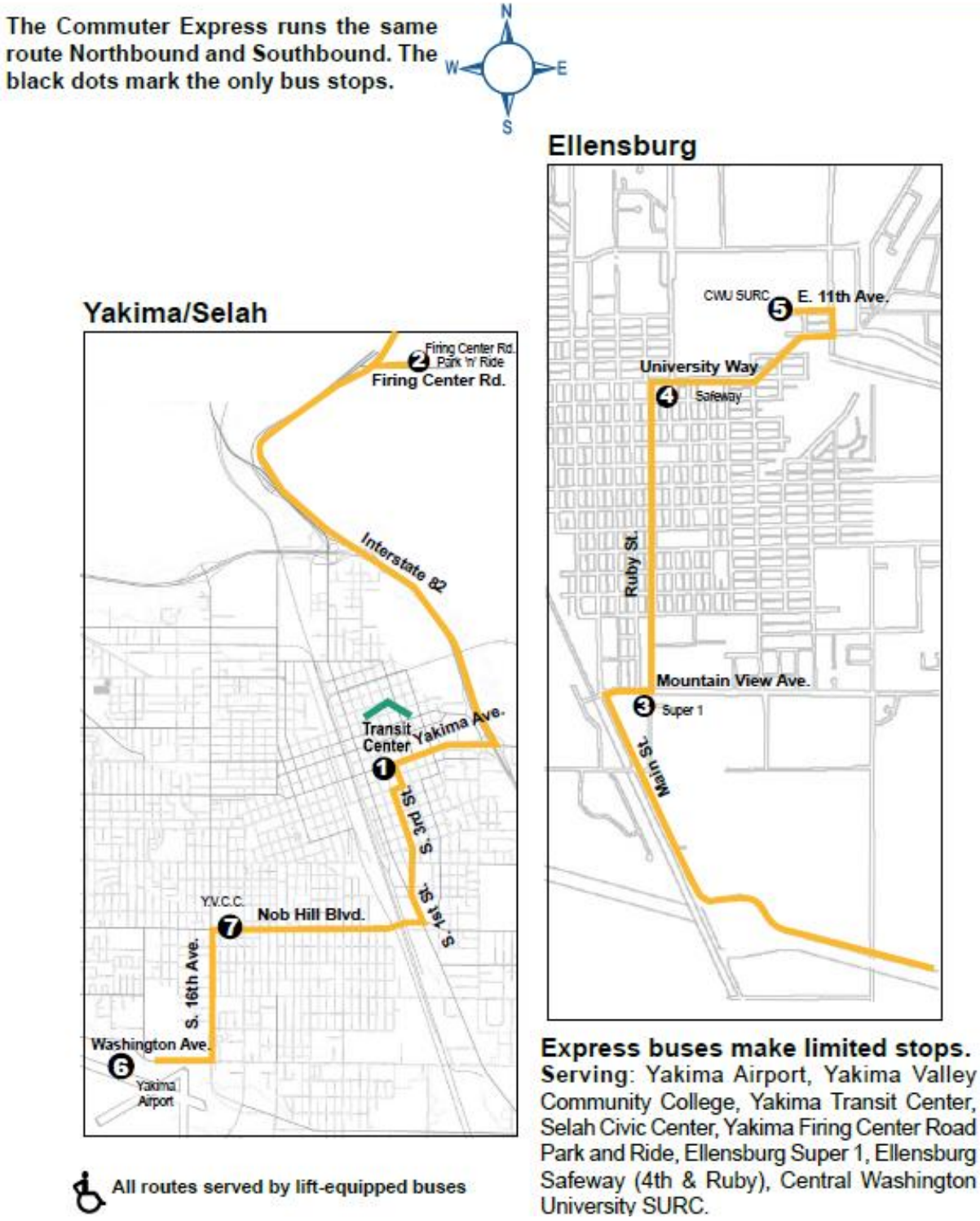
For connections outside of the County, the Greyhound bus offers a stop in Ellensburg, the Apple Line bus travels north into Chelan and Okanogan counties, and the Bellaire Airport Shuttle takes residents to and from the Seattle Airport.

Grant and Kittitas Counties were recently awarded a grant to create an express route from Ellensburg at CWU, to Moses Lake in Grant County. This project will facilitate travel between the counties along the I-90 corridor.

As part of this plan, the City will be looking for opportunities to enhance Ellensburg's local service to make transit a more appealing option to residents, as well as to better connect with regional service.

Figure 16. Existing Transit Routes

Figure 17. Yakima-Ellensburg Commuter Routes



Freight Network

Freight movement is essential in Ellensburg in order to bring goods to citizens, as well as to export products such as the world famous Timothy Hay grown in Kittitas County and exported through the state. Ellensburg has planned a truck route system that aims to avoid heavy truck traffic on lower volume streets. The North-South spines of this truck route are Canyon Road/Main Street, Water Street, and Railroad Avenue. In the East-West directions, Dolarway Road, Mountain View Avenue/Kittitas Highway, University Way, and Bender Road/Sanders Road are the spines. Reecer Creek Road, Look Road, and Bowers Road are truck routes outside

of city limits. This route map is shown in *Figure 18*.

Figure 18. Existing Truck Routes

Auto Network

With many Ellensburg residents and employees relying on vehicles as their primary mode of transportation, the City's street network is critical to the transportation system. Growth within the region has increased traffic congestion along some of Ellensburg's roadways.

Analyses were conducted at 48 intersections throughout Ellensburg and the surrounding UGA. This included all signalized intersections and the busiest stop sign controlled intersections in the study area. Intersection operations were evaluated and assigned a level of service (LOS) value based on their operations in terms of vehicle delay. *Figure 19* shows the locations of the intersections analyzed.

Table 13 and Table 14 describe the Level of Service definitions from the Highway Capacity Manual (HCM), which is a standard methodology for measuring the performance of intersections.

Table 13. Level of Service Definitions for Signalized Intersections

Facility Type	Description	Control Delay (seconds/vehicle)
A	Free-flowing conditions.	≤10
B	Stable Flow (slight delays)	>10-20
C	Stable Flow (acceptable delays)	>20-35
D	Approaching Unstable Flow (tolerable delay)	>35-55
E	Unstable Flow (intolerable delay)	>55-80
F	Forced Flow (congested and queues fail to clear)	>80

Table 14. Level of Service Definitions for Unsignalized Intersections

Facility Type	Control Delay (seconds/vehicle)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

In Ellensburg, the LOS standard for intersections depends on the highest classification of the roadways intersecting. The standard adopted in both the 1995 and the 2006 Comprehensive Plan is LOS B for local streets, LOS C for arterials and collectors, and LOS D for arterials at the interchanges with I-90.

Of the 48 intersections analyzed, all currently meet the City's LOS standard (*Figure 19*). Detailed reports of existing intersection operations are available in Appendix D. However, given the growth anticipated in Ellensburg and surrounding Kittitas County, capacity enhancements will be needed in the future to maintain the City's LOS standard through 2037. *Figure 20* represents

LOS standards without the implementation of capital improvement projects and *Figure 21* represent LOS standards with the implementation of capital improvement projects.

