

CHAPTER 9 TRANSPORTATION

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9.1 INTRODUCTION



The Transportation Element addresses the motorized and non-motorized transportation needs of the City of Cheney. It represents the community's policy regarding projected transportation needs (current and future); location and condition of the existing traffic circulation system; the cause, scope and nature of transportation problems; level of service standards; street classifications; and associated transportation problems the city must address regarding growth in the next 20 years. As specified in the GMA, new developments will be prohibited unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. Such improvements and strategies must be in place or financially planned for within six years of development use.

The type and availability of transportation resources are major factors in the development of land use patterns, while conversely, the way land is used greatly influences the need and location for new transportation facilities. The relationship between transportation and land use is one of continuous interaction and their planning must be coordinated. The current land use plan, the future land use map and the transportation plan are highly dependent on each other and need to be carefully coordinated.

9.2 EXISTING CONDITIONS

Access to Cheney by vehicular traffic from Spokane is by Interstate 90 (I-90), exiting at Four Lakes, then by State Road 904 (SR-904) to the city. SR-904 is a designated principle arterial as it enters Cheney at the city's most northern boundary and exits the city at its southwest

boundary. SR-904 also connects to I-90 at Tyler, 10 miles southwest of Cheney. Salnave Road connects to I-90 from the west. SR-904 is the only state road having a major impact and influence on the city's traffic volume and circulation pattern. County roads impacting Cheney are: the Cheney-Spokane Road which connects to Highway 195 at the northeast end of Cheney; the Cheney-Spangle Road which also connects with Highway 195 from the east; the Cheney-Plaza Road which connects to Rock Lake Road southeast of the city before entering Whitman County; Mullinix Road southwest of the Union Pacific Railroad tracks as it enters the city's extreme southwestern boundary; and Betz Road bordering the northwest city boundary.

9.2.1 Functional Classification

The Washington State Department of Transportation (WSDOT) has developed a Functional Classification System, which all municipalities in the state use as a guideline for designation streets within their jurisdiction. This classification system has been developed to ensure consistent determinations of streets throughout the state. The classifications of streets inside the city was developed by the Spokane Regional Council, which is the designated Metropolitan Planning Organization (MPO) for transportation issues throughout Spokane County. A listing of minor and collector arterials is presented in section 9.2.1 and is shown in Figure 9.1.

Minor Arterial Streets. Minor arterials are intended to provide important access within the city, but secondary in use and convenience to principle arterials. Minor arterials provide an important link to other road classifications within the city.

SR-904 essentially provides for through traffic along the Four Lakes to Tyler corridor and provides access to both major commercial areas of the city and the industrially zoned land. Several minor arterials extend from SR-904 and provide access to other service areas of the city. The Cheney-Spokane Road provides an alternative route to and from Spokane via State Highway 195 and also allows access to Fish Lake. Cheney-Spangle Road is a county road providing access to Cheney from the outlying areas of unincorporated Spokane County and terminates on State Highway 195 at Spangle.

Salnave Road forms a vital link for the Salnave area residents by providing access to the downtown, and in addition serves as another route to Interstate 90. The North Second Street to Sixth Street to Clay Street to the 4th Leg extension route brings traffic to Elm Street and Oakland from SR-904 and from the Cheney-Spokane Road, and serves as a connector between residential areas and the commercial district near the intersection of SR-904 and the Cheney-Spokane Road.

Collector Arterial Streets. Collector arterials are streets and roadways connecting residential neighborhoods with smaller community centers and facilities as well as access to the minor arterial system. Property access is generally a higher priority for collector arterials and through traffic service is a lower priority.

Collector arterials in the City of Cheney are as follows:

