CITY OF CASHMERE

COMPREHENSIVE TRANSPORTATION AND DEVELOPMENT STANDARDS

DECEMBER 2016

CITY OF CASHMERE
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Chapter 1: Community Characteristics

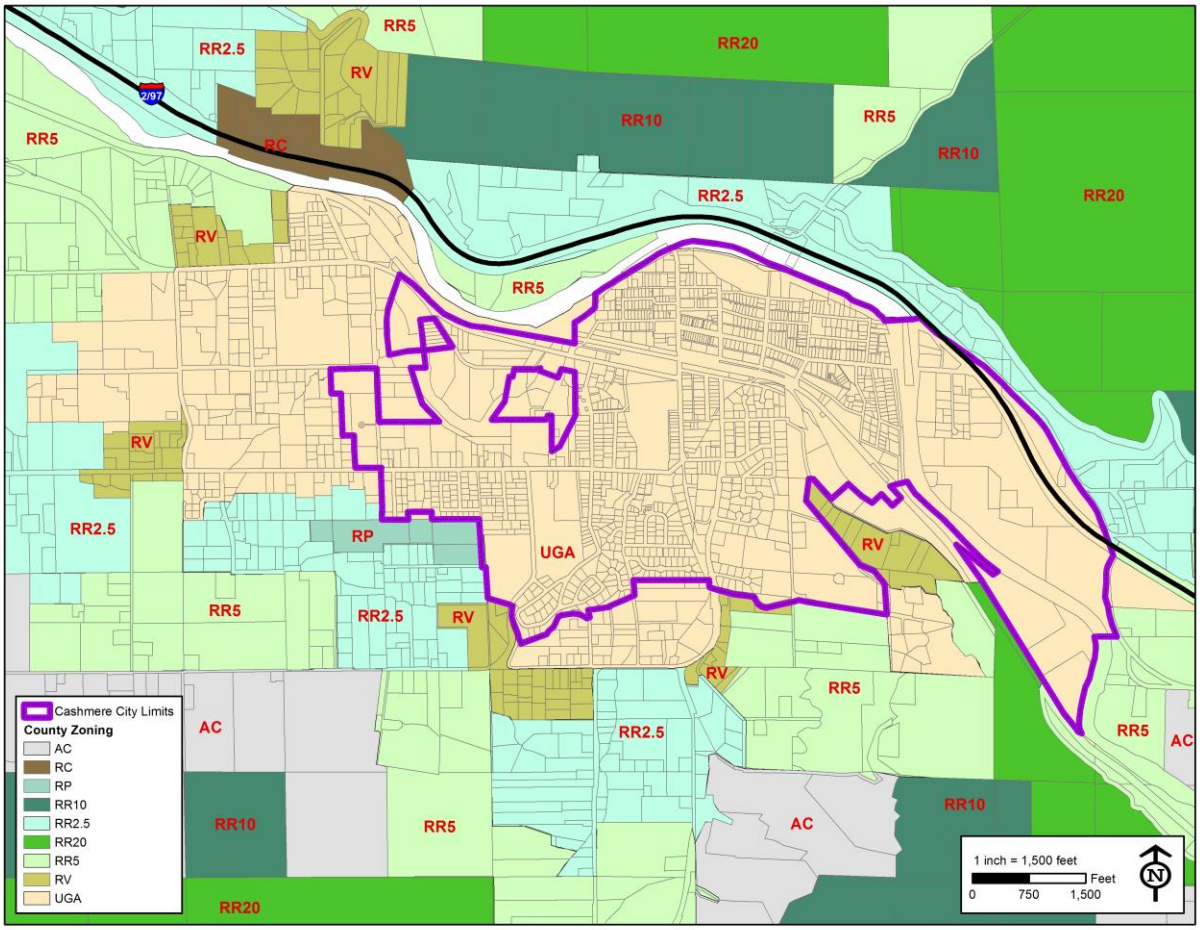
Introduction

The transportation system is a vital component of Cashmere's social, economic, and physical structure. On the most basic level, it enables the movement of people and goods throughout the City and mid-Wenatchee River Valley. Transportation influences patterns of growth and economic activity by providing access to different land uses. Planning for the development and maintenance of the transportation system is a crucial component in promoting the efficient movement of people and goods, for ensuring emergency access, and for optimizing the role transportation plays in attaining other community connections, such as LINK and Highway 97.

This document is a summary of the existing conditions and future transportation needs for the City of Cashmere. Cashmere is a small Washington city located alongside US 2/97 between Leavenworth and Wenatchee. The Wenatchee River generally separates the City from the highway and the hilly terrain to the north, although there is a small portion of the City that lies to the east and north of the river. The City is located on a reasonably level river plain, with the majority of the future growth areas being to the south and west of City within the Urban Growth Areas.

The study area for this project is the existing City area and the Urban Growth Area. The analysis included quantifying the existing traffic demand and the development of the future scenario of complete build-out of the study area to the zoned densities. **Figure 1-1** illustrates the existing City limits and the adjacent Urban Growth Area.

Figure 1-1



Purpose

The Comprehensive Transportation Plan is the blueprint for transportation planning in Cashmere. It functions as the overarching guide for development of the transportation system. This Plan evaluates the existing system by identifying key assets and improvement needs. These findings are then incorporated into a needs assessment, which provide direction the City will take in developing the future transportation system.

Community Characteristics

Cashmere is a community with strong agricultural ties, especially related to fruit production and processing. Significant industries are fruit warehouses, fruit packing plants, and the service businesses necessary to support the fruit industry. It is the home of Liberty Orchards, a firm that produces the Aplets® and Cotlets® confections that are distributed worldwide. Industrial activities include Bethlehem Construction (pre-cast concrete plant) and the fruit packing and storage plants owned by Blue Star Growers and Crunch Pak, who produce and distribute packaged sliced apples worldwide, and growing Agricultural Tourism, such as wineries. Commercial areas include the downtown business district, the East Cashmere area, Sunset Highway and there are several small businesses at various locations within the city.

Cashmere is primarily a residential community with a large percentage of the population commuting to Wenatchee for employment. Residential properties comprise approximately 367.61 acres, which is 50% of the total land area within city limits.

The City is located within 20 minutes of Leavenworth to the west and Wenatchee to the east. The ease of commuting to those Cities positions the City of Cashmere well to serve as a bedroom community for a larger region.

Vision:

The Comprehensive Transportation Plan reflects the needs and sensibilities of the Cashmere Community and, in doing so seeks to:

- Enhance the quality of life for all Cashmere residents
- Provide and maintain roads to promote safe travel for all modes of transportation.
- Encourage safe & positive engagement, such as walkable and livable communities).
- Encourage pedestrian and bicycle use for local mobility by adopting and implementing street standards that embrace these forms of travel.
- Promote a transportation system that supports local business and enhances economic development opportunities.
- Create a transportation system that is thoughtfully designed and welcoming to visitors.
- Provide a balanced, multi-modal transportation system that addresses local and regional needs.

GMA Requirements:

Washington State's 1990 Growth Management Act (GMA) requires that transportation planning be directly tied to the City's land use decisions and fiscal planning. This is traditionally accomplished through the adoption of the Comprehensive Plan transportation element. However, Cashmere fulfils this mandate by adopting a Comprehensive Transportation Plan as the Comprehensive Plan transportation element. Cashmere's Comprehensive Plan will contain an executive summary of this Plan. In order to be GMA compliant, this Comprehensive Transportation Plan must:

- Use land use assumptions to estimate future travel, including impact to state owned facilities.
- Inventory the existing transportation system in order to identify existing capital facilities and travel levels as a basis for future funding.
- Identify level-of-service (LOS) standards for all arterials, transit routes, and state-owned facilities as a gauge for evaluating system performance.
- Specify actions and requirements for remaining in compliance of locally owned transportation facilities or services that are below an established level-of-service standard.
- Determine existing deficiencies of the system.

- Include a multiyear financing plan based on identified needs.
- Address intergovernmental coordination.

Under Growth Management policies, Chelan County adopted countywide planning policies to guide development in both incorporated and unincorporated areas of their jurisdiction. The County Planning policies are also important because they provide direction for planning and development of potential annexation areas. In line with these policies, Cashmere works closely with Chelan-Douglas Transportation Council (CDTC) to ensure adequate transportation infrastructure is provided.

Needs Assessment:

A system-wide, multimodal needs assessment was conducted throughout Plan development to ascertain which aspects of Cashmere's transportation system work well and which ones need improvement. The end result is that Cashmere has a more thorough understanding of system deficiencies, a better grasp of the best ways to address these deficiencies, and direction for growing the system in a sustainable manner.

- Public Involvement: Public outreach was an important component of the needs assessment process. One open house and several open planning Commission meetings were held to solicit feedback from the public on transportation issues.
- The City also met with various inter-governmental agencies to solicit guidance in specialized areas of transportation. Agencies included Washington State Department of Transportation, Cashmere Public Works, Chelan County Public Works, LINK-Public Transit, and Chelan-Douglas Transportation Council.

Some communities rely quite heavily on input from the general public to assess needs. The approach may not accurately reflect true community need. Special interest groups, as the name implies, reflect a specific desire or direction which may not reflect the community as a whole. This Plan has been an agenda topic for several public meetings. The public meetings were advertised in the *Cashmere Record*, and were the topic of feature articles in the paper.

Public Participation Process

Public/City/Agency Participation	Date	Hearing or Workshop
Agency Kick-off Meeting	May 2, 2016	Workshop
Planning Commission	July 5, 2016	Workshop
Planning Commission	August 1, 2016	Workshop
Planning Commission	September 6, 2016	Public Hearing
City Council	October 10, 2016	Public Hearing

Capital Facilities Plan and Transportation Improvement Program:

Plans

The City uses the Transportation Improvement Program (TIP) and Capital Facilities Plan (CFP) to develop a financial plan for capital improvement in Cashmere, thus enabling the City to fulfill the GMA requirements of having a multiyear financing plan based on the identified transportation needs.

The TIP, a 6-year transportation financing plan, is adopted annually by the City Council. It is a financial planning tool used to implement the list of transportation improvement projects identified in the Transportation Plan. It is reviewed annually by City Council and modified as projects, priorities and funding circumstances change.

The CFP is also an annually adopted 6-year financing plan. The CFP is an adopted element of Cashmere's Comprehensive Plan. The CFP is a mandatory GMA Comprehensive Plan element. Also, the CFP includes non-transportation projects in addition to the transportation related projects also found in the TIP.

Development Standards:

This Plan includes standards for road construction, storm water drainage, and sidewalks. The Growth Management Act requires that the transportation Plan must be consistent with all other elements and specifically the land use element of this Plan. Land development and transportation system improvements have a cause and effect relationship. Improvements to streets and highways can result in increased land development, and land development can result in traffic problems such as restricted movement of vehicles, higher costs for road improvements and higher risk for accidents. By considering the potential for future growth in and around the community the City can prioritize street construction or improvement projects in an attempt to avoid the adverse side effects that result from more traffic. Likewise, if a significant transportation problem is identified then growth (residential, commercial, and industrial) can be reassessed and actions taken to prevent problems.

