

MLM
6/6/19

ORDINANCE NO. 919

AN ORDINANCE OF THE CITY OF CARNATION, WASHINGTON, AMENDING CHAPTER 7 TRANSPORTATION ELEMENT AND CHAPTER 9 CAPITAL FACILITIES ELEMENT OF THE CARNATION COMPREHENSIVE PLAN TO ADOPT AND INCORPORATE BY REFERENCE THE CITY'S 2020 TRANSPORTATION IMPROVEMENT PLAN AND THE 2019 RIVERVIEW SCHOOL DISTRICT CAPITAL FACILITIES PLAN; SETTING FORTH LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, pursuant to Chapter 36.70A RCW, the City of Carnation has adopted a Comprehensive Plan for the purpose of guiding and informing future growth, development, and infrastructure planning within the City; and

WHEREAS, the City desires to amend Chapter 7 Transportation Element of the Comprehensive Plan in order to adopt and incorporate by reference the City's Transportation Element Background Information and 2020 Transportation Improvement Plan as adopted by City Council Resolution No. 435; and

WHEREAS, the City further desires to amend Chapter 9 Capital Facilities Element of the Carnation Comprehensive Plan to incorporate by reference the 2019 Riverview School District Capital Facilities Plan and update the Capital Improvements Program to reflect the City's 2020 Transportation Improvement Plan; NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF CARNATION, WASHINGTON, DO
ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council hereby adopts the above recitals as findings in support of the Comprehensive Plan amendments set forth in this ordinance. The City Council further adopts by reference the findings of the Planning Board dated June 25, 2019, together with the following:

A. The City is authorized by state law, including but not limited to Chapter 36.70A RCW, to adopt and periodically amend a local comprehensive plan.

B. The Planning Board conducted a public hearing on the substance of this ordinance on June 25, 2019, and recommended adoption by the City Council. The City Council held a public hearing on this ordinance on August 6, 2019.

C. The Comprehensive Plan amendments set forth in this ordinance have been processed and considered by the City in material compliance with all applicable procedural requirements, including but not limited to requirements related to public notice and comment.

D. All relevant requirements of SEPA have been satisfied with respect to this ordinance.

E. The City Council has carefully considered, and the Comprehensive Plan amendments set forth in this ordinance satisfy, the review criteria codified at CMC 15.100.030(E).

F. The Comprehensive Plan amendments set forth in this ordinance will advance the public health, safety, and welfare.

G. The Comprehensive Plan amendments set forth in this ordinance have been considered by the City Council concurrently to enable the cumulative effect of these amendments to be ascertained.

Section 2. Amendment of Comprehensive Plan Chapter 7. Chapter 7 Transportation Element of the Carnation Comprehensive Plan is hereby amended to provide in

its entirety as contained in Exhibit A, attached hereto and incorporated herein by this reference as if set forth in full.

Section 3. Amendment of Comprehensive Plan Chapter 9. Chapter 9 Capital Facilities Element of the Carnation Comprehensive Plan is hereby amended to provide in its entirety as contained in Exhibit B, attached hereto and incorporated herein by this reference as if set forth in full.

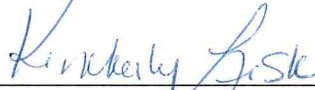
Section 4. Copy to Commerce. Pursuant to RCW 36.70A.106, the City Planner is hereby authorized and directed to provide a copy of this ordinance to the Washington Department of Commerce within ten (10) days of adoption.

Section 5. Severability. If any section, sentence, clause, or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause, or phrase of this ordinance.

Section 6. Effective Date. This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after publication.

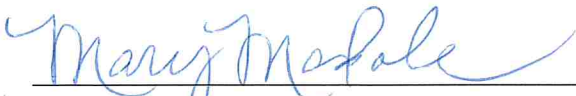
APPROVED by the Carnation City Council this 20th day of August, 2019.

CITY OF CARNATION



MAYOR, KIMBERLY LISK

ATTEST/AUTHENTICATED:



CITY CLERK, MARY MADOLE

APPROVED AS TO FORM:
OFFICE OF THE CITY ATTORNEY:

BY 
J. ZACHARY LELL

FILED WITH THE CITY CLERK: 08/16/2019
PASSED BY THE CITY COUNCIL: 08/20/2019
PUBLISHED: 08/30/2019
EFFECTIVE DATE:..... 09/04/2019
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**City of Carnation
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CHAPTER 7 – TRANSPORTATION ELEMENT

INTRODUCTION

The purpose of the Transportation Element is to establish goals and policies that will guide the development of surface transportation in the City of Carnation in a manner consistent with the overall goals of the Comprehensive Plan. The Transportation Element is supported by and inter-connected with many other elements of the Comprehensive Plan. In particular, the transportation system needs to be designed to support the planned densities described in the Land Use Element. Based upon existing and projected land use and travel patterns, the Transportation Element addresses roadway classifications, levels of service, transit and non-motorized modes, future travel projections, transportation system improvements, financing strategies, and concurrency management. It establishes the technical basis for transportation system development, and for existing and future transportation improvement programs and facilities guided by the transportation goals and policies of the Comprehensive Plan.

As required by the Growth Management Act, the Transportation Element must demonstrate that there is enough transportation system capacity to serve the land uses that are planned, and to serve them at a level of service established in the goals and policies. This element also needs to include a financing plan to show how planned transportation improvements will be funded. The Transportation Element Background Information and ~~2019-2020~~ Transportation Improvement Plan contains the background data and analysis to satisfy these requirements, and is adopted by reference into this Element.

TRANSPORTATION GOALS AND POLICIES

City of Carnation Transportation Goals and Policies incorporate the Countywide Planning Policies as well as the Multi-county Planning Policies expressed in VISION 2040.

GOAL T1

To ensure that transportation facilities and services needed to support development are available concurrent with the impacts of such development, which protects investments in existing transportation facilities and services, maximizes the use of these facilities and services, and promotes orderly compact growth.

Policy T1.1 A minimum level of service standard D for arterial intersections, and a level of service standard D for State highway intersections, .76 to 1.0 passengers per seat for vanpool services.

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- Policy T1.2 Development permits will only be issued when projects which require transportation improvements do not exceed the City's ability to provide these in accordance with the adopted level of service standards. However, these necessary improvements in transportation facilities and services, or development of strategies to accommodate the impacts of development may be provided by the developer.
- Policy T1.4 The City will design and improve its transportation system to accommodate not only existing conditions, but projected growth based on adopted City, County and state planning policies and projections.
- Policy T1.5 The City will allow new development only when and where all transportation facilities are adequate at the time of development, or unless a financial commitment is in place to complete the necessary improvements or strategies which will accommodate the impacts within six years; and only when and where such development can be adequately served by essential transportation facilities without reducing the adopted level of service elsewhere.
- Policy T1.6 The City will actively solicit action by the State and King County to program and construct those improvements to State and County arterial systems which may be needed to maintain the level of service standards adopted in Carnation.
- Policy T1.7 The City will adopt development regulations which will require developers to construct streets directly serving new development, and pay a fair-share fee for specific off-site improvements needed to mitigate the impacts of the development. This fee may be in the form of a Transportation Impact Fee adopted by the City.
- Policy T1.8 The City will coordinate land use and public works planning activities with an ongoing program of long range financial planning, in order to conserve fiscal resources available to implement the Transportation Impact Plan (TIP).
- Policy T1.9 The City will base the timing of implementing actions under the Comprehensive Plans and elements on the financial resources available to fund the necessary public facilities.
- Policy T1.10 The City will grant high priority for funding to projects which are consistent with the goals and objectives adopted by the City Council and as specified in the Comprehensive Plan. Improvements that will

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serve the Town Center and that promote economic viability for the community will be given highest priority.

Policy T1.11 The City will fund projects only when incorporated into the City budget, as adopted by the City Council.

Policy T1.12 The City will encourage the maintenance and safety improvements of Carnation's existing roads as a priority over the creation of new roads.

GOAL T2

To develop, maintain and operate a balanced, safe, and efficient multi-modal transportation system to serve all persons, special needs populations and activities in the community.

Policy T2.1 The City will develop a future transportation system which encourages flexible, adaptive and multiple uses of transportation facilities and services.

Policy T2.2 The City will implement measures that will relieve pressures on the existing transportation infrastructure by approaches that include, but are not limited to:

- a. Multi-modal transportation alternatives
- b. Land use coordination
- c. Prioritized improvements

Policy T2.3 The City will integrate, coordinate and link the connections and transfer points between all modes of transportation.

Policy T2.4 The City will work with King County, WSDOT, the Snoqualmie Tribe, and other local jurisdictions in improving transit service and adequately siting park and ride and park and pool lots in the Carnation area.

Policy T2.5 The City will minimize potential conflicts between bicycle and automobile traffic by providing signage at intersections of bike trails with roadways.

Policy T2.6 The City will encourage the location of bicycle racks at appropriate destination points, such as within the downtown, parks, schools, transit, and park and ride lots.

Policy T2.7 The City will provide and promote the development of pedestrian and bicycle paths to schools, parks, transit and activity centers, as well as linkages between these paths.

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Policy T2.8 The City will include the need to accommodate bicycle safely in its management and design of the City street network, including designating bicycle routes throughout the city.

Policy T2.9 The City will encourage the siting of bicycle-related commercial activities in the Central Business District and Mixed Use areas.

Policy T2-10 The City will implement the adopted Comprehensive Emergency Management Plan in the event of an emergency that impacts transportation facilities.

GOAL T3

To recognize and promote pedestrian and bicycle movement as a basic means of circulation and to assure adequate accommodation of pedestrians, bicycles and handicapped persons' needs in all transportation policies and facilities. New development will be encouraged or in some cases required to implement Pedestrian Oriented Development design features that have been incorporated into City codes and standards, such as providing sidewalks or pathways and amenities such as street trees and street lighting, and site design that encompasses connectivity with existing transportation facilities and between uses.

Policy T3.1 Require developers to include pedestrian facilities such as sidewalks or pathways within formal subdivisions, and to provide links to existing walking trails and pathways that form the City's looped trails system.

Policy T3.2 Carnation will strive to reduce the pedestrian barrier created by Tolt Avenue (SR 203) by:

- Providing pedestrian crossings at key points along SR203, including on the northern, central and southern ends of the roadway corridor through the City.
- Promote accessibility by reducing travel distance on busy cross streets.
- As allowed by the WSDOT, enhance the visibility of the pedestrian crosswalk by using different materials, textures or patterns, and adding landscaping or installing sidewalk design elements such as color or art.
- Coordinate access management on SR203 with WSDOT to promote alternative access and/or shared access points for developments that front this street.

Policy T3.3 Carnation will promote the creation of a pedestrian oriented downtown commercial area by:

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- Implementing design standards for commercial development along SR203 which encourage a pedestrian environment by requiring parking at the side or rear of building.
- Modifying the placement of new buildings in ways that encourage pedestrian activities by making streets more attractive routes for walking.

Policy T3.4 Improve pedestrian amenities in the downtown through public improvements, sign regulations, and development standards. The maintenance of public and private improvements should be given priority commensurate with downtown's role as the focal point of the community.

Policy T3.5 Work with WSDOT to develop mechanisms to reduce traffic speed on SR203 through the city to increase public safety and enhance local mobility, yet maintain the regional movement of traffic through the city.

Policy T3.6 Work with WSDOT to evaluate potential pedestrian improvements along SR203, as well as coordinate implementation strategies for such improvements.

Policy T3.7 Seek to improve the appearance of existing street corridors and incorporate high standards of design when developing new streets, including construction of sidewalks. Where appropriate landscaping, street furniture, lighting and other measures should be implemented to enhance the appearance of city street corridors. Existing trees along street rights-of-way should be preserved when trees are healthy and can be maintained, while at the same time introducing new trees where appropriate.

Policy T3.8 Include construction of pedestrian amenities such as pathways, trails, sidewalks whenever significant development or major maintenance work occurs on city streets. This may include the identification of potential funding sources such as concomitant agreements, Local Improvement Districts, and including sidewalks as an "alternate" in construction bid documents.

Policy T3.9 Where these are feasible and will promote public safety, the City will consider traffic calming techniques especially on non-arterial roadways that carry significant traffic.

Policy T3.10 The City will support and promote bicycle use as an alternative to motorized transportation through improvements such as designated bicycle paths, signage, bicycle parking, etc. Improvements to the

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transportation system must balance the needs of motorists, pedestrians and bicyclists.

GOAL T4

To ensure adequate parking in the downtown commercial area which is consistent with downtown design and pedestrian circulation goals.

- Policy T4.1 Allow on-street parking in the downtown area to form a buffer between pedestrians and street traffic, reduce the speed of traffic, and provide for short term parking needs.
- Policy T4.2 Explore alternative methods of ensuring the adequate provision of parking for new and existing commercial and residential development in the downtown commercial area, while reducing the amount of parking provided by individual developments and influencing the location and type of parking in ways that promote pedestrian mobility and minimize pedestrian/vehicular conflicts. This includes, but is not limited to:
- Installing directional signage to public parking areas.
 - Encouraging the use of joint-use parking opportunities utilizing existing parking for churches, public buildings and stores.
 - Separating short (< 2 hrs), intermediate (2-5 hrs) and long term (> 5 hrs) parking uses; on street parking reserved for short term, and long term parking provided in lots on the periphery of the downtown commercial area.

GOAL T5

To manage, conserve and protect Carnation's natural resources through a balance of development activities complemented with sound environmental practices. Where consistent with mobility goals, encourage green streetscapes that incorporate natural drainage, reduced impervious surface, and vegetation. Incorporate non-motorized transportation facilities into roadway improvements and new roadways.

