Chapter 5

TRANSPORTATION ELEMENT

A. Introduction

The Transportation Element provides an assessment of the existing transportation conditions and future transportation needs within the Urban Growth Area of the City of Colville. It represents the City of Colville transportation policy plan through 2030.

The purpose of the Transportation Plan is to provide a guide for Colville to identify transportation goals and policies that will accommodate present and future needs of the community. Identifying these needs involves a process of evaluating the relationship between land use and transportation. Transportation resources influence the development of land use patterns, and the way the land is used influences the need and location for transportation systems. The integration of future land use plans and transportation plans will enable Colville to achieve its community goals. The transportation planning process used the following goals to guide the future shape of Colville:

- ✓ The City of Colville's transportation system should provide an effective stewardship of the environment, protecting critical areas, and conserving land, air, water, and energy resources.
- ✓ The transportation plan should encourage the livability of the community by providing alternative transportation modes and minimizing noise pollution and traffic congestion.
- ✓ The transportation plan should enhance efforts to diversify and expand the local economy.
- ✓ The transportation plan should enhance the opportunities for enjoyment of recreational and cultural activities, and improve the City's quality of life.

Prior to the Growth Management Act, comprehensive plans were not required to consider the linkage between land use and transportation. The Growth Management Act mandates that the transportation element be consistent with the land use element of a local comprehensive plan. This linkage begins with a vision of what the community desires for its quality of life, now and in the future. The transportation plan element will relate transportation planning decisions to decisions concerning land use in order to achieve the community vision. The process includes the following components:

- land use assumptions;
- level of service standards;
- inventory of existing services and facilities;
- determining current and future deficiencies;
- analysis of funding options to meet these deficiencies;
- concurrency management, to include multi-modal improvements;
- transportation improvement plan; and,
- inter-governmental coordination.

B. Transportation System Inventory

A city's transportation system is one of the most important indicators of its economic viability and livability. Traffic and population in and around the City of Colville are expected to grow at a moderate pace over the next twenty years. This section of the report provides a summary of the existing transportation system conditions within the Colville UGA. General traffic flow along the roadways within Colville was analyzed to gain an understanding of the traffic circulation as a whole. The description of existing traffic conditions and roadway inventory includes major east/west and north/south roadways. It also includes roadway links to specified land uses such as commercial or industrial centers, trucking routes, highways, and natural barriers or crossings.

1. Roadway Facilities

The City of Colville is located at the north end of the Colville River Valley. It is surrounded on the north and northeast by the slopes of Colville Mountain and on the west by the Colville River. Traffic circulation in Colville flows between these geographic markers.

Two major transportation facilities cross the City of Colville: U.S. Highway 395 (US 395) and State Route 20 (SR 20). US 395 runs north and south across the state. Through Colville it runs in a north-south direction through the center of the downtown business district and then heads northwest toward Kettle Falls at its junction with 5th Avenue. SR 20 runs east along 3rd Avenue from US 395 at the north end of the central business district. SR 20 provides access to the Colville Municipal Airport and to Colville High School.

Traffic circulation within the downtown area is principally served by US 395, the truck route, and Wynne Street. From Hawthorne Avenue on the south end of the City, US 395 is a five-lane road traveling through the middle of the central business district. It is referred to as Main Street until its intersection with 5th Avenue. At this intersection US 395 makes a sharp turn to the west and turns into three lanes through the remainder of the commercial district to Buena Vista Drive. From Buena Vista Drive north to Williams Lake Road, the northernmost city limits, the highway narrows to two lanes.

Colville has five signalized intersections along Main Street (US 395): Birch Avenue, 1st Avenue, 3rd Avenue (SR 20), Wynne Street, and Canning Drive. Other major streets utilize stop signs and yield signs to control the flow of traffic. New roundabouts have been constructed at both ends of the new truck route. The south roundabout is located at Main Street and Hawthorne Avenue, and the north roundabout is located at Railroad Street and 5th Avenue, which is a part of the highway route.

a) Functional Street Classification System

The streets within Colville have been classified according to their function in the overall road network. The functional street classification system consists of major and minor arterials, and collectors and city arterials (local streets) -- consistent with the Federal Functional Classification System. Each of these classifications is based on its access and movement functions. The functional classification and needs for on-street parking determines the maximum road design standard, funding, and street operation.

Arterials serve the highest volumes of traffic with fewer access points. They serve traffic going into, out of, and through the urban area as well as some intra-city traffic. Collectors serve internal circulation, connect to arterials, and provide land access. All other unclassified streets are local streets. Table 5.1 lists the street classification system for city arterials and collectors in Colville. Figure 5.1 shows the system graphically, including proposed extensions or new roadways, as described in the Transportation Improvement Plan (TIP).

Table 5.1
Functional Street Classification System

Street	From/To	Classification
US 395 (Main Street/5th Avenue)	South City Limits to West City Limits	Principal Arterial
SR 20 (3rd Avenue)	US 395/Main Street to East City Limits	Minor Arterial
1st Avenue	West City Limits to Main Street	Minor Collector
1st Avenue	Main Street to Oak Street	Major Collector
3rd Avenue	Rail Road to Main Street	Proposed Major Collector
6th Avenue	Main Street to Hofstetter Street	Major Collector
7th Avenue	Hofstetter Street to Madison Street	Major Collector
8th Avenue	Main Street to Wynne Street	Proposed City Arterial
9th Avenue	Wynne Street to Washington Street	City Arterial
Aladdin Road (mostly county)	SR 20 to north UGA Boundary	Major Collector
Birch Avenue	Wynne Street to Main Street	City Arterial
Birch Avenue	Main Street to Miner Street	Major Collector
Buena Vista Drive (mostly county)	US 395 to Washington Street	Proposed Major Collector
Dominion Avenue	Main Street to Oak Street	Major Collector
Dominion Avenue	Oak Street to Hofstetter Street	City Arterial
Evergreen Way (partially county)	Hawthorne Avenue to Ricketts Road	Proposed Major Collector
Garden Homes Drive	Hawthorne Avenue to Swede Anderson Rd	Major Collector
Garden Homes Drive (mostly county)	Swede Anderson Rd to Graham Road	Minor Collector
Graham Road (county)	Garden Homes Drive to UGA Boundary	Minor Collector
Hawthorne Avenue	Main Street to Garden Homes Drive	Major Collector
Hawthorne Avenue	Garden Homes Drive to Miner Street	City Arterial
Hawthorne Avenue	Miner Street to East City Limits	Proposed Major Collector
Hofstetter Street	Hawthorne Avenue to 3rd Avenue	City Arterial
Hofstetter Street	6th Avenue to 7th Avenue	Major Arterial
Louis Perras Road	Oakshot Road to 1st Avenue	Minor Collector
Main Street	5th Avenue to 6th Avenue	Major Collector
Main Street	6th Avenue to 11th Avenue	City Arterial
Miner Street	Birch Avenue to Garden Homes Drive	Major Collector
Oak Street	Dominion Avenue to 6th Avenue	Major Collector
Oakshot Road	West City Limits to Louis Perras Road	Minor Collector
Railroad Street/Truck Route	Hawthorne to 5th Avenue	Major Collector
Silke Road	Birch Avenue to 3rd Avenue	City Arterial
Washington Street	1st Avenue to US 395 (5th Avenue)	Major Collector
Washington Street	9th Avenue to Buena Vista Drive	City Arterial
Wynne Street	5th Avenue (Hwy 395) to 6th Avenue	City Arterial
Wynne Street	5th Avenue (Hwy 395) to Hawthorne Avenue	Major Collector