Seventh Street provides access for the Reid Elementary School and the University from Washington Street to F Street. Fifth Street runs parallel to the extreme southern boundary of the EWU campus from F Street to Elm Street. F Street travels in a north-south direction and serves as a main corridor from the University to the downtown commercial area. Presley Drive serves as a corridor from Salnave Road to SR-904 and provides access to Salnave Elementary School from the surrounding neighborhoods and SR-904. Oakland to North Second Street carries traffic to and from EWU and Cheney High School and serves as a collector for the north central neighborhood. North 6th Street is used for the High School and Junior High School as well as by residents who live nearby who want a quicker access to SR-904. Betz Road and Washington Street have experienced a significant increase in traffic over the past decade. This increase in traffic is primarily due to the increase of commuters from Spokane and the West Plains area to Eastern Washington University as well as work commuters from Cheney to Spokane. Betz Road also serves as a collector to SR-904 for the unincorporated fringe area surrounding Cheney. Elm Street provides access for the northern part of Cheney as well as the University. Mullinix Road provides a corridor to Whitman County and Turnbull Federal Wildlife Refuge and is also the extreme southwestern boundary of the city. Cheney-Plaza is a county road which serves as an access roadway to Whitman County and provides access to the many recreational sites located throughout southwestern Spokane County and the Turnbull Federal Wildlife Refuge.



Access Streets. Access streets have a variety of functions to perform with the principal purpose to provide vehicular and pedestrian access to property abutting the public right-of-way. Moving traffic is a secondary function of access streets. Land service is the primary function, and being such, these streets should not carry through traffic. Buses and heavy trucks should be excluded from access streets except where the access street is in a commercial or industrial district of the city. Access streets also serve as an easement for utilities, open spaces between buildings and as an element of the urban landscape.

9.2.1 Functional Classification

Minor Arterial Streets

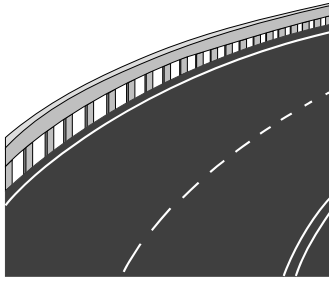
Street	Start Location	End Location	Length in Miles
SR 904	MP 9.97	MP 12.50	2.53
Salnave Road	West C/L	SR 904	1.09
Cheney-Spangle Road	SR 904	East C/L	0.21
Cheney-Spokane Road	SR 904	East C/L	0.25
N. Second Street	Elm Street	Sixth Street	0.34
Sixth Street	N. Second Street	Clay Street	0.18
Clay Street	Sixth Street	Fourth Street	0.11
Fourth Street	Clay Street	SR 904	0.07
Spokane Street	N. Second Street	SR 904	0.05

Collector Arterial Streets

Street	Start Location	End Location	Length in Miles
Cheney-Plaza Road	SR 904	East C/L	0.15
Washington Street	SR 904	Old Betz Road	1.90
Sixth Street	"G" Street	"F" Street	0.05
"F" Street	Sixth Street	Fifth Street	0.05
Fifth Street	"F" Street	Elm Street	0.34
N. Sixth Street	Elm Street	Betz Road	1.01
Seventh Street	Washington Street	"G" Street	0.31
"G" Street	Seventh Street	SR 904	0.30
Presley Drive	SR 904	Salnave Road	0.38
Elm Street	Washington Street	N. Second Street	0.69
Oakland Street	N. Second Street	N. Sixth Street	0.25
Betz Road	SR 904	Old Betz Road	0.80
Parkway Drive	SR 904	N. Sixth Street	0.50
Mullinix Road	SR 904	South C/L	0.33
Second Street	SR 904	Elm Street	0.60

**Insert Figure 9.1
Street Classification Map**

9.2.2 Surface Type



There are 40.1 miles of streets in the City of Cheney. Of the 40.1 miles, 37.5 miles or 94 percent are paved. The number of miles of city streets by surface type are shown in Figure 9.2.

**Figure 9.2
City Streets by Surface Type**

Type of Surface	Number of Miles
Concrete	0.8
Asphalt	37.5
Gravel	1.8
Total	40.1

9.2.3 Traffic Volumes

Vehicular traffic within the city is generated primarily by three sources: Eastern Washington University, south Cheney industrial area, and the commercial areas of the city (F&M Center and the central business district). Traffic generated by Eastern Washington University primarily originates in Spokane and reaches campus by way of SR-904, Betz Road, and Washington Street. Traffic generated by the F&M Center and the Downtown Business District originates from within the city with traffic movement mostly along the major corridor of SR-904. A limited amount of traffic is generated by the commercial areas serving residential living in the surrounding rural areas. The 1995 average weekday traffic volumes on principal and minor arterials are shown in Figure 9.3.

Minor arterials are the heavy-traffic-carrying facilities, followed by collector arterials. Local streets should only carry the traffic that is accessing the adjoining property. Traffic volumes associated with street classification are shown in Figure 9.3.