- Policy T5.1 New transportation facilities should be designed in a manner which minimizes impacts on natural drainage patterns, soil profiles and habitat.
- Policy T5.2 Promote the use and development of routes and methods of alternative modes of transportation, such as transit, bicycling and walking, which reduce Carnation's consumption of non-renewable energy sources and reduce emission of greenhouse gases.
- Policy T5.3 Assist all major employers in complying with current federal and state policies aimed at reducing auto-related air pollution by implementing

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programs to reduce the number of employees commuting in single occupancy vehicles. This compliance can be realized through such transportation demand strategies as preferential parking for carpools/vanpools, alternative work hours, bicycle parking, and distribution of transit and ridesharing information. Cooperate with major employers located outside the City with their ridesharing or van pooling resources that serve Carnation residents.

Policy T5.4 Carnation will seek to reduce levels of air pollutants and greenhouse gas emissions in an effort to maintain or do better than existing state and federal air quality goals and standards, by: providing a compact urban form that promotes non-motorized trips within the City; promoting economic development to increase local employment opportunities and to maximize the goods and services that are locally available; by working with partners such as King County, the Snoqualmie Tribe and the other Snoqualmie Valley cities to create transit service that provides real options for commuting to reduce trips to work; and by cooperating with regional employers to promote ride-share options.

Policy T5.5 Site, design, and buffer (through extensive screening and/or landscaping) transportation facilities and services to fit in harmoniously with their surroundings. When sited within or adjacent to residential areas, special attention should be given to minimizing noise, light and glare impacts.

GOAL T6

To actively influence the future character of the City by managing land use change and by developing City facilities and services in a manner that directs and controls land use patterns and intensities.

Policy T6.1 Coordinate Land Use with the facility/utility planning activities of agencies and utilities identified in this Comprehensive Plan element. Adopt procedures that encourage providers of public services and private utilities to utilize the Land Use Element of this Plan in planning future facilities.

Policy T6.2 The cities and counties in the region should coordinate transportation planning and infrastructure development in order to:

- Ensure a supply of buildable land sufficient in area and services to meet the region's housing, commercial and employment needs; located so as to be efficiently provided with public facilities and services.
- Ensure protection of important natural resources.
- Avoid unnecessary duplication of services.

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- Avoid overbuilding of public infrastructure in relation to future needs.

Policy T6.3 Recognize the important role that public facilities and programs such as sidewalks, bike lanes, walking trails and street lights play in providing a healthy family environment within the community.

Policy T6.4 Work with local, regional and state jurisdictions to craft land use development strategies that will support public transportation.

Policy T6.5 Consider the impacts of land use decisions on adjacent roads. Likewise, road improvements should be consistent with proposed land use densities.

Policy T6.6 Regional traffic should be discouraged in Carnation's residential areas.

GOAL T7

To encourage pedestrian and bicycle transportation modes by providing a comprehensive system of walkways and trails that links residential areas to each other and to needed services. In addition to promoting non-motorized trips within the City, the trail system should be designed to provide for the recreational, cultural, environmental and aesthetic needs of City residents. As resources allow, the City will update the map of pedestrian and bicycle trails that serve Carnation.

Policy T7.1 Coordinate with King County Parks to support continued improvement of the Snoqualmie Valley Trail through Carnation as part of a regional trail system.

Policy T7.2 Support the development of paths, signage, and marked roadways which link the Snoqualmie Valley Trail with Carnation's other trails and resources such as the rivers, parks and downtown commercial areas.

Policy T7.3 Coordinate with land owners to develop a community trail system along the banks of the Tolt and Snoqualmie Rivers which is linked to the downtown commercial district, parks and the Snoqualmie Valley Trail.

CHAPTER 9 – CAPITAL FACILITIES ELEMENT

INTRODUCTION

The Capital Facilities Element has been developed in accordance with Section 36.70A of the Growth Management Act to address the financing of Capital Facilities in the City of Carnation Urban Growth Area (UGA). It represents the community's policy plan for the financing of the public facilities for the next 20 years, and includes a financing plan for Capital Facilities over the next six years. The policies and objectives in this plan will be used to guide public decisions on the use of capital funds. They will also indirectly guide private development decisions by providing a strategy of planned public capital expenditures.

The Element has also been developed in accordance with the King County County-wide Planning Policies, and has been integrated with all other planning elements to ensure consistency throughout the Comprehensive Plan. The Element specifically evaluates the city's fiscal capability to provide the public facilities necessary to support the other Comprehensive Plan elements. The Capital Facilities Element includes:

- Inventory and Analysis
- Future Needs and Alternatives
- Six-Year Capital Improvement Plan
- Monitoring and Evaluation
- Goals and Policies

LEVEL OF SERVICE (LOS) STANDARDS

Where LOS standards are established, they are also discussed in the subject element of this Comprehensive Plan (e.g. Transportation, Parks, etc.) A detailed listing of those standards is provided in those chapters.

MAJOR CAPITAL FACILITIES CONSIDERATIONS AND GOALS

The Capital Facilities Element is the mechanism the City uses to coordinate its physical and fiscal planning. This planning effort requires ongoing communication between various disciplines, including engineering, finance, and planning. The Comprehensive Plan is realistic and achievable as a result of integrating the concerns of various local administrators and coordinating all of the Comprehensive Plan Elements.

The Capital Facilities Element promotes efficiency by requiring the City to prioritize capital improvements for a longer period of time than the single budget year.

Long-range financial planning presents the opportunity to schedule projects so that the various steps in development logically follow one another, with regard to relative urgency, economic desirability, and community benefit. In addition, the identification of adequate

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funding sources results in the prioritization of needs, and allows the trade-off between projects to be evaluated explicitly.

INVENTORY AND ANALYSIS

The inventory presented in this Element provides information useful to the planning process as well as summarizing new capital improvement projects for the growth projected from 2015 and beyond, and major repair, renovation, or replacement of existing facilities.

EXISTING CAPITAL FACILITIES

This section includes a brief summary of existing city facilities. Additional information can be in each respective Comprehensive Plan Element under which the facility would be considered.

City Hall. The facilities for general government consist of a 6,700 square-foot two-story City Hall building located at 4621 Tolt Avenue. The building is comprised of three separate attached structures, built in different decades. General government is administered from the ground floor, which underwent partial interior renovation and finish work in 2001 and 2002. The general government facility provides meeting space, office space, and ADA accessible public spaces. Office space consists of a front office with capacity for three employees, and five private offices. City Hall office space is currently at maximum capacity.

In December 2016, the City conducted a structural inspection of City Hall. The northern structure of the building has masonry walls which are likely backfilled with unreinforced concrete, and will not serve as a lateral resisting system for meeting current codes such as loadings for wind and seismic forces. Hence, remodel work will likely be limited to only cosmetic changes or non-structural modifications. If a future remodel design includes structural changes, it could trigger bringing applicable areas or the entire building up to current codes. Trying to work with the existing building may prove to be too costly, so demolition and replacement of City Hall is being contemplated.

Public Works Maintenance Shop. A 5,000 square foot public works maintenance building was constructed in 1995, and is located at NE 45th and 330th Avenue NE. The building consists of two heated bays, three storage bays, and office/parts area. This facility should be adequate to meet public works maintenance needs throughout the planning period.

Water System. Principal water facilities include a spring fed water supply supplemented by a groundwater well located in Loutsis Park, and three above-ground storage reservoirs providing a total of 938,000 gallons. The city water distribution mains consist of pipes ranging in size from 2" to 12". The quality of the water provided by the City is good. The capacity is adequate to serve current needs, and the City anticipates having enough capacity to serve the projected population. Provision of water to future development not

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only depends on capacity, but also on design considerations. See the Utilities Element for more information on the water system.

Sanitary Sewer System. The City has an operational public sewer system. The City constructed and operates the vacuum sewage collection system, and King County provides wastewater treatment at a facility located at 4405 Larson Avenue. The wastewater treatment facility was designed and built to accommodate a build-out population of 4,974, which exceeds the City's projected build-out population of 4,652. In 2018, the average annual influent flow for the Carnation Wastewater Treatment Plant was 0.1083 MGD, which is approximately 25% of the plant's ultimate capacity. The outfall is approximately one mile to the north of the city at Chinook Bend, where it is used for enhancement of a wetland.

Stormwater. The stormwater drainage system consists of two major drainage basins draining to the Tolt and Snoqualmie Rivers. The majority of the city's planning area drains to the Snoqualmie River, with only approximately 33.1 acres draining to the Tolt River.

The City of Carnation does not have a public storm sewer system. Stormwater from impervious surfaces must be infiltrated on-site, which can sometimes be difficult to achieve given localized areas of poorly drained soils and/or seasonal high water tables. Local drainage facilities that collect and convey surface water runoff consist of open channels and roadside ditches, wetlands, infiltration systems and detention ponds. The Snoqualmie and Tolt rivers ultimately serve as receiving waters, but there are no direct outfalls to the rivers. See the Utilities Element for additional information.

Solid Waste Disposal. Garbage collection is mandatory throughout the City of Carnation. Curbside recycling and yard waste collection is also available to all residents. The City previously operated a landfill which stopped receiving refuse in 1990, and entered a post-closure period in 1995. See the Utilities Element for additional information.

Transportation Facilities. City streets consist of various street pavement, alleys, sidewalks, street lighting, traffic control devices and surface water drainage facilities. The City street network consists of ~~42~~11.1 miles of paved streets, and 1.55 miles of alleys. Some of the paved street system features sidewalks either on one side or both. The remaining streets have gravel shoulders. A traffic signal is located at the intersection of SR 203 and Entwistle, and the intersection of SR 203 and Morrison has an improved pedestrian crossing. Transportation throughout the the City is adequate to meet LOS standards through the planning period if the Transportation Improvement Plan identified in Chapter 7 and in this Element is implemented. See the Transportation Element for more information.

Parks and Recreation Facilities. City park land consists of three developed city parks: Valley Memorial Park, Fred Hockert Park, and Nick Loutsis Park.

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Valley Memorial Park features two tennis courts, children's playground equipment, a skateboard bowl, BMX track, open space, and picnic areas. Hockert Park is a mini-park featuring a children's play structure and other playground equipment. Loutsis Park consists of open spaces and dense, poorly spaced conifer trees. It also houses the city's well-site. Additionally, the City and a few Homeowners Associations own several acres of land which have been dedicated as open space. Park and recreation facilities that are enjoyed by Carnation residents and visitors but not owned by the City include Tolt McDonald Park, which is a 500-acre regional park located partially within and adjacent to the City, as well as facilities owned and operated by the Riverview School District, King County Library System, Sno-Valley Senior Center, etc.

The City has adequate park and recreation land to satisfy current demand although some of its park facilities are in poor condition, and some of its park lands are undeveloped or underdeveloped. More information about park and recreation facilities and needs are listed in the Park and Recreation Element.

Library. The City of Carnation is part of the King County Library System (KCLS) which operates a 5,000 sq. ft. library on Tolt Avenue. Property owners pay a property tax assessment for operations and maintenance of the library plus levy assessments for any voter approved library bond levies.

Cemetery. The City operates a 2.1-acre cemetery located at 5110 Carnation-Duvall Road. The Carnation Cemetery consists of two sections, the north section which was founded by the Masonic Cemetery Association in 1905, and the south section which was founded by the Tolt Lodge International Order of Odd Fellows (IOOF) in 1906. The cemetery was deeded to the City in 1993.

Emergency Preparedness Evacuation Site. In 2001 with funds provided by Seattle Public Utilities and the King County Council the City purchased Tolt Highlands Lot 'W' from Weyerhaeuser, a 20.4-acre site adjacent to the north-eastern portion of the city limits. The site was purchased for the purpose of providing an elevated evacuation site for the community in the event of catastrophic failure of the South Fork Tolt River Reservoir and Dam. The site includes an abandoned gravel pit. Three large metal storage containers which are owned by Riverview School District and house emergency preparedness supplies are presently located at the gravel pit. In 2004, the City and American Red Cross entered into an agreement and the Red Cross paid for and constructed the first King County Disaster Relief Shelter, which is located at the gravel pit. In 2005, a pedestrian trail was constructed from NE 50th Street to the evacuation site which serves as an evacuation route in the event of a dam failure. The City intends to improve the pedestrian evacuation trail so that it can accommodate more people by making it wider, and adding treads and handrails. In addition to the pedestrian trail, the parcel can also be accessed by vehicles from Tolt Highlands Drive.

In addition to its function as an evacuation site, Lot 'W' can also be used for limited passive recreation.

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Medical, Emergency, and Fire Protection Facilities. The City of Carnation has annexed to both the Snoqualmie Valley Hospital District and Fire District #10. Fire District #10 entered into a joint operation inter-local agreement with Fire District #38 and the cities of Issaquah, North Bend and Sammamish in 1999.

This agreement formed a new agency called Eastside Fire and Rescue. The total Fire District service area, including Carnation, is 165 square miles. The Carnation fire station is located at 3600 Tolt Avenue and is operational 24 hours a day, seven days a week. The Station is adequate to meet current and future needs through the planning period. Staff and equipment at the Carnation Fire Station consists of twelve career firefighters, ten reserve firefighters, two fire engines, one aid car, and one tender. The average response time within the Carnation city limits is approximately two minutes. The fire district has three major sources of funding -- property tax revenues, a share of the King County Emergency Management Services (EMS) funding, and fees charged for services.

Public Education Facilities. Riverview School District No. 407 serves the lower Snoqualmie Valley area, particularly Carnation and Duvall. The District annually issues a Capital Facilities Plan that describes the facilities needed to accommodate projected student enrollment over the following six-year period. The Riverview School District's ~~2018~~ 2019 Capital Facilities Plan is hereby adopted by reference.