Source: City of Colville Staff, 2010

The major streets in Colville are classified as principal or city arterials and major or minor collectors. Pavement is generally in good condition on these roads; however, the public works department has expressed the need to initiate an ongoing program to rotate maintenance on these roadways. They have proposed that a "pavement preservation program" be included as a goal within this element and recommended that the city establish and contribute to a fund for this program on a regular basis.

The speed limit within the city limits is 25 mph; except for school zones, which are 20 mph during hours of school activity. Highway 395 has speed limits upwards of 55 mph, starting at 35 mph just north of Buena Vista Drive. Generally, on-street parking may be available on many roads within the city. However, the Colville Municipal Code needs to be consulted to confirm compliance regarding hours of parking and specific restrictions. Roadways fall under city jurisdiction except for the highways, which fall under state jurisdiction in accordance with RCW 47.24.

The roadways in the central business district form a fairly continuous grid system. The grid roadway pattern is extended northwards into the hilly terrain at the base of Colville Mountain to service primarily residential neighborhoods. Most of these streets are local streets. Access is also provided to this residential section from the northwest along Buena Vista Drive, which connects with US 395.

b) Regional Traffic

A significant amount of regional traffic travels along US 395 through Colville and the downtown business corridor. Colville is the retail, government, education, and medical center for northeast Washington's tri-county area, which includes Ferry County, Stevens County, and Pend Oreille County. Visitors and shoppers are attracted from as far away as Trail, British Columbia. As the population grows within Stevens County, more traffic can be expected along the US 395 corridor.

A new truck route has been constructed to redirect truck traffic around the city center, which opened in 2007. The truck route starts at the roundabout at Hawthorne Avenue and Main Street (US 395) on the south end of town; it heads west, then northwesterly along Railroad Street to reconnect with US 395 at a second roundabout (5^{th} Avenue). The truck route has been successful in redirecting traffic from the central business district. However, there have been requests to consider switching the on-street parking from parallel back to diagonal parking in this area, to encourage patronage of local merchants along Main Street.

A new regional bus service has been proposed for the route between Spokane and Kettle Falls. This service will provide connectivity to Greyhound bus service, Spokane's Transit Authority, Spokane International Airport, and the many services and shopping opportunities offered by the Spokane community.

c) Natural Traffic Barriers

Water, geology, and critical resource areas create natural barriers to the traffic circulation system requiring special consideration when planning for a community's future transportation needs. Outside of the downtown business corridor, Colville's topography is hilly with restrictions that include steep grades to the north and northeast and wetlands to the west.

d) Parking Facilities

The City of Colville provides designated on-street parking on most of its arterials and on collectors in the downtown business district. On-street parking is also provided along Hawthorne Avenue outside of the downtown corridor from Main Street to Miner Street. Diagonal parking is

provided adjacent to government offices and public facilities along Oak Street, Astor Avenue, and 1st Avenue in the downtown area. On-street parking is permitted throughout the city in residential areas as well. There are restrictions in some areas, however, and the Colville Municipal Code needs to be consulted to ensure compliance with these restrictions.

Since our development standards do not require off-street parking be provided within the C-2 (Central Business) District, property owners contribute to a parking fund which provides public, off-street parking at a few locations: 1) On the east side of Wynne Street, on both sides of the Astor Avenue alignment; 2) the southwest corner of 1st Avenue and Wynne Street; 3) the northeast corner of 1st Avenue and Wynne Street; and 4) the southeast corner of 2nd Avenue and Oak Street.

2. Non-Motorized Transportation

Providing a comprehensive plan to accommodate pedestrian and bicycle traffic will benefit the community in a number of ways. It will relieve vehicle traffic congestion on the local roadways; increase safety for users of all modes of transportation; provide energy savings by using less fuel; reduce the discharge of pollutants into the environment from motorized vehicles; promote physical activity for improved health; and provide a recreational outlet for residents and visitors.

Colville ranks very high as a walkable community, according to an internet website called "Walkscore.com," with a score of 97 out of 100. This website lists the following criteria to determine whether or not a neighborhood is considered walkable:

- There is a discernable center, i.e., a shopping district, main street, or public space.
- The neighborhood is compact enough to accommodate local businesses and public transportation.
- Housing in the area accommodates mixed income, and businesses and residences are located near each other.
- There are ample public places to gather and play.
- Buildings are situated close to street to cater to foot traffic. Parking is relegated to the rear of the buildings.
- Schools and workplaces are close to residential areas.
- Street designs accommodate bicyclists, pedestrians, transit use, and handicapped users by providing sidewalks, ramps, benches, and shade.
- Streets are built for the right speed using narrow lanes and traffic calming techniques.
- Pedestrian/bicycle use is more comfortable by using medians, crosswalk timers, bicycle lanes and storage, and shelters. Make the streets work better for those outside of a car.

There have been recent discussions about the possibility of providing a non-motorized trail between Colville and Kettle Falls, in the proximity of the US 395 alignment. The trail would

accommodate both pedestrian and bicycle traffic. This prospect has opened up inquiries about providing a more in-depth system for pedestrian and bicycle travel within the city limits that would tie this trail to the Rotary Trail or other non-motorized routes.