**Figure 9.3
Street Classification and Traffic Volumes**

Street Classifications	Daily Traffic Volumes
Access Streets	0 - 500
Collector Arterials	501 - 2,000
Minor Arterials	2,001 - 5,000
Principal Arterials	5,001 - or more

9.2.4 Parking

Limited parking spaces on the streets within the Central Business District and around the EWU campus point toward the need to implement measures geared toward discouraging long-term parking on the City's streets. This can be accomplished through the installation of parking meters and through signage restricting parking on City streets to a specified period of the day and for a specified duration of time. The City and EWU have been actively working together to address the issue of parking on the City streets around the EWU campus. To that end, the City and EWU entered into an interagency agreement resulting in the installation of parking meters on portions of Washington Street, Elm Street, and Fifth Street. The parking meters have had the desired affect of creating turnover throughout the day in the prime parking spaces around campus while at the same time increasing the usage of the parking lots on campus for all day parking.

The City and EWU still need to develop ways to limit long-term parking in the residential neighborhoods around the campus. EWU has adopted a program to provide free or reduced transit fares in an effort to alleviate parking congestion in the residential neighborhoods, but as EWU's student enrollment continues to climb, additional measure may be needed such as the development of more off street parking facilities. Finding ways to encourage shopping within the Central Business District through the implementation of reasonable parking measures remains a prime objective of the City.

9.3 LEVEL OF SERVICE STANDARDS

Standards, which principal and collector arterials are measured against, allow the city to determine if a street or a segment of a street is operating at a level acceptable to the city. When a street, or a segment of a street, falls below the acceptable level of service standard assigned to that classification of street, it is a clear indication that traffic volume is exceeding the capacity of the street, or traffic controls such as signalization, turning lanes, or traveling lanes are not sufficient or are lacking. The city has adopted Link (A-F) Level of Service (LOS) standards as a minimum criteria for the quality of service provided at peak hours for roadways on all principal and collector arterials in the city that handle significant levels of local traffic. These standards are as follows:

LOS A. Primarily free-flow traffic operations at a average travel speed. Vehicles are completely unimpeded in their ability of maneuver within the traffic stream. Stopped delays at intersections are minimal.

LOS B. Reasonably unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subject to appreciable tensions.

LOS C. Stable traffic flow operations. However the ability to maneuver and change lanes in mid block locations may be more restricted than in LOS B, and longer queues and/or

adverse signal coordination may contribute to lower average travel speeds. Motorists will experience appreciable tension while driving.

LOS D. Small increases in traffic flow may cause substantial increases in approach delays and decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes or some combinations of these.

LOS E. Significant delays in traffic flow operations and lower operating speeds. Conditions are caused by some combination of adverse signal progression, high signal density, extensive queuing at critical intersections and inappropriate signal timing.

LOS F. Traffic flow operations at extreme low speeds. Intersection congestion is likely at critical signalization locations, with high approach delays resulting. Adverse signal progression is frequently a contributor to this condition.

Level of Service is based on the qualitative perceptions of the motorist or passengers, but has a quantitative basis of measurement. The motorist or passenger will judge the quality of the commute trip on road condition, time traveling and safety of the commute from one location to another. However, to determine if the roadway is operating at its designed capacity, and is contributing to the overall efficiency of the combined network of roads and streets within the city, a quantitative analysis to determine the minimum acceptable LOS must be established. The WSDOT has established a LOS D for principal arterials as the minimum acceptable LOS for roads within an urban area. Roads operating at that level of service are considered operating at their capacity. A LOS C at peak hour is a reasonable and achievable standard for the city's two principal arterial roadways, (Betz Road and SR-904). According to WSDOT, both arterials are presently operating at LOS B or better. The LOS for types of street and traffic volumes are shown in Figure 9.4.

The level of service on principal and minor arterials is show in Figure 9.5. The level of service values reflect the 1995 traffic volumes. In general, the level of service values are relatively high reflecting congestion free travel. Recent widening of SR-904 (First Street) through the downtown area raised the level of service considerably. Without this improvement (5 lanes) First Street would have suffered considerable congestion. Also, the city's new access ordinance controls the number of access points on SR-904 within the city. This combined with the realignment project will help maintain the desirable level of service.