Figure 19. Intersections and 2017 Level of Service

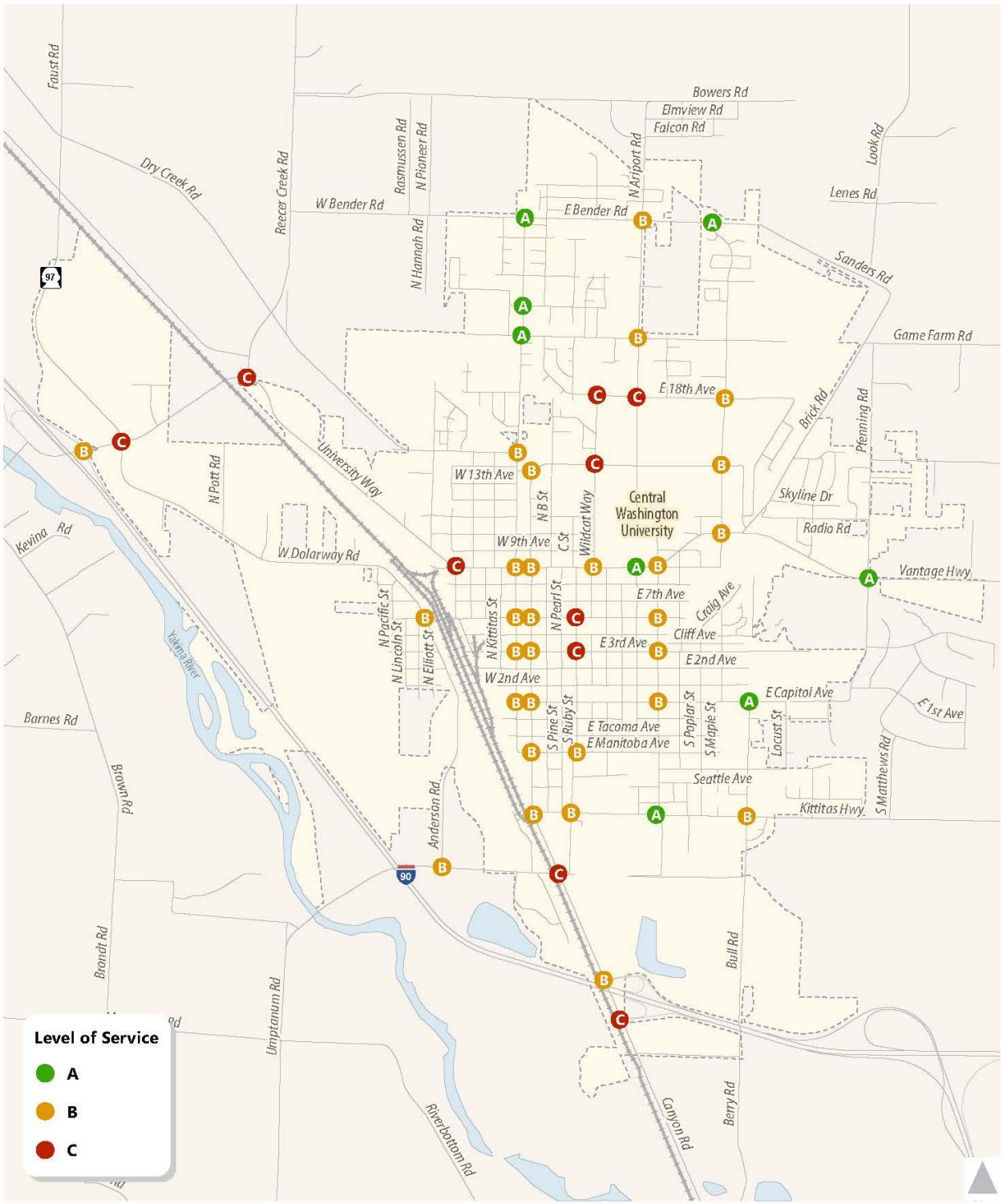


Figure 20. Intersections and Projected 2037 Level of Service – without Capital Improvement Projects