The District has four elementary schools (Carnation, Cherry Valley, Stillwater Elementary and the Eagle Rock Multi-Age Program), one middle school (Tolt) in Carnation, and one senior high school (Cedarcrest) in Duvall. In addition, the District has an alternative Learning Center located near the Carnation Elementary School. An inventory of existing school facilities, including locations and capacities of those facilities at various grade levels, is provided below:

Table CF-1
Riverview School District Public School Facility Inventory ~~2017~~2019

FACILITY	LOCATION	BUILDING AREA (sf)	PERMANENT STUDENT CAPACITY	INTERIM STUDENT CAPACITY	TOTAL STUDENT CAPACITY
Carnation Elementary (K-5)	4950 Tolt Avenue, Carnation	50,567	308	<u>0</u>	<u>308</u>
Stillwater Elementary (K-5)	11530 320th Avenue NE, Carnation	49,588	363 <u>315</u>	<u>48</u>	<u>363</u>
Cherry Valley Elementary (K-5)	26701 N.E. Cherry Valley Road, Duvall	56,252	462 <u>414</u>	<u>96</u>	<u>510</u>
Multi-Age Program (K-5)	29300 NE 150th Street, Duvall	0 (@CHS site)	96 <u>0</u>	<u>96</u>	<u>96</u>
SUBTOTAL (K-5)			1,229 <u>1,037</u>	<u>240</u>	<u>1,277</u>
Tolt Middle School (6-8)	3740 Tolt Avenue, Carnation	85,157	750 <u>606</u>	<u>144</u>	<u>750</u>
Cedarcrest High School (9-12)	29000 NE 150th Street, Duvall	108,946	966 <u>726</u>	<u>240</u>	<u>966</u>

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Riverview Learning Center (K-12)	32240 NE 50 th St, Carnation	14,545	168	<u>0</u>	<u>168</u>
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Source: Riverview School District ~~2018~~ 2019 Capital Facilities Plan, Table 4.1

Table CF-2
Riverview School District Projected School Enrollment
~~2018~~ 2019-19 through ~~2023~~ 2024-24

Grade Level	Actual							
	2017 <u>2018</u>	2018 <u>2019</u>	2019 <u>2020</u>	2020 <u>2021</u>	2021 <u>2022</u>	2022 <u>2023</u>	2023 <u>2024</u>	
	-1819	-1920	-2021	-2122	-2223	-2324	-2425	
K-5	1,511,520	1,511,540	1,501,591	1,531,631	1,528,666	1,532,721	1,558,737	
6-8	775,826	828,829	833,827	824,813	831,808	822,818	834,854	
9-12	991,950	1,018,043	1,096,112	1,127,138	1,133,193	1,202,166	1,167,178	
Total	3,277	3,357	3,430	3,482	3,492	3,556	3,559	

Source: Riverview School District ~~2018~~ 2019 Capital Facilities Plan, Table 5.1.

Financing School Facilities. Funding of school facilities is typically secured from a number of sources including voter-approved bonds and levies, state matching funds, impact fees, and mitigation payments. Riverview School District has an inter-local agreement with the cities of Duvall and Carnation as well as King County for the assessment of school impact fees. This permits the district to use the impact fee proceeds to partially fund needed capital facilities to accommodate new students generated by new residential development. Capital projects may also be funded through voter approved bonds and property tax levies, and state financial assistance from the Common School Construction Fund.

CAPITAL FACILITIES PROGRAM

Capital Facilities are characterized by long useful life and substantial cost. Capital Facilities Programs include the plan for financing these facilities but do not include the cost of operation or maintenance. The Capital Facilities Program includes facilities that are provided by the City of Carnation (i.e., city streets, parks, city hall, utilities, etc.) and facilities that are provided by other entities (i.e., state roads, public schools, County parks, utilities, etc.). These facilities require a policy for long-term financing rather than the annual budget cycle. Once future capital facility requirements are determined, the six-year Capital Facilities Plan will assist with annual budget decisions to incrementally fund these facilities. The six-year Capital Facilities Plan is not a substitute, but a budgetary tool for making budgetary decisions.

The Capital Facilities Program within this element is a six-year financing plan for capital expenditures. Because most Carnation projects are dependent of various grants, which may or may not be available or awarded, it is not realistic to put a year to the project. Thus, facilities may be listed by priority, with high priority projects being those to be undertaken first whenever possible, preferably the next budget year.

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The capital project list sets forth each capital project which the City plans to undertake and presents estimates of the resources needed to finance the project. The Capital Facilities Program reflects the goals, objectives, and implementation strategy of the Capital Facilities Element. The top priorities of the Capital Facilities Program will be converted to the annual capital budget whenever possible, while the remaining projects will be considered for future years. The Capital Facilities Program is a rolling plan that is periodically revised and extended to reflect changing circumstances.

The list of improvements contained in this Element has been limited to these major projects. Smaller scale improvements are addressed in the annual budget of the City as they occur over time. A capital project may include design, engineering efforts, permitting, environmental analysis, land acquisition, construction, major maintenance, site improvements, energy conservation projects, landscaping, initial furnishings, and equipment.

FINANCIAL INVENTORY AND ANALYSIS

The City has employed State authorized financing mechanisms to fund city services and capital improvements, and uses the Washington State Budgeting, Accounting, and Reporting System (BARS) as prescribed by the Washington State Auditor. The City currently funds capital projects from the following funds:

- Parks Development Fund 108
- Transportation Impact Fund 109
- Capital Improvement Fund 301 (*REET 2, Transportation Projects*)
- Capital Facilities Fund 302 (*REET 1, Parks & Government Facilities*)
- Water Capital Replacement Fund 402
- Landfill Post-Closure Financial Assurance Account 406
- Sewer Capital Improvements Fund 408

The only dedicated revenue source for the Capital Improvement Fund is the Real Estate Excise Tax. Other revenues consist of transfers from enterprise funds and other sources for capital improvements. During the 1990s and early 2000s, there was very little or no excess general revenue, after funding basic operations and maintenance activities, to transfer to the 301 Fund for capital improvements. The City's street and general government capital improvements are budgeted in this fund.

In 2004 the City conducted a water rate study and since that time, a capital replacement component has been incorporated into the water rate, providing for the availability of funds that are directly deposited into the 402 Fund for capital water system improvement projects. In addition to the capital replacement component of the utility rates, new development is charged a capital facilities charge (GFC) to connect to the water system. The GFCs for water are also deposited into the 402 Fund.

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The 408 Fund is the Sewer Capital Improvement Fund. New development must pay GFCs to connect to the sewer system; the GFCs for sewer are directly deposited into the 408 Fund. Beginning in 2013, the sewer rate includes a capital replacement component to be deposited directly into the 408 Fund. In addition to the GFCs to connect to the City's sewer collection and conveyance system, sewer customers also pay a Capacity Charge to King County.

The Landfill Post-Closure Financial Assurance Account receives its revenues through a flat rate charged to each property for landfill post-closure monitoring and maintenance activities. Revenues in this fund are restricted to financing costs associated with the post-closure maintenance and water quality monitoring at the closed Carnation landfill.

The City of Carnation has adopted a Transportation Impact Fee (TIF) on all new development within the City and a Parks Impact Fee on new residential development. Funds from Impact fees can be combined with other funding sources such as grants to pay for improvements to the City's transportation system and parks facilities. The transportation and parks improvements that may be funded in this way are identified in the Transportation and Parks and Recreation Elements of the Comprehensive Plan; these improvements ensure that levels of service for parks and transportation will remain at acceptable levels once new development occurs. The Riverview School District also imposes a School Impact Fee on new development which is collected for the District by the City in accordance with an Inter-local Agreement (ILA).

FUTURE CAPITAL NEEDS AND ALTERNATIVES

PROJECTION OF CAPITAL FACILITY NEEDS

Public facility needs have been identified in the other Elements of this plan. The other plan elements describe the location and capacity of facilities, and analyze the need for increased capacity from 2015 and beyond. Policy CF3.3 summarizes the current and adopted level-of-service standards. Capital improvement projects have been identified for parks and recreation, transportation, and utility facility improvements. Facilities for fire protection and schools are contained in district and agency plans. These have been coordinated with, but are independent of, the Comprehensive Plan. The Riverview School District's Capital Facilities Plan is adopted by reference in this Element.

Prioritization of Projected Needs. The identified capital improvement needs listed in the Table CF-4 were developed by City staff in view of the needs identified in this Plan. The projects contained in this plan undergo review by the Planning Board, City Council, and are subjected to a public hearing. The following criteria may be used to evaluate the priority of various capital projects.

Economic Considerations:

Potential for Financing
Impact on Future Operating Budgets

Feasibility Considerations:

Legal Mandates
Community Support

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Timeliness of Opportunity
Benefit to Economy and Tax Base
Grant and or Loan Availability

Service Considerations:

Safety, Health, and Welfare Factors
Environmental Impact
Effect on Quality of Service

Concurrency Considerations:

Goals and Objectives in Other Elements
Linkage to Other Planned Projects
Level of Service (LOS)
Plans of Other Jurisdictions

Revenue Sources and Cost Estimates for Projected Needs. Cost estimates in this Element are presented in current year dollars for both the Transportation Improvement Plan and Parks Capital Improvement Plan. These cost estimates were derived from various federal, regional, local, and state documents, published cost estimates, records of past expenditures, information from private contractors, and general knowledge.

The Capital Facilities Plan for the City of Carnation is based upon:

- Current Revenue Sources
- Financial Resources
- Capital Facilities Policies
- Method for Addressing Shortfalls

The City has reviewed and identified various means to finance Capital Facilities. It should be noted that financial regulations and fund availability change over time. Furthermore, changing market conditions may influence the city's choice of financing mechanisms, and the timing of specific improvements may depend upon future development patterns. The following list of sources includes major financial resources available and is not limited to those sources which are currently in use or will be used in the six-year schedule of improvements. The list of financial resources that are available to cities for capital projects includes the following:

- Local Multi-Purpose Levies
- Local Single-Purpose Levies
- Local Non-Levy Financing Mechanisms
- Federal, State, Regional, County, and Local Grants and Loans

Federal, State, Regional, County, and Local Grants and Loans

The City of Carnation has used and continues to look to a variety of grants and loans to fund needed capital improvements. The following is a non-exhaustive list of grant and loan programs used by the City:

Centennial Clean Water Fund (CCWF): The Department of Ecology (DOE) provides grants and loans for the design, acquisition, construction, and improvement of water pollution control facilities and related activities to meet state and federal requirements to protect water quality. Funded projects must address water quality problems related to public health and environmental degradation. The City was awarded both grants and loans to help pay for the new sewer system through the Centennial Clean Water Fund.

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Community Development Block Grant (CDBG): Funds are available annually statewide through the federal Department of Housing and Urban Development for public facilities, economic development, housing, and infrastructure projects which benefit low- and moderate-income households.

Community Economic Revitalization Board (CERB): The state Department of Commerce provides low interest loans and occasional grants to finance infrastructure projects such as sewer, water, access roads, bridges and other facilities which support specific private developments or expansions in manufacturing and businesses that support the trading of goods and services outside of the state.

Public Works Trust Fund (PWTF): The Washington State Public Works Board provides low interest loans to finance capital facility planning; emergency planning; and construction of bridges, roads, domestic water, sanitary sewer, and storm sewer.

Recreation and Conservation Office: (formerly the Interagency Committee for Outdoor Recreation or IAC) provides grant-in-aid funding for the acquisition, development, and renovation of outdoor recreation facilities. Park grants require a 50% local match.

Transportation Improvement Board (TIB) Complete Streets Award Program: The Complete Streets Award is a new funding opportunity for local governments. The legislature provided funding in 2015 and the first awards were given in 2017. The Complete Streets Award is different from other TIB funding sources, and is flexible money given to any city or county in Washington state which has an adopted complete streets ordinance and shows an ethic of planning and building streets that use context sensitive solutions to accommodate all users, including pedestrians, transit users, cyclists, and motorists. Carnation adopted a complete streets ordinance in 2016 which has been codified under Chapter 12.02 CMC. Awards will typically range between \$250,000 and \$500,000.

Transportation Improvement Board (TIB) Small City Programs (SCP): The Washington State TIB provides funding for projects that reconstruct or maintain transportation infrastructure. Projects are selected based on the condition of the pavement, roadway geometrics and safety. Cities and towns with a population under 5,000, such as Carnation, are eligible for TIB's Small City Programs.

The Small City Arterial Program (SCAP) provides funding for improving safety and roadway conditions for classified arterial roadways located within federally designated urban areas. ~~The City will pursue funding from the SCAP for West Morrison Street Reconstruction.~~

The Small City Sidewalk (SCSP) funds sidewalk projects.

The Small City Preservation Program (SCPP) funds pavement improvements to existing non-arterial streets. The City will apply for funding through this program for local street improvements.

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State and Tribal Assistance Grants (STAG). The State and Tribal Assistance Grant is a special appropriation in the Congressional Budget. Projects to be funded through this special appropriation may include water, wastewater and groundwater infrastructure.

Rural Town Centers and Corridors (RTCC) through PSRC: RTCC for projects in smaller towns and cities in rural areas of the Puget Sound region. This program was established by PSRC to recognize and support the needs of the region's rural areas.

Transportation Alternatives (TAP) allocated through PSRC: TAP provides funding for programs and projects defined as transportation alternatives, including:

- On- and off-road pedestrian and bicycle facilities
- Infrastructure projects for improving non-driver access to public transportation and improved mobility
- Community improvement activities
- Environmental remediation
- Recreational trail program projects
- Federally funded Safe Routes to School projects.

The PSRC TAP program has been identified as a significant potential funding source for construction of the CBD as well as other projects identified in the Tolt Corridor Action Plan.