As pedestrian and bicycle routes become interconnected with the city limits, intermittent trail heads or "pocket parks" need to be established. This would provide rest areas for the users of these trails systems, travelers, and local residents. The upkeep and maintenance of these parks would need to be handled by either a private, local service organization or the City Park Department.

The proposed Pedestrian & Bicycle Plan was compiled in 2009 through public outreach to local citizens. The plan was reviewed by the Planning Commission and they recommended the plan be adopted by City Council as a part of this element. When the new plan is in place, construction of these facilities would be more attainable when specific funding opportunities arise. As new development occurs, the proposed facilities may be incorporated into the project design, as deemed appropriate during the review process. Figure 5.2 shows the Pedestrian & Bicycle Plan.

a) Pedestrian Facilities

When the term "pedestrian" is used, it usually evokes a vision of a person that is walking. This term also refers to individuals that use personal, alternative modes of transportation -- some even motorized. These types of equipment are known as "electric personal assistive mobility devices" or EPAMDs, that are typically electric wheelchairs or scooters. They use pedestrian facilities such as sidewalks, hard-surfaced trails and travel at very low speeds.

Pedestrian facilities in Colville consist of sidewalks on most streets in the downtown business area and on some streets in the remainder of the community. Table 5.2, on the following page, shows an inventory of sidewalks along arterial and collector streets. The list was accumulated through a walking inventory performed in 2008 by city staff and the engineering department's documentation.

As adopted per Ordinance No. 1343 N.S., sidewalks are required within the C-2 District, along the school walk route, and on arterial and collector streets, as shown on the Sidewalk Plan adopted in 2004. There are sections of sidewalk throughout the community that need repair, replacement, or new construction.

A network of pedestrian facilities exists along most of the major arterials and collectors in Colville. The designated school walk route provides accessibility for school-age children to travel to school. These same routes are regularly used by the general public, due to their connectivity throughout the community. There is a single, marked pedestrian lane, which is on the east side of the Silke Road from Birch Avenue north to the beginning of the sidewalk in front of the old armory site. A temporary solution to providing additional pedestrian facilities may be to incorporate more marked pedestrian lanes, as deemed appropriate, until permanent facilities could be constructed.

Table 5.2
Sidewalk Inventory – Arterial & Collector Streets

Street	Location	Side of Street
Main Street	Approx. 600ft S/of Juniper to Hawthorne Avenue	East
	Hawthorne Avenue to 5th Avenue	West/Partial
5th Avenue	Main Street to Lincoln Street	Both/Partial
US 395	Lincoln Street to 7th Avenue	Both/Partial
	7th Avenue to Buena Vista Drive (end of sidewalks)	North/Partial
SR 20 (3rd Avenue)	Main Street to Cedar Street	South
	Cedar Street to Madison Street	South
	Madison Street to the High School	South North/Partial
1st Avenue	Railroad Street to Oak Street	Both
	Oak Street to Elm Street	Both/Partial
	Elm Street to Hofstetter Street	Both
	Hofstetter Street to Alder Street	Both/Partial
3rd Avenue	Lincoln Street to Washington Street	North
	Wynne Street to Main Street	Both
6th Avenue	Main Street to Walnut Street	Both
	Walnut Street to Hofstetter	South
7th Avenue	Hofstetter Street to Madison Street	South
8th Avenue	US 395 to Lincoln Street	North
	Lincoln Street to Main Street	South/Partial
Birch Avenue	Main Street to Jefferson Street	Both
	Jefferson Street to Summit Street	South
Hawthorne Avenue	Main Street to Crestview Street	Both/Partial
Hawthorne Avenue	Miner Street E/approx 525ft	North
Hofstetter Street	Hawthorne Avenue to Birch Avenue	Both
	Birch Avenue to SR 20	Both/Partial
Madison Street	SR20 to 7th Avenue	West
Main Street	5th Avenue to 6th Avenue	Both
	6th Avenue N/approx 175ft	West
	7th Avenue to 8th Avenue	East
Miner Street	Hawthorne Avenue N/approx 250ft	East
Oak Street	Dominion Avenue to Birch Avenue	Both
	Birch Avenue to 6th Avenue	Both
Silke Road	Birch Avenue to SR 20	Both/Partial

Source: City of Colville Staff; 2008, 2010
"Partial" indicates that sections of sidewalk are not present.

Rotary Trail is a private pedestrian path that was established for the benefit of the public; it was constructed and is maintained by the local Rotary Club. It connects Hawthorne Avenue with SR 20, heading north along Evergreen Way through the residential development of Pheasant Ridge Estates. It has paths that branch off, creating a loop that meanders through the golf course and adjoining rural residential area; reconnecting with the Evergreen Way alignment on the east side of the high school.

In recent years, pedestrian safety has increased with the completion of a couple of projects. Main Street, Wynne Street, and Oak Street were recently revitalized with the Colville 2000 project; providing bulb-outs, center islands, new landscaping, and marked pedestrian crossings. The new truck route, which was completed in 2007, has alleviated some of the truck and other traffic through the city center.

During the development of the Pedestrian & Bicycle Plan, it was recommended that other safety elements be utilized at pedestrian crossings in high-traffic areas. Suggestions included using manually activated electronic signals or hand-held flags at these crossings to make pedestrians more visible to oncoming traffic.

b) Bicycle Facilities

Designated bicycle lanes are currently provided along 6th Avenue from Main Street to Hofstetter Street, then along Hofstetter Street to 7th Avenue, then east along 7th Avenue to Madison Street. (The bicycle lane actually continues past Madison Street, into the county's jurisdiction.) This bicycle route provides access to Hofstetter Elementary School on the corner of Hofstetter Street and 7th Avenue, and continues eastward to Colville High School, which is on State Route 20, just east of the airport.

US 395 and SR 20 are part of a designated, cross-state scenic bike route called the "Golden Tiger Bike Path." Within the city limits there are intermittent markings for bike lanes on both sides of these highways. The lanes are varying widths, sometimes becoming narrower than typical bike lanes, and are not clearly identified as bike lanes.

The existing facilities are utilized to some degree; however, it has been brought to the city's attention that they are not always kept clear for safe travel. A program to enable the city to regularly maintain these routes should be considered.

Another factor of providing a "complete" bicycle system would be to include parking facilities such as bicycle racks and covered shelters. Locating secure bicycle facilities close to shopping, services, employment, and recreational centers may encourage the regular use of this type of transportation for local residents.