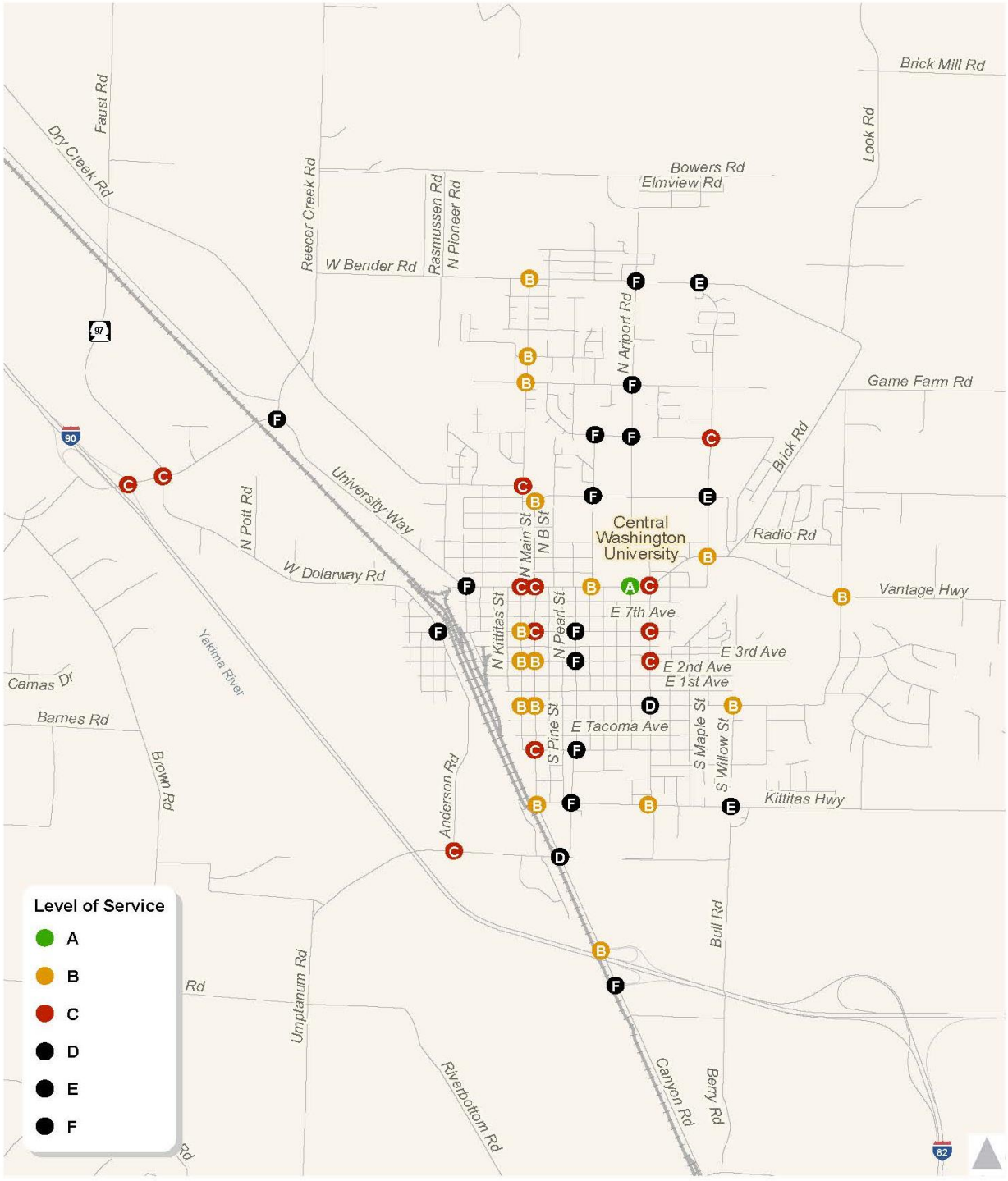
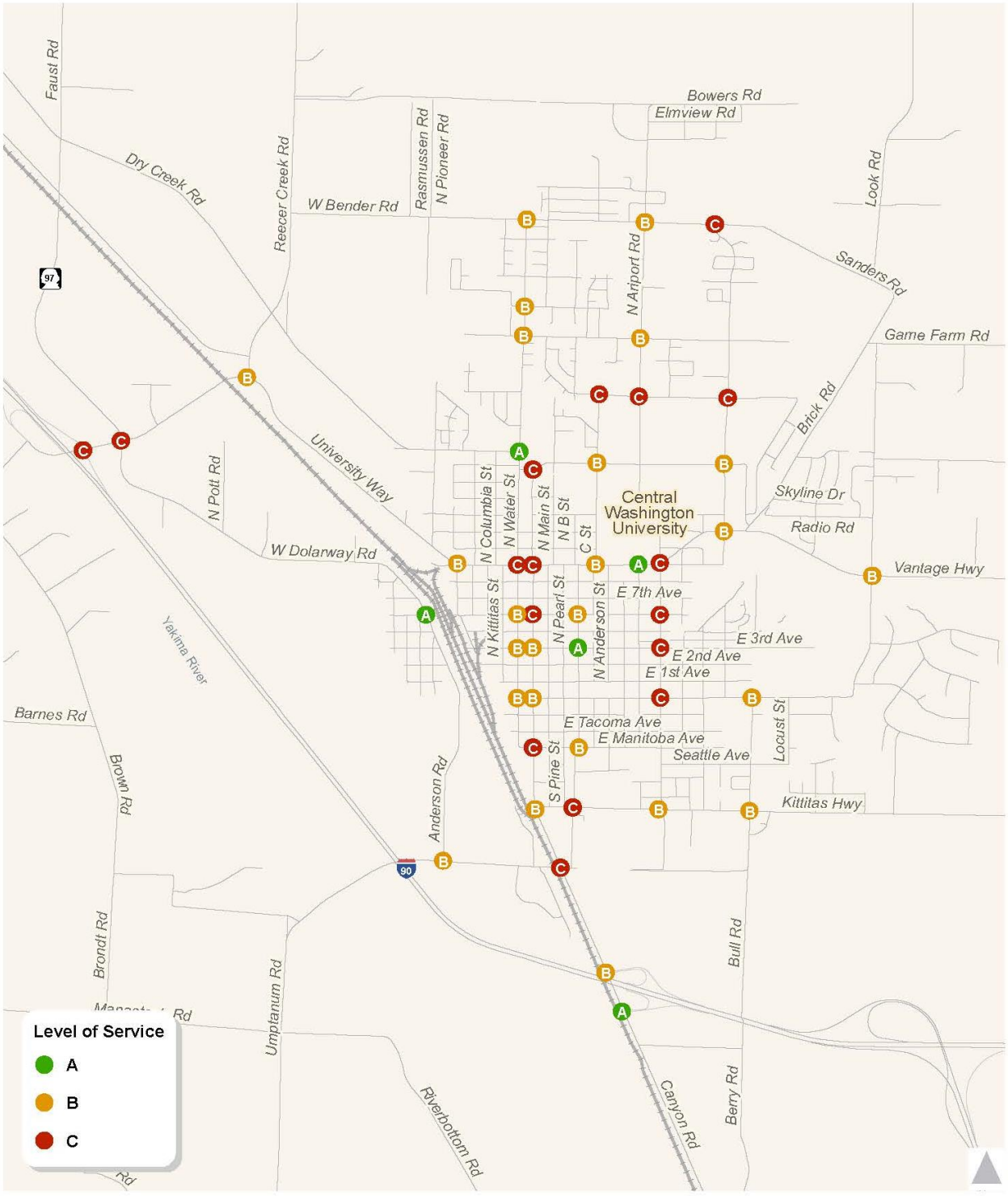