U.S. Department of Transportation TIGER Grants: The United States Department of Transportation awards cycles of TIGER grants. The availability of funds through the TIGER program and TIGER Discretionary Grants varies with federal appropriations. The current grant program focus is on capital projects that generate economic development and improve access to reliable, safe and affordable transportation for disconnected communities both urban and rural, while emphasizing improved connection to employment, education, services and other opportunities, workforce development, or community revitalization.

This funding source could be pursued for the Larson Avenue Connector which has an economic development component.

USDA Rural Development: This federal agency provides assistance to rural areas through direct or guaranteed loans and grants. The Rural Development programs help rural communities build or improve community facilities.

Department of Health Water Drinking Water State Revolving Fund (DWSRF): Grants for upgrading existing water systems. The DWSRF is a federal/state partnership program whose purpose is to provide loans to public water systems for capital improvements aimed at increasing public health protection.

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WSDOT Safe Routes to School: This program provides technical assistance and resources to cities, counties, schools, school districts and state agencies for improvements that get more children walking and bicycling to school safely, reduce congestion around schools, and improve air quality.

WSDOT Surface Transportation Program (STP): WSDOT allocates STP funds to Metropolitan Planning Organizations (MPOs) and County Lead Agencies for prioritizing and selecting projects that align with their regional priorities involving all entities eligible to participate in a public process. Projects eligible for STP funding includes highway and bridge construction and repair; transit capital projects; bicycle, pedestrian, and recreational trails; construction of ferry boats and terminals.

CAPITAL FACILITY STRATEGIES

The Growth Management Act (GMA) requires that Transportation and Capital Facilities Elements of the Comprehensive Plan contain finance plans that match future transportation and other Capital Facilities needs against projected revenue capacities. To project realistic available revenues and expected costs for Capital Facilities, the City needs to consider all current programs and policies that influence decisions about the funding mechanisms for public facilities. The most relevant of these are described below. These policies along with the goals and policies articulated in the Comprehensive Plan form the basis for the development of various funding scenarios.

MECHANISMS TO PROVIDE CAPITAL FACILITIES

Increase Local Government Appropriations. The City will investigate the impact of increasing current revenues, including any related tax rates, and will actively seek new revenue sources. In addition, on an annual basis at the time of budget preparation and adoption, the City will review the implications of the current revenue system as a whole.

The City has developed and adopted its Six-Year Capital Improvement Program within this chapter as required by the GMA. However, many funding sources are difficult to forecast and it is understood that many of the projects require grants which may not be approved in the timeframe desired by the City. The actual year of the project would depend on need and available funding. Also, a number of long range projects have been identified for the remaining fiscal years of the Comprehensive Planning period.

Analysis of Debt Capacity. Generally, Washington state law permits a city to ensure a general obligation (GO) bonded debt equal to 1.5% of its property valuation without voter approval. By a 60% majority vote of its citizens, a city may assume an additional general obligation bonded debt of 1%, bringing the total for general purposes up to 2.5% of the value of taxable property. The value of taxable property is defined by law as being equal to 100% of the value of assessed valuation. For the purpose of supplying municipally-owned electric, water, or sewer service and with voter approval, a city may incur another general obligation bonded debt equal to 2.5% of the value of taxable property. With voter approval, cities may also incur an additional general obligation bonded debt equal to 2.5% of the value of taxable property for parks and open space.

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Thus, under state law, the maximum general obligation bonded debt which a city may incur cannot exceed 7.5% of the assessed property valuation.

Municipal revenue bonds, such as water utility bonds, are not subject to a limitation on the maximum amount of debt which can be incurred. These bonds have no effect on the city's tax revenues because they are repaid from revenues derived from the sale of service.

The "pay as you go" financing method is easy to administer and may be appropriate for certain capital projects, especially during periods of slow growth and when future tax receipts may be uncertain. However, the city will consider using debt financing if a significant level of growth occurs. This will shift some of the cost for Capital Facilities to future users, and the effects of inflation will allow the city to repay the debt in "cheaper" dollars.

User Charges and Connection Fees. User charges are designed to recoup the costs of public facilities or services by charging those who benefit from such services. As a tool for affecting the pace and pattern of development, user fees may be designed to vary for the quantity and location of the service provided. Thus, charges could be greater for providing services further distances from urban areas.

Mandatory Dedications or Fees in Lieu of. The City may require, as a condition of plat approval, that subdivision developers dedicate a certain portion of the land in the development to be used for public purposes, such as roads or parks. Dedication may be made to the local government or to a private group, such as a homeowners association. The provision of public services through subdivision dedications not only makes it more feasible to serve the subdivision, but may make it more feasible to provide public facilities and services to adjacent areas. This tool may be used to direct growth into certain areas.

Negotiated Agreement. This is an agreement whereby a developer studies the impact of development and proposes mitigation for the city's approval. These agreements rely on the expertise of the developer to assess the impacts and costs of development. Such agreements are enforceable by the jurisdiction. The negotiated agreement may require lower administrative and enforcement costs than impact fees.

Impact Fees. Impact fees may be used to affect the location and timing of infill development. Infill development usually occurs in areas with excess capacity of Capital Facilities. If the local government chooses not to recoup the costs of Capital Facilities in underutilized service areas, infill development may be encouraged by the absence of impact fees on development(s) proposed within such service areas. Impact fees may be particularly useful when a community is facing rapid growth and new residents desire a higher level of service than the community has traditionally provided.

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OBLIGATION TO PROVIDE CAPITAL FACILITIES

Coordination with Other Public Service Providers: Local goals and policies as described in the other Comprehensive Plan Elements are used to guide the location and timing of development. However, many local decisions are influenced by state agencies, special service districts, and utilities that provide public facilities within the City. The planned capacity of public facilities operated by other jurisdictions must be considered when making development decisions. Coordination with other entities is essential not only for the location and timing of public services, but also in the financing of such services. Such coordination would include financing for construction and operation of such facilities as fire stations, libraries, schools, state facilities, and river levees.

The City's plan for working with the natural gas, electric, and telecommunication providers is detailed in the Utilities Element. This Element includes policies for sharing information and a procedure for negotiating agreements for provision of new services in a timely manner.

Level of Service (LOS) Standards: Level of service standards are an indicator of the extent or quality of service provided by a facility related to the operational characteristics of the facility. They are a summary of existing or desired public service conditions. The process of establishing level of service standards requires the city to make quality of service decisions explicit. The types of public services for which the city has adopted level of service standards will be improved to accommodate the impacts of development and maintain existing service in a timely manner with new development.

Level of service standards will influence the timing and location of development, by clarifying which locations have excess capacity that may easily support new development, and by delaying new development until it is feasible to provide the needed public facilities. In addition, to avoid over extending public facilities, the provision of public services may be phased over time to ensure that new development and projected public revenues keep pace with public planning. The city has adopted level of service standards for a number of public services, as summarized in Policy CF3.3.

Potential Annexation Areas: The City's Potential Annexation Areas can adequately be served by the current City services when annexed. Prior to approval of new development within these areas, the City will review the Capital Facilities and other Elements of the Comprehensive Plan to ensure the resources will be available to provide the services necessary to support such new development at adopted or specified levels of service.

CAPITAL FACILITIES PROJECTS

Table CF-4 sets forth a six-year Capital Facilities project plan, based on the capital facility needs identified in this plan. Since the Comprehensive Planning process is dynamic and ongoing, the six-year plan will be periodically reviewed and updated. Given the uncertainties of funding sources, patterns of development, etc. it is sometimes impractical

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to identify in the plan a specific year in which a given capital facility project will be undertaken.

There are a number of financial assumptions upon which the Capital Facilities Element is based. The assumptions about current and future conditions include the following:

- The cost of running the City government will continue to increase due to inflation, state and federal mandates, and other factors, while state and federal shared revenues will continue to decrease.
- New revenue sources will be necessary to maintain and improve city services and facilities.
- In the General Fund, revenues are inadequate to meet operating and maintenance needs, let alone capital needs.

Significant capital investment is needed to maintain, repair, and rehabilitate the City's aging infrastructure and to accommodate future growth.

WATER UTILITY FACILITIES

The 2015 Comprehensive Water System Plan includes a Capital Improvements Plan for water improvements. Table CF-6 at the end of this Capital Facilities Element summarizes the Water System Capital Improvements Program at a high level. More detailed information about the specific projects can be found in the Water System Plan.

SEWER UTILITY FACILITIES

As the City's sewer collection and conveyance system was ~~very~~ recently built in 2008 and designed to accommodate a build-out population of 4,974 which exceeds the City's projected build-out population of 4,652, there is no Capital Improvements Program developed for it as this time. The City is in the process of creating a program for the sewer system.

TRANSPORTATION FACILITIES

The Transportation Element was updated in 2015, and amended in 2017, ~~and~~ 2018, and 2019. The 2015 Comprehensive Plan Update included new traffic modeling which reflects the proposed land use changes from a 2015 docket request to reclassify approximately 35 acres of light industrial land to high-density residential. The 2018 amendment included a new traffic level of service analysis which was based on traffic count data reported from 2007, 2009, 2012, 2016, and 2017. The twenty-year Transportation Improvement Plan (TIP) is presented in Table CF-4 below. The TIP includes projects that are needed to increase the capacity of the City's roadways in order to accommodate new growth. The City's transportation impact fee is calculated from the cost of implementing the capacity/LOS related projects listed in the Transportation Improvement Plan.

Table CF-4

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Transportation Improvement Plan 2015-2035

Project Name	Project Description	Cost in 2018 2019 Dollars	Capacity (LOS) Related
Tolt Ave (SR 203) Corridor Central Business District (CBD) Improvements Eugene to Rutherford	Construction of full street and hardscape improvements, including: street re-grading and paving; aerial-to-underground utility conversion; street and pedestrian lighting; storm drainage infrastructure; street trees and planting; and site furnishings. Widen to three lanes for left turns.	\$ 6,072,588 <u>6,833,380</u>	Yes
Tolt Ave (SR 203) Corridor South Greenway (east side) Tolt Bridge to Entwistle	New curbs, gutters, planting strip, and paved pathway; storm drainage improvements; partial aerial-to-underground utility conversion; illumination; crosswalk; parking and site furnishing. Widen to three lanes for left turns.	\$ 4,450,000 <u>4,758,300</u>	Yes
Tolt Ave (SR 203) Corridor South Entry (west side) Tolt MacDonald Park to Eugene	Enhance the pedestrian network and Widen widen roadway for on-street parking; new curb, gutter, planting strip, and sidewalk; storm drainage improvements; and street trees and site furnishings. Widen to three lanes for left turns.	\$ 1,250,000 <u>1,339,000</u>	Yes
Larson Avenue Connector 40 th to Entwistle	Construct <u>new 2 lane arterial roadway</u> with parking lanes, curb & gutter, sidewalk, new storm drainage, illumination, and signing/stripping. <u>A parking lane could be replaced with two bicycle lanes or a sharrow lane.</u>	\$ 1,798,500 <u>1,987,950</u>	Yes
Milwaukee Avenue Connector 50 th to 55 th	Construct <u>new 2 lane roadway</u> with shoulders and a parking lane ; curb, gutter, and sidewalk on one side ; new storm drainage infiltration swales ; illumination, and signing/stripping.	\$ 1,675,000 <u>1,835,500</u>	Yes
316th (Stewart) Avenue Connector Morrison to 55 th	Construct <u>new 2 lane roadway</u> with a parking lane; curb, gutter, and shoulders and sidewalk on one side ; new storm drainage infiltration swales ; illumination, and signing/stripping.	\$ 2,000,000 <u>2,115,000</u>	Yes
Tolt Ave at Morrison Intersection Improvements	Install traffic signal or circle and reconstruct pavement with curbs, gutters, and ADA compliant sidewalk ramps; illumination upgrades; drainage modifications; and signing/stripping.	\$ 550,000 <u>54,000</u>	Yes
Tolt Ave at Blanche Intersection Improvements	Construct a traffic circle and reconstruct pavement with curbs, gutters, and ADA compliant sidewalk ramps; illumination upgrades; drainage modifications; and signing/stripping.	\$1,884,969	Yes
Tolt Hill Road/SR 203 Intersection Improvements	This project is outside the UGA boundary. This is a partnership-project in which the City, if desired, could be a financial participant to a WSDOT and/or King County lead project. Requires WSDOT warrant justification for signalization of the intersection.	\$670,000	Yes, but outside city limits

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Project Name	Project Description	Cost in 2018 2019 Dollars	Capacity (LOS) Related
East Bird Street Reconstruction Commercial to Milwaukee	Reconstruct and widen 2 lane road with asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	\$522,500 52 8,580	No
East Reitze Street Reconstruction Milwaukee to Stossel	Reconstruct and widen 2 lane road with asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	\$632,500 63 9,860	No
West Rutherford Street Reconstruction Tolt to Stewart	Reconstruct and widen 2 lane road with asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	\$491,500 58 4,220	No
Tolt Ave (SR 203) Corridor North Greenway (east side) Rutherford to 55th	Improve east side of the existing travel lanes, including new curb, gutter, on-street parking; planting strip and paved pathway; storm drainage improvements; partial aerial-to-underground utility conversion; illumination; planting and site furnishings.	\$2,400,000 2 .652,000	No
Tolt Ave (SR 203) Corridor North Entry (west side) Rutherford to 55th	Improve west side with a new curb, gutter, planting strip, and sidewalk; storm drainage improvements; portions of street widening with a center landscaped median within the existing roadway; street trees and site furnishings.	\$1,985,000 2 .190,100	No
NE 40th St. "Arterial" Reconstruction Tolt to Larson	Reconstruct and widen approximately 500 LF of NE 40th Street to include 2-12' asphalt travel lanes with <u>a turn lane at the intersection with Tolt; a parking lane; a bike lane; curb & gutters, and sidewalk on both sides of the street</u> ; new storm drainage facilities; illumination upgrades; and signing/stripping.	\$825,200 84 7,600	No
Bird Street "Festival Street" Reconstruction Stossel to Stephens	Reconstruct approximately 575 LF of Bird Street between Stephens Ave and Stossel Ave as a "festival street" to include special paving and a "curb-less" facility accommodating two travel lanes, parking, and sidewalk/furnishing zone; underground stormwater facilities; planters, lighting, and other pedestrian amenities; and signing/stripping.	\$1,375,000 1 .508,000	No