3. Public Transportation

The City of Colville and Stevens County has limited public transportation available to its residents. Rural Resources has developed a bus program that provides free, countywide dial-a-ride service for seniors, the disabled, and low-income households in the area. They provide limited fixed-route services for the general public between Chewelah and Kettle Falls, charging a minimal fare. Depending upon available funding for the program, this service is sometimes if only offered Monday through Thursday. This requires that users of the service to find alternative means of transportation during the off days. They offer shopping trips every two weeks into Colville, Chewelah, and Kettle Falls for residents that live in outlying areas.

Even though the need for a public transit system has been expressed by some of the local citizens, there has not been adequate funding to provide such a service. A feasibility study to establish a regional public transit system is currently being conducted by the local Regional Transportation Planning Organization (RTPO). The local RTPO consists of representatives from agencies throughout the tri-county area, which includes Ferry, Stevens, and Pend Oreille counties. The organization reviews local needs and project proposals to ensure regional collaboration in transportation planning.

4. Rail Transportation

Rail transportation to Colville is limited to the transport of goods. The Burlington Northern Santa Fe (BNSF) Railroad maintains a line from Spokane that heads north, generally following US 395. The railway becomes the Kettle Falls International Railway from Chewelah north, crossing into Canada. At the juncture of Kettle Falls, where the line splits, one route follows the Columbia River north through Marcus and up to the Canadian border at Boundary. The other route crosses the Columbia River then continues north to the Canadian border at Laurier.

The railroad runs through the west side of Colville. It enters the city from the south, parallel to US 395, and is approximately one-half mile to the west. Within the city, the tracks skirt the western edge of Colville, following the truck route and US 395.

Railroad crossings in Colville are limited. There are only two public track crossings; the first is located at 1st Avenue, just north of the Wastewater Treatment Facility. The Canning Road crossing provides access to an industrial park. This crossing includes a traffic signal on the highway tied into an automatic gate signal at the railroad tracks. There is another crossing located at 5th Avenue, that is a private access road into the lumber mill.

The nearest railroad yard is located in Kettle Falls. In Colville, one spur currently serves the lumber mill. There are no spurs planned for the industrial park at this time.

5. Water Transportation

The City of Colville does not have any water transportation.

6. Air Transportation

The City of Colville presently operates the Colville Municipal Airport located on the east side of the city south of SR 20. This is a year-round, general aviation airport - no commercial service is available. The nearest commercial service is in Spokane. The airport plays a critical role in the economic vitality of the rural community of Colville. The airport management recently reported that the facility has approximately 5000 operations per year, which would average 13.7 operations per day (landings and takeoffs).

The airport site is bounded on the east by Colville High School; to the south by undeveloped land, a public golf course, residential properties, and a fairly steep bluff; to the west by a State Department of Natural Resources fire cache and operations center and a city softball complex; and to the north by SR 20 and a mixture of agricultural, commercial, and residential land uses.

Facilities at the airport include a 45-foot wide, 2,695-foot long runway with a 25-foot paved section and a 15-foot wide parallel taxiway. The primary parking apron on the east side of the facility is 95 X 600 feet. There are two additional aprons on the west side at 40 X 148 feet and 80 X 80 feet. There is an 8,000-gallon automatic card-lock fueling facility, which allows 24-hour access for pilots. There are numerous privately-owned structures on the property and one publicly-owned structure, which is the operations facility.

There has been a considerable amount of discussion about the possibility of expanding the existing airport; however, at this time it only seems feasible to relocate and construct a new airport facility capable of serving air transportation needs on a regional basis. The current airport does not meet some of the FAA standards for A-1 or B-1 (small) categories of aircraft. Agencies such as the U.S. Forest Service fire fighting program, and the regional U.S. Custom and Border Protection have expressed concerns over their inability to utilize the existing airport due to its substandard design. Tri-County Economic Development District supports a regional airport to accommodate air freight and business-class flights. The state transportation plan and some of the business community have expressed the desire and need to accommodate commercial and commuter flights; however, very significant public response indicates many in the community seek to retain the current airport without such expansion. Various options are being evaluated to determine the feasibility of such a project.

7. Electric and Hybrid Vehicles

A new era of electric and hybrid vehicles has emerged that may require consideration of providing facilities to accommodate their recharging needs. An area resident who owns such a vehicle provided some insight on what the current needs are and what is to be expected in the near future.

There are two types of vehicles available; a pure electric vehicle (EV) or plug-in hybrid vehicle (PHEV). Both of these utilize electrical charges stored in batteries in the vehicle; however, the hybrid also uses gasoline for supplemental power. The vehicles may be plugged into either a 110-volt outlet or 220-volt outlet for recharging. The higher the level of voltage available, the less time it takes to recharge their on-board battery. While these vehicles may recharge while they are parked at home, the operating range of each charge is limited. This creates a need for access to strategically placed public recharging stations to enable them to travel longer distances. *(Electrification Roadmap, Electrification Coalition, November 2009).*

Colville does not have any public recharging stations. At this time, a couple of local businesses allow EV/PHEV users to plug into their electrical outlets; however, this is voluntary. Through public input and discussion, the Planning Commission has suggested that the city consider the installation of electric recharging stations within public parking areas.

C. Level of Service (LOS) Standards

As part of the Growth Management Act planning effort, level of service (LOS) standards must be established for evaluating the performance of existing transportation systems and planning future transportation facilities that meet future needs. In accordance with the concurrency requirement, no development order or permit may be issued if it results in a reduction of LOS below adopted standards.

Transportation engineers have established various methods for evaluating the ability of a transportation facility to carry traffic. Six categories of LOS have been established to describe the operations of a roadway facility, whether it is a freeway, rural highway, signalized intersection, non-signalized intersection, or other roadway facility. The LOS categories consider factors such as capacity, travel speed, delay, frequency of interruptions in traffic flow, relative freedom for traffic maneuvers, driving comfort and convenience, and operating cost. They do

not directly assess roadway condition, but condition of the roadway is an important consideration for drivers using a road.

The six categories typically used, and used in this plan, range from LOS A to F. A roadway facility operating at LOS A has free-flowing traffic with minimal delays at intersections. A facility operating at LOS F is totally saturated with traffic, delays are long, and movement is very difficult. The levels in between reflect intermediate levels of traffic interruption, delay, and traffic demand as compared with the capacity of the facility.