**Figure 9.4
Level of Service Standards, Type of Roadway and Traffic Volume**

Average Weekday Traffic on 2 Lane Roads and Streets No Turn Lanes at Intersections.	
Level of Service	Number of Automobiles
A	0 to 4,000
B	4,100 to 7,000
C	7,100 to 9,000
D	9,100 to 11,000
E	11,100 to 13,000
F	13,100 plus
Average Weekday Traffic on 2 Lane Roads and Streets With Turn Lanes at Intersection.	
Level of Service	Number of Automobiles
A	0 to 9,000
B	9,100 to 13,000
C	13,100 to 14,000
D	14,100 to 15,000
E	15,100 to 16,000
F	16,100 plus
Average Weekday Traffic on 4 Lane Roads and Streets No Turn Lanes at Intersections, No Two-way Left Turn Lanes.	
Level of Service	Number of Automobiles
A	0 to 17,300
B	17,400 to 19,300
C	19,400 to 21,300
D	21,400 to 23,300
E	23,400 to 25,300
F	25,400 plus
Average Weekday Traffic on 4 Lane Roads and Streets Left Turn Lanes at Intersections, Two-way Left Turn Lanes.	
Level of Service	Number of Automobiles
A	0 to 22,500
B	22,600 to 24,500
C	25,600 to 26,500
D	26,600 to 28,500
E	28,600 to 30,500
F	30,600 plus

**Figure 9.5
Level of Service**

9.4 OTHER MODES OF TRANSPORTATION

9.4.1 Public Transportation



Cheney is a member of the Spokane Transit Authority, a public transportation benefit area. Bus service between Cheney and Spokane is provided by the Spokane Transit Authority. Bus routes run from downtown Spokane directly to Eastern Washington University and from the Campus via downtown Cheney to Spokane. According to the Spokane Transit Authority there are 74 bus trips made during weekdays and an average ridership of 2,300 per day. Service is diminished when the University is not in session and on weekends. Additional service is provided between Cheney and Medical Lake via Four Lakes. This route includes a limited degree of local service within Cheney as well.

Spokane Transit Authority also provides intra-city and inter-city paratransit service for those who qualify under the Americans with Disabilities Act (ADA), because physical and/or mental disabilities prevent them from riding the regular bus. Riders who qualify for this program can make arrangements for rides within the paratransit services area by telephone and be picked up in a paratransit van. This service is based in Spokane but includes Cheney as its service district. Greyhound bus service is available in Cheney.

9.4.2 Rail Transportation

Two railroads, Burlington Northern and Union Pacific, operate main lines through Cheney on a northeast to southwest axis adjacent to the southeastern City boundary. Cheney is one of three cities in the State of Washington, along with Spokane and Seattle, which can claim the distinction of having two main line railroads running side by side through its city limits. Burlington Northern carries on a substantial amount of local business with the ADM Specialty Flour Mill and the Cheney Grain Growers. The Burlington Northern line forks with one leg continuing northeasterly to Spokane while the other crosses both the Marshall Road and SR-904 and continues north. Once leaving Cheney to the southwest, Burlington Northern continues on to serve the Puget Sound area before traveling on to serve other West Coast cities. Union Pacific continues west to serve the Tri-Cities area and Portland before traveling on to serve other West Coast cities. Passenger rail service is provided by Amtrak in Spokane.

9.4.3 Air Transportation

Air transportation is available to Cheney residents at the nearby Spokane International Airport, ten miles away. Although not very accommodating, ground service to and from the airport is available. This service is provided by taxi or airport shuttle from Spokane. Bus service is available via Spokane.

9.4.4 Bicycles

Most bicycle traffic is to and from schools, both public schools and EWU. Residents ride for recreation, exercise and transportation. Streets most frequently traveled by bicycles to school were prioritized as follows: North Sixth Street, Elm, Oakland, Salnave, Seventh, Washington and Presley.

The existing improved bikeway system and proposed future routes are shown in Figure 9.6. It should be noted that 2nd Street has been designated as the major north-south bikeway instead of 1st Street which is the major traffic-carrying route. Second Street was chosen over 1st Street because 2nd Street carries less traffic than 1st Street and affords bicyclists greater roadway safety.