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Project Name	Project Description	Cost in 2018 2019 Dollars	Capacity (LOS) Related
East Entwistle Pedestrian Improvements 329th to 332nd	Construct a 5-foot-wide asphalt path separated from the roadway by an improved stormwater ditch/infiltration swale, restore shoulder sidewalk, curb, gutter, and stormwater collection and infiltration facilities on the south side of the road, install ADA compliant curb ramps, and add lighting <u>three light standards</u> to better illuminate the roadway and pedestrian path. Low Impact Development (LID) features will be incorporated where technically feasible to reduce runoff and provide water quality treatment.	\$260,800 40 1,830	No
McKinley Avenue Sidewalk Eugene to Blanche	Construct approximately 400 lineal feet of cement concrete sidewalk, curb, gutter and stormwater collection and infiltration facilities along the west east side of the street. This project fills in sidewalk gaps along McKinley Avenue.	\$259,100 43 3,420	No
City Wayfinding Signage Improvements	Install wayfinding directional signs; en-route markers; information kiosks & gateways; and other signage to formalize and mark wayfinding for motorist and creating pedestrian-oriented walking routes within the City.	\$190,000	No
Tolt Ave (SR 203) Corridor Garden Tracts Walkway 55th to 60th	Construct approximately 1300 LF of a 6-foot asphalt path along the east side of Tolt Ave (SR 203) with 10-foot wide landscaping/planting in a buffer strip between the path and roadway shoulder.	\$135,000 37 7,000	No
Tolt River Bridge Painting and Walkway Improvements	This project consists of painting the bridge and installing accent lighting to enhance character in creating a “gateway” at the south end of the City. Additional improvements include modifying the existing channelization across the bridge structure to provide an additional sidewalk to the eastside of the bridge. <u>This is a partnership-project in which the City, if desired, could be a financial participant to a WSDOT lead project.</u>	\$1,540,000	No
	Local Street Improvements <u>(Overlays, Chip Seals)</u>	\$321,100 1,2 94,785	No
	TOTAL	\$31,374,657 35,255,494	

PARKS FACILITIES

The Parks and Recreation Capital Improvement Plan (CIP) in Table CF-5 below is developed from the priorities, goals and policies established in the Parks and Recreation Element. Parks improvements that are identified in the Parks and Recreation Capital Improvement Plan are expected to adequately serve the population increase.

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Table CF-5
Parks and Recreation Capital Improvement Plan

	2017 Cost Estimates	Phase 1 2015-2021	Phase 2 2022-2028	Phase 3 2029-2035
Hockert Park (Redevelopment completed in 2018)				
— Replace play structure	\$187,500	\$215,625		-
— Toddler structure	\$25,000	\$28,750		-
— New swing set	\$12,500	\$14,375		-
— New Climbing structure	\$7,500	\$8,625		-
— Merry go round	\$12,500		\$18,901	-
— Add a picnic table	\$3,750		\$5,670	-
	\$248,750			
Valley Memorial Park				
Re-finish tennis/basketball courts	\$25,000	\$28,750		
Picnic structure	\$80,000	\$92,000		
Looped trail	\$46,875	\$53,906		
Basketball hoop	\$3,750	\$4,313		
Toddler structure	\$25,000	\$28,750		
Reconfigure/pave parking lot 18 spaces	\$50,750		\$76,736	
Skatebowl improvements	\$50,000		\$75,602	
BMX viewing/picnic area	\$5,000	\$5,750		
	\$286,375			
Tolt Commons/Community Shelter				
Picnic tables	\$7,500	\$8,625		
Grills	\$2,500	\$2,875		
Land acquisition between Commons + adjacent to Shelter (acquired 2018)	\$70,313	\$80,859		
Land acquisition between Commons + Shelter	\$178,313		\$269,616	
	\$258,625			
	88,313			
River's Edge Park				
New Fence	\$15,625		\$23,626	
Other improvements desired by neighborhood	\$78,125		\$118,128	
	\$93,750			
Loutsis Park				
Landscape screen along western boundary	\$18,750	\$21,563		
Fitness course	\$50,000		\$75,602	
Pave parking lot	\$55,000		\$83,162	
	\$123,750			
West Side Park				
Site work	\$12,500		\$18,901	
Fence:	\$15,200		\$22,983	
Play structure(s)	\$62,500		\$94,503	
Picnic table	\$3,750			\$6,400
Grill	\$1,250			\$2,155
Open sided structure	\$20,000			\$35,000
	\$115,200			
Trails system				

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	2017 Cost Estimates	Phase 1 2015-2021	Phase 2 2022-2028	Phase 3 2029-2035
Pathway on Entwistle/NE 45th				
Sidewalk on SR203 west side s. of NE 40th	\$25,000	\$28,750		
Work with King County on Tolt Levee Trail				
Work with King County on Snoqualmie River Trail				
Signage	\$62,500	\$71,875		
Bicycle racks 10 in CBD/SC zones	\$15,000	\$17,250		
	\$102,500			
New Mini-parks				
In PAA west of SR203	\$187,500			\$222,000
Northeastern development	\$187,500			\$222,000
	\$375,000			
		Phase 1	Phase 2	Phase 3
Total in 2017 Dollars	\$1,603,950			
Totals	\$2,083,626	\$712,641	\$883,430	\$487,555

SIX YEAR CAPITAL IMPROVEMENTS PLAN

Table CF-6 contains a summary of the City’s capital improvements for water, streets and parks over the next six-year period. Grants and loans will be used to pay for many of these improvements, although the City must carefully plan its resources to have adequate local match funds. It should be noted that the year of implementation for some of the projects may not fall within the next six-year period, if grant funding is not available. Other projects on the list may not occur within the six-year period, as development that would create the necessity for particular capital projects may not occur within that time period. For example, some of the projects listed in the CIP will not be initiated until annexation of Potential Annexation Areas to the north.

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**TABLE CF-6
CAPITAL IMPROVEMENTS PROGRAM 2015-2035**

TRANSPORTATION SYSTEM IMPROVEMENT PROJECTS

Type	Project No.	STIP Priority	Project Name	Actual Prior Years	Estimated 20182019	20192020	20202021	20212022	20222023	20232024	20242025	Six-Year Period Total	Beyond 20242025
Tier I CAPACITY/LOS (CP)	CP1	1	Tolt Ave (SR203) Central Business District (CBD) Improvements (Eugene to Rutherford)	\$ 595,498 <u>946,373</u>	\$ 454,502 <u>1,036,427</u>	\$ 6,072,588 <u>4,850,580</u>						\$ 6,072,588 <u>850,580</u>	
	CP2	4	Larson Avenue Connector (NE 40th St. to Entwistle St.)					\$ 668,900 <u>392,200</u>	\$ 1,129,600	\$ — <u>184,125</u>	\$ — <u>1,411,625</u>	\$ 1,798,500 <u>987,950</u>	
	CP3		Tolt Ave (SR203) - South Greenway (East side: Tolt Ave bridge to Entwistle St.)										\$ 4,450,000 <u>758,300</u>
	CP4		Tolt Ave (SR 203) - South Entry (West side: Tolt McDonald Pk to Eugene)										\$ 1,250,000 <u>339,000</u>
	CP5		Milwaukee Avenue Connector (NE 50th St. to 55th St.)										\$ 1,675,000 <u>835,500</u>
	CP6		316th (Stewart) Avenue NE Connector (NE 55th St. to Morrison St.)										\$ 2,000,000 <u>115,000</u>

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Type	Project No.	STIP Priority	Project Name	Actual Prior Years	Estimated 20182019	20192020	20202021	20212022	20222023	20232024	20242025	Six-Year Period Total	Beyond 20242025
	CP7		Tolt Ave (SR203) and Morrison Street Intersection Improvements										\$ 550,000 <u>644,000</u>
	CP8		Tolt Ave (SR203) and Blanche Street Intersection Improvements										\$ 1,884,969
	SUBTOTAL CAPACITY PROJECTS				\$595,498 <u>946,373</u>	\$454,502 <u>1,036,427</u>	\$6,072,588 <u>4,850,580</u>		\$ 668,900 <u>392,200</u>	\$1,129,600	\$ 184,125	\$1,411,625 <u>838,530</u>	\$7,871,088 <u>6,838,530</u>
Tier II STREET IMPROVEMENT (SI)	SI1	5	NE 40th Street Arterial Reconstruction (Tolt Ave to Larson Ave)					\$ 190,400	\$ 634,800	\$ 97,800	\$ 749,800	\$ 825,200 <u>847,600</u>	
	SI2	11 <u>7</u>	East Bird Street Reconstruction (Commercial to Milwaukee - 950 LF)				\$ 60,990	\$ 467,590	\$ 75,000	\$ 447,500		\$ 522,500 <u>528,580</u>	
	SI4	12 <u>13</u>	East Reitze Street Reconstruction (Milwaukee to Stossel - 1,150 LF)						\$ 73,830	\$ 95,000 <u>566,030</u>	\$ 537,500	\$ 632,500 <u>639,860</u>	
	SI4	13 <u>11</u>	West Rutherford Street Reconstruction (Tolt to Stewart - 1,050 LF)					\$ 67,410	\$ 516,810		\$ 86,000	\$ 86,000 <u>584,220</u>	\$ 491,500
	SI5		Tolt Ave (SR 203) Corridor - North Greenway (East side:										\$ 2,400,000 <u>2,652,000</u>

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Type	Project No.	STIP Priority	Project Name	Actual Prior Years	Estimated 20182019	20192020	20202021	20212022	20222023	20232024	20242025	Six-Year Period Total	Beyond 20242025
			Rutherford to NE 55th)										
	SI6		Tolt Ave (SR 203) Corridor - North Entry (West side: Rutherford to NE 55th)										\$ 1,985,000 <u>190,100</u>
	SI7	<u>15</u>	Bird Street "Festival Street" Reconstruction (Stossel to Stephens)							\$ <u>174,000</u>	\$ <u>1,334,000</u>	\$ <u>1,508,000</u>	\$ 1,375,000
	SUBTOTAL STREET IMPROVEMENT PROJECTS						\$ <u>60,990</u>	\$ 190,400 <u>53,000</u>	\$ 709,800 <u>59,640</u>	\$ 542,500 <u>83,780</u>	\$ 623,500 <u>2,083,800</u>	\$ 2,066,200 <u>108,260</u>	\$ 6,251,500 <u>4,842,100</u>
Tier III STREET REPAIR (SR)	SR1	6	NE 40th Street Overlay (Larson Ave to Park Entry - 1,150 LF)					\$ 20,000	\$ 70,000	\$ <u>10,500</u>	\$ <u>80,500</u>	\$ 90 <u>91,000</u>	
	SR2	7 <u>8</u>	West Bird Street Chip Seal (Tolt Ave to Stephens Ave - 280 LF)			\$ <u>1,605</u>		\$ 6,000 <u>12,305</u>	\$ 10,400			\$ 16,400 <u>13,910</u>	
	SR3	8 <u>9</u>	West Commercial Street Chip Seal Overlay (Tolt Ave to Stephens - 400 LF)			\$ <u>7,050</u>		\$ 6,000 <u>51,700</u>	\$ 12,000			\$ 18,000 <u>58,750</u>	
	SR4	9 <u>10</u>	Myrtle Street Chip Seal Overlay (Tolt Ave to King/Stossel St - 820 LF)			\$ <u>14,475</u>		\$ 10,000 <u>106,150</u>	\$ 24,600			\$ 34,600 <u>120,625</u>	

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Type	Project No.	STIP Priority	Project Name	Actual Prior Years	Estimated 20182019	20192020	20202021	20212022	20222023	20232024	20242025	Six-Year Period Total	Beyond 20242025
	SR5	10 12	Stossel Avenue Overlay (Entwistle to Rutherford - 1,180 LF)					\$ 20,000 16,050	\$ 70,000 123,050			\$ 90,000 139,100	
	SR6	14	Regal Glen Cul-de-Sacs Overlay (1,531 LF)						\$ 31,400	\$ 172,700		\$ 204,100	
	SR7	16	East Entwistle Street Overlay (Spilman to 329 th - 2,325 LF)							\$ 37,600	\$ 376,000	\$ 413,600	
	SR8	17	Stephens Avenue Overlay (W Entwistle to Morrison - 1,825 LF)								\$ 21,500	\$ 21,500	\$ 232,200
	SUBTOTAL STREET PAVEMENT PRESERVATION PROJECTS							\$ 23,130	\$ 62,000 186,205	\$ 187,000 154,450	\$ 220,800	\$ 478,000	\$ 249,000 1,062,585
Tier IV MAINTENANCE (SM)	WA-03837		Preventative Street Repair & Maintenance (crack sealing, pothole filling)	\$ 10,800	\$ 10,206 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000		
	SUBTOTAL PREVENTATIVE STREET REPAIR & MAINTENANCE PROJECTS				\$ 10,800	\$ 10,206 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000		
NON-MOTO PROJECTS (NM)	NM1	2	East Entwistle Pedestrian Improvements (329th to 334th Ave)				\$ 401,830	\$ 260,800				\$ 260,800 401,830	
	NM2	3	McKinley Avenue Sidewalk (Eugene Street				\$ 433,420	\$ 259,100				\$ 259,100 433,420	