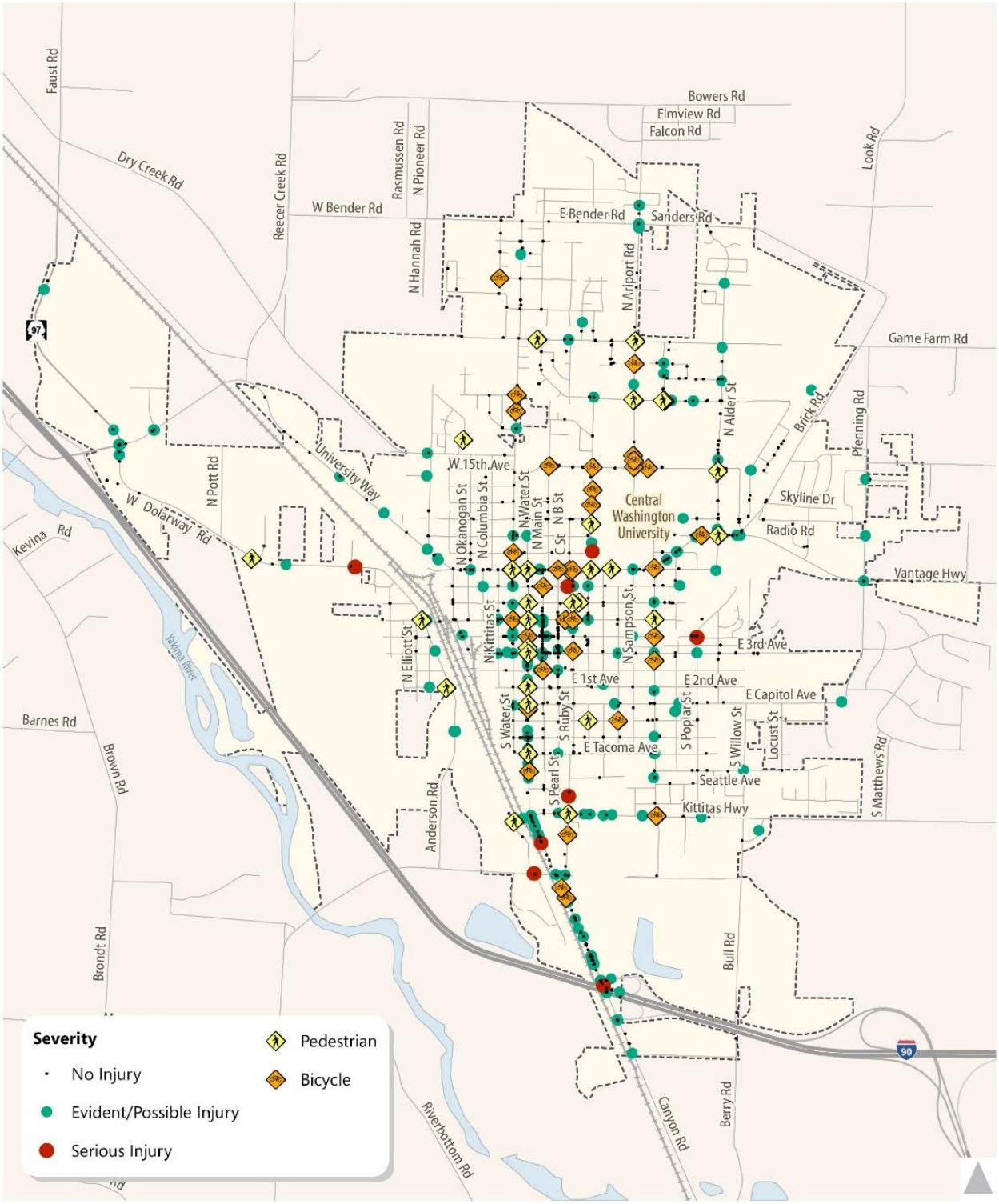
Figure 21. Intersections and Projected 2037 Level of Service – with Capital Improvement Projects



Safety

Collision data was obtained from WSDOT to analyze safety hotspots and overall trends in Ellensburg. Data was analyzed for the time period between January 2010 and September 2016, the most recent data available. In total, 1,546 collisions occurred, an average of approximately 230 crashes each year. A total of 460 injuries were reported, 34 of the collisions involved pedestrians, and 53 involved bicyclists. No fatalities were recorded. As expected, more collisions occurred on higher volume facilities, such as Canyon Road, University Way, Water Street, and Main Street. All collisions are shown in *Figure 22*.

Figure 22. Collisions in Ellensburg (2010-2016)



OPPORTUNITIES AND CHALLENGES

The City of Ellensburg has several important challenges to face as it prepares for future growth and development over the next twenty years. While pedestrians and cyclists make up a sizeable percentage of mode share, vehicle travel still dominates the transportation network in parts of the City. Ellensburg is working to improve transit and nonmotorized access, increase mobility, and prepare for growth.

Network Connectivity

Barriers to Mobility

Ellensburg faces several barriers that increase congestion and can lead to chokepoints in the transportation network. These barriers include the low number of alternative routes from central and northern portions of Ellensburg to the interstate and retail areas in the southern portion of the city, limited railroad crossings and stream crossings, and areas where the grid system is non-existent or is missing links. This chapter seeks to **support commerce through efficient connections**. Projects that add route options and reduce chokepoints/barriers to mobility should be prioritized.

Pedestrian and Bicycle Infrastructure

Sidewalks are available in central Ellensburg and in subdivision areas, although there are some missing links and often no sidewalks in outlying areas. The City's existing bicycle network is growing and is relatively connected, however, the network does not provide much in the way of separation between modes and does contain some missing links. These limitations can inhibit the mobility of citizens and lead to increased vehicle use when a walking or biking trip would otherwise be preferable. The project list includes projects that **offer complete and user friendly connections for walking and biking.**

Transit

Ellensburg's citizens and City staff are working to improve transit in Ellensburg with increased funding. The current system is infrequent (one hour between buses) and cannot serve all destinations and users. The City is looking to **integrate transit into the Citywide and regional transportation network**. Service that is coordinated with Yakima Transit, as well as more frequent service with a larger coverage area could increase usage of the transit system and improve mobility.

ELLENSBURG TRAVEL DEMAND FORECASTING

The Growth Management Act (GMA) requires that the Transportation Element support the land uses envisioned in the Comprehensive Plan. Thus, an important component of this plan is forecasting how the future land uses envisioned in the City, as well as regional growth, would influence demand on Ellensburg's transportation network. A description of the travel demand modeling process is provided below with more detail about land use assumptions in Appendix C.

The Tool. As a part of previous planning efforts, Kittitas County created a travel model with the Visum software package (Appendix E). This model forecasts traffic volumes during the evening commute (4-6pm) along Ellensburg's key streets and intersections. This tool provides a reasonable foundation for developing year 2037 forecasts, as the underlying land use assumptions have been updated to match the land use forecasts for the 2017 Comprehensive Plan.

- **Estimate Land Use Growth in the City.** The City is planning for growth in population and employment over the next 20 years through 2037. Based on growth estimates from Kittitas County Council of Governments and review by City staff, Ellensburg is preparing for 11,757 new residents and 6,998 new workers by 2037. The City will accommodate growth throughout Ellensburg based on adopted zoning, observed development patterns, and other city policies.
- **Capture Regional Growth Patterns.** Other communities throughout the region are going through this very same process. Since travel does not stop at a jurisdiction's borders, it is important to capture how regional growth could influence travel patterns on Ellensburg's streets.

Translating Land Uses into Trips. The next step is evaluating how the City and regional growth assumptions described above translate into walking, biking, transit, and auto trips. The travel model represents the number of housing units and employees in spatial units called traffic analysis zones (TAZs). TAZs can be as small as a few street blocks to as large as an entire neighborhood. They provide a simplified means to represent trip making rather than modeling individual parcels. The travel model estimates trips generated from each TAZ (both inside and outside of the City) using established relationships between different land use types with trip making. These trips are then assigned onto the roadway network to estimate how much traffic would be on each street during the evening commute hour.

Regional Growth

Growth in population, mostly in the northern portion of Ellensburg, the UGA, and the surrounding area will place more demands on the entire transportation network. This growth will add traffic to arterials and impact the quality of life for Ellensburg residents. To maintain and improve mobility throughout the city, Ellensburg must **facilitate active partnerships** with regional partners and stakeholders such as Kittitas County, WSDOT, Yakima Transit, CWU, Ellensburg School District, and BNSF Railroad. This coordination will ensure that Ellensburg residents, employees, and visitors continue to have a good experience on the transportation network.

Safety

Ellensburg has had no traffic collision fatalities and only sixteen serious injury collisions since 2010. However, there is always room for improvement in safety. Pedestrian and bicycle collisions are of particular cause for concern as they are more vulnerable users.