The State Highway System Plan requires a LOS of "D" for all highways within communities of populations less than 200,000. This includes all side streets where they intersect with the highway.

The methodologies used most often are for signalized and non-signalized intersections.

Highway Capacity Manual Transportation Research Board 1994 Edition

Table 5.4
Level of Service Description
Non-signalized Intersections

Level of Service	Description
A	Operations with less than 5 seconds of delay per vehicle
B	Operations with between 5 and 10 seconds of delay per vehicle
C	Operations with between 10 and 20 seconds of delay per vehicle
D	Operations with between 20 and 30 seconds of delay per vehicle
E	Operations with between 30 and 45 seconds of delay per vehicle
F	Operations with more than 45 seconds of delay per vehicle

Source: 1994 Highway Capacity Manual, p. 10-12 for Non-signalized Intersections.

Table 5.3 Level of Service Description
Signalized Intersections

Level of Service	Description
A	Operations with very low delay - less than 5 seconds per vehicle; occurs when most vehicles arrive during green phase, with most vehicles not stopping at all; short cycle lengths may contribute to low delay.
B	Operations with delay from 5.1 to 15 seconds per vehicle; occurs with good progression and/or short cycle lengths; more vehicles stop than with level of service (LOS) A.
C	Operations with delay from 15.1 to 25 seconds per vehicle; occurs with fair progression and/or longer cycle lengths; individual cycle failures may begin to appear at this level; the number of vehicles stopping is significant at this level, although many vehicles still pass through the intersection without stopping.
D	Operations with delay from 25.1 to 40 seconds per vehicle; at this LOS, the influence of congestion becomes more noticeable; longer delays result from a combination of unfavorable progression, long cycle lengths, or high volume/capacity (v/c) ratios; many vehicles stop, and the proportion of vehicles not stopping declines; individual cycle failures are noticeable.
E	Operations with a delay of 40.1 to 60 seconds per vehicle; upper limit reflects capacity of intersection; high delay indicates poor progression, long cycle lengths, and high v/c ratios; individual cycle failures are frequent.
F	Operations with delay in excess of 60 seconds per vehicle; condition occurs from oversaturation, when arrival flow rates exceed capacity of the intersection; may also occur with high v/c ratios less than 1.0 with many individual cycle failures; poor progression and long cycle lengths may also contribute to high delay.

Source: 1994 Highway Capacity Manual, p. 9-6 and 9-7 for Signalized Intersections.

The Growth Management Act requires that LOS standards be regionally coordinated. For Colville, coordination occurs with WSDOT and Stevens County. For non-highway roadways and intersections within Colville, a LOS standard of E has been adopted. Average delays for vehicles would be less than 60 seconds for signalized intersections and 45 seconds for non-signalized intersections.

These LOS standards focus on a roadway's capacity to carry vehicles. Problems can arise when a facility may have adequate capacity to address the needs of adjacent development, but the roadway components themselves may be inappropriate for the type and level of development along the roadway. An example of this conflict would be a local residential street which carries high volumes of traffic traveling through to other nearby development. Another example would be roads with poor surface conditions (potholes, etc.) where capacity might be adequate, but the condition of the facility might not meet the needs of adjacent development.

Table 5.5 shows the relationship between LOS standards and the Average Daily Traffic Volume (ADT), which is used to determine the need for upgrades or expansion when growth occurs.

Table 5.5
Relationship between
LOS Standard & Average Daily Traffic Volume

Average weekday traffic on two-lane streets without turn lanes at the intersections		**Average weekday traffic on two-lane streets with turn lanes at the intersections**	
LOS Standard	**Average Daily Traffic Volume**	**LOS Standard**	**Average Daily Traffic Volume**
A	0 – 4,000	A	0 – 9,000
B	4,001 – 8,000	B	9,001 – 13,000
C	7,001 – 9,000	C	13,001 – 14,000
D	9,001 – 11,000	D	14,001 – 15,000
E	11,0001 – 13,000	E	15,001 – 16,000
F	13,001 and above	F	16,001 and above

Source: Airway Heights Transportation Element, 2006 Comprehensive Plan; referencing WSDOT data

Where an unacceptable LOS occurs, a range of improvements may be considered, including such measures as channelization, lane use controls, sight distance improvements, or all-way stop control. The construction of adjacent parallel streets can also alter the distribution of traffic to reduce minor street LOS problems.

If LOS at any intersection drops below adopted LOS standards, a signal warrant analysis should be performed to address the need for signalization. Minimum volume warrants for signal installation are specified in the *Manual on Uniform Traffic Control Devices (MUTCD)*, Federal Highway Administration, 2003 Edition.

Transportation demand management methods can also reduce the impacts of development and help maintain LOS standards. Techniques that have been successful in alleviating some traffic congestion include carpooling for longer distance trips and improving bicycle and pedestrian facilities for shorter trips.

These options should be considered first, before roadway widening, to provide additional capacity for current or projected travel demand, because the widening improvements often have the most impacts to the adjacent lands and cost the most.

If demand for additional capacity cannot be met using any of the methods described above, the City has two options: 1) it can stop additional development which calls for more capacity, or 2) it can lower its LOS standards.

D. Current Levels of Service

As part of the planning process, the current operating conditions for the transportation system were evaluated to identify deficiencies. This evaluation focused primarily on street system operating conditions since the automobile is the dominant mode of transportation in Colville. In the City of Colville, the highways and the truck route carry the highest traffic volumes. The Average Daily Traffic Volumes (ADTs) are measured by WSDOT annually for Main Street (US 395) and 3rd Avenue (SR 20) only, as described in Table 5.6. To compare traffic pattern changes, the ADTs for 1994 and 2007 are shown with the corresponding percentage of increase/decrease. In late 2007, the truck route was opened to redirect traffic off of Main Street. The ADTs for 2008 reflect the decrease of through traffic in the city's central business district.