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Type	Project No.	STIP Priority	Project Name	Actual Prior Years	Estimated 20182019	20192020	20202021	20212022	20222023	20232024	20242025	Six-Year Period Total	Beyond 20242025
			to Blanche Street)										
	*		City Wayfinding Signage Improvements										\$ 190,000
	SUBTOTAL NON-MOTORIZED IMPROVEMENT PROJECTS						\$ 835,250	\$ 519,900				\$ 519,900 835,250	\$ 190,000
JOINT-AGENCY PROJECTS (JA)	JA1		Tolt Ave. (SR 203) - Garden Tracts Walkway (55th to 60th)										\$ 135,000 377,000
	JA2		Tolt Hill Road/SR 203 Intersection Improvements										\$ 670,000
	JA3		Tolt River Bridge Painting and Walkway Improvements										\$ 1,540,000
	SUBTOTAL JOINT-AGENCY PROJECTS												\$ 2,345,587,000
TOTAL ALL PROJECTS				\$595,498	\$464,708	\$6,084,588	\$ -12,000	\$1,453,200	\$2,038,400	\$554,500	\$-635,500	\$10,778,188	\$20,596,469
				<u>957,173</u>	<u>048,427</u>	<u>4,862,580</u>	<u>931,370</u>	<u>1,125,405</u>	<u>757,090</u>	<u>254,755</u>	<u>3,985,425</u>	<u>12,844,625</u>	<u>20,428,069</u>

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PARKS & RECREATION IMPROVEMENT PROJECTS

	Priority	Project Name	Actual Prior Years	Estimated 2017-2019	2018-2020	2019-2021	2020-2022	2021-2023	2022-2024	2023-2025	Six-Year Period Total	Beyond 2023-2025
PARKS IMPROVEMENT PROJECTS	1	Fred Hockert Park Redevelopment	\$308,092	\$32,000	\$218,000						\$218,000	\$41,946
		Valley Memorial Park Improvements	\$4,506,141	\$9,681								\$351,621
	2	Tolt Commons	\$4,351,760	\$80,000		\$11,500					\$11,500	\$266,125
		River's Edge Park										\$141,754
		Nick Loutsis Park					\$21,563				\$21,563	\$158,765
		West Side Park										\$179,941
		New Mini-Park in PAA west of SR 203										\$222,000
		New Mini-Park in Northeastern Development										\$222,000
TRAILS SYSTEM PROJECTS		East Entwistle Pedestrian Path	(Project included in TIP)									
		Sidewalk on west side SR 203 south of 40th					\$28,750				\$28,750	
		Signage					\$71,875				\$71,875	
		Bicycle Racks in CBD/SC Zones					\$17,250				\$17,250	
TOTAL PARKS & RECREATION PROJECTS			<u>\$8,857,398</u>	<u>\$121,681</u>	<u>\$218,000</u>		\$11,500	\$139,438			<u>\$368,938</u>	<u>\$1,584,151</u>
			<u>8,318</u>								<u>150,938</u>	<u>1,542,206</u>

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WATER SYSTEM IMPROVEMENT PROJECTS (see the 2015 Comprehensive Water System Plan for detailed project information)

		Priority	Project Name	Actual Prior Years	Estimated 2017 2019	2018 2020	2019 2021	2020 2022	2021 2023	2022 2024	2023 2025	Six-Year Period Total	Beyond 2023 2025
WATER SYSTEM PROJECTS			Spring Source Related Improvements		\$20,000								\$5,310,000 5,290,000
			Well Source Related Improvements	\$21,900	\$100,000	\$182,000				\$30,000	\$182,000 30,000		\$30,000
			Miscellaneous CIP Improvements	\$305,347 168,704	\$40,000 39,500	\$140,000	\$4080,000	\$14070,00 0	\$8040,000	\$7040,000	\$40215,0 00	\$410585,00 0	\$1,790,000 2,031,796
			Water Main Improvements	\$1,538,146	\$812,500 450,000	\$65070,00 0	\$532,500	\$70,000 402,500		\$402,500	\$437,500	\$1,655,000 910,000	\$5,328,000 5,807,354
TOTAL WATER SYSTEM PROJECTS				\$305,347 728,750	\$852,609,5 00	\$872,210,0 00	\$572,500 80,000	\$210,000 472,500	\$8040,000	\$472,500 40,000	\$40,000 682,500	\$2,247,000 1,525,000	\$12,458,000 13,129,150

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V. MONITORING AND EVALUATION

The Capital Facilities Element is the mechanism by which the City can stage the timing, location, projected cost, and revenue sources for the capital improvements identified for implementation. The planned expenditures and funding sources for each project from FY 2015 through FY 2021 are shown by priority. Top priority is generally given to projects which correct existing deficiencies, followed by those required for facility replacement, and those needed for future growth.

Monitoring and evaluation are essential in ensuring the effectiveness of the Capital Facilities Element. This Element will be reviewed and amended periodically to verify that fiscal resources are available to provide public facilities needed to support adopted level of service (LOS) standards and measurable objectives.

The review will include an examination of the following considerations in order to determine their continued appropriateness:

- Any corrections, updates, and modification concerning costs; revenue sources; acceptance of any dedications which are consistent with the element; or projected dates of construction of any proposed improvements;
- The Capital Facilities Element's continued consistency with the other elements and its support of the Land Use Element;
- The priority assignment of existing public facility deficiencies, especially those related to health and safety;
- The City's progress in addressing existing deficiencies;
- The criteria used to evaluate capital improvement projects in order to ensure that projects are being ranked in their appropriate order of priority;
- The City's effectiveness in maintaining the adopted LOS standards and achieving measurable objectives;
- The use and effectiveness of impact fees or mandatory dedications of property which may be required of a new development in order to provide new developments' *pro rata* share of Capital Facilities costs required to meet adopted LOS standards.
- The impacts of special districts or other regional service providers on the City's ability to maintain its adopted LOS standards;
- Efforts made to secure grants or private funds, whenever available, to finance the provision of capital improvements;
- The criteria used to evaluate proposed plan amendments.

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VI. GOALS AND POLICIES

GOAL CF 1

To assure that capital improvements necessary to carry out the Comprehensive Plan are provided when they are needed.

Policy CF1.1 The City shall coordinate its land use and public works planning activities with an ongoing program of long-range financial planning, in order to conserve fiscal resources available to implement the Capital Facilities plan.

Policy CF1.2 Inter-local service agreements with water utilities serving rural and resource lands should specify limitations on the use of the surplus water consistent with Countywide planning policies. Surplus water may be sold to resolve immediate health or safety problems threatening existing residents but must not be in perpetuity unless the City can do so without risks to its current and future residents.

Policy CF1.3 Continue to upgrade the City water system to improve water use efficiency.

Policy CF1.4 Ensure the use of the sanitary sewer system in a manner consistent with the City's adopted Sewer Plan.

Policy CF1.5 The City adopts the School Impact Mitigation Fee Schedule from the Riverview School District Capital Facilities Plan to enable the district to collect impact mitigation fees in accordance with the Inter-local Agreement.

Policy CF1.6 The City will develop and adopt appropriate impact fees or related funding mechanisms to assess the developer's fair share contributions to other public facility improvements (such as parks and streets) required to serve new development.

Policy CF1.7 The City shall coordinate or provide needed Capital Facilities and utilities based on adopted levels-of-service and forecasted growth in accordance with the Land Use Element of this plan.

GOAL CF2

To ensure that the continued development and implementation of the Capital Facilities Plan (CFP) reflects the policy priorities of the City Council.

Policy CF2.1 High priority of funding shall be accorded projects which are consistent with the adopted goals and policies of the City Council.

Policy CF2.2 Projects shall be funded only when incorporated into the City budget, as adopted by the City Council.

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Policy CF2.3 Capital projects that are not included in the six-year Capital Facilities Plan and which are potentially inconsistent with the Comprehensive Plan shall be evaluated through the Comprehensive Planning process prior to their inclusion into the City's annual budget, unless otherwise agreed upon by the City Council.

Policy CF2.4 The six-year Capital Facilities Plan should be updated annually prior to the City budget process.

Policy CF2.5 Any city capital activity with a cost of over \$100,000 may require a financial impact analysis that contains sections dealing with sources and uses of funds, impacts on the overall city budget and on public debt, impact on taxes, impacts on users and non-users (e.g. regarding user fees, if any) and benefit-cost computations, if applicable.

Policy CF2.6 All City departments shall review changes to the CFP and shall participate in the annual review as deemed necessary by City Council and the City Manager.

Policy CF2.7 Large-scale capital improvement projects will be included in the Six-Year Schedule of Improvements of this element. Smaller capital improvements will be reviewed for inclusion in the annual budget.

Policy CF2.8 Proposed capital improvement projects will be evaluated using all the following criteria: a. whether the project is needed to correct existing deficiencies, replace needed facilities, or to provide facilities needed for future growth; b. elimination of public hazards; c. elimination of capacity deficits; d. financial feasibility; e. site needs based on projected growth patterns; f. new development and redevelopment; g. plans of state agencies; h. local budget impact; and i. location and effect upon natural and cultural resources.

GOAL CF 3

To actively influence the future character of the City by managing land use change and by developing City facilities and services in a manner that directs and controls land use patterns and intensities.

Policy CF3.1 Development shall be allowed only when and where all public facilities are adequate and only when and where such development can be adequately served by essential public services without reducing levels of service elsewhere.

Policy CF3.2 If adequate facilities are currently unavailable and public funds are not committed to provide such facilities, developers must provide such facilities at their own expense in order to develop.

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Policy CF3.3 The following level of service guidelines should be used to evaluate whether existing public facilities are adequate to accommodate the demands of new development:

- A. Water - Require that new development have adequate water supply for consumption and fire flow. Maintain the current level of service of 225 gallons per day per equivalent residential unit.
- B. Wastewater - Residential flow planning value of 65 gallons per capita per day based on using a vacuum sewer system.
- C. Solid Waste - Collection service for garbage, recyclable materials, and yard waste shall be available to all properties within the City.
- D. Police Protection - Coordinate development review and police protection facility planning to ensure that: a) adequate police protection can be provided; and b) project designs discourage criminal activity.
- E. Fire Protection - Coordinate development review and fire protection facility planning to ensure that: a) adequate fire protection and emergency medical service can be provided; and b) project designs minimize the potential for fire hazard.
- F. Public Schools - Coordinate development review and school facility planning to ensure that adequate school facilities will be available to accommodate anticipated increases in students. Adequate school facilities are considered to be permanent school buildings.
- G. Parks and Recreation - Maintain level of service standards as identified in the Parks and Recreation Element to provide adequate parks and recreation facilities to serve City residents.
- H. Transportation - Maintain the following level of service standards as identified in the Transportation Element:
 - State Highway Intersections: Level of Service "D"
 - Arterials: Level of Service "D"
 - Transit: As established by the Transit service provider
 - Collectors and Local: Design Standards
- I. Stormwater Management Systems – Stormwater shall be infiltrated on site. Development will be regulated to ensure that its post development run-off does not exceed the predeveloped discharge volume and/or rate. Stormwater management for new development shall comply with all relevant state and federal regulations,

Policy CF3.4 A development shall not be approved if it causes the level of service on a capital facility to decline below the standards set forth in Policy CF3.3, unless capital improvements or a strategy to accommodate the impacts are

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made concurrent with the development for the purposes of this policy. "Concurrent with the development" shall mean that improvements or strategy are in place at the time of the development or that a financial commitment is in place to complete the improvements or strategies within six years, except in the case of public schools, whereby a financial commitment to complete the improvements within three years is required.

Policy CF3.6 Provide copies of development proposals to the various providers of services, such as the school district, fire district and utility providers, for comments on the available capacity to accommodate development and any needed system improvements.

Policy CF3.7 The community impacts of new or expanded Capital Facilities should be reviewed. They should be compatible with surrounding land uses; to the extent reasonably possible for a growing rural city, such facilities should have minimum impacts on natural and historic resources or built environment, and follow strict adherence to environmental regulations.

Policy CF3.8 City plans and Development Regulations should identify and allow for the siting of essential public facilities. Cooperatively work with surrounding municipalities and King County during the siting and development of facilities of regional significance.

GOAL CF4

To finance the city's needed Capital Facilities in as economic, efficient, and equitable a manner as possible.

Policy CF4.1 Provide needed public facilities that are within the ability of the City to fund or within the City's authority to require others to provide.

Policy CF4.2 Finance the six-year Capital Improvement Program within the City's financial capacity to achieve a balance between available revenue and needed public facilities. If the projected funding is inadequate to finance needed public facilities based on forecasted growth, the City could do one or more of the following:

- Change the land use element;
- Increase the amount of revenue from existing sources;
- Adopt new sources of revenue; and/or
- Adopt a lower level of service for public facilities.

Policy CF4.3 The ongoing operation and maintenance costs of a public facility should be financially feasible prior to constructing the facility.

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Policy CF4.4 Base the financing plan for public facilities on realistic estimates of current local revenues and external revenues that are reasonably anticipated to be received by the City.

Policy CF4.5 The City will support and encourage the joint development and use of cultural and community facilities with other governmental or community organizations in areas of mutual concern and benefit.



Transportation Element
Background Information &

2020

Transportation Improvement Plan



and
Six-Year Transportation Improvement Program (STIP) 2020-2025

adopted by Resolution No. 435, 05/21/2019

City of Carnation

2020 Transportation Improvement Plan

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Introduction

a. Purpose

The purpose of the Transportation Element is to establish goals and policies that will guide the development of surface transportation in the City of Carnation in a manner consistent with the overall goals of the Comprehensive Plan. Based upon existing and projected land use and travel patterns, the Transportation Element addresses roadway classifications, levels of service, transit and non-motorized modes, future travel projections, transportation system improvements, financing strategies, and concurrency management. It establishes the technical basis for transportation system development, and for existing and future transportation improvement programs and facilities guided by the Transportation Policies of the Comprehensive Plan.