Regional Coordination:

More and more, Cashmere's transportation system is influenced by what happens beyond its city limits. Growth in neighboring communities, infrastructure maintenance by regional agencies, lack of funding for road maintenance as well as capacity expansion, and competing demands for transit services all affect mobility in Cashmere. This Plan calls for effective inter-jurisdictional actions to address beyond city limit issues.

Existing Zoning:

City of Cashmere

The City's existing zoning is predominantly residential. The majority of the area is single family, with some multi-family in the central and western portions of the City. The area adjacent to the railroad is typically commercial or warehouse/industrial. There are also large tracts of public areas, typically park and school sites.

TABLE 1-1

	Within City Limits		Combine City & UGA	
Land Use	**Acres**	**Percent**	**Acres**	**Percent**
Single Family Residential	301.7	40.8%	302.4	26.3%
Multi-Family Residential	62.3	8.4%	83.3	7.2%
Airport Residential	3.2	0.5%	4.0	0.3%
Suburban Residential	0.4	0%	273.4	23.7%
Mixed Comm – Lt Indust	149.3	20.2%	180.6	15.7%
Downtown Business	25.1	3.4%	25.1	2.2%
Warehouse Industrial	69.1	9.4%	88.1	7.7%
Public	128.1	17.3%	194.7	16.9%
TOTAL	**739.2**	**100%**	**1,151.6**	**100%**

Table 1-1 identifies the acres of land taken up by different categories of land use in the City, while **Figure 1-2** graphically represents the distribution of land uses. The data represented in this table was compiled during a parcel-by-parcel land use inventory and field survey of the entire urban growth area that was conducted by the City during the spring of 2016. The field inventory has been recorded in an electronic computer database that will be continuously updated as changes occur on the ground through subdivisions as well as land use and building permits.

Cashmere Urban Growth Area

As part of the Growth Management Act coordination process, Chelan County and the City of Cashmere have jointly developed the Plan for the Urban Growth Area assigned to the City. Table 1-1 summarizes the existing land uses in the City. **Figure 1-2** illustrates the existing City limits and the adjacent Urban Growth Area with the planned development potential.

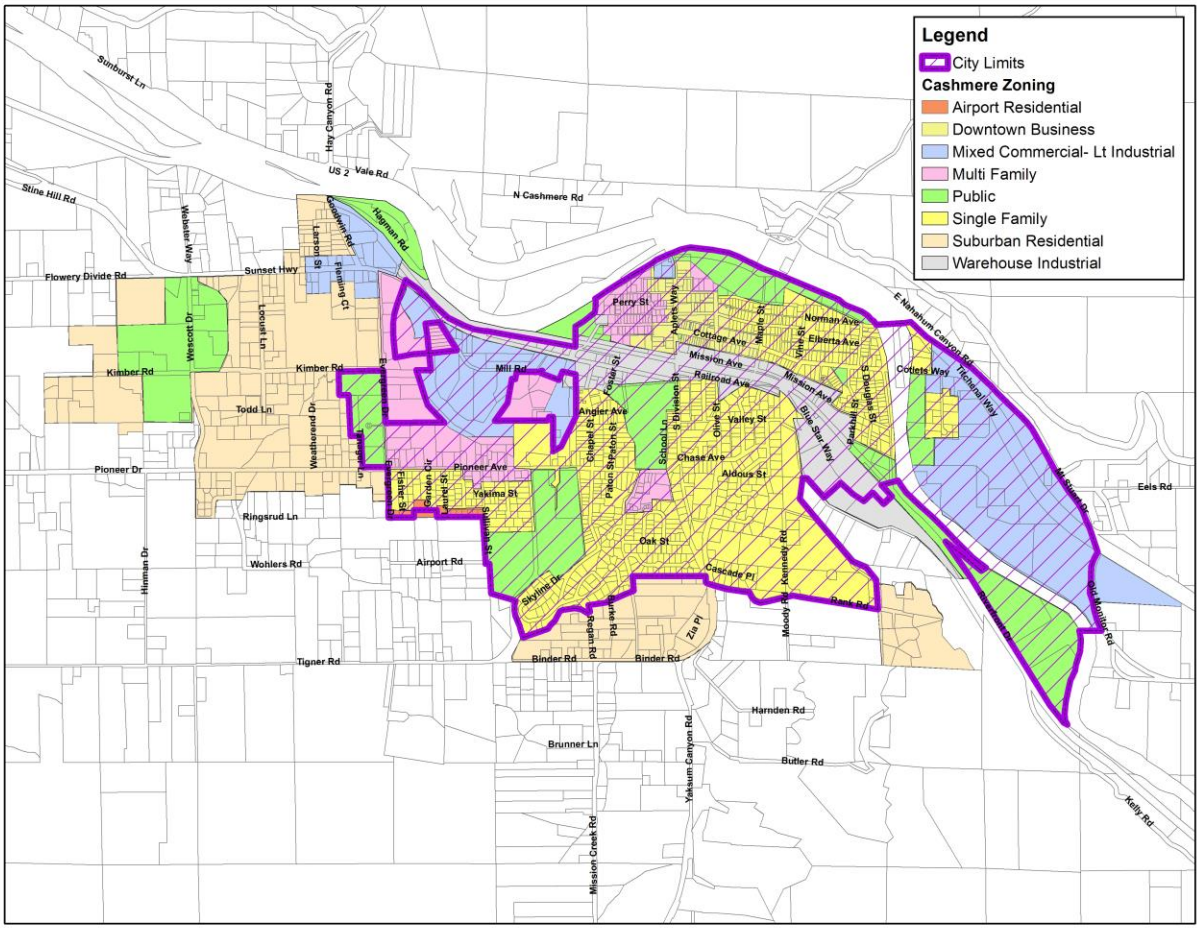


Figure 1-2

Existing Transportation Systems:

Arterial Street Network

What is an Arterial?

An Arterial is a roadway that provides circulation routes for traffic. An arterial is normally a through route that provides a relatively unimpeded travel path for traffic. Arterial routes are normally determined by the function they provide and that is not typically a function of traffic volume. A particular street may have traffic volume that is considered ‘high’ and still not provide the functionality expected of an arterial.

Federal Aid Classification

The City of Cashmere has a well defined arterial network that has been included in the roadway classification plan for the State of Washington. The Federal Aid network for Cashmere provides an excellent framework for the needed traffic circulation. The routes on the Federal Aid system are eligible to compete for various external funding programs.

Table 1-2 lists the street segments that are classified as Major Collector. A roadway classified under the Federal Highways plan as a Major Collector is intended to provide traffic needs of a more regional nature, such as inter-city or service to a major employment or activity center. The City's existing Federally Classified arterial network is illustrated on **Figure 1-3**, which is the Functional Classification map from the Washington State Department of Transportation (WSDOT)[1]. Routes that are on the Functional Classification Map maintained by WSDOT are eligible to compete for Federal Funding. All Federal Aid routes are coordinated with the adjacent Chelan County and WSDOT routes to provide route continuity through all political jurisdictions.

Street Name	From	To
Pioneer Avenue	West City Limits	Aplets Way/Division Street
Sunset Avenue	West City Limits	Aplets Way/Division Street
Mission Creek Road	South City Limits	Pioneer Avenue
Aplets Way/Division Street	Pioneer Avenue	North City Limits at Wenatchee River
Cottage Avenue	Aplets Way	Cotlets Way
Cotlets Way	Cottage Avenue	East City Limits at SR-2

Table 1-2
Major Collector

A Minor Collector typically serves to collect traffic from local streets and link to the higher classified routes. **Table 1-3** lists the street segments that are classified as Minor Collector.

Street Name	From	To
Yaksum Canyon Road	South City Limits	Olive Street
Olive Street	Yaksum Canyon Road	Railroad Avenue
Railroad Avenue	Aplets Way	Olive Street
Tigner Road	South City Limits	Pioneer Avenue

Table 1-3
Minor Collector

[1] http://www.wsdot.wa.gov/mapsdata/tdo/FunctionalClassMaps/PDF/cashmere.pdf

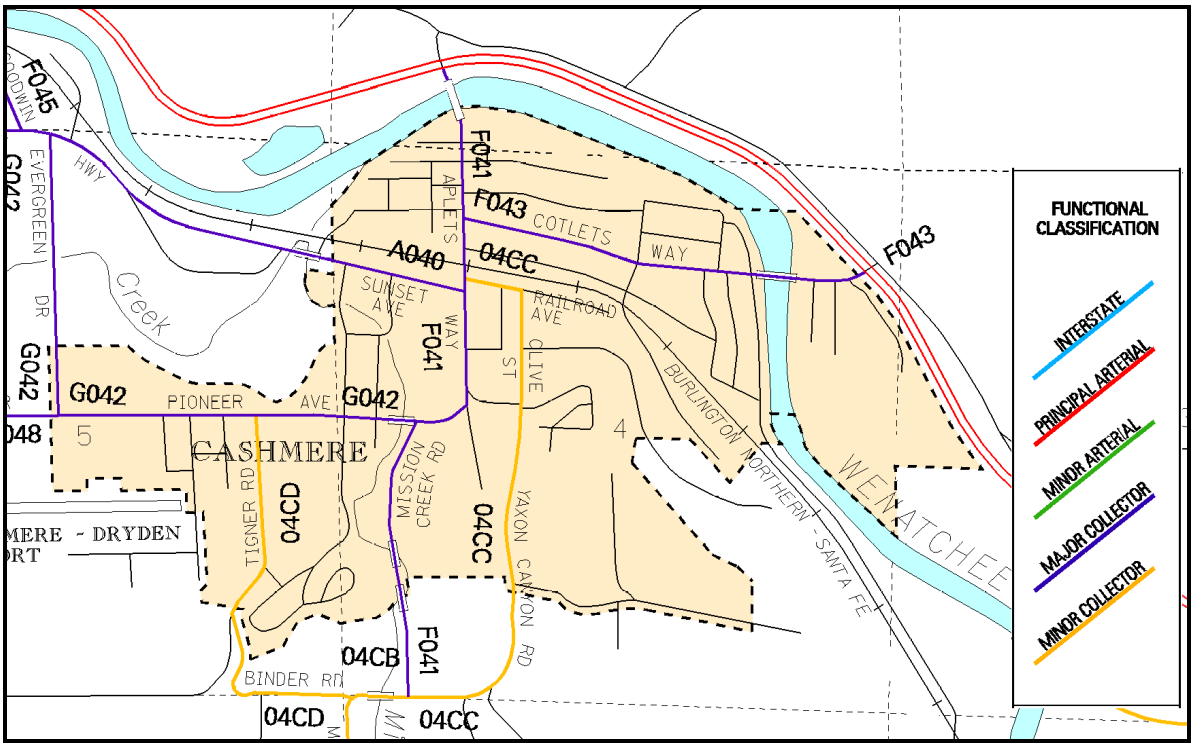


Figure 1-3 Federal Aid Route Classification Map provided by WSDOT (City Limits not update)

Typical Rural Street

The City's streets currently have a wide variation of construction standards. Some streets are constructed to a typical urban standard with sidewalks, enclosed drainage, landscaping and other urban amenities. Other streets are a basic rural configuration with roadside ditches, swales and no sidewalk.