Table 5.6
Comparison of Daily Traffic Volumes

Location	1994 Volume	2007 Volume	Percent Change	2008 Volume	Percent Change
Population	4,440	5,020	13%	5040	.007%
US 395 / Main Street					
South of SR 20	11,060	11,000	<.005%>	7,100	<35%>
SR 20 to 8th Ave	11,640	12,000	3%	8,400	<30%>
8th Avenue to Williams Lake Rd	10,350	14,000	35%	11,950	<15%>
North of Williams Lake Road	6,480	8,600	33%	7,900	<8%>
State Route 20 / 3rd Avenue					
Main St to Oak Street	5,500	5,400	<2%>	5,200	<4%>
Oak Street to Aladdin Road	4,770	5,500	13%	5,100	<7%>
East of Aladdin Road	2,750	4,200	53%	4,000	<5%>

1994 Data carried over from 1996 Comprehensive Plan
2007 & 2008 Data obtained from WSDOT Trips System Annual Traffic Reports

The traffic volumes along Main Street/US 395 are a combination of vehicles traveling through the city and locally generated trips. In 2005, the ADT ranged from 10,000 just south of SR 20 to 13,000 near 8th Avenue. From 8th Avenue to Williams Lake Road the ADT dropped to 11,000. Traffic volumes measured in 2006 and 2007 increased by 1000 ADT at the locations by SR 20 and 8th Avenue, and remained the same from 8th Avenue up to Williams Lake Road.

In 2005, ADT volumes on 3rd Avenue/SR 20 ranged from about 5,400 near the intersection of Oak Street to 5,300 at Aladdin Road; then the count drops to 4,100 east of Aladdin Road. Traffic volumes measured in 2006 and 2007 remained fairly consistent with a difference of 100 less vehicles in 2006 at Oak Street, and 100 more vehicles counted in 2007 from Oak Street eastward.

Based on the criteria provided on Table 5.5 in the previous section, in 2007 the LOS for both Main Street and 3rd Avenue ranked at "B". In 2008, the ADT for Main Street averaged 8,837, with a LOS of "A". The 22% decrease of traffic on Main Street is mostly attributable to the construction of the new truck route. The traffic also decreased along 3rd Avenue; approximately 5%. With an average ADT of 4767, 3rd Avenue now ranks at a LOS of "A" also.

1. Peak Hour Traffic Patterns

In June 2008, a traffic study was conducted by Welch Comer & Associates. Based on their data, Table 5.7 shows the peak hour traffic volumes carry from 8 to 13 percent of the Average Daily Traffic Volume, for the sections of roadways described:

Table 5.7
Average Daily Traffic (ADT) -- Peak Volumes

Street	Location	ADT	AM Peak	Percent of ADT	PM Peak	Percent of ADT
Dominion Avenue	Oak St to Main St	1,950	169	9	198	10
Oak Street	2nd Ave to 3rd Ave	3,195	279	9	344	11
Wynne Street	2nd Ave to 3rd Ave	3,920	333	8	430	11
3rd Avenue	Washington to Lincoln	755	82	11	96	13
Railroad Street (Truck Route)	3rd Ave to 5th Ave	10,310	814	8	932	9
1st Avenue	Washington to Lincoln	2,225	219	10	257	12

Source: Welch Comer & Associates, June 2008 Traffic Study

Table 5.8
Peak Hours -- Vehicle Volume Summary

Criteria	Main Street / US 395				3rd Avenue / SR 20			
PM Peak Hours	North (3362)		South (2827)		East (1885)		West (520)	
Tues. 6/3/08	NB	SB	NB	SB	EB	WB	EB	WB
Time Frame: 2:00 – 6:00 p.m.	1993	1369	1701	1126	980	805	322	198
Highest evening peak volume was between 4:15 – 5:15 p.m.								
AM Peak Hours	North (1946)		South (1652)		East (1161)		West (283)	
Wed. 6/4/08	NB	SB	NB	SB	EB	WB	EB	WB
Time Frame: 6:00 – 10:00 a.m.	1107	839	890	762	509	652	140	143
Highest morning peak volume was between 9:00 – 10:00 a.m.								

Source: Washington Dept. of Transportation, June 2008
NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Table 5.8 provides a breakdown from a *Vehicle Volume Summary,* prepared by Washington Department of Transportation (WSDOT) in June 2008. The summary covers peak hours for the intersection of Main Street (US 395) and 3rd Avenue (SR 20). The evening peak volumes (between 2:00 p.m. and 6:00 p.m.) were taken on Tuesday, June 3, 2008, and the morning peak volumes (between 6:00 a.m. and 10:00 a.m.) were taken Wednesday, June 4, 2008. The numbers reflect the culmination of traffic as vehicles approach each of the four borders of the intersection, including the various turning movements, based on the direction of traffic flow.

2. Truck Traffic

Trucks are a major component of the highway traffic through Colville; it continues to be the primary mode of freight mobility within the region. Based on data from the *U.S. 395 Corridor Study - Spokane to Canada*, truck percentages in 1995 were about 13 percent on US 395 just south of Colville and 9 percent on SR 20 two miles east of Colville. Within Colville itself, truck percentages are estimated to range between 10 and 15 percent on US 395 and 7 to 10 percent on SR 20.

The *Vehicle Volume Summary* developed in 2008, showed that the Main Street truck traffic was just below 6% during morning peak hours and just above 2.5% in the evening peak hours. The truck volumes for 3rd Avenue were approximately 11% in the mornings and between 5 to 6% in the evenings. This new study was performed to gauge the change in the amount of truck volume along Main Street since the construction of the truck route. It reflects a decrease of truck traffic through the central corridor, as anticipated. There has been as much as 7.5% less truck traffic along Main Street during peak hours and up to 4% during the evening peak times along 3rd Avenue. The morning peak hours were 1% higher than the previous study along 3rd Avenue.

3. Accident Analysis

Data obtained from WSDOT for accidents within the Colville city limits was examined for 2006, 2007, and 2008 (Table 5.8). There were 166 accidents reported during 2006 and 2007, involving 318 vehicles. About 19% percent of the accidents involved injuries, with one fatality in 2006. The remaining 80 percent were property damage only. There were 89 accidents reported for 2008 involving 176 vehicles, with no fatalities and 27 injuries.

The accident report showed seven intersections within the city that had five or more accidents during the three-year period. All of these intersections have some type of traffic control, using either a traffic signal or stop signs. The report also reflected an accident at every intersection along Main Street (US 395) from Dominion Avenue to 6th Avenue, ranging from one accident to six accidents. The opening of the new truck route in late 2007 has reduced the amount of traffic traveling through the city center, thereby reducing the potential for accidents.