The improved bike route along Washington Street consists of one path, approximately one mile in length, which runs from the intersection of Seventh and Washington through the campus and terminates at North Sixth and Betz Road. On most streets, bicycles must share the same lanes with motor vehicles, creating unsafe situations, especially on streets with high volume traffic flows. The condition of the existing bikeway system, other than the improved route, is poor, with irregular surfaces and faded or unmarked bike lanes. Improved bike lanes generally improve the flow of both bicycle and automobile traffic and are suitable for streets with moderate motor vehicle volume and low speed limits.

Criteria for choosing the type of bicycle facility design depend on the volume of bicycle traffic, physical and operational constraints and the level of public interest and funding. While the signing of secondary streets as “bike routes” demonstrates civic interest, these bikeways will not be heavily traveled unless they happen to coincide with routes of direct access. Since bicyclists rely on their own motive power, they are reluctant to go far out of their way to reach a destination, except for recreational pleasure cycling. A system of bicycle facilities which discourages cyclists from the alignments of direct access will serve little purpose. The proposed bike path shows the route best suited to Cheney.

9.4.5 Pedestrians

Most pedestrians in Cheney walk for recreation and exercise, but certain others rely on walking as a means for traveling to school, to work, and in particular for senior citizens, to shop. Sidewalks are present along one or both sides of the street in most parts of the city; however, sidewalks are absent or in need of repair in some areas. Major pedestrian areas include the boundaries of the EWU Campus (Washington, Elm, “C”, Fifth, and Seventh Streets), the downtown area on First and Second Streets, the Cheney-Spokane Road commercial area, and the schools, particularly along North Sixth and Salnave Road.

Figure 9.6
Improved and Proposed Bike Routes

9.5 LAND USE AND TRANSPORTATION

There is a strong relationship between land use and transportation. Land use generates the need for transportation facilities. Residential land use is the producer of trips. Land uses such as the University, the downtown commercial area, and the industrial/employment areas are trip attraction areas. Trips between production areas and attraction areas are made by auto, bus, bicycle, or walking. Therefore, any increase of activity in residential, commercial and industrial land results in increased trip making.

Trip making by automobile also results in the need to park the automobile. Parking in and around the University during the morning peak hour commute presents numerous problems which include: congestion, hampering pedestrian travel, disregarding property rights, increasing potential for accidents by blocking the clear view triangle at intersections and interfering with snow removal and maintenance of roads. Policies addressing the parking issue are being considered as a means of reducing the impact on the community regarding parking. These include establishing an area around the campus fringe where a residential parking permit will be required to park; the installation of parking meters on designated streets; working with Spokane Transit Authority towards increasing the amount and types of public transportation available to the public; improving public transportation routes to cover a wider network of streets and amending the zoning ordinance to accommodate park and ride lots where such lots are presently not allowed.

The City has approached the University regarding parking, and the impacts parking creates on public streets and residential neighborhoods. The streets and neighborhoods directly adjacent to, and on the fringe of the campus, experience severe congestion and in some instances invasion of private property. This occurs when private driveways are blocked or parked in, or when the space is insufficient for the vehicle and the vehicle is either squeezed in or an attempt is made to squeeze a vehicle into an insufficient space. Because of this congestion on the city's residential streets and the impacts parking has on quality of life issues in neighborhoods surrounding the campus, capital expansion projects planned for on the EWU campus have been questioned regarding how the University plans to mitigate the increased need for parking. The University is addressing the impacts of parking to the community and has included parking enhancements in its capital planning/budgeting.

Areas with different development characteristics are associated with different types of bicycle and pedestrian facilities. Urban, "walkable" areas are associated with in-street bike routes which mingle bicycle and motorized vehicular traffic. The downtown core would emphasize walkability and pedestrian/bicycle oriented facilities such as narrower streets, slower speeds, handicapped-accessible sidewalks and mid-block bump-outs, and a dense, connected grid of streets with short block lengths. On arterials connecting the downtown with dense neighborhoods, in-street bicycle lanes tend to be most appropriate due to the increased average car speeds and wider streets. Also, on-street parking tends to be used somewhat less on suburban roads than on walkable urban or downtown core streets. Separated paths are more appropriate for low density suburban areas, due to the relatively high speed of motor vehicles and the relative lack of crossing roads. Such paths in denser areas significantly increase bicycle

danger, largely due to the number of cross streets, the reduced visibility of the bicyclist, and the false sense of security created for the bicyclist. In-street bicycle lanes are sometimes appropriate in rural areas, but not as appropriate as in denser locations.