The Transportation Element was updated in 2015 and amended in subsequent years. The 2015 Comprehensive Plan Update included new traffic modeling which reflected the proposed land use changes from a 2015 docket request to reclassify approximately 35 acres of light industrial land to mixed use. The Transportation modeling was based on a 2035 projection of traffic, based on build-out assumptions for land use within the city of Carnation. The transportation modeling was funded by a grant from the Department of Commerce and reflects land use development that was underway as well as projected changes in land use.

Transportation Plan Goals and Challenges

Fortunately, Carnation has few traffic congestion problems when compared to other King County cities. There are, however, several unique issues and challenges that must be considered to achieve a viable transportation system that is consistent with the other system needs. Some of these issues include the following:

1. Carnation is bisected by State Route 203 which carries a substantial amount of through traffic. SR 203 is also Carnation's main street, passing through the downtown commercial area. It is a challenge to develop a more pedestrian oriented downtown while at the same time providing for efficient traffic flows through town. Large volumes of traffic passing through town on SR 203 decrease local traffic mobility within town and are a hazard for pedestrians and bicyclists.

2. A City of Carnation goal is to create an attractive, accessible and safe pedestrian environment throughout the downtown commercial and residential areas by promoting non-motorized access. Downtown improvements such as clearly defined and safe crosswalks, bicycle racks as well as signage, lighting and street furniture are necessary to achieve this goal. Long term planning for the downtown also needs to incorporate sufficient parking to support economic development. In the residential areas, several of Carnation’s older streets are without sidewalks or pathways. Additional pathways as well as amenities for pedestrians and bicycles are needed to achieve the goal of providing substantial opportunity for non-motorized travel throughout the City.
3. There is currently limited public transit service linking Carnation to the rest of the Snoqualmie Valley. Local shuttle service to other Valley cities that are connected by regional transit to population and employment centers to the south and west is the only access to transit service that links Carnation residents to the regional transit system.

b. Planning Context

The Transportation Element is required to be consistent with a number of other documents:

State of Washington Growth Management Act (RCW 36.70A)

Transportation planning at the State, County and local levels is mandated by the State of Washington Growth Management Act (GMA) [RCW 36.70A]. The GMA contains many requirements for the preparation of a Comprehensive Plan Transportation Element. In addition to requiring consistency with the land use element, specific GMA requirements for a Transportation Element include [RCW 36.70A.070(6)]:

- Inventory of facilities by mode of transport.
- Level-of-service standards to aid in determining the existing and future operating conditions of the facilities.
- Proposed actions to bring these deficient facilities into compliance with adopted level-of-service standards.
- Traffic forecasts, based upon land use.
- Identification of transportation infrastructure needs to meet current and future demands.
- Funding analysis for needed improvements, as well as possible additional funding sources.
- Identification of intergovernmental coordination efforts.
- Identification of transportation demand management strategies as available.
- Identification of improvements for pedestrian and bicycle facilities and corridors.

In addition to these elements, GMA mandates that development cannot occur unless infrastructure exists, infrastructure improvements or strategies are concurrent with

development, or a financial commitment is in place to complete the improvements or strategies within six years.

Washington Administrative Code (WAC 365-196-430)

WAC 365-196-430 (2) provides the following recommendations for how the Transportation Element can meet the requirements GMA:

- Consistency with the Land Use Element, regional and state planning.
- Goals and policies to guide the development and implementation of the transportation element which are consistent with statewide and regional goals and policies.
- Inventory and analysis of transportation facilities defining existing capital facilities and travel levels as a basis for future planning.
- Level of service standards to monitor the performance of the system, to evaluate improvement strategies, and to facilitate coordination between city, county and state transportation investment programs.
- Traffic forecasts for at least ten years based on the adopted land use plan to provide information on the location, timing, and capacity needs of future growth.
- Identification of transportation system needs.
- Estimates of traffic impacts to state-owned transportation facilities resulting from land use assumptions.
- Transportation demand management strategies designed to encourage the use of alternatives to single occupancy travel and to reduce congestion, especially during peak times.
- Pedestrian and bicycle component that includes collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles.
- Multiyear financing plan based on the needs identified in the comprehensive plan that serves as the basis for the six-year street program, and reassessment if probable funding falls short of meeting identified needs.
- Implementation measures designed to proactively implement the Transportation Element.

Six-Year Transportation Improvement Program (RCW 35.77.010)

Each City is required prepare and adopt a transportation program for the ensuing six calendar years. A copy of the adopted program must be filed with Secretary of Transportation on an annual basis. This program represents a forecast of the transportation related improvements to meet locally defined levels of service and policies as identified in the Transportation Element. The Six-Year Transportation Improvement Program for the City of Carnation is set forth in Section 6 of this Plan.

Statewide Multimodal Transportation Plan (RCW 47.06)

The Washington Transportation Plan (WTP) 2030 presents the State of Washington's strategy for implementation programs and budget development over a 20-year planning horizon. The WTP contains an overview of the current conditions of the statewide transportation system, as well as an assessment of the State's future transportation investment needs. The WTP policy framework sets the course for meeting those future needs. The WTP is based on the following six transportation policy goals:

- **Economic Vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy.
- **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services;
- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system;
- **Mobility:** To improve the predictable movement of goods and people throughout Washington state;
- **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and
- **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.

The WTP addresses the essential and interconnected roles of the Regional Planning Organizations and their local jurisdictions, and the important transportation issues of tribal governments in Washington State. It highlights the role of the Washington State Department of Transportation (WSDOT) to maintain, preserve and improve the transportation system while meeting the other societal goals defined above.

Washington State Ten-Year Investment Program (RCW 47.05.030)

The legislature created a statewide transportation development plan to identify present status and set goals for the future; to facilitate the supply of federal and state aid to those areas which will most benefit the state as a whole; to provide for public involvement in the transportation planning and development process; and to coordinate and implement national transportation policy with the state transportation planning program. The Office of Financial Management proposes to the legislature a comprehensive ten-year investment program for the preservation and improvement programs consistent with the transportation system policy goals. The investments preserve the existing state highway system and restore existing safety features, giving consideration to lowest life cycle costing.

Puget Sound Regional Council – Consistency with VISION 2040

The Puget Sound Regional Council (PSRC) is tasked with developing Multi-Countywide Planning Policies (MPPs) for the four counties of King, Snohomish, Pierce and Kitsap, plus all the cities within those counties. The PSRC has developed its MPPs in VISION 2040. PSRC reviews local plans for consistency with VISION 2040, and must certify the Transportation Element in order for the City to be eligible for transportation funding.

Carnation’s Comprehensive Plan is consistent with the goals and policies of VISION 2040 in advancing cleaner and more sustainable mobility by promoting non-motorized trips through its compact urban form. The Transportation Element encourages the development of a transportation system that provides adequate levels of service while also minimizing environmental impacts of roadway development. The City’s goals for safe and attractive pedestrian and bicycle linkages to the designated City center (the downtown area along SR 203) are also consistent with VISION 2040. While transit service is provided by regional entities; citizens, City staff and elected officials have worked to promote transit service to serve Carnation residents and others within the Snoqualmie Valley. In general, Carnation seeks to coordinate its planning efforts with neighboring jurisdictions, such as King County, as well as with the other Valley cities, the Snoqualmie Tribe, and any other service providers.

King County Planning Policies 2012

- Supporting Growth. An effective transportation system is critical to achieving the Regional Growth Strategy and ensuring that centers are functional and appealing to the residents and businesses they are designed to attract.
Goal Statement: Local and regional development of the transportation system is consistent with and furthers realization of the Regional Growth Strategy.
- Mobility. Mobility is necessary to sustain personal quality of life and the regional economy. For individuals, mobility requires an effective transportation system that provides safe, reliable, and affordable travel options for people of all ages, incomes and abilities. The movement of goods is also of vital importance to the local and regional economy.
Goal Statement: A well-integrated, multi-modal transportation system transports people and goods effectively and efficiently to destinations within the region and beyond.
- System Operations. The design, management and operation of the transportation system are major factors that influence the region’s growth and mobility.
Goal Statement: The regional transportation system is well-designed and managed to protect public investments, promote public health and safety, and achieve optimum efficiency.

2. Inventory and Existing Conditions

This section of the Transportation Element presents an inventory and description of the existing transportation system, and begins to analyze current and projected needs based on estimates of projected land use and growth in Carnation.

a. Identification of State Highway

Tolt Avenue, which is also designated as SR 203, runs north-south through the city limits and is the primary access route through the city of Carnation. SR 203 is designated as a regionally significant state highway, which is the classification for all state transportation facilities that are not designated as Highways of Statewide Significance (HSS). It connects Carnation to US 2 to the north and SR 202 the south. WSDOT currently classifies Tolt Avenue as an “Urban Minor Arterial”. Tolt Avenue has the functional characteristics of a “Class 5” highway, as defined in the WSDOT Design Manual. SR 203 is classified as a T-3 Freight Corridor (300,000 to 4 million tons per year) in the Washington State Freight and Goods Transportation System (FGTS).

A Climate Impacts Vulnerability Assessment was performed on state highways in 2011. SR 203 was assessed at moderate vulnerability along its entire length. Vulnerability is based primarily on two factors:

- **Impacts.** Most of the impacts along SR 203 are expected to result in either reduced capacity or temporary road closures due to heavy rain events, as well as the high winds already coming off the Cascades which are expected to increase with more extreme weather events.
- **Asset criticality.** A moderate rating in this category means SR 203 is likely to have temporary (hours or days) operational failure, with repair or re-opening within 60 days.

Outside of city limits, SR 203 is called the Carnation-Duvall Road to the north and the Carnation-Fall City Road to the south. It connects Carnation to the cities of Duvall and Monroe to the north, and to the communities of Fall City, Snoqualmie and North Bend to the south. This two-lane rural highway has a speed limit that varies by location, and is currently posted at 40 mph north of 55th Street, 30 mph from 55th south through the city, then 55 mph south of NE 32nd Street.

b. Influence of Regional Traffic

Regional traffic influences traffic volumes within the City, especially along SR 203. In 2004 the Puget Sound Regional Council (PSRC) completed a conceptual corridor plan for SR 203 between Fall City and Monroe. This plan recognized the SR 203 corridor's importance to the region's long term economic growth and transportation strategies. Elements of this plan included improvements to non-motorized systems (pedestrians and bicycles), town entries and transition zones, in-town circulation, and streetscape elements. Within the city of Carnation, recommended actions focused on pedestrian and safety improvements.

Since the completion of the PSRC report, construction projects completed include a traffic signal at Entwistle Street, sidewalk connections and pedestrian activated street crossing beacons at Morrison St for Carnation Elementary School, and curb bulbs along Tolt Avenue. Additional improvements will be built as part of the Tolt Avenue (SR 203) Central Business District (CBD) Improvements Project. Improvements on SR 203 will highly impact traffic conditions in Carnation and in turn, conditions on the highway will be impacted by transportation conditions and improvements in Carnation.

c. Natural Traffic Barriers

Rivers and steep hills create a few natural barriers to efficient traffic access to and circulation within Carnation. Motorized traffic originating in the eastern portion of the City, wanting to move in a southerly direction must proceed west to SR 203, then proceed south on SR 203 across the Tolt River bridge. Traffic desiring to move in a westerly direction must proceed either north to NE 60th Street or Carnation Farm road, or proceed south to the Tolt River Bridge, and then turn west on NE Tolt Hill Road. East Entwistle Street provides the only eastern access to unincorporated King County along Tolt River Road /NE 45th Street. SR 203 forms an impediment to non-motorized traffic.

d. General Description of Existing Transportation System

State Route (SR) 203, or Tolt Avenue, is the City's principle arterial and connection to the rest of the Snoqualmie Valley. As SR 203 passes through Carnation it is known as Tolt Avenue. Tolt Avenue is Carnation's main business street in the downtown area, with a speed limit of 30 mph. Roads surrounding the downtown business district are east-west oriented streets which are typically paved, have gravel shoulders or no shoulder, and are without road markings. Stop signs regulate traffic flow at intersections. A traffic signal is located at the intersection of SR 203 and Entwistle; this is Carnation's only signalized intersection.

The original plat of the city included 60-foot rights-of-way as well as 16-foot alleys. Newer roads typically have 50-foot rights-of-way. On the local access streets pavement width varies from 12

feet to 40 feet, with 18 feet being the average. Few residential streets in the older portions of the City have sidewalks. A few of the alleys which receive heavy use are paved.

e. Roadway Inventory and Classifications

Public streets are classified according to their function in terms of mobility and land access. Carnation's functional street classifications are defined below:

State Route 203 / Tolt Avenue:

Tolt Avenue acts as both the city's main street and also as a state highway that links Carnation to the rest of the Snoqualmie Valley. Tolt Avenue consists of a 70-foot right-of-way starting from the northern city limits at Bagwell Street to Entwistle Street. From Entwistle Street southward, the right of way is 60 feet. There are two travel lanes, shoulder, and sidewalk on both sides for most of Tolt Avenue from Bagwell Street on the north, to approximately Tolt Middle School on the south. Bulb-outs and ADA ramps are located at key intersections in the downtown. Due to the large volume of local and through traffic carried through the center of town, residents are concerned with pedestrian and bicycle safety crossing SR 203, as well as local automobile mobility. The Washington State Department of Transportation (WSDOT) is responsible for maintenance of the roadway from the curb inwards; the City is responsible for the area between curbing and the property lines.