Table 5.9
Vehicle Accidents Reported in 2006 - 2008

	2006	2007	2008*
Number of Incidents	88	78	89
Total Vehicles	172	145	176
Number of Injuries	22	9	27
Number of Fatalities	1	0	0
Property Damage Only	65	69	62

Source: WSDOT Collision report dated 1/13/09
** 2008 Reflects numbers after construction of the truck route*

As outlined on Table 5.9, the report for 2008 did not show a significant drop in the number of accidents overall; however, it does reflect a significant reduction of accidents along Main Street (US 395). Oak Street, just east of Main Street, was included in the table since it is a main

north/south corridor for Colville's downtown business district. The table indicates that the construction of the truck route was also beneficial to Oak Street congestion through a reduction of accidents.

Table 5.10
Intersections with High Incidents
Before & After Construction of Truck Route

Intersection	2006	2007	2008*	Control Type
Canning Drive & US 395	5	5	3	Traffic Signal
Wynne Street & 5th Avenue (US 395)	6	3	4	Traffic Signal
Oak Street & 3rd Avenue (SR 20)	3	6	1	Stop Sign
Oak Street & 1st Avenue	4	1	1	Stop Sign
Main Street (US 395) & 1st Avenue	5	1	0	Traffic Signal
Main Street (US 395) & Astor Avenue	0	5	1	Stop Sign
Oak Street & Astor Avenue	4	1	0	Stop Sign

Source: WSDOT Collision Reports dated 1/13/09
** 2008 Reflects numbers after construction of the truck route*

E. Future Transportation Conditions

The original evaluation of future transportation conditions for the City of Colville were based on projected traffic volumes. These volumes were based on the land use projections and projected population growth. Under the Growth Management Act, most future growth will be directed to urban areas where infrastructure is already available to accommodate it. Since Colville is the employment center for the region, the influx of commuters from outlying areas has an impact on our transportation system.

With the limited traffic data available, the travel forecasting methodology was based solely on the projected growth for the City of Colville. In the *U.S. 395 Corridor Study - Spokane to Canada* prepared by WSDOT and finalized in July 1995, traffic volumes on the highways near Colville were projected to grow about 60 percent on both US 395 and SR 20 between 1995 and 2015. Based on the annual traffic report done by WSDOT for 2007, the actual growth has been considerably lower than anticipated. See Table 5.6 for comparisons of traffic volume.

The data acquired from WSDOT's 2007 report indicated that the highest increases were towards the outer edges of the city. The section between 8th Avenue and Williams Lake Road had increased 35% on US 395 from 1994. This would correlate with the expansion of Wal-Mart at 8th Avenue in 2002 and the construction of a new commercial park between Buena Vista Drive and Canning Drive in the late 90s and early 2000s. It appears that the highest increase, 53%, was actually east of Aladdin Road on SR 20, which occurred in relation to the construction of the new high school in this area. The area north of Williams Lake Road came in high at 33%, also reflecting probable commuter traffic.

In 2008, WSDOT's report showed a decrease in traffic volume along both Main Street and 3rd Avenue. The decrease on Main Street, due to the traffic being redirected onto the truck route, averaged 22%. (The 2008 traffic volume for the truck route registered an ADT of 10,300). The 5.3% decrease of traffic along 3rd Avenue could not be attributed to any specific action.

Since the construction of the truck route in 2008, no new issues have been identified regarding management of traffic volume. Due to the slow population growth in recent years, the major roadways are expected to be able to accommodate traffic volumes at adopted levels of service into the foreseeable future. Specific needs will be addressed through the annual review of the six-year Transportation Improvement Plan (TIP).

F. Transportation Improvement Plan (TIP)

Roadway Improvements

The potential for expansion into the designated UGA exists, which would necessitate providing a connecting street network. The commercial and industrial uses are primarily in the central business district, in the west side of the community, and continuing northerly along US 395 up to Williams Lake Road. The general commercial uses along Main Street/US 395 extend to the south end of the city. The residential areas are primarily in the central to eastern sections of the city, bordering the airport and golf course.

Proposed transportation improvement options are reflected on Figure 5.1. The following list includes all potential system improvements to be considered.

- Improve 3rd Avenue (extension of SR 20), crossing the truck route and railroad tracks up to the lumber mill.
- Upgrade Washington Street between Buena Vista Road and 8th Avenue.
- Extend Evergreen Way between Hawthorne Avenue and SR 20 (east of the airport.)
- Extend Mountain View eastward to connect with Cedar Loop.
- Connect Garden Homes Drive with Cedar Loop Road (in the UGA).
- Extend Hawthorne Avenue east/northeasterly to SR 20 above the reservoir sites.
- Provide for increasing lanes/widening of US 395 within the northern commercial district.

In determining which roadway improvements should be recommended, several factors were considered. One of the key factors was maintaining a grid pattern system of development where terrain and other geographical factors allow it. Frequency of minor arterial and collector streets was also considered. If there are not enough roads which are designed to be arterials or collectors, drivers will naturally choose certain local streets and use them as arterials or collectors anyway. Connectivity was another factor considered. Arterial and collector streets need to connect different land uses and neighborhoods together. Good connectivity allows people options for the routes and modes of travel that they choose.

Construction costs for roadway improvement would be based on the approximate length and roadway design standard for its classification. These costs could include right-of-way acquisition, subsurface exploration, underground utility design or installation, engineering, construction management fees, materials, labor, and contingency fees of about 40 percent.

Efforts to preserve existing right-of-way within each corridor are an important part of controlling costs. Permitting development that could potentially block the roadway before it is completed can add to the cost. Potential alignments should be designated in order to protect the corridor and provide logical right-of-way acquisition during future development.

G. Goals

Colville's transportation goals and policies were developed to support and guide implementation of the City of Colville's transportation system, consistent with Colville's vision and existing and projected needs. Colville's transportation goals are:

Goal 1: Provide safe access and travel for all users, including motorists, transit vehicles and riders, bicyclists, and pedestrians.

Goal 2: Provide year-round access to pedestrian and bicycle facilities.

Goal 3: Provide connectivity between neighborhoods and activity centers.

Goal 4: Protect and enhance the Colville airport.

Goal 5: Preserve the existing character of Colville.

Goal 6: Accommodate and encourage future growth.

Goal 7: Develop policies consistent countywide transportation policies, statewide and regional transportation plans, and the Growth Management Act.

Goal 8: Investigate the feasibility of installing electrical recharging stations for EV/PHEVs within public parking facilities.

Goal 9: To improve and maintain the condition of streets, trails, and sidewalks as expeditiously as possible.