In summary, bicycle travel routes and facilities are increasingly separated from motor vehicles as one moves along the scale of urban density from walkable to suburban to rural.

9.6 TRANSPORTATION GOALS AND POLICIES

9.6.1 Overall Transportation

Goal: Design, construct, and maintain safe and efficient transportation facilities capable of accommodating multiple modes of transportation.

Policies

Transportation Priorities

Provide adequate transportation facilities to serve the residential neighborhoods, schools and businesses located throughout the City.

Discussion: In addition to providing streets that are in good structural condition and also have the capacity to meet increasing traffic loads, this policy also emphasizes meeting the needs of pedestrians and bicyclists in this community.

9.6.2 Transportation Options

Goal: Ensure there are wide-ranging viable transportation choices capable of serving the motorized and non-motorized needs of the City.

Policies

Motorized Transportation

Maintain existing streets to accommodate single occupancy and high occupancy vehicles, and plan for the design and construction of additional streets to meet future motorized transportation demands.

Discussion: Maintaining the structural condition of the City's arterial and residential streets is critical to a healthy transportation infrastructure. Moreover, ensuring that the City's streets are designed to accommodate the smooth flow of traffic in a timely fashion throughout the City is also an essential element to meeting the motorized transportation needs of the City. The City has been able to successfully achieve this goal through the use of a Pavement Management System to maintain the structural integrity of the City's streets and through the use of a Level of Service standard to maintain efficient mobility on the City's streets. Since 1999, approximately six miles or nearly half of the City's functionally classified arterial streets have been improved through resurfacing, widening, reconstruction, and in the case of Parkway Drive, new construction. All of these improvements were made to address deficiencies identified through the City's Pavement Management System and adopted Level of Service standard. In 1999, the City also implemented

a residential street and sidewalk program aimed specifically at repairing the street and sidewalks segments found to be deficient on the City’s Pavement Management System.

TDM Strategies

Whenever possible, implement Transportation Demand Management strategies to encourage the use of high occupancy vehicles or non-motorized modes of transportation.

Discussion: Providing sidewalks, bikeway lanes and transit facilities is not just a luxury but rather a necessity in a college community such as Cheney and this is where implementation of Transportation Demand Management (TDM) strategies is a must. In recent years, the City has filled in missing sidewalk segments along its arterial streets so that now a pedestrian can walk from one end of SR 904 to the other and along the way stop and shop at numerous commercial businesses including those in the Central Business District. In addition, whenever possible, the widening of any arterial street has included the addition of bikeway lanes where none previously existed. The City has also constructed several bus turnouts and installed shelters to accommodate transit passengers. A partnership between the City and the Spokane Transit Authority resulted in the construction of the “K” Street Transit Station located on SR 904 at the southwest end of the City. The City will look to continue to expand opportunities for pedestrians, bicyclists, and transit passengers to travel throughout the City in a safe and efficient fashion.

Parking Requirements

Work with the businesses and Eastern Washington University to develop parking strategies.

Discussion: Parking, and specifically parking in the Central Business District and around the Eastern Washington University (EWU) campus, has and will continue to be an issue that will require considerable input from all of the parties involved. The growth in EWU’s student population has increased the demand for parking around the EWU campus. Officials from the City and EWU have been working together to find a way to address this issue both now and into the future. Efforts thus far have included the installation of parking meters as a way to encourage short term parking on the City’s streets while encouraging long term parking in the lots around campus. Discussions between the City and the representatives of the Central Business District have focused on creating off-street parking and limiting on-street parking to prescribed time periods.

Safe and Viable Walking Alternatives

Provide safe sidewalks leading to high demand destination points as a viable alternative to driving.

Sidewalks and handicap ramps should be installed on all arterial streets as soon as practical.

Discussion: Promoting walking in a community has to start with safe sidewalks that lead to the most desired locations within the community. The City has made significant strides in recent years to replace deteriorated sidewalks or construct sidewalks where none currently exist in an effort to create viable walking routes leading from the City’s neighborhoods to the businesses on SR 904 and the EWU campus.

Crosswalks

Establish and maintain sidewalk crossings.