Typical Urban Street

As a component of this study, a general physical inventory of the arterial routes was taken. Arterial routes were divided into logical segments based on existing improvements and/or future project segments.

Bridges

There are seven (7) bridges within Cashmere City limits and Urban Growth Area. The structures are of various designs and materials. The bridges have been rated as required by Federal law and any deficiencies in design and/or load rating have been documented.

- Cotlets Ave Bridge is located at the east City limits and crosses a high water channel of the Wenatchee River. The bridge includes a pedestrian pathway on the north and south portion which is separated from the roadway by jersey barriers.

- Aplets Way Bridge is located at the north City limits and crosses a high water channel of the Wenatchee River. The bridge includes pedestrian walkways on the east and west sides. Curb separates the sidewalk from the roadway. This bridge is owned by WSDOT.

- Angier Ave Bridge is located within the central portion of the city that crosses a high water channel of Mission Creek. This bridge was rated 25 in 2016 by a bridge/ transportation improvement committee. The rating of 25 indicates that the bridge is structurally deficient. This bridge is too narrow to accommodate the current traffic safely (motor homes, travel trailers, and large trucks) and does not offer a safe crossing for pedestrian traffic. The bridge is heavily used by school children walking to school and children walking to the community pool. This bridge is currently closed to vehicular traffic.

- Mission Creek Bridge is located south of the city on Mission Creek Road. This bridge is too narrow to accommodate the current traffic safely (motor homes, travel trailers, and large trucks). This bridge does offer a crossing for pedestrian traffic. This bridge is heavily used by school children. The bridge needs to be reconstructed to allow for a safe path for pedestrians.

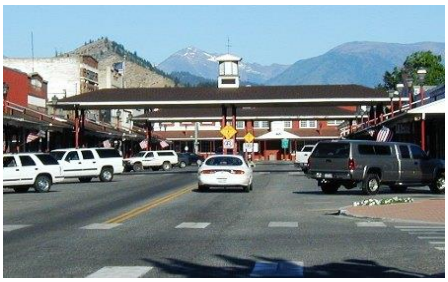
- Mission Creek/Sunset Highway Bridge is located west of the city on Sunset Highway. This bridge was reconstructed in 2010-2011 as part of the overall Sunset Highway improvements. This bridge is heavily used by school children.

- Mission Creek/Pioneer Bridge is located near Vale School. This bridge is too narrow to accommodate the current traffic safely (motor homes, travel trailers, and large trucks)

- Service Bridge located behind City Sanitation and Recycling Center. This bridge provides access to City owned property adjacent to the Wenatchee River. The City uses this bridge for access to a public works storage yard. The bridge is in relatively good shape, but embankment stabilization is needed to help preserve the bridge. The City is currently working with FEMA for embankment stabilization repairs and funding.

Non-Motorized Travel

Non-motorized transportation is an integral component of Cashmere's transportation System. Non-motorized travel includes walking and bicycling. The City seeks to enhance non-motorized travel and reduce trips taken via car or bus in order to improve mobility and environmental health.



Pedestrian facility on Cottage Avenue

Planning and developing a strong non-motorized network supports several state and national laws, including Washington's Growth Management Act, Clean Air Act, and Commute Trip Reduction Act, and the Federal Clean Air Act, and the Americans with Disabilities Act (ADA),

Non-Motorized travel needs and integration should be evaluated at the earliest stage of new development proposal. This will insure that the network connectivity and continuity interests are fully integrated into the development proposal.

Sidewalks

Most of the streets in the Central Business District have sidewalks and there are two mid-block pedestrian facility crossings on Cottage Ave. Aplets Way also has sidewalks along all of its length. The remainder of the arterial street network has some sidewalks on segments where street reconstruction or improvement has been recent. There are no formally designated Safe School Routes for student use, although schools have sidewalks adjacent to the school campus.

A sidewalk inventory was conducted as part of the Plan update. The inventory identifies sidewalks in the City, as shown in Table 1-4. The older residential neighborhoods, such as Elberta Avenue, River Street, Perry Street and North Douglas Street, tend to have sidewalks on both sides of the street, but they vary widely in condition and construction standards. Some residential areas, such as Laurel Street, Orchid Street, and Sullivan Road were built under Chelan County jurisdiction and sidewalk construction was not required. The inventory also rates their condition. This inventory will help the City identify problem areas and schedule improvements according to prioritization guidelines.

A comprehensive sidewalk inventory for the City of Cashmere was conducted through this comprehensive plan process. The purpose of this inventory is to collect valid, current data on sidewalk locations and conditions. This information will assist the City with establishing priorities for infrastructure improvements. Furthermore, it will provide support for pedestrian planning applications and Safe Routes to School program.

The table below contains information for all sidewalks as collected and measured in the field. City staff visually assessed and categorized the sidewalk conditions using the following scale:

Good	Sidewalk is free from cracking, buckling, gravel or other debris that would impede pedestrian traffic
Fair	Sidewalk is passable, but may contain surface cracks, negligible vegetative overgrowth or debris
Poor	Sidewalk has deep cracking or buckling, significant vegetative overgrowth and/or debris such that pedestrian traffic would be impeded

Pedestrian Facility Criteria

Additionally, obstruction to pedestrian traffic, such as utility poles, planters, or buckled concrete was noted. While assessing sidewalk conditions, City staff verified the location of all curb ramps, noting their compliance with American with Disabilities Act (ADA) standards.

Condition	Criteria
ADA Compliant	Compliant ramps include the following design functionality: • Truncated domes in a contrasting color to offer both a visual and tactical indication that the pedestrian is approaching the ramp (Note: truncated domes are required on new construction only). Previously constructed ramps are still considered compliant if they: • Are of adequate width to accommodate a wheelchair (36”). • Have an acceptable (not overly steep) slope. • Adequate flat landing space.
ADA Non-Compliant	Non-compliant ramps could include the following design limitations: • No landing within the sidewalk. • Extremely steep slopes. • Narrower than 36”. • Ramp empties into the center of the intersection rather than aligning with the cross walk.

Pedestrian Facility Criteria

Street	Condition	ADA & Additional Information
Cottage (500, 400, 300, 200, 100 Block)	Good	ADA Compliant
North Douglas	Poor	ADA Non-Compliant
Cotlets Way	Good	ADA Compliant
Titchenal Way	Good	ADA Compliant
Park Hill Street	Good	ADA Compliant
Elberta Avenue (300, 200, 100 Block)	Fair	Areas of ADA-Compliant (ramps, and sidewalks contain surface cracks)
Woodring Street	Good	ADA Compliant
East Pleasant Avenue (100 Block)	Poor	Areas of ADA Non-Compliant (ramps)
Prospect Street	Poor	Areas of ADA Non-Compliant (ramps
Perry Street	Fair	Areas of ADA Non- Compliant (ramps and poles within sidewalks)
River Street	Poor	Areas of ADA Non- Compliant (ramps and poles in sidewalks, areas of sidewalk less than 36”)
Aplets Way	Good	ADA Compliant
Division Street	Good	ADA Compliant
Pioneer Ave	Good	Areas of ADA Non- Compliant (Steep ramps)
Chase Avenue	Good	ADA Compliant
Olive Avenue	Good	ADA Compliant
Mission View	Good	ADA Compliant

Cascade Place	Good	ADA Compliant
Mission Creek (100 Block)	Good	Areas of ADA Non- Compliant (ramps)
Creekside Place	Good	ADA Compliant
Meadow Sweet Place	Good	ADA Compliant
Railroad Avenue (100 Block)	Good	ADA Compliant
Mission Avenue (100 Block)	Good	ADA Compliant
Tigner Road	Good	ADA Compliant
Fisher Street	Good	ADA Compliant
Norman Avenue (West portion of 400 block)	Poor	ADA Compliant
Maple Street	Poor	Areas of ADA Non- Compliant (ramps and sidewalks contain surface cracks)
Angier Avenue	Fair	ADA Compliant

Table 1-4
Pedestrian Facility Inventory

Investments in Cashmere's neighborhoods are an essential component of providing a comprehensive and functional pedestrian system. As noted in the Pedestrian Facility Inventory sidewalk, conditions vary throughout the City. This section acknowledges the need to install new sidewalk or retrofit existing sidewalk systems. Below are the streets identified that either need retrofit of an existing system or installation of a new pedestrian system.

Street North Douglas	Description Completion of sidewalk system/ ADA
South Douglas	Installation of new sidewalk system/ADA upgrades
Blue Star Way	Installation of new sidewalk system/ADA upgrades
Maple Street	Completion of sidewalk system/ ADA upgrades
Riverside Drive	Installation of new sidewalk system/ADA upgrades
Chapel Street	Installation of new sidewalk system/ADA upgrades
Mission Creek	Completion of sidewalk system/ADA upgrades
Sullivan Street	Installation of new sidewalk system/ADA upgrades
Evergreen Drive	Installation of new sidewalk System
Sunset Highway	Installation of new sidewalk system/ADA upgrades from approximately West Mill Road to West City limits.
Olive Street	Completion of sidewalk system/ADA upgrades

Table 1-5
Recommended Pedestrian Improvements

Accessible Routes of Travel;

The American with Disabilities Act (ADA) requires that all new public, commercial and institutional developments meet ADA standards. Furthermore, existing public buildings, public outdoor facilities, and public rights-of-way

shall be retrofitted to achieve accessibility. An accessible route of travel is designated to accommodate the needs of many different people, including those who are blind, using wheelchairs, or pushing strollers.

Trails, Pathways and Bikeways;

Trails, pathways and bikeways are designed to provide walking, bicycling and other non-motorized recreational opportunities. By providing linkage to other areas and facilities, they also allow non-vehicular options for travel throughout the community. Trails can be designed for single or multiple types of users.

Riverside trail extends from Aplets Way, through Riverside Park and ends at North Douglas Street. This is a Trail that when completed will extend approximately 20 miles from Leavenworth, through Riverside Park to Wenatchee. The project is included in City of Cashmere, City of Wenatchee and Leavenworth's Parks & Recreation. The Chelan Douglas Land Trust is working to assist in the development of the project.

Transit:

Transit service is provided by the Chelan Douglas Public Transportation System. Primary funding is from a local sales tax within the public transportation benefit area. The system operates under the **Link Transit** identifier.

Transit service is a key component of Cashmere's transportation system, improving mobility within the City and providing connections to the employment and commercial centers in Wenatchee, East Wenatchee, and Leavenworth.

Local

Regional transit service is currently provided by LINK. LINK services operate from approximately 5 am until approximately 8 pm. The route primary operates between Wenatchee and Leavenworth with a loop through the Central Business District. A single morning and a single evening loop is provided for commuters and serves the eastern portion of the City. A full service schedule is provided Monday through Friday, and a reduced level of service is provided on Saturday.

Rail Transportation:

History

Cashmere is bisected by the Burlington Northern – Santa Fe Mainline (BNSF). The rail line is one of the original routes that provided train service to the Pacific Northwest. It was originally constructed by the Great Northern Railroad in the late 1800's as part of the western expansion. The Great Northern was succeeded by Burlington Northern Railroad, later BNSF.

Passenger

There is no direct passenger service in Cashmere. The Empire Builder, operated by Amtrak, has passenger stops at Wenatchee and Leavenworth.