This plan includes as its number one goal to **provide safe connections for all users**. Implementation of countermeasures should be considered, as appropriate, at locations with high incidence of more severe collisions, as well as those that include a pedestrian or cyclist.

Funding

Ellensburg, as with all jurisdictions, faces issues with how to fund improvements to the transportation network. Alternative sources of funding, such as grants and private dollars, should be explored to augment system funds and increase

investment in transportation infrastructure. Moreover, this plan includes a goal to **reliably fund system maintenance and preservation**. Capital project expenditures should consider projects' full lifecycle costs and also be balanced with the need to maintain the current system.

TRANSPORTATION VISION

Ellensburg envisions a future transportation system that serves all users and modes of travel by offering a safe and robust network of walkways, bicycle facilities, roadways, and complementary transit options. This transportation system is well-linked with the built environment, since the way people travel is greatly influenced by the key destinations where people live, work, shop, and recreate.

As identified in this plan, most of the improvements are focused on the development of a 'layered' transportation network, which emphasizes providing complete accommodation for all modes of travel. While some of the projects identified in this Transportation chapter are needed to meet the City's vehicular Level of Service (LOS) standard, many of the future improvements focus on providing safer and more complete facilities for walking, bicycling, and riding transit in order to improve access and mobility for all road users.

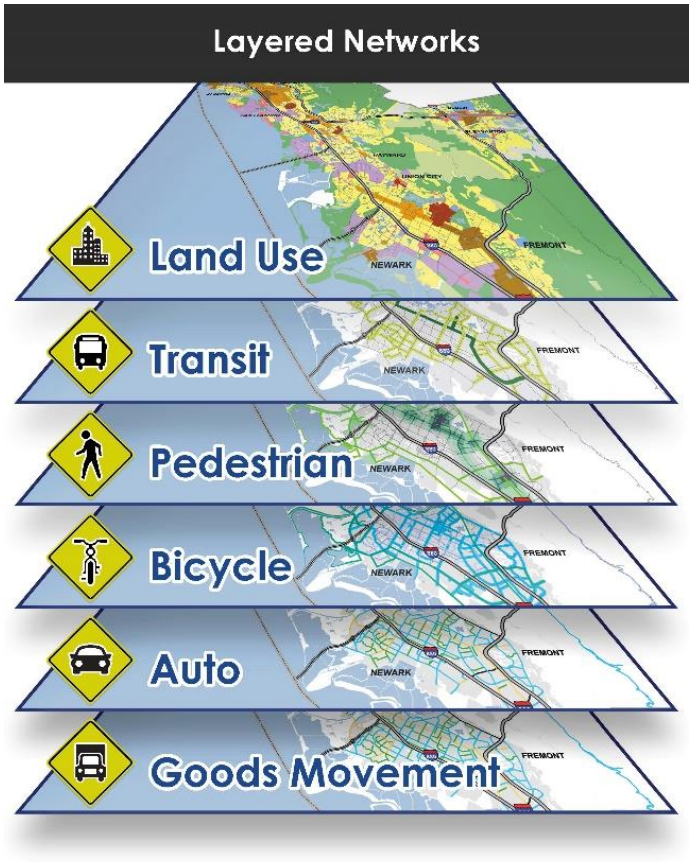
Introduction to the Layered Network

It can be a challenge for a single roadway to meet the demands and expectations of all modes at any given time. This is also generally not desirable from a user or a planning perspective.

In response to this challenge, the City of Ellensburg has adopted a layered network approach that focuses on how the City's transportation network can function as a system to meet the needs of all users. In such a system, different facilities are identified for different travel needs to ensure that everyone has complete accommodation throughout the overall network. *Figure 23* illustrates the concept of a layered network.

The City will implement this layered network through a system of modal networks that define each street's user priorities and associated infrastructure needs.

Figure 23. Layered Network



Modal Networks

Streets in Ellensburg serve different travel purposes, and the modal networks therefore prioritize a different balance of users on each corridor. Determining how the entire transportation network fits together in Ellensburg requires identifying desirable streets for each mode, combining them to locate overlaps, and then identifying infrastructure enhancements to ensure safe and complete facilities for all modes. The following sections review the priority networks for each mode and establish their level of service standards.

Walking

Walking is the most fundamental transportation mode of all since all trips include a walking component. Effective pedestrian facilities enable community building and social equity. Dense areas with commercial land uses and streets that serve schools, parks, and churches are particularly important as they support more pedestrians and may have a larger portion of vulnerable users than other streets. Measures such as increased separation from moving vehicles, marked crosswalks, bulb-out curbing, and sidewalks at crossings can keep pedestrians safer.

Figure 24 highlights the Pedestrian Priority Network, which specifies where pedestrian infrastructure should be provided in the long term. Sidewalks on the Pedestrian Priority Network should provide both comfort and safe travel space whenever possible.