Discussion: Maintaining crosswalks in high pedestrian locations such as around the Central Business District and the EWU campus is a critical element to creating safe and viable walking alternatives. Monitoring the need for placement of crosswalks where none currently exist has to be a focal point in this effort. Installation of crosswalk lighting in conjunction with striping should be encouraged whenever feasible to do so. The City, EWU, and the Cheney School District, to name a few, should work together to maintain safe crosswalks.

Safe and Viable Biking Alternatives

Provide safe bikeway lanes leading to high demand destination points as a viable alternative to driving.

Discussion: Whenever possible, bikeway lanes should be in place on both sides of arterial streets with a five foot minimum width per lane. Bikeway lanes should be clearly marked on the street surface and through signage. There should be an adequate number of bicycle racks in the Central Business District and at the schools in order to encourage safe storage of bicycles.

Transportation Signage

Provide user friendly signage in compliance with applicable signage standards.

Discussion: Concise and highly visible signage consistent with the *Manual on Uniform Traffic Control Devices* should be in place to ensure the safe movement of vehicular, pedestrian and bicycle traffic.

Viable Transit

Create and promote increased transit ridership opportunities in the community.

Discussion: The City and EWU should work with the Spokane Transit Authority (STA) whenever possible to increase STA’s ridership. This includes increasing the number of residents of Cheney traveling by bus to Spokane to work and shop or residents from outside of Cheney traveling by bus to EWU to work and attend class. EWU has been working extensively with STA to provide free or reduced fares to EWU’s students as a way to increase ridership and lessen the demand for on-street parking. If the development of the light industrial zoned land to the southwest of the City takes place as expected in the near future, the City should work with STA to develop transit facilities to accommodate the transportation needs of the employees traveling to the area.

9.7 FORECASTED TRAFFIC VOLUMES

As stated earlier, growth in population, employment, and student enrollment at the Eastern Washington University generates additional auto traffic. Traffic counters maintained by

the Washington State Department of Transportation along SR-904 indicate a four percent per year growth. The population, however, is forecast to grow at a rate of about 1.5 percent per year. Based on advise from professional transportation planning consultants that worked on other city projects, a reasonable traffic growth rate of about 1.8 percent per year seems realistic.

Forecast traffic volumes for the year 2022 are shown in Figure 9.7. As expected, heavy traffic volumes are found on SR-904 (First Street). Average weekday traffic volumes on SR-904 range from a low of 2,200 vehicles per day southwest of Mullinix Road to 23,400 vehicles per day near Elm Street. Levels of service also drop as traffic volumes increase, clearly shown on Figure 9.5.

FIGURE 9.7
2022 Forecasted Traffic Volumes

FIGURE 9.8
2022 Forecasted Levels of Service

9.8 TRANSPORTATION CAPITAL FACILITIES PROGRAM

The Transportation Capital Facilities Program identifies transportation improvements spanning a six and twenty year planning horizon to meet current and future transportation demands. The Six Year Transportation Improvement Program is updated and adopted annually by the Cheney City Council. The program includes the following types of projects:

- Reconstruct to structural standards
- Widening of existing streets not meeting capacity standards
- Preservation of existing streets meeting structural and capacity standards
- Construction of new routes to meet transportation demands

The following table summarizes the estimated cost of the Transportation Capital Facilities Program over twenty years.

Figure 9.9
20-Year Transportation Capital Facilities Program
(Estimated Costs - \$1,000s)

Project Type	
Reconstruct to Structural Standards	\$440
Preserve to Structural Standards	\$8,122
Widen to Capacity Standards	\$0
New Route Construction	\$9,430
Totals	\$17,992

The following table summarizes the City's Six-Year Transportation Improvement Program.

Figure 9.10
Transportation Six-Year Financing Plan
(Estimated Costs - \$1,000s)

Funding Sources	2004	2005	2006	2007	2008	2009	Totals
Gas/REET Taxes	\$62	\$23	\$40	\$16	\$64	\$29	\$234
Utility Taxes	\$303	\$236	\$239	\$245	\$210	\$165	\$1,398
TIB	\$0	\$0	\$0	\$300	\$0	\$0	\$300
FHWA	\$398	\$144	\$255	\$99	\$408	\$186	\$1,490
Private	\$0	\$0	\$	\$200	\$0	\$0	\$200
Revenue Totals	\$763	\$403	\$534	\$860	\$682	\$380	\$3,622
Projects							
Residential Street Reconstruction/Preservatn	\$303	\$236	\$239	\$245	\$210	\$165	\$1,398
Arterial Street Reconstruction/Preservatn	\$230	\$167	\$295	\$115	\$472	\$215	\$1,494
Arterial Street New Route	\$230	\$0	\$0	\$500	\$0	\$0	\$730
Project Costs	\$763	\$403	\$534	\$860	\$682	\$380	\$3,622