Arterial:

Arterials collect and distribute traffic between Tolt Avenue and collectors or local access streets, or directly to destinations such as schools, shopping, churches, as well as traffic from neighborhood to neighborhood within the community. The facility stresses mobility and circulation needs over providing specific access to properties. Arterials include:

Entwistle Street. Entwistle Street provides east-west access from Larson Avenue to the easterly extent of the City. Entwistle has a 60 foot right-or-way, which carries 2 lanes of traffic and curb, gutter and sidewalk from Larson Avenue to 329th Avenue NE in Swiftwater on the south side, and to opposite 326th Street on the north side.

Larson Avenue. Larson Avenue is designed to be a north-south arterial that provides access to the commercial and industrial areas west of SR 203. Currently only the northern 380 feet of Larson Avenue has been improved to serve the wastewater treatment plant and sewer vacuum station; the remainder of the corridor identified for Larson Avenue will link Entwistle to NE 40th with the purpose of providing access for commercial and industrial uses.

NE 40th Street (segment). The segment of NE 40th from SR 203 westerly to Larson Avenue (extended) is also classified as an arterial; its purpose is to link Larson Avenue to SR 203 to serve existing and potential commercial and industrial development.

Collector:

Collectors distribute traffic between arterial streets and local access streets, or directly to neighborhood destinations such as stores, elementary schools, churches, clinics, and multifamily homes. Collectors include:

NE 40th Street (segment) from its intersection with the Larson Avenue (extended) corridor westerly to Tolt-MacDonald Park;

Blanche Street, Myrtle Street, Eugene Street, which serve the area of intense development (Mixed Use and/or high density residential) east of SR 203 and south of Entwistle;

King Street and Stossel Avenue between East Blanche and Rutherford Street which provides a north south route on the east side of SR 203 adjacent to areas of intense development;

Bird Street between Stephens and Stossel Avenue which provides east west access in the commercial core. This segment of Bird Street is planned for future development as a Festival Street;

Commercial Street between Stephens Avenue and East Entwistle Street, which provides east west access in the commercial core;

Stephens Avenue between West Entwistle and Commercial Street which provides a north south route on the west side of SR 203 adjacent to the commercial core;

East Morrison Street and NE 50th Street between Milwaukee and SR 203 and NE 50th east of Milwaukee Avenue provides access to the northeastern part of the City.

Minor Collector:

Minor collectors distribute traffic between arterial streets and local access streets, or directly to neighborhood destinations such as stores, elementary schools, churches, clinics, and multifamily homes. Minor Collectors include:

Milwaukee Avenue, which provides north south access between East Entwistle and NE 50th Street. Future development of the Potential Annexation Area north of the Carnation Elementary School would also be served by an extension of Milwaukee Avenue (see the Milwaukee Avenue Connector project) to link residential development of that portion of the UGA to the rest of the city's street grid; and

Stewart Avenue, which provides north south access between West Entwistle and Bagwell Street. Future development of the Potential Annexation Area north of Bagwell would also be served by an extension of Stewart Avenue (see the 316th Avenue NE Connector project) to link residential development of that portion of the UGA to the rest of the City's street grid.

Local Access Street:

This category comprises all local roadways and streets not otherwise classified. They provide for direct access to individual lots and connections to the larger roadway system. Local access streets offer the lowest levels of mobility.

Current conditions and rights-of way for these roadways vary widely throughout the city. In most of the older portions of the city, 60-foot rights-of-way are typical, but several streets consist of minimal pavement, in many cases less than twenty feet in width and only a few inches in depth, with no paved parking, and no sidewalk or pathway for pedestrians. Some of these roads are in very poor condition. Newer subdivisions generally have 50-foot rights-of-way, with pedestrian amenities that include curbs and sidewalks.

Alley:

Alleys provide very low speed access between land uses and local streets or collectors. They generally consist of a 1-lane 16-foot wide right of way that provides access to rear yards, garages, and refuse collection. Carnation has an extensive system of alleys in the original Plat of Tolt. A few of the alleys which receive heavy use have been paved but most are not paved.

Street Inventory

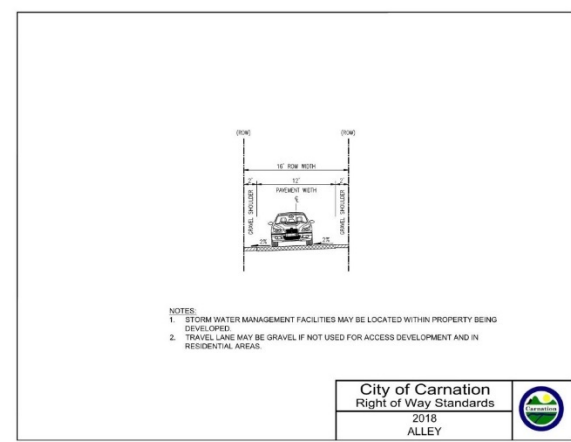
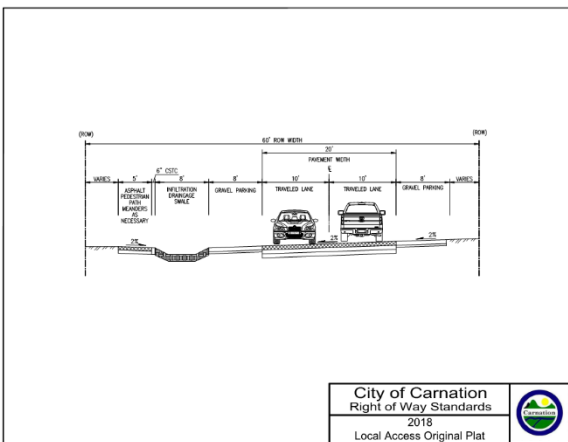
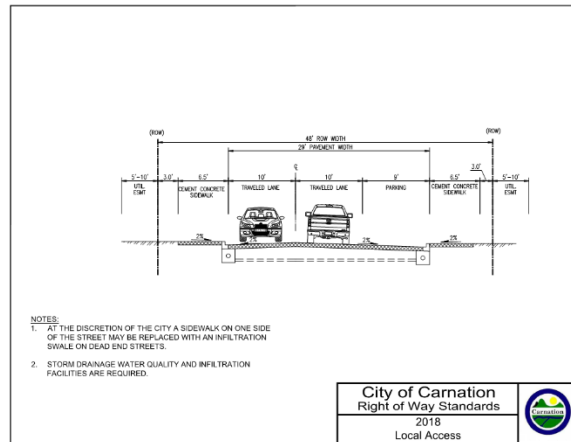
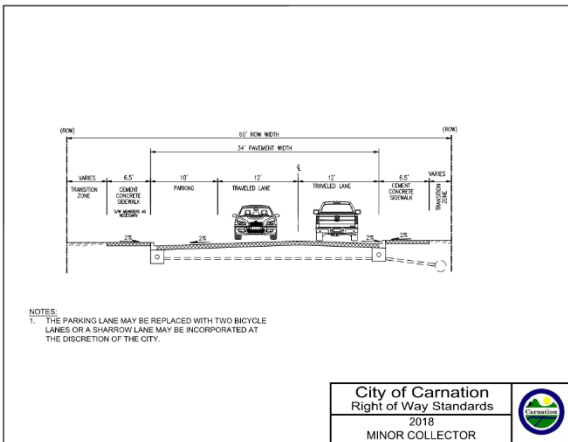
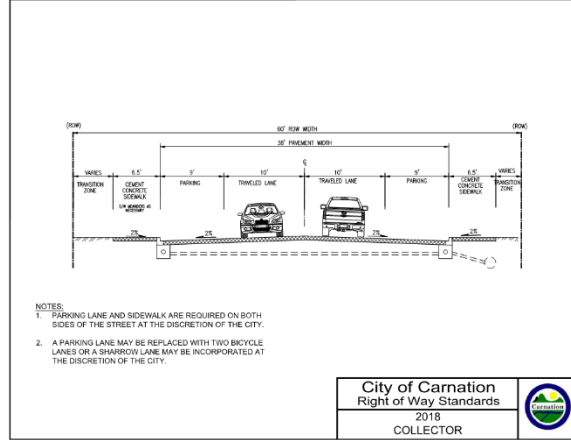
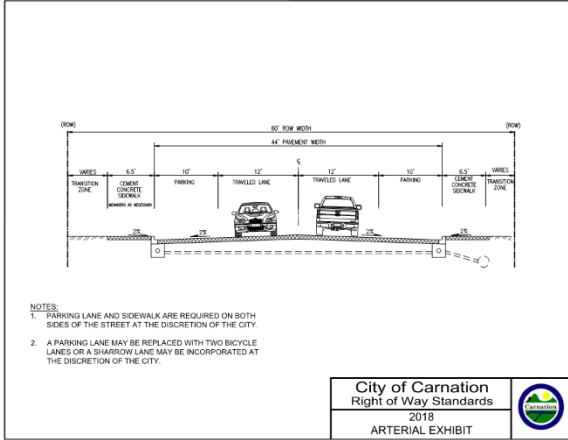
The Transportation Improvement Board analyzed Carnations' streets by condition (See Appendix A). The Rating Map gives us a picture of all the streets in town and their condition. This Rating has proved to be a major boon for Carnation, as the Assessment has helped us in prioritizing which streets to reconstruct vs. which just need a different approach: crack sealing, chip sealing, or overlay.

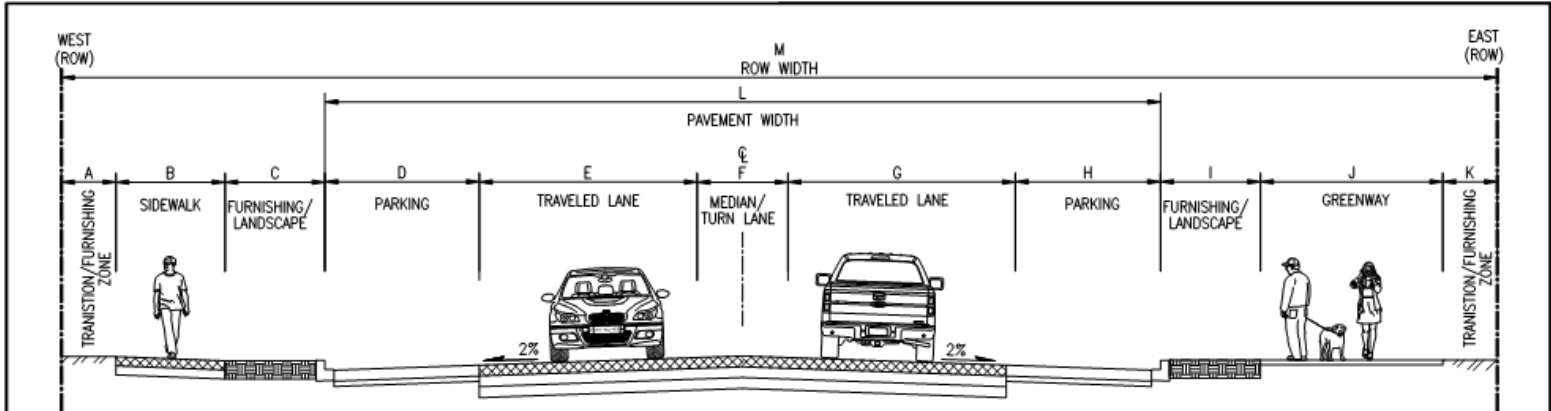
Figure T-1 Typical Street Sections

Figure T-2 Street Classification Map

Figure T-3 Pavement Condition Rating Map

Figure T-1 – Typical Street Sections
(as adopted in the December 2018 Street and Storm Sewer System Standards)





RIGHT OF WAY SECTION DIMENSIONS													
	A	B	C	D	E	F	G	H	I	J	K	L	M
SECTION	TRANSITION/ FURNISHING ZONE	SIDEWALK	FURNISHING/ LANDSCAPE	PARKING	TRAVELED LANE	MEDIAN/ TURN LANE	TRAVELED LANE	PARKING	FURNISHING/ LANDSCAPE	GREENWAY	TRANSITION/ FURNISHING ZONE	PAVEMENT WIDTH	ROW WIDTH
TOLT MACDONALD PARK TO FIRE STATION	0'	0'	0'	0'	12'	0'	12'	0'	5.5'	12'	0'	24'	80'
FIRE STATION TO TOLT MIDDLE SCHOOL	5'	6'	0'	8'	12'	0'	12'	0'	5'	12'	0'	32'	60'
TOLT MIDDLE SCHOOL E. BLANCHE ST	0'	6'	5'	0'	12'	0'	12'	0'	5'	12'	0'	24'	60'
E. BLANCHE ST TO E. EUGENE ST	0'	6'	5'	8'	12'	0'	12'	0'	5'	12'	0'	32'	60'
E. EUGENE ST TO ENTWISTLE ST	3'	6'	0'	8'	12'	0'	12'	0'	5'	12'	2'	32'	60'
ENTWISTLE ST TO COMMERCIAL ST	15'		0'	8'	12'	0'	12'	8'	0'	15'		40'	70'
COMMERCIAL ST TO MORRISON ST	0'	8'	7'	8'	12'	0'	12'	0'	7'	12'	4'	32'	70'
IN FRONT OF CEMETERY	0'	7'	5.5'	0	12'	11'	12'	8'	5.5'	12'	0'	32'-43'	65'

NOTES:

1. REFERENCE: CITY OF CARNATION TOLT AVENUE ACTION PLAN FEBRUARY 2013. FOR ADDITIONAL SECTIONS AND TRANSITIONS.

City of Carnation
Right of Way Standards
 2018
 TOLT AVE
 SECTIONS



Figure T-2 – Street Classification Map