Freight

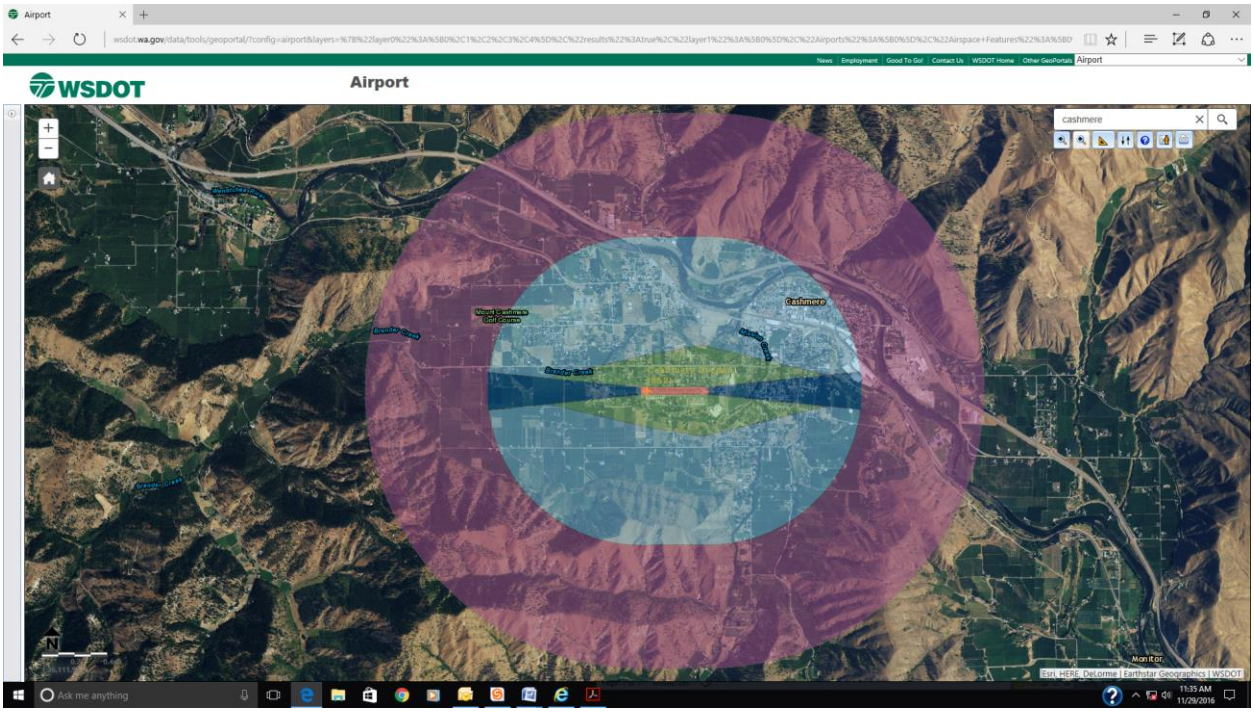
BNSF provides no freight service to Cashmere.

Air Transportation:

The Cashmere-Dryden Airport lies immediately southwest of the urban area. It is used by private aircraft and there is no scheduled airline service.

One of the main challenges facing aviation today is the encroachment of incompatible land uses adjacent to airports. Incompatible land use can degrade airport operations, impede airport expansion, and reduce quality of life for airport neighbors. Encroachment is a key factor contributing to escalating airport operating costs and restrictions of operations.

In 1996, Washington State passed land use legislation (RCW 36.70.547 and RCW 36.70A.510). Under these provisions, all towns, cities and counties are required to discourage encroachment of incompatible development adjacent to public use airports through adoption of comprehensive plans and development regulations. Additionally, the Growth Management Act (GMA) identified airports as essential public facilities.



Chapter 2: Traffic Volume

Existing Traffic Volume:

Sources of Information

The City of Cashmere does not have a traffic count program. Therefore, no specific historical perspective can be generated from past count history.

Existing traffic counts were obtained from several sources. The Chelan-Douglas Transportation Council provided traffic counts in the region from their planning efforts. Those were supplemented with traffic counts used in the Chelan County Transportation Plan, information from the WSDOT traffic count files and manual counts taken by RH2 Engineering.

Average Daily Traffic Volume

The daily traffic volume is the number of vehicles that can be expected on a particular street segment. They are typically shown as arterial-to-arterial links unless there are significant opportunities to gain or lose traffic between arterial intersections. Daily traffic volumes for arterial segments are illustrated on **Figure 2-1, Existing Traffic Volume**.

PM Peak Hour Volume

Unless there is a traffic pattern unique to a specific community, the most significant traffic congestion is during the afternoon peak travel times. Generally, this is a two hour period between 4 PM and 6 PM. PM Peak Hour Volumes were developed by analysis of existing detailed count records, obtaining new afternoon manual counts, or applying a peak hour percentage to an existing daily count. PM Peak Hour traffic volumes for arterial segments are illustrated on **Figure 2-1**.

Turning Movements

Traffic movement within the arterial network was assigned using information obtained from manual turning movement counts obtained by RH2 Engineering during November 2008, 2015 and 2016. Counts were taken at 5 arterial intersections which provided a basis for calculation of intersection capacity.

Projected Traffic Volume:

Methodology

The intent of this Plan is to provide guidance for the City of Cashmere as the area develops as intended under the Growth Management Act. Actual development will depend on many factors, including economic, which are difficult to place into a specific timeframe. Therefore, this Plan provides for the transportation needs for the ultimate development of the current City and the UGA as planned. Non-residential land uses were evaluated to determine whether an increase in traffic volume could be expected if the land was re-developed in the future. If so, the additional traffic volume was added for future needs consideration. Undeveloped non-residential land was assigned the traffic potential of the underlying zoning.

The Institute for Transportation Engineers (ITE) Trip Generation Manual, 8th Edition, was used to calculate both the daily and PM Peak Hour trip potential for all land uses. **Table 2-1** provides the Land Use Codes and trip generation values used in this study. Obviously, any specific land development proposal may generate greater or fewer trips

for a variety of factors, such as a less intense development than allowed by the zoning or less developable land due to road right-of way dedication or park land.

Zoning	ITE Code	Measure	Daily Trips	PM Peak Trips
Residential, Single Family	210	Dwelling Unit	9.57	1.01
Residential, Multi Family	220	Dwelling Unit	6.65	0.62
Residential, Suburban	210	Dwelling Unit	9.57	1.01
Residential, Airport	210	Dwelling Unit	9.57	1.01
Warehouse Industrial	130	Acres	63.11	8.84
Mixed Commercial/Light Industrial	110	Acres	51.8	7.51
Downtown Business (CBD)	814	1000 Sq. Ft.	44.32	2.71
Public	411	Acres	1.59	N/A

Table 2-1
ITE Trip Values

Projected Daily Traffic Volume

Additional daily traffic volume for residential zoning was calculated by determining the undeveloped land traffic generation potential for vacant lots within the City and underdeveloped land within the UGA. This volume was assigned to the arterial network using the existing travel characteristics as a guide. The result of adding the future traffic demand and the existing traffic volume is the projected daily traffic volume expected when the City and UGA are fully developed. Projected total daily traffic volumes are summarized in **Table 2-2,** These values were calculated using the various land uses assigned within the City and the adjacent UGA. The existing development traffic was estimated from an analysis of the current development within each zoning classification. The potential future was similarly calculated by assigning the maximum allowable density for the zone. This methodology presents a worst case scenario, as it is very unlikely that all zones will be developed to the maximum density allowed.

Zoning	Existing Trips	Future Trips	Total Trips
Residential, Single Family	7685	6986	14671
Residential, Multi Family	2611	5347	7958
Residential, Suburban	2226	7111	9337
Residential, Airport	96	38	134
Warehouse Industrial	2612	470	3082
Mixed Commercial/Light Industrial	6586	2303	8889
Downtown Business (CBD)	10456	3460	13916
Public	229	0	229
Totals	**32501**	**25715**	**58216**

Table2-2
Daily Trip Generation

Projected PM Peak Hour Volume

The estimate of future peak hour traffic volume was calculated using the existing turn information and traffic patterns as a basis. PM Peak Hour traffic volumes for arterial segments are illustrated on **Table 2-2**.

Level of Service:

What is a Level of Service (LOS)?

Quantification of a roadway's ability to provide the transportation needs assigned to it can be expressed several ways. Operating speeds, volume-to-capacity ratios, load factors, and level of service are the most common delineations. The most understandable to the general public is level of service. Level of Service is a means of providing some indication of how an intersection (urban areas) or roadway segment (rural areas) is operating.

Level of Service is expressed as a letter, A through F. As in school grades, "A" is excellent and an "F" is failing. Drivers in dense urban areas, such as Seattle, are willing to tolerate a worse LOS than a suburban or rural area city. The Growth Management Act requires that cities and counties adopt a LOS standard in order to determine that transportation system concurrency is achieved by proposed development. A LOS of "C" is typical for most agencies.

LOS	Description
A	Free flow, a driver is able to travel at the posted speed and make lane changes or turns with minimal conflict.
B	Stable flow near the speed limit, but a driver may encounter slight delays because of other traffic when turning or making lane changes
C	Stable flow with speed and movement limited by other traffic; most drivers will tolerate this condition for short time periods
D	Approaching unstable flow where speeds fluctuate widely; crossing a through street from a stop sign is difficult; often considered the minimum acceptable LOS for Urban intersections
E	Unstable flow with wide fluctuations in speeds, driver lane changes very difficult; generally considered the maximum capacity of a facility
F	Forced flow at low speeds; often stopped by congestion; generally, not considered acceptable even in dense Urban Areas