H. Policies

The policies will enable Colville to provide a safe and convenient transportation system that meets the demand for travel in Colville, that is coordinated and consistent with regional and comprehensive plans, and that optimizes economic and fiscal resources in a timely and efficient manner.

Policy 1: Continue to improve and enhance safety and circulation on the local street system.

Policy 2: Encourage the continued use of an efficient grid transportation system.

Policy 3: Coordinate all development proposals to ensure consistency with the community's vision, the Washington State Transportation Plan, and other regional plans.

Policy 4: Coordinate the Transportation Element with the Land Use Element of Colville's Comprehensive Plan and with the transportation plans and Land Use Elements of adjacent jurisdictions.

Policy 5: Develop a concurrency management system and secure adequate financing for transportation to ensure that a consistent level of transportation service is provided.

Policy 6: Adopt standards for street improvements, connectivity, spacing, and access management.

Policy 7: Develop and implement a comprehensive Pedestrian & Bicycle Plan to use as a guide for future development.

Policy 8: Promote the use of alternative modes of transportation (walking, bicycling, and transit) through improved access, safety, and service, including year-round maintenance of pedestrian and bicycle facilities.

Policy 9: Promote alternative modes of transportation through community awareness and education.

Policy 10: Coordinate with local, regional, and state agencies to plan for public transit service.

Policy 11: Require traffic impact studies for new development or redevelopment projects that will require more than 10 off-street parking spaces.

Policy 12: Coordinate the planning, design, and construction of transportation system improvements with other jurisdictions, as appropriate.

Policy 13: Adopt policies and ordinances to ensure the continued operational viability of the City airport. Discourage incompatible development adjacent to the airport by giving priority to large open space lands, resource lands, and recreation areas within Airport Accident Safety (Compatible Use) Zones.

Policy 14: Incorporate the transportation system improvements identified in the transportation element into the Colville capital facilities plan.

Policy 15: Establish and regularly contribute to a fund for a pavement preservation program to regularly maintain the roadway surfaces within the city.

I. Implementation

Implementation of the transportation plan will occur by: adopting policies, programs, and ordinances; securing financing for improvements; obtaining permits and environmental clearances; and designing and building transportation projects. Through this process, the transportation improvement program serves as a guiding framework for capital expenditures during each six-year period.

The GMA formalizes the relationships between the adopted land use plan, the transportation plan, environmental compatibility, and financial feasibility. This section reviews various implementation considerations and their conformance with the provisions of the GMA.

1. Improvement Priorities

In developing the Colville transportation plan, two planning horizons were selected. The long-range plan considers transportation needs at full build-out of the Comprehensive Plan through

the year 2030. The short-term plan considers needs over a six-year horizon, corresponding to the period covered by the annual Capital Facilities Plan update.

Long-range versus short-range transportation improvement priorities will shift as funding becomes available. Project priorities will also shift depending on the level of growth in Colville and along US 395 and SR 20. Additional future funding will depend on receipt of grants and/or an increase in revenues.

2. Comprehensive Plan Consistency

The GMA requires that the transportation plan be consistent with other elements of the Comprehensive Plan, including the Land Use and Capital Facilities Elements. The Transportation Element must be capable of supporting the land use plan at a specified level of service. The planning process must demonstrate that capital facilities can be financed with projected revenues. Otherwise, the land use plan or the LOS standards must be adjusted to be internally consistent.

The LOS analysis for future conditions demonstrates that the future cumulative development can be accommodated with the proposed program of transportation infrastructure improvements. Financing these future improvements will depend on continued state support for improvements to US 395 AND SR 20 and on new developments contributing to transportation projects within Colville.

3. Concurrency Management and Development Review

Concurrency refers to the on-going process of coordinating infrastructure needs with community development. This concept was formalized in the GMA to ensure that adequate public facilities are provided in concert with population and employment growth. For transportation facilities, the GMA requirement is fulfilled if roadway LOS standards are met concurrent with the additional travel demand generated by each succeeding development action.

Concurrency determinations for the roadway network are closely linked with development review decisions. Currently, the City performs this function under its SEPA authority. Projects that produce adverse traffic impacts are required to fund or implement mitigation measures that reduce the impact below a level of significance. Impacts and mitigation measures for large projects are typically studied in a traffic impact analysis prepared during the SEPA review.

The concurrency requirement will revise this process by formalizing the adoption of LOS standards and guidelines for the preparation of traffic impact studies and by providing for tracking or monitoring of actual transportation capacity.

In the development review process, there may be instances when a transportation improvement is required to mitigate a project-related impact in advance of its programming through the TIP. Concurrency will require that the spot improvement be completed as a permit condition or the project can be denied. If the required improvement is consistent with the transportation plan, it may be possible to credit the investment in the spot improvement against the amount to be collected in impact fees, or as a credit to the City's share of a grant-funded project.

Monitoring concurrency can be accomplished by tracking traffic counts along US 395 and SR 20 and reviewing actual population and employment growth on a periodic basis. This periodic tracking of the traffic and actual growth rates can provide the City of Colville, Stevens County, and WSDOT with good information for keeping the transportation improvement program updated.

4. Intergovernmental Coordination

Implementation actions for transportation projects often involve several agencies, each with different responsibilities and controls. A major focus of the GMA is to establish coordination among the responsible agencies and to increase the effectiveness of intergovernmental planning efforts.

It will be important for the City of Colville to coordinate future transportation projects and planning efforts with both Stevens County and WSDOT. This coordination is very important for transportation improvements for the sections of US 395 and SR 20 in and near the city. State highway improvements in the Colville area, such as the addition of bike lanes and sidewalks, are more likely to be funded if there is broad community and inter-agency support. Likewise, Stevens County and WSDOT need to be kept informed of new development proposals in Colville that may impact the highway or county roads.

The Transportation Element will require revisions during the next 20 years because of changes in growth rates and growth patterns. Revisions may also be required because of changes in goals and policies of Colville and the region. The transportation planning process is a dynamic one, and changes in the assumptions that have been made in this study will also lead to the need for plan revisions.

The transportation plan should be reviewed on a periodic basis. The schedule for reviews should be dictated by GMA planning and funding mandates. For instance, the six-year Transportation Improvement Program (TIP) must be updated every year. The six-year TIP is dependent on annual revenues and expenditures for improvement projects in Colville and any grant moneys received for specific projects. Traffic volumes should be monitored at key intersections along the highway. In this way, individual intersection improvements can be programmed in the six-year TIP even in advance of major transportation improvements.