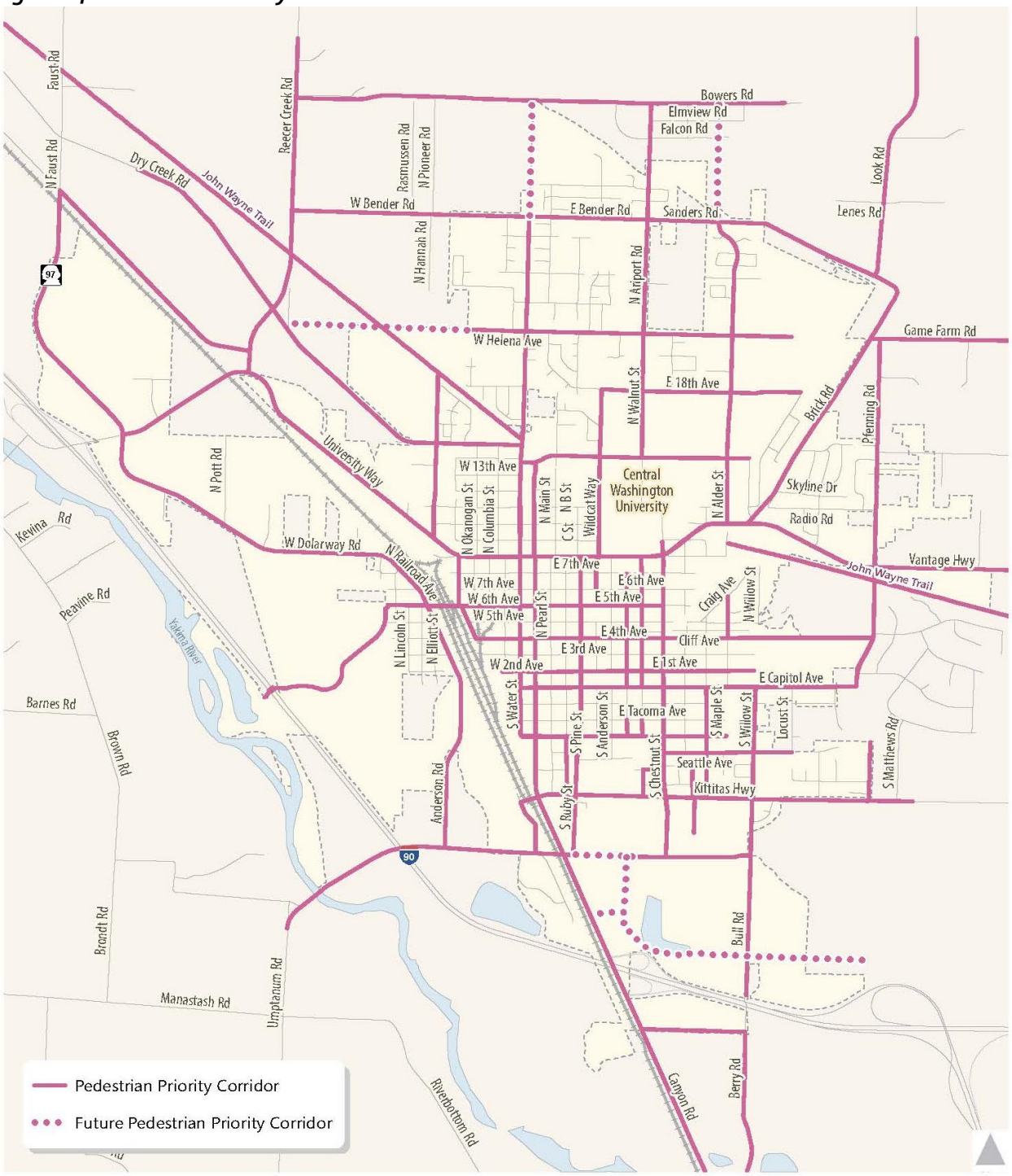
Building on the Pedestrian Priority Network, *Table 15* establishes levels of pedestrian infrastructure that will be used as a tool to identify and prioritize gaps in the City's pedestrian infrastructure. The highest level of accommodation for walking, indicated in the green row, would provide facilities identified in the Pedestrian Priority Network. The long-term goal is for all City streets to be at the green level, and with few exceptions all new development requires the construction of sidewalks on both sides of the street. The yellow level of accommodation is seen as an interim measure or condition that would make strong progress in building out the Pedestrian Priority Network by filling sidewalk gaps to ensure that a sidewalk is provided on at least one side of the street. Incomplete or missing pedestrian facilities would fall into the red category and not satisfy the City's goals for accommodating pedestrians. Identification of existing yellow and red areas is a tool for the City to prioritize filling in pedestrian infrastructure gaps in the Pedestrian Priority Network.

Table 15. Levels of Pedestrian Infrastructure

Within Pedestrian Priority Network	
	Pedestrian facility* where indicated in Pedestrian Priority Network
	Pedestrian facility* provided on one side of the street
	No pedestrian facility

*Pedestrian facility includes sidewalks and shoulders protected by a raised curb

Figure 24. Pedestrian Priority Network



Bicycling

Ellensburg already offers great recreational bicycling options on the multiple waterfront trails along the Yakima River, as well as the John Wayne Trail sections to the east and west of the city. The presence of the University campus also leads to significant bicycle activity in the City.

Connecting to these routes from other areas of the City can be challenging, however, due to the lack of bicycle infrastructure. Key mobility corridors for bicyclists, such as Water Street, North Alder Street, South Chestnut Street, and West Helena Street would be best served with on-street bike lanes while existing facilities would suffice on quieter streets.

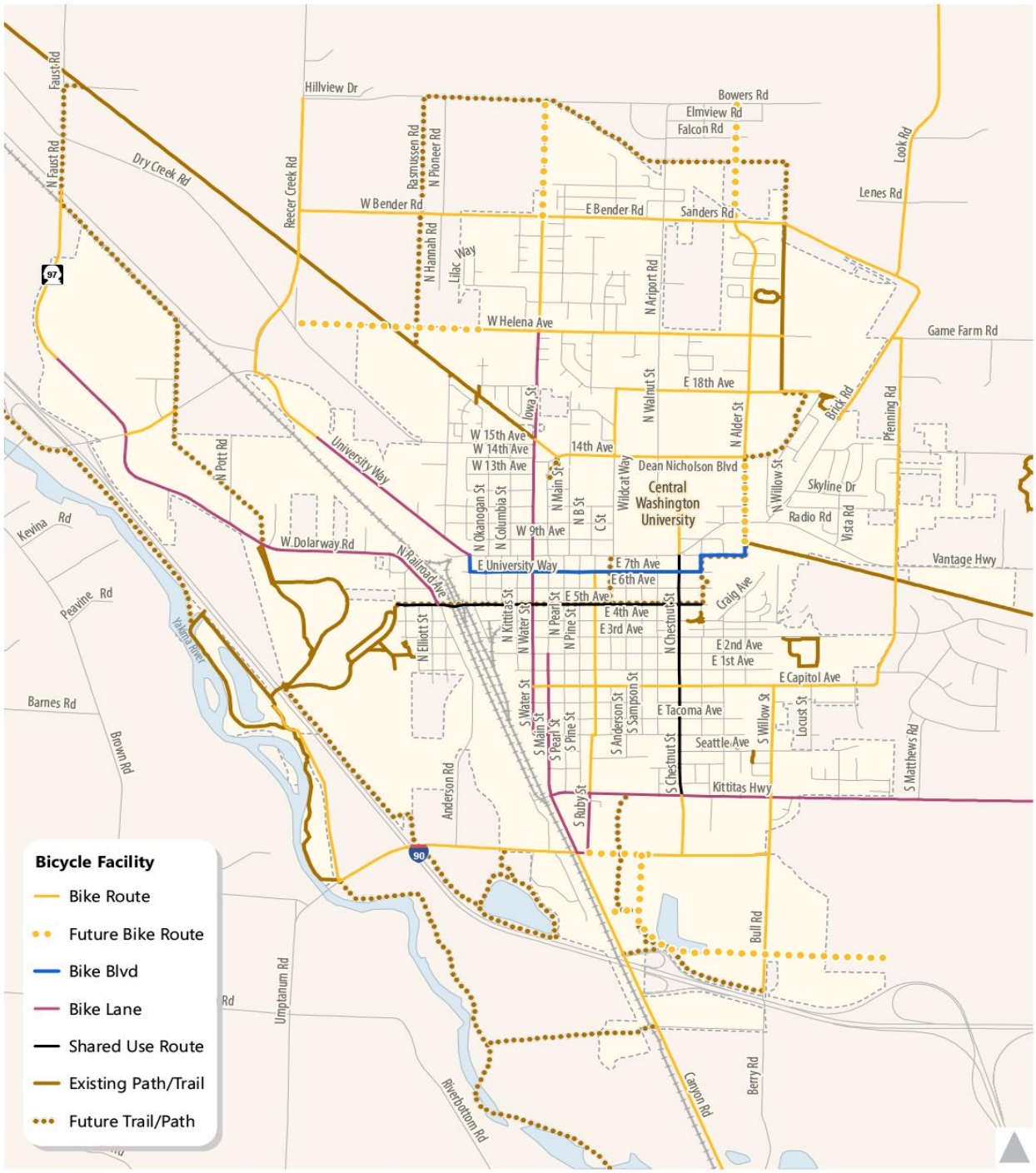
Figure 25 highlights the Bicycle Priority Network, which specifies where bicycle infrastructure should be provided in the long term.