Table 2-3
Level of Service

Current Status

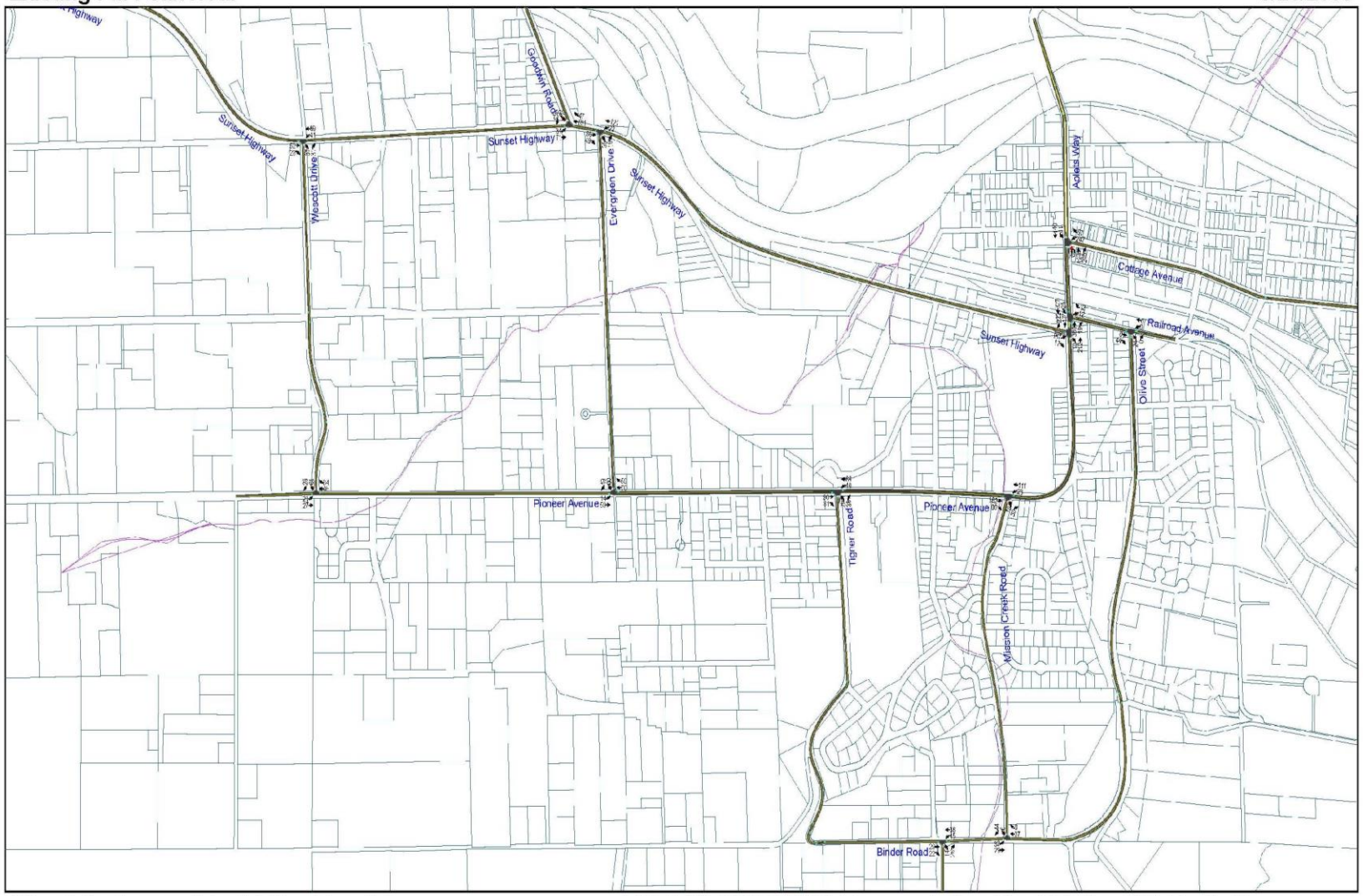
Existing traffic volumes, turn movements, traffic control and roadway geometry data for arterial intersections within the City and UGA was analyzed using SYNCRO®7 software..

Future Status

The future LOS was calculated in the same manner using the values generated for the PM Peak Hour traffic volume and the existing roadway geometry.

City of Cashmere
Existing PM Peak Hour

Prepared By: RH2 Engineering
5/26/2009



City of Cashmere Arterial Map Baseline

J:\Data\Ca\208-048\03 Transportation Plan\CAD\ca-PM_Peak_Hour-ex.syn

Figure 2-1 Existing Traffic Volume

Chapter 3: Transportation Network and Design Standards

Capacity Deficiency:

Level of Service & Utilization

The intersection analysis performed using Synchro 7® traffic modeling program did not result in any Level of Service deficiencies. Two intersections, Sunset Highway at Aplets Way/Division Street, Cottage Ave, demonstrate a change from LOS A to LOS B. This indicates that the two intersections are approaching capacity during the peak hour and likely operate above capacity for short periods of time during that peak hour.

RECOMMENDATION:

Adopt LOS "C" as the minimum acceptable LOS for concurrency under the Growth Management Act for all intersections other than Aplets Way and Cottage Avenue where LOS "D" is the minimum acceptable.

Intersection	Current LOS	Existing Utilization	Future LOS	Future Utilization
Sunset Highway & Wescott Drive	A	24.2%	A	28.2%
Sunset Highway & Goodwin Road	A	30.8%	A	37.2%
Sunset Highway & Aplets Way	A	39.6%	B	59.7%
Sunset Highway & Evergreen Drive	A	28.4%	A	35.5%
Pioneer Avenue & Evergreen Drive	A	25.7%	A	35.3%
Pioneer Avenue & Tigner Road	A	29.7%	A	32.3%
Pioneer Avenue & Mission Creek Road	A	35.3%	A	42.6%
Mission Creek Road (No) & Binder Road	A	20.0%	A	26.0%
Railroad Avenue & Aplets Way	A	31.2%	A	50.0%
Railroad Avenue & Olive Street	A	13.3%	A	17.7%
Cottage Avenue & Aplets Way	A	37.9%	B	56.8%
Binder Road & Mission Creek Road (So)	A	21..2%	A	24.3%

Table 3-1
LOS Comparison

Network Recommendations:

Street Classification

The City of Cashmere is not a large city and the need for an extensive classification scheme for the arterial system does not provide a significant advantage. The differentiation in use between arterial classes becomes difficult to define and even more difficult to apply when using a complex classification scheme.

The Federal Aid Route Major Collector and Minor Collector designations appear to provide an adequate classification basis for the City of Cashmere. This means that there will be two classes of arterials, a local access street, and a private road to define all roadways within the city and UGA. There may be a future need to define some streets as arterials in addition to those on the Federal Aid System. Care should be taken to ensure that additions to the arterial network are truly arterial in function as previously described.

The classification of an arterial segment indicates its relative importance to the community. This is a balance between providing mobility and providing access to adjacent property. Some features are evident, such as multiple lanes of travel. Others, such as sidewalk location or lane width are less evident.

- A Major Collector provides reasonably direct routes within the City's major points of traffic demand or routes that cross the City that provide direct access to regional routes. Movement of traffic generally takes priority over providing on-street parking, so a bikeway may be present with no parking allowed. A Major Collector is generally a continuous route.

- A Minor Collector provides access between Major Collectors and local destinations, such as industrial areas, school complexes or neighborhoods. A Minor Collector may also provide a travel path between two Major Arterials that might not be the most direct (straight) path. A Minor Collector might end at an intersection with a local access street. Traffic movement and local property access are generally considered to be of equal importance, although individual intersections might have parking restricted to provide for dedicated turn lanes.

- A Local Access Street is a non-arterial public street. The main purpose is to provide access to adjacent property. The alignment of a local access street can used to reduce traffic speeds in order to improve the livability of the neighborhood. Access to adjacent property is a higher priority than traffic movement.

- A Private Street serves the same function as a Local Access Street, but is not part of the public street system. Property owners are responsible for all maintenance of the street. Typical uses of private streets are within housing developments, especially apartment complexes, and commercial and industrial parks.

Design Standards:

Design standards are provided as guidance for the designer when building or reconstructing facilities. It is not generally feasible for streets that have been constructed to a different standard to be reconstructed to a new standard when such is adopted. Every reasonable effort should be made to bring existing streets to the current standard when reconstruction is necessary. The minimum standards for arterial streets and roads in the State of Washington are determined by a committee of City and County officials.[2] Utilizing those standards as a basis for the City of Cashmere's standards for arterials and collectors will insure that designs that conform will be eligible for various state and federal funding programs that may be available. Local conditions, such as the need for snow storage, may necessitate design standards that exceed the minimum requirements.

Local access streets (non-arterials) should have standards appropriate for the ultimate use of the roadway. Often, the needs of emergency response vehicles – especially fire trucks – will dictate the minimum standards for width.

Although the City of Cashmere has limited ability to impose design standards directly on development outside the City and within the UGA, the City's standards should be applied to such development to reduce the need for major reconstruction when the UGA areas become annexed. The City and Chelan County have executed an agreement where the County requires the City's standards for development within the Cashmere UGA.

[2] WSDOT Local Agency Guidelines M36-63.04 Page 42-1, RCW 36.78.030, RCW 43.32.020

Utility Location:

All new construction should include underground installation of all utilities. Each utility type is assigned a location within the City's right-of-way as shown on the street sections. The design standards for the ultimate owner of the utility installation shall apply to the facility being installed.

Street Design Standards:

Major Arterials

Major Arterials are defined as transportation arteries, which connect the focal points of traffic interest within a city; arteries which provide communications with other communities and the outlying areas; or arteries which have relatively high traffic volume compared with other streets within the city.

Major arterials shall be designed in accordance with current State Design Standards including WSDOT Local Agency Guidelines and AASHTO A Policy on Geometric Design of Highways and Streets.

Secondary Arterials

Secondary arterials (and/or collectors) are defined as routes, which serve lesser points of traffic interest within a city; provide communication with outlying districts in the same degree or serve to collect and distribute traffic from the major arterials to the local streets.

Secondary arterials shall be designed in accordance with current State Design Standards including WSDOT Local Agency Guidelines and AASHTO A Policy on Geometric Design of Highways and Streets.

Local Access Streets

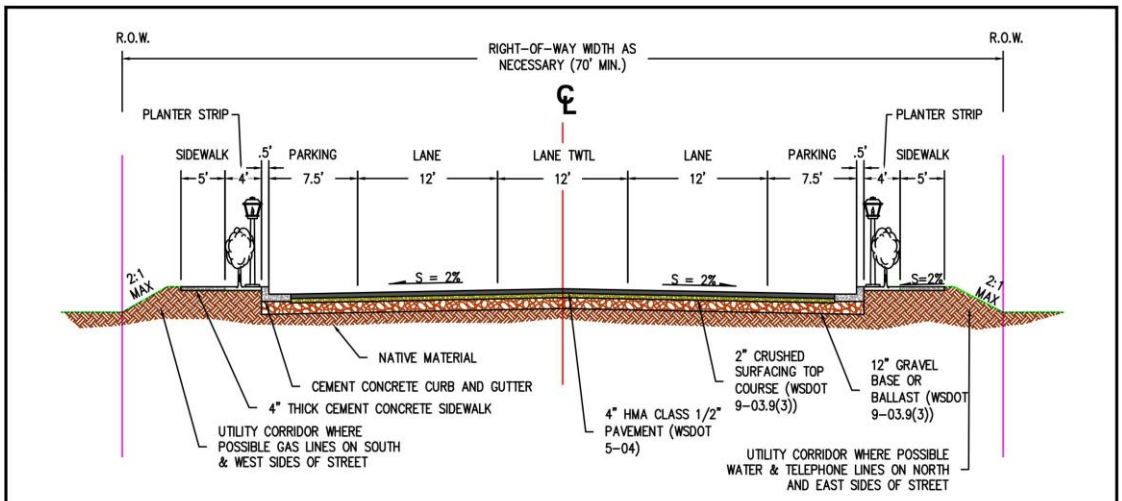
Local access streets are defined as land service streets and are generally limited to providing access to abutting property. They are tributary to the major and secondary thoroughfares and generally discourage through traffic.

Local Access Streets shall be designed in accordance with current City adopted standards and/or State Design Standards including WSDOT Local Agency Guidelines and AASHTO A Policy on Geometric Design of Highways and Streets.