9.8.1 Transportation Funding

The City relies upon local, state, federal, and private funding to finance the construction, preservation, and reconstruction of access and arterial streets. Local and private funding provide the lion's share of the financing for the City's access streets, whereas local, state, federal, and private funding have all been utilized to finance the City's arterial streets. The specific sources of funding under each of the four funding categories are as follows:

Local Funding

State Arterial Street Gas Tax
Real Estate Excise Tax
Electrical and Natural Gas Taxes

State Funding

Transportation Improvement Board

Federal Funding

Federal Highway Administration

Private Funding

Developer Funds

Local Funding Sources

State Arterial Street Gas Tax

The City receives an annual per capita allotment of the state gas tax proceeds that are dedicated solely to arterial street capital improvements. The City has predominantly relied upon this source of funding as a match to leverage state and/or federal funding for arterial street improvements.

Real Estate Excise Tax (REET)

The City assesses a .50% tax on the sale of real estate, and under state law, this funding must be used for infrastructure. The City has utilized REET proceeds to supplement the State Arterial Street Gas Tax where necessary in order to meet the requisite state and/or federal funding matching requirements for arterial street improvements.

Electrical and Natural Gas Taxes

The voters of Cheney approved a 4% increase in the electrical and natural gas taxes back in the fall of 1998. The proceeds from the 4% tax are to be used exclusively for the improvement of the City's residential streets and sidewalks. The 14-year tax went into effect in January of 1999 and will sunset in December of 2012. The estimated \$3.1 million in tax income is to be used to pay for the resurfacing of the approximately 19 miles of the City's most deteriorated streets and approximately seven miles of the City's most deteriorated sidewalks.

State Funding Sources

Transportation Improvement Board (TIB)

The City has received funding from the Washington State Transportation Improvement Board through a number of programs including the: Transportation Partnership Program (formerly Transportation Improvement Account), Arterial Improvement Program (formerly Urban Arterial Trust Account), and the Pedestrian Safety and Mobility Program (formerly Pedestrian Facility Program). Since 1999, more than \$3 million in TIB funding has been used to significantly improve travel along SR 904 and Betz Road that respectively provide access to the Central Business District and the EWU campus. In addition, TIB funding was used to construct Parkway Drive, a much needed east-west arterial street located at the north end of Cheney in order to accommodate the traffic demands resulting from extensive commercial and residential development taking place in this area of the City.

Federal Funding Sources

Federal Highway Administration

Funding from the Federal Highway Administration through the Transportation Equity Act for the 21st Century (TEA-21) has been instrumental in enabling the city to widen, resurface and in many instances, reconstruct the City's functionally classified arterials. Since 1999, approximately \$2.2 million in federal funding has been used to improve approximately four miles of arterial streets. In addition to the arterial street improvements financed with federal funding, the City has also utilized nearly \$800,000 in federal funding for enhancement projects geared toward non-motorized transportation improvements such as the Downtown Revitalization Project and the Cheney Visitor Center.

Private Funding Sources

Developer Funds

The matching funding for the construction of Parkway Drive came from the developers owning property along the route. In addition to donating the right-of-way, the developers put more than \$500,000 toward the cost of the water, sewer, street, and sidewalk costs. The public-private funding partnership resulting in the Parkway Drive Project is one that the City will look to use in the future to accommodate the transportation needs resulting from new development within the City.

9.9 TRANSPORTATION CONCURRENCY

The State of Washington's Growth Management Act requires that a jurisdiction's transportation plan contain a funding analysis of the transportation projects it recommends. The analysis should cover funding needs and funding resources, and it should include a multi-year financing plan. The purpose of this is to insure that each jurisdiction's transportation plan is affordable and achievable. If a funding analysis reveals that a plan is not affordable or achievable, the plan must discuss how additional funds will be raised, or how land use assumptions will be reassessed.

**Insert Figure 9.11
Transportation Plan**