The City of Ellensburg can strive for the green level of accommodation for bicycling by installing the bicycle facilities depicted in the Bicycle Priority Network or a facility that offers more separation from vehicle traffic. At a minimum, the City should build a marked shared use facility throughout the Bicycle Priority Network, as depicted in the yellow level of accommodation. Incomplete or missing bicycle facilities would not meet the City's desired level of accommodation in the Bicycle Priority Network as shown in *Table 16*. Identification of existing yellow and red areas is a tool for the City to prioritize filling in bicycle infrastructure gaps in the Bicycle Priority Network.

Table 16. Levels of Bicycle Accommodation

Within Bicycle Priority Network	
	Provides bike lanes, trails, or pathways, as shown within Bicycle Priority Network
	Provides a marked shared use facility
	No bicycle facility

Figure 25. Bicycle Priority Network



TRANSIT

Transit operations recently came under the direct control of the City after a successful ballot initiative for a transit sales tax. Ellensburg will create an environment that is welcoming to transit by offering:

- Street lighting
- Pedestrian and bicycle facilities for connecting to transit stops
- High-amenity bus stops

Ellensburg's level of transit accommodation is defined based on the amenities discussed below.

The City can reach the highest level of accommodation (green) by providing a high level of transit-supportive amenities such as benches, shelters, garbage cans, and lighting, in addition to providing amenities that support pedestrian access such as sidewalks and marked crosswalks at all stops.

As a minimum target, the City can strive to provide the transit stop amenities depicted in yellow in *Table 17* as well as pedestrian access improvements such as sidewalks and marked crosswalks near stops where feasible. Little to no amenities and a lack of crosswalks would mean a facility would fall into the red category and not satisfy the City's goals for the transit system.

Table 17. Transit Accommodations - Stop Amenities, Pedestrian Access, and Frequency of Service

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
	High level	Sidewalks and marked crosswalks serving stops	Plan for future service and accommodate any transit service expansion.
	Some amenities	Sidewalks and marked crosswalks serving some stops	Maintain existing transit service.
	Little or no amenities	General lack of sidewalks and marked crosswalks	Removal of transit service or failure to serve dependent transit riders.

FREIGHT AND AUTO

Most trips in Ellensburg occur along its street network, which serves as the backbone for accessing homes, jobs, and other destinations. Many of these streets are local streets, however, and do not see significant traffic volumes throughout the day. Similarly, goods movement and delivery vehicles use some corridors frequently while other streets see only the occasional local delivery.

Figure 13 calls out the functional classification of each of Ellensburg's streets, distinguishing whether it is an arterial, collector, or local street. These classes indicate the level of priority of each street for automobiles, specifically in terms of facilitating vehicle and freight mobility as well as other modes. The figure also shows potential future street extensions, which may be completed over time as development occurs.

Figure 18 specifies the WSDOT freight classification of Ellensburg's major streets that support goods movement. These classifications indicate the annual weight of goods that travel a corridor, whether via large trailer loads or smaller delivery vehicles. The functional classification and freight class of a street should guide future investments in streetscape to ensure that streets can carry appropriate freight loads.

Ellensburg will maintain its current LOS standards of LOS B for local streets, LOS C for arterials and collectors, and LOS D for arterials at the interchanges with I-90. Of the 48 intersections analyzed, all currently meet the City's LOS standard.

Appendix D summarizes existing and future forecast delay at intersections in the City. The capital list provided in Appendix B includes future roadway projects that would maintain the City's LOS standard through 2037.

GOALS AND POLICIES

Ellensburg has established six goals to accomplish its overall vision for transportation in the future. The goals establish overarching priorities that serve the vision of this Transportation chapter while policies lay out specific actions. Together, the goals and policies lay the foundation for the remainder of this chapter, including the proposed action items and ongoing implementation of the chapter.

Goal T-1: Create a transportation networks that provides safe and comfortable connections for all users to key destinations.

Policy A Every project considers all users in a complete streets context, including pedestrians, bicyclists, transit, motorists, and freight.

Policy B Increase pedestrian and bicyclist safety along arterial streets or provide alternative routes.

Policy C Prioritize safety improvements as part of every project, including maintenance tasks when possible.

Policy D Reduce auto demand on local and arterial streets by encouraging alternative modes of transportation, such as walking, biking, and transit.

Policy E Implement calming measures to slow traffic on non-arterial streets.

Policy F Where possible provide higher comfort pedestrian facilities, and accommodate on-street parking in commercial districts.

Policy G In planning facilities for active modes, when feasible choose lower stress parallel bicycle and pedestrian routes in order to increase safety by separating auto and active transportation modes.

Policy H Improve pedestrian use while maintaining automobile access to the Central Commercial zones by enhancing pedestrian access throughout the Central Commercial zones.

Policy I Consider aligning streets to take advantage of views of landmarks when designing subdivisions.

Policy J Make progress in building transportation facilities that are consistent with the City's adopted plans, including function classification and street standards, nonmotorized plan, and downtown plan.

Goal T-2 Prioritize connections with state highway routes and removal of bottlenecks that delay the movement of people and goods.

Policy A Maintain interconnectedness and high levels of access through a well-developed grid network and high quality connections between the walking, biking, auto, freight, and transit networks.

Policy B Design of new streets in the city shall use a street grid system at an interval of 1/2 mile for arterial streets. Within the 1/2 mile sections, attempt to maintain a 1/4 mile connection for auto circulation, with 200 to 600 foot pedestrian connections, depending on zone density.

Policy C For all undeveloped areas of the city and UGA, prepare maps of future street alignments, especially for arterials, considering existing development patterns and physical barriers such as streams and steep slopes.

Policy D Establish LOS B as the standard for local streets, LOS C for collectors and arterials, and LOS D for the I-90 interchanges.

Policy E Wherever possible, seek to increase route options through strategic additions to the transportation system that fill gaps and add alternative routes.

Policy F Maintain and enforce truck routes through the city and ensure connection to freeway interchanges.

Policy G Focus industrial growth along specific transportation corridors that are designed to accommodate heavy vehicles and other industrial users.

Policy H Concentrate land uses that generate long-haul truck traffic nearby the City's freeway interchange areas.

Policy I Ensure development regulations and street standards are current with contemporary truck design criteria, particularly as they apply to those areas near the freeway interchanges.

Goal T-3 Fill gaps in the system to accommodate safe, enjoyable, and energy efficient travel by those of all abilities choosing to walk, bike, or use transit.

Policy A Prioritize building streets, trails, linear parks, and pathways to connect neighborhoods, schools, parks, and commercial areas so that walking and biking are viable modes for both recreation and transportation purposes.

Policy B Establish bicycle and pedestrian priority networks that highlight the most critical facilities to accommodate those modes.

Policy C Use the following LOS indicators to identify and prioritize filling in the gaps of the pedestrian infrastructure in *Figure 24*, the Pedestrian Priority Network:

LOS	LOS Within Pedestrian Priority Network
	Pedestrian facility* where indicated in Pedestrian Priority Network
	Pedestrian facility* provided on one side of the street
	No pedestrian facility

*Pedestrian facility includes sidewalks and shoulders protected by a raised curb

Policy D Establish LOS standards for bicycle networks according to *Figure 25* Bicycle Priority Network:

LOS	Within Bicycle Priority Network
	Provides bike lanes, trails, or pathways, as shown within Bicycle Priority Network
	Provides a shared use facility
	No Facility

Policy E Identify critical rights-of-way and important pedestrian corridors accessing the Central Commercial zones, CWU, and local schools and linking these areas to the west and south interchanges.

Policy F Whenever possible, establish additional logical access routes outside of the established street system for bicycle and foot traffic.

Policy G Identify trail easements.

Policy H Minimize the use of cul-de-sacs.

Policy I Whenever possible, retrofit existing streets to include pedestrian and bicycle facilities.

Policy J Develop, design, and construct standards for walkways and bikeways that emphasize connectivity and reduce operations and maintenance costs.

Policy K Enhance the appearance of the public rights-of-way to make traveling through Ellensburg more enjoyable, in particular for people travelling on foot.

Goal T-4 The City will take an active role to ensure that transit is a community asset, offering convenient routes, serving key destinations, and coordinating with other regional transit operators.

Policy A Provide a consistent level of reliable, public transportation to medical, governmental, financial, retail and cultural locations throughout the community through a locally supported public transportation system with the following LOS standards:

LOS	Transit Stop Amenities	Pedestrian Access	Frequency of Service
	High level	Sidewalks and marked crosswalks serving stops	Plan for future service and accommodate any transit service expansion.
	Some amenities	Sidewalks and marked crosswalks serving some stops	Maintain existing transit service.
	Little or no amenities	General lack of sidewalks and marked crosswalks	Removal of transit service and failure to serve dependent transit riders.

Policy B As a regional transit leader, build partnerships with the County and smaller communities to develop interconnected transit systems.

Policy C Design higher density projects to be compatible with future public transportation service.

Policy D Coordinate with transit operators in the design of streets to ensure that street cross-sections and offered amenities meet the needs of transit.

Policy E Work with local and regional transit providers to integrate service and create a multimodal transit system.

Policy F Build active partnerships with local non-profits and businesses to develop future in-city transit options.

Policy G Explore potential locations for a future transit center.

Goal T-5 Plan for a system that is financially viable, including consideration of full lifecycle costs in infrastructure investments and leveraging funds to maximize community benefits.

Policy A Prioritize the cost-effective maintenance and preservation of the existing transportation system over system expansion.

Policy B Develop an effective maintenance strategy, including identification of reliable sources of funding for maintenance.

Policy C Create a street fund to finance the City's share of matching grants and Local Improvement Districts, and to complete motorized and nonmotorized transportation systems.

Policy D Explore grant opportunities and other funding sources for street improvement projects, maintenance, and operation needs.

Policy E Minimize street widths to reduce maintenance needs.

Policy F Develop an emergency fund to address unanticipated events.

Policy G Review parking requirements for institutional uses and reduce them where appropriate.

Policy H Create storm water runoff designs and strategies that minimize the amount of land necessary to treat runoff from parking areas.

Goal T-6 Actively coordinate with a broad range of groups to develop and operate the transportation system.

Policy A Continue to collaborate with Kittitas County regarding the design and preservation of transportation corridors and defining street intervals in the UGA and develop and adopt an interlocal agreement.

Policy B Continue to identify, evaluate and acquire major arterial corridors leading from the established community through the UGA.

Policy C Review and comment on plans that affect Ellensburg, including development proposals in the UGA, County land use actions and transportation improvement programs, and street and highway project designs from the County and WSDOT.

Policy D Coordinate with WSDOT on project design and opportunities for innovation.

Policy E Facilitate long-range planning between CWU, the Ellensburg School District, and the downtown organizations to address transportation needs in Ellensburg.

Policy F Coordinate with the County on airport master plan implementation to ensure air travel is integrated with the rest of the transportation network.

Policy G Adopt an interlocal agreement with the County to align rights-of-way in a manner that helps conserve prime farmland.

Policy H Collaborate with CWU to overcome University Way's function as a divider between CWU and the Central Commercial zones.

Policy I Circulate the Comprehensive Plan and other transportation plans to the County and WSDOT for comment.

Policy J Collaborate with Ellensburg School District to minimize traffic impacts around schools and their adjacent neighborhoods, and provide Safe Routes to School through engineering and education.

Policy K Ensure that the Ellensburg School District is involved in projects that will affect school students.

ACTION ITEMS

Citywide Transit Master Plan

Develop a citywide transit master plan to identify ways that the transit service can better connect citywide destinations, including CWU, downtown, and the interchange areas, as well as to regional destinations. This transit master plan should also address how staff and equipment resources will need to grow to provide more service in the future.

Monitor Parking Demand

Monitor parking demand in the Central Commercial zones and around CWU, as appropriate, and consider strategies to address parking-related issues as they arise.

Monitor Street Design Standards and Parking Standards

Monitor the implementation of street design and parking standards in achieving the following results:

- Increase separation of pedestrians from travel ways by the use of curb and gutter or offset sidewalks
- Mixing of residential and commercial uses
- Accommodation of on-street parking in commercial districts

Nonmotorized Transportation Plan

Implement and update the Nonmotorized Transportation Plan.

Review Parking Requirements

Review parking requirements and prepare studies as necessary for the following:

- Central Commercial zones; including where parking facilities should be located, how to implement them, and possible adjustment of requirements
- Updated standards that recognize the ability to share parking supply among complementary uses
- Parking for Downtown Historic District residents
- Parking on the southern and western periphery of Downtown Historic District
- Multifamily housing near jobs and transit

Study rail impacts

Study rail impacts with respect to container handling and local industrial uses.

Study University Way pedestrian crossings

Study ways to improve safety on University Way pedestrian crossings.

POLICY CONNECTIONS

The **Land Use** chapter is key to understanding the integration between land use and the city's multi-modal transportation system to ensure that transportation facilities and services support the city's growth strategy.

Trails are a component of both recreation and transportation and are discussed in the **Parks and Recreation** chapter.