Street Standards
Table 3-2

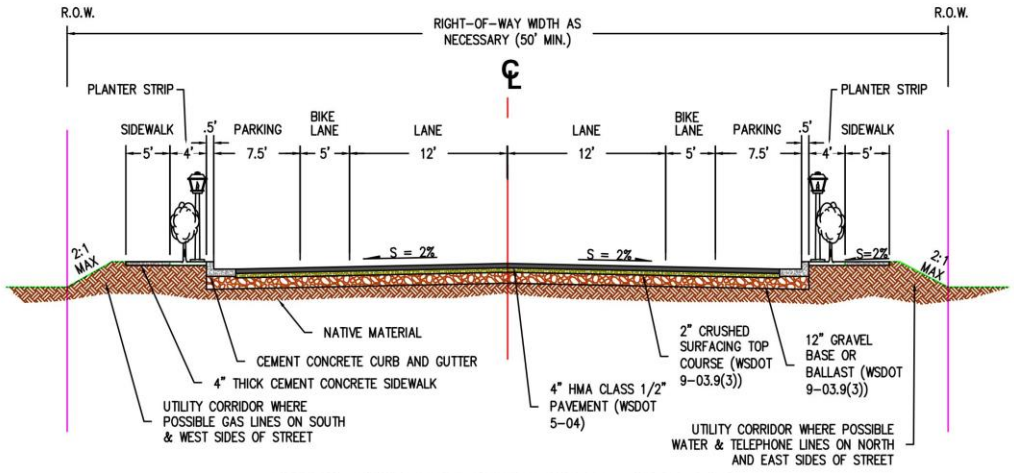
Design Element	Major Collector (Figure 3-1)	Minor Collector (Figure 3-2)	Local Access (Figure 3-3)	Private (UGA) (Figure 3-4)
Right-of-Way	65’ (min.)	50’ (min.)	40’	30’ (easement or tract)-UGA
# Lanes	3 – 5	2 - 3	2	2
Lane Width	12’, 13’ TWLT	12’, 13’ TWLT	13’	13’
Pavement	Gutter to gutter	Gutter to gutter	Gutter to gutter	20 ft
Typical Cul-De-Sac	Yes	Yes	Yes	Yes
Curb & Gutter	Yes	Yes	Yes	*No if 4 lots or less. 5 or great lots Require curb & gutter
Parking	Yes	Yes	Yes (one side)	*Off-site parking if they serve lots less than 14,000 square feet
Sidewalk	Yes, Both Sides	Yes, Both Sides	*May be determined during SEPA review	*No if 4 or less lots. 5 or greater lots require sidewalk system
Drainage/Stormwater	Enclosed	Enclosed	Enclosed	*Swale
Bike Lane	Yes (If Designated)	Yes (If Designated)	No	No
Landscaping/Trees	Yes (Figure 3-9-4)	Yes (Figure 3-9-4)	No	*No
Transit Pullout	Yes (Yes if designated by LINK)	Yes (Yes if designated by LINK)	No	No
Illumination/Street lights	Yes (Figure 3-9-5)	No	No	No
Maximum Road Grade (Percent)	8%	12%	12%	12%
Roadway Geometrics	Per AASHTO & WSDOT STDS	Per AASHTO & WSDOT STDS	Per AASHTO & WSDOT STDS	N/A
Amount of Lots	N/A	N/A	N/A	3 to 12 lots

* Possible Site Plan, Subdivision or SEPA condition or condition of approval



MAJOR URBAN COLLECTOR STREET

1. INCLUDE BIKE LANE IF DESIGNATED BIKEWAY
2. CONTINUOUS STREET LIGHTING
3. CONTINUOUS LANDSCAPING, STREET TREES
4. ADDITIONAL TRAVEL LANES MAY BE REQUIRED IF WARRANTED BY AN ENGINEERING STUDY
5. INCLUDE 8' MIN ON-STREET PARKING IN CENTRAL BUSINESS DISTRICT ONLY
6. ALL LANE, BIKE LANE, PLANTER STRIP, AND SIDEWALK DIMENSIONS ARE MINIMUM DIMENSIONS
7. ALL INTERSECTIONS, PROVIDE ADA APPROVED SIDEWALK RAMPS. SEE WSDOT STANDARD PLANS F-3A, F-3B, F-3C, F-3D, AND F-3E



MINOR URBAN COLLECTOR STREET

1. INCLUDE PARKING LANE ON AT LEAST ONE SIDE OF THE ROADWAY
2. INCLUDE BIKE LANE IF DESIGNATED BIKEWAY
3. INCLUDE PLANTER STRIP ON AT LEAST ONE SIDE OF THE ROADWAY
4. STREET LIGHTING AT INTERSECTIONS ONLY
5. INCLUDE TURN LANE AT INTERSECTIONS IF WARRANTED
6. ALL LANE, BIKE LANE, PLANTER STRIP, PARKING, AND SIDEWALK DIMENSIONS ARE MINIMUM DIMENSIONS
7. ALL INTERSECTIONS, PROVIDE ADA APPROVED SIDEWALK RAMPS. SEE WSDOT STANDARD PLANS F-3A, F-3B, F-3C, F-3D, AND F-3E

City of Cashmere
101 Woodring St
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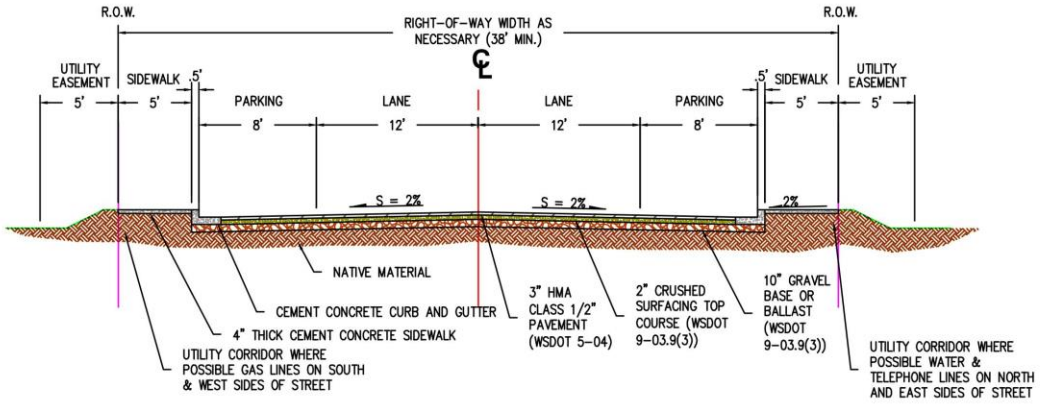
Fax 509 782-2840

STREET DESIGN STANDARD DETAILS

MAJOR AND MINOR COLLECTOR STREET CROSS SECTIONS

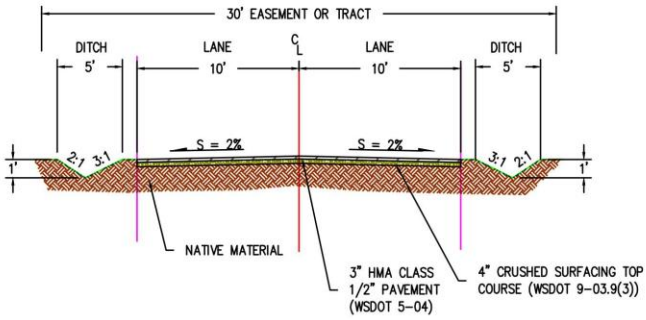
FILE: STDT1	REVISED: 2/20/2015	DETAIL NO.: STDT1

Figure 3-1 Major and Minor Urban Collector Street



URBAN LOCAL ACCESS ROAD

1. ALL LANE, SIDEWALK, AND EASEMENT DIMENSIONS ARE MINIMUM DIMENSIONS
2. ALL INTERSECTIONS, PROVIDE ADA APPROVED SIDEWALK RAMPS. SEE WSDOT STANDARD PLANS F-3A, F-3B, F-3C, F-3D, AND F-3E
3. INCLUDE PARKING LANE ON AT LEAST ONE SIDE OF THE ROADWAY
4. INCLUDE SIDEWALK ON AT LEAST ONE SIDE OF THE ROADWAY
5. SIDEWALK MAY BE PLACED ON EASEMENT WITH CITY APPROVAL THEREBY DECREASING THE REQUIRE RIGHT-OF-WAY WIDTH TO 33'



PRIVATE ROAD

1. ALL LANE, DITCH, AND EASEMENT DIMENSIONS ARE MINIMUM DIMENSIONS
2. ROAD MAY BE SUPERELEVATED ALLOWING THE DITCHES TO BE COMBINED ON ONE SIDE OF THE ROAD

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STREET DESIGN STANDARD DETAILS

URBAN LOCAL ACCESS AND PRIVATE ROAD CROSS SECTIONS

FILE: STDT2	REVISED: 2/20/2015	DETAIL NO.: STDT2

Figure 3-2 Urban Local Access and Private Road

Figure 3-9-4 Typical Street Tree Details

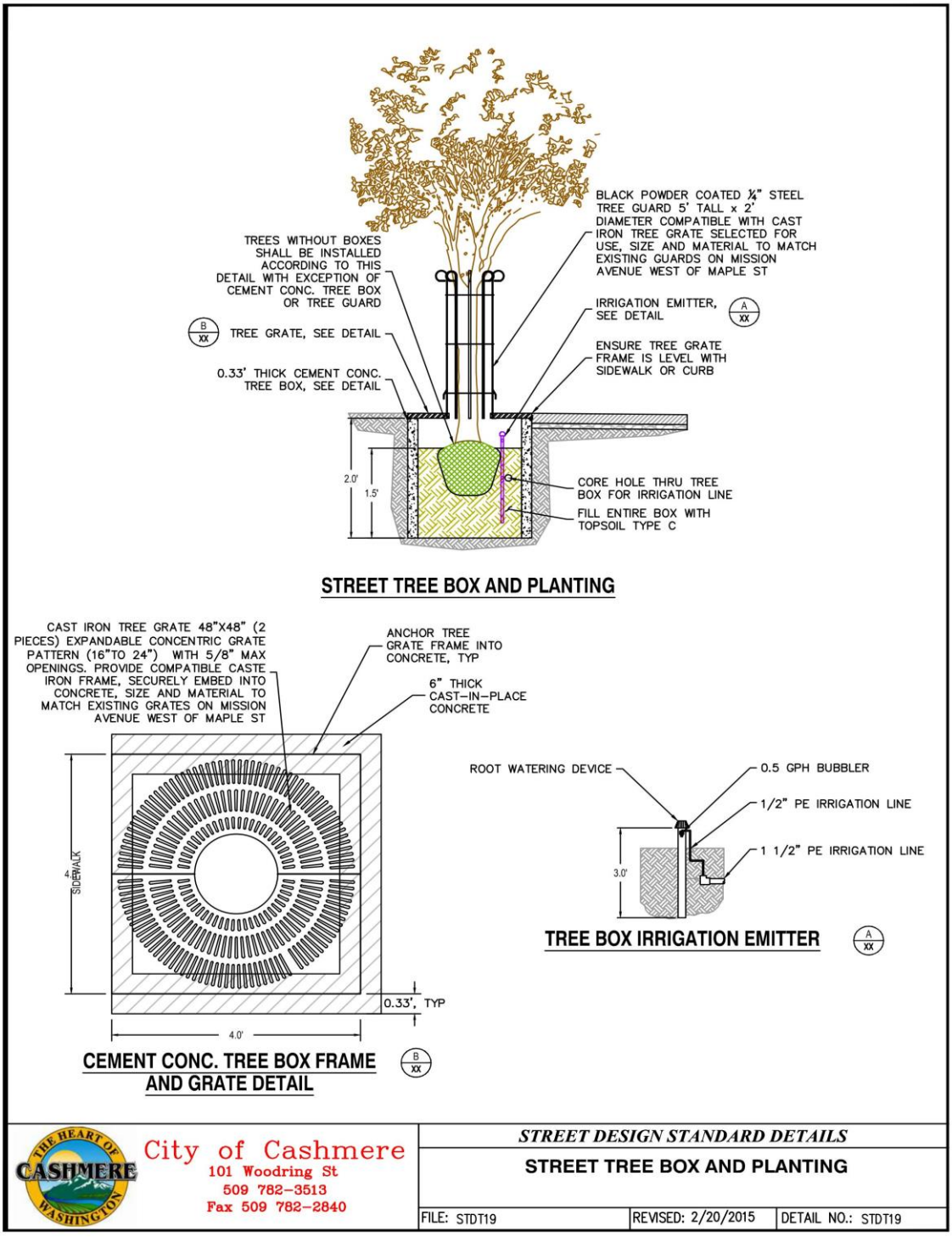
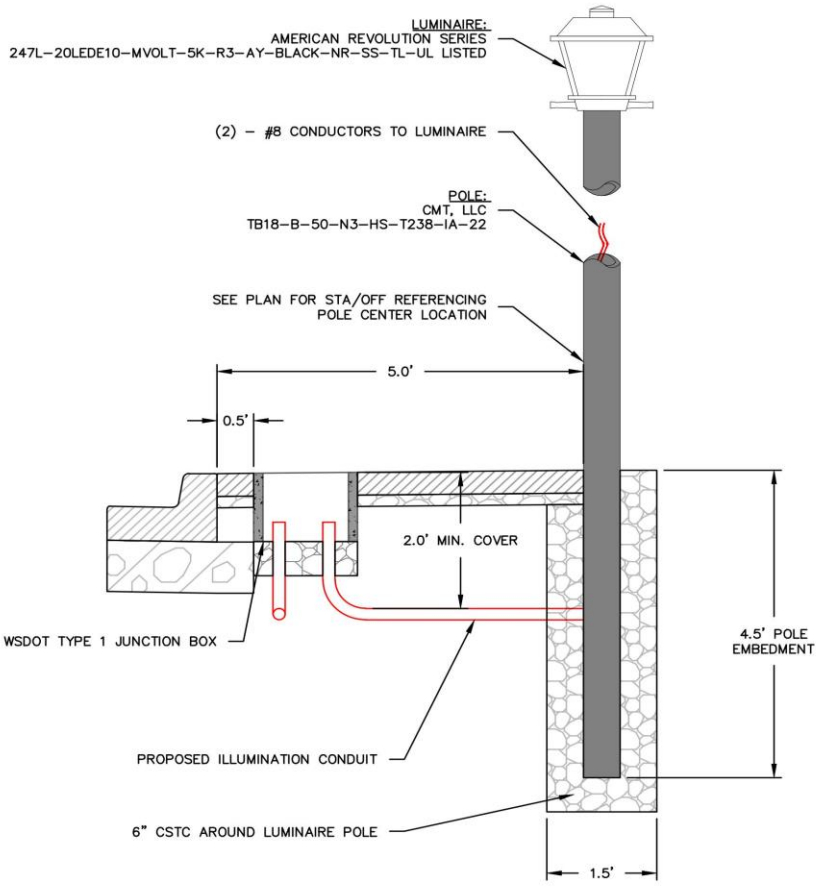


Figure 3-9-5 Typical Street Luminaire Details



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STREET DESIGN STANDARD DETAILS

LUMINAIRE DETAIL

FILE: STDT18	REVISED: 2/20/2015	DETAIL NO.: STDT18

Chapter 4: Application for Variance

Requests for a variance shall be submitted by a variance permit application with applicable fee or in conjunction with a development land use application. Alternative standard compliance applies to standards within this Plan.

The Mayor or his/her designee is authorized to grant non-substantial design deviations from the requirements of this section.

The request for a variance shall be submitted in a format that clearly states the problem and the alternative standard proposed. The following information shall be required before the request for variance will be considered:

- Explain the design standard(s) from which a variance is requested
- Proposed requested alternative(s) to the design standard(s). Provide graphics as necessary to clearly illustrate your proposal.
- Explain why the proposed alternative design is necessary. Topics to consider are special circumstances relating to the size, shape, topography, location, or surroundings of the property, compatibility with adjacent development or transportation system improvements.
- Explain how the alternative design will achieve at least the same result as the design standard would have accomplished. If this is not possible or practical, clearly explain the deviations from the standards.
- Compare the environmental impact of the proposed alternative on adjacent properties with impact of the design standards.
- Compare the safety considerations of the proposed alternative such as police and fire access, vehicular operation, transit operation, clear sight view, non-vehicular travel and adverse weather travel with the design standards.
- Demonstrate that the proposed alternative accommodates all utilities, pedestrians, drainage, and snow removal.
- Demonstrate that the proposed alternative provides clear passage of emergency vehicles.
- Demonstrate that the proposed alternative is compatible with all existing and proposed transportation system improvements.
- Demonstrate that the proposed alternative does not preclude access to, or development of, adjacent property.
- Demonstrate that the proposed alternative will not be materially detrimental to the public welfare or injurious to the property or improvement in the project vicinity.

Variance Process:

Upon receipt of a complete request for variance, the variance will be reviewed by the City of Cashmere Planning Commission at the next available Planning Commission meeting and reviewed by the City of Cashmere Engineer. The deliberations and recommendations of the Cashmere Planning Commission and the City of Cashmere Engineer

will be presented to the City of Cashmere. Final decision on the variance request shall be made by City of Cashmere Hearing Examiner and shall comply with applicable procedures for open record public hearing and notifications.

Variance Process (City of Cashmere Urban Growth Area (UGA)):

Design deviations within Cashmere's Urban Growth Area shall comply with Appendix B of Chelan County Title 15 "Development Standards".

Chapter 5: Stormwater Management

Urban development causes significant changes in patterns of stormwater flow from land into receiving waters. Water quality can be affected when runoff carries sediment or other pollutants into streams, wetlands, lakes, and marine waters or into groundwater. Stormwater management can help to reduce these effects. Stormwater management involves careful application of site design principles, construction techniques and source controls to prevent sediment and other pollutants from entering surface or groundwater, treatment of runoff to reduce pollutants, and flow controls to reduce the impact of altered hydrology.

Design Manual:

Developments in the City of Cashmere should comply with the requirements of the most recent addition of *Stormwater Management Manual for Eastern Washington* (SWMMEW) prepared by the Washington State Department of Ecology. For the purposes of Hydrologic Analysis, Cashmere should be considered to be in Region 2 of Eastern Washington.

Pavement Drainage:

Road pavement drainage shall comply with Chapter 5 – Drainage of Highway Pavements of the Washington State Department of Transportation's (WSDOT's) *Hydraulics Manual*, with the following two exceptions:

- Computing runoff for pavement may be calculated using the Rational Method or the Single Event Hydrograph Method and the Short Duration Regional Storm as identified in the *Stormwater Management Manual for Eastern Washington*;
- Because of much lower traffic volumes within the City of Cashmere as compared with WSDOT highways, the design storm frequency for sag points in roads shall be the 25-year event (replacing the 50-year event identified in Figure 5-4.1 of the WSDOT *Hydraulics Manual*).

Note: This generally means that the pavements on a grade will need to be designed with a storm collection system to safely intercept the 10-year design storm and pavements at sag points will need to safely intercept the 25-year design storm. The general concept behind this is that roads on a grade may utilize the curb and gutter as a secondary conveyance component, and in turn reduce the required pipe conveyance sizing up to the sag locations.

Conveyance Systems:

City recommends that conveyance systems (pipes, ditches, swales, etc.) should be designed to convey the water tributary to them as described for road pavement drainage. If the conveyance system is not associated with road pavement drainage (i.e. the runoff being conveyed is directly from areas such as parking lots, roofs, landscaped areas, etc.) then the conveyance system shall be sized to safely convey the peak runoff from the 25-year design storm event using the Rational Method or the Single Event Hydrograph Method and the Short Duration Regional Storm as identified in the *Stormwater Management Manual for Eastern Washington*.

Conveyance systems shall be allowed to overtop for design storm events larger than the aforementioned design events to the extent that the overtopping does not create or contribute to a flooding or erosion problem. The project design shall demonstrate a stabilized conveyance path (e.g. overland) for the 100-year peak flow within the project site to ensure it is adequately conveyed to an exempt water body or to an adequately sized surface water management facility, and discharges at the natural location for the project site.

A backwater analysis should be performed on any proposed conveyance system design or existing conveyance system to be affected by the project to ensure adequate conveyance capacity, unless it can be reasonably concluded that the system will have adequate capacity. (e.g. pipe flowing less than 70 percent full using a Manning's equation and low flow velocities so as to not create significant head losses at junctions.)

Chapter 6: Transportation Improvement Program

Transportation Goals and Policies:

The City's transportation goals and policies have been adopted through the comprehensive planning process. They are as follows:

Transportation Goal 1

Encourage efficient transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

Policy Statements

- Participate in regional transportation planning efforts to provide and improve services and infrastructure.
- Collaborate in projects with other agencies.
- Encourage use of public transportation for commuting and local mobility.
- Encourage pedestrian and bicycle use for local mobility by adopting and implementing street standards that embrace these forms of travel.
- The level of service standard for this facility is as follows, as established by the Washington State Department of Transportation: LOS "C" in rural areas, LOS "D" in urban areas.
- The following are recognized as transportation facilities and services of statewide significance (including Highways of State-wide Significance) within the Cashmere Urban Growth Area: US 2/97 and the Burlington Northern Railroad.
- The level of service standards for these facilities are as follows, as established by the Washington State Department of Transportation: US 2/97 as in Policy EE-6.
- The following are recognized as part of the Regional Roadway System within the Cashmere Urban Growth Area, as established in the NCW Regional Transportation Plan.
    - US 2/97
    - Sunset Highway
    - Cashmere Dryden Airport
- The level of service standards for these facilities are as follows, as established by the Chelan-Douglas Transportation Council.
    - US 2/97 as in Policy EE-6
    - Sunset Highway Minimum acceptable ranking is 47
    - Cashmere Dryden Airport is GA (general aviation)

- For the purposes of identifying estimated traffic impacts to state-owned transportation facilities resulting from the land use assumptions and designations found within this Plan, the Chelan County Transportation Element, completed in October 1997 is hereby adopted by reference.

TRANSPORTATION GOAL 2

Implement the City's transportation plan, making improvements to infrastructure.

Policy Statements

- Maintain existing roads to provide safe travel for all modes of transportation. On a priority basis improve existing roads to meet applicable standards specified in the City's transportation plan.
- Require new roads in developments to meet the applicable road standards contained in the City's transportation plan.
- Require existing private roads to be improved to city standards before they will be accepted as city roads.
- Private roads serving residential land uses will not be approved within city limits.
- In the event that funding to complete identified transportation improvements is not adequate to address those needs, there shall be a discussion of how additional funding will be raised or how land use assumptions will be reassessed to ensure that level of service standards are met.
- If a proposed development causes the level of service on a locally owned transportation facility to decline below the standards adopted in this comprehensive plan, Developers will be responsible to participate in funding the improvements that are warranted by associated development. For the purposes of this comprehensive plan, "concurrent with development" shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

TRANSPORTATION GOAL 3

Improve Safety.

Policy Statements

- Maintain existing roads to provide safe travel for all modes of transportation. On a priority basis improve existing roads to meet applicable standards specified in the City's transportation plan.
- Require new roads in developments to meet the applicable road standards contained in the City's transportation plan.

Project Funding:

The City uses a combination of public and private funding sources to implement transportation improvements in Cashmere, both for maintenance activities and capital improvements. The ability to finance the construction of improvements to the transportation system is critical to the implementation of this Plan. This section outlines a selection of the tools and funding opportunities that are typically available to the City.

The City receives tax revenues from a variety of state, regional, and local sources including the real estate tax, sales tax, and the motor vehicle fuel tax. Despite these revenues, the City has numerous maintenance and capital improvement needs that cannot be met by existing tax revenues alone. The City has an active grant program and continually seeks grants, both private and public, to improve Cashmere's transportation system.

Grants:

The following is a list of some of the grants the City has historically applied for. Cashmere will likely compete for these funds in the future when applications are being accepted.

- The **Transportation Enhancement Program** funds projects designed to strengthen the cultural, aesthetic, and environmental aspects of the inter-model transportation system. The program provides for the implementation of a variety of non-motorized projects, including the restoration of historic transportation facilities, the construction of bicycle and pedestrian facilities, landscaping and scenic beautification, and the mitigation of water pollution from highway runoff.

- The **Surface Transportation Program (STP)** provides flexible funding that may be used by state and localities for projects on any Federal-aid highway, including the National Highway System, bridge projects on any public road, transit capital projects, and intra-city and intercity bus terminals and facilities.

- The **Safe Routes to School Programs** is a state funded program that aims to protect children from traffic related deaths and injuries and promotes a healthy lifestyle by encouraging bicycling and walking to school.

- The **Pedestrian and Bicycle Safety Grant** is a state funded program that funds non-motorized safety improvements.

- The **Community Economic Revitalization Board** is a state funded program that provides low-cost financing for public facility improvements that are required for private development.

- The **Transportation Improvement Board** administers the following grant programs.

    - Small City Arterial Programs (SCAP)

    - Sidewalk Program (SP)

    - Small Cities Pavement Preservation (SCPP)

These programs are intended to improve mobility, safety, and preservation, while supporting an environment essential to the quality of life of the citizens of Washington.

Loans:

The Public Works Trust Fund has several low-interest loan programs. Loans can be secured for planning, design and construction. The planning and pre-construction design loans are often used to complete the master plans and engineering necessary to prepare bid-ready plans. These loans can be strategically employed to leverage grant funding providing a local match, enabling the City to compete for funding for public infrastructure projects.

In addition, the City has the option of issuing bonds for public infrastructure.

Private Sector Contributions (Traffic Impact Fees):

The City currently does not assess traffic impact fees

Local Improvement Districts (LID):

Local Improvement Districts (LID) enable city investments in a specified area by leveraging city funds with contributions from property owners in the district. In essence, LID's are a means of using limited city resources to improve neighborhood quality through improvements of streets, sidewalk, and other features of the roadways.

Funding Strategies and Project Prioritization:

The City uses a variety of criteria to prioritize transportation projects, including safety, mobility, and overall community benefit. In additional the City also considers the availability of funding and the ability to leverage city dollars to raise addition funds. The City often needs to budget for maintenance through tax revenues. Capital improvements may be financially secured through a combination of private and public investment. In the future the City will need to continue lobbying for its share of federal, state, and county tax revenues, seeking creative avenues for securing private investment dollars and grant funds, and potentially implementing new funding strategies.

State Environmental Policy Act (SEPA) Voluntary Mitigation Payments:

The State Environmental Policy Act (SEPA) requires mitigation for significant adverse environmental impacts. SEPA has been used in conjunction with local codes and ordinances to require mitigation for infrastructure impacts for many years. SEPA requires adequate public policy to provide the ability to demonstrate an impact and require mitigation. Adopted Level of Service standards are the policy typically used to require mitigation of transportation impacts under SEPA. Public safety is also cited as the policy for mitigation for transportation impacts.

SEPA lends itself well to mitigation of impacts directly and substantially attributed to a development. Improvements can be located on-site or near to the development and also off-site but development related. Fair share or "Pro-Rata" financial contributions to transportation improvements can provide funding to make improvements a reality. SEPA provides the flexibility to assess both large and small development in sharing the cost for transportation improvements. Unlike transportation impact fees, SEPA pro-rata mitigation does not have a strict time limit when mitigation payments need to be spent. Generally the identified improvements will be built within two (2) to ten (10) years. Mitigation payments can be used on any aspect of a transportation projects; such as design, right-of-way acquisition, construction, and inspection.

Project Priority:

General

In an ideal situation, there would be adequate funding available for all needs and those needs would be addressed in a specific priority order as identified in the Six-Year Transportation Program. This is not the most likely scenario. A community should have its capital needs in a priority order, yet remain flexible enough to secure external funding for needed projects, regardless of whether a particular project is the next one on the priority list.

Improvement Priority List

The following prioritization of identified deficiency categories are recommended to assist the City of Cashmere in developing the Capital Facilities Plan for the transportation network.

1. Identified safety deficiencies, as documented by accident history.
2. Isolated capacity deficiency, such as at an intersection.
3. Structural deficiency, such as a deteriorated pavement or load restricted bridge.

4. Functional deficiency, where the current geometric configuration of the roadway does not comply with the adopted design standard

Funding:

The ability to finance the transportation system is critical to the implementation of this Plan and the success of the future transportation system. Funding is needed to realize the capital improvements and maintenance activities outlined in this Plan. This chapter details the financial planning tools and funding mechanisms available to accomplish these improvements.

Transportation Improvement Program:

The City adopts a six-year Transportation Improvement Program (TIP) annually, which lists planned transportation improvements on the arterial and collector systems, including intersections and non-motorized improvements. Transportation needs are identified by examining the latest information concerning safety and accident history, growth trends, the traffic model, traffic studies, and the Comprehensive Transportation Plan.

Capital Facilities Plan:

The Capital Facilities Plan (CFP) is the Comprehensive Plan element that identifies the financial plan for implementing all capital improvements in Cashmere. Transportation improvements are included in the Capital Facilities Plan, which is amended annually. The CFP enables the City to fulfill the GMA requirements of having a multi-year Plan based on transportation needs. It also enables the City to make informed decisions about its investment in public dollars and make timely decisions about maintaining levels-of-service.

Chapter 7: Capital Facilities Plan (CFP)

Capital facilities are the durable goods portion of governmental service. They have a long-term useable life and can cost considerable amounts of tax dollars to construct. The process of obtaining capital facilities can require years of design, public involvement, budgeting and construction. Once constructed, capital facilities tend to become permanent, requiring an ongoing operations/maintenance cost.

As a result of the high cost of capital facilities, it is important for the government to prioritize and plan capital facilities as far ahead as possible. Lack of funding often results in some worthwhile projects being delayed as more urgent problems are addressed. This chapter was prepared to comply with the Growth Management Act. The Act stipulates that the City must estimate what new or improved capital facilities will be needed for the next twenty years to support the probable growth in population.

Planning future capital facilities projects involves estimating the future needs for a variety of facilities and services. As part of the city's budgeting process, the capital facilities projections should be revised to recognize new needs or revised plans/costs. An annual review will assist in updating the highest priority projects.

This Capital Facilities Plan CFP is intended to serve as an objectively derived guide for the orderly growth and maintenance of the community. It will serve as the framework for coordinating capital improvement projects that implement the vision of the community. It is designed to be a valuable tool of the City Council, staff and private citizens, which enables the community to:

- Gain a better understanding of their existing public works systems and capacities.
- Identify potential problems associated with limited revenues and increased public demands for better services.
- Identify potential sources and programs that may be used to fund needed improvements.
- Create a continuing process of setting priorities for needed capital improvements, based on consistent background information.

It is understood that some capital needs may go beyond the resources available through the general City revenues. Furthermore, future issues may develop quickly in response to citizens' desires or a change in community standards or circumstances. The CFP is designed to be flexible to these situations by identifying different possibilities for funding beyond the norm, as well as attempting to identify which foreseeable needs will require some future action in order to be completed. The availability of optional funding sources such as bond issues, levies, tax and/or rate increases, loan or grant applications, etc., do exist. If the community is unable to contribute the full amount planned for in the CFP in any one year, the Plan is not abandoned but instead reviewed and amended to reflect changing circumstances.

Investments in Cashmere's neighborhoods and streets are an essential component of providing a comprehensive and functional transportation system. Below are the project recommendations identified that either need retrofit of an existing system or installation of a new system with cost estimates. Refer to the City's adopted 6-yr TIP for currently planned projects.

Chapter 8: Relationships, References Design Specifications

References Design Specifications:

Except where these standards provide otherwise, design detail, construction materials and workmanship shall be in accordance with the following publications:

A. WSDOT Standard Plans Specifications for Road, Bridge and Municipal Construction, current edition, henceforth referenced as the "WSDOT Standards Specifications" along with the WSDOT Design Manual, current editions
B. WSDOT Standard Plans for Road and Bridge Construction, current edition, henceforth referenced as the "WSDOT Standard Plans"
C. WSDOT Local Agency Guidelines, current edition, including the City and County Design Standards for the Construction of Urban and Rural Arterials and Collectors
D. AASHTO "A Policy on Geometric Design of Highways ", current edition, also known as the 'Green Book"
E. AASHTO "Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT<=400), Current edition
F. AASHTO "Roadside Design Guide", Current Edition
G. USDOT "Manual on International Traffic Control Devices", current edition as adopted, including amendments, by the Washington State Department of Transportation, henceforth referenced as the "MUTCD"
H. ITE Trip Generation Manual, current edition

Relationship to Other County/State Standards, Requirements or studies:

Other Chelan County plans, standards and requirements for which these standards are intended to be consistent with are:

A. City of Cashmere Comprehensive Plan
B. City of Cashmere Title 12, 13, 14, 15, 17, 17, 18
C. Chelan County Comprehensive Plan
D. Chelan County Code, as amended, specifically Title 8, 10, 11, 12, 13, 14 and the remainder of Title 15
E. Other adopted community plans within Chelan County
F. The City of Cashmere was a participating agency with the Chelan County, Port of Chelan County and Chelan-Douglas Transportation Council in the "Cashmere Area Transportation Study" which was completed in June 2015

Violation and Penalties:

Failure to comply with these standards shall be cause for withholding or withdrawing approval of plans, forfeiture of financial security or non-acceptance of the work by the City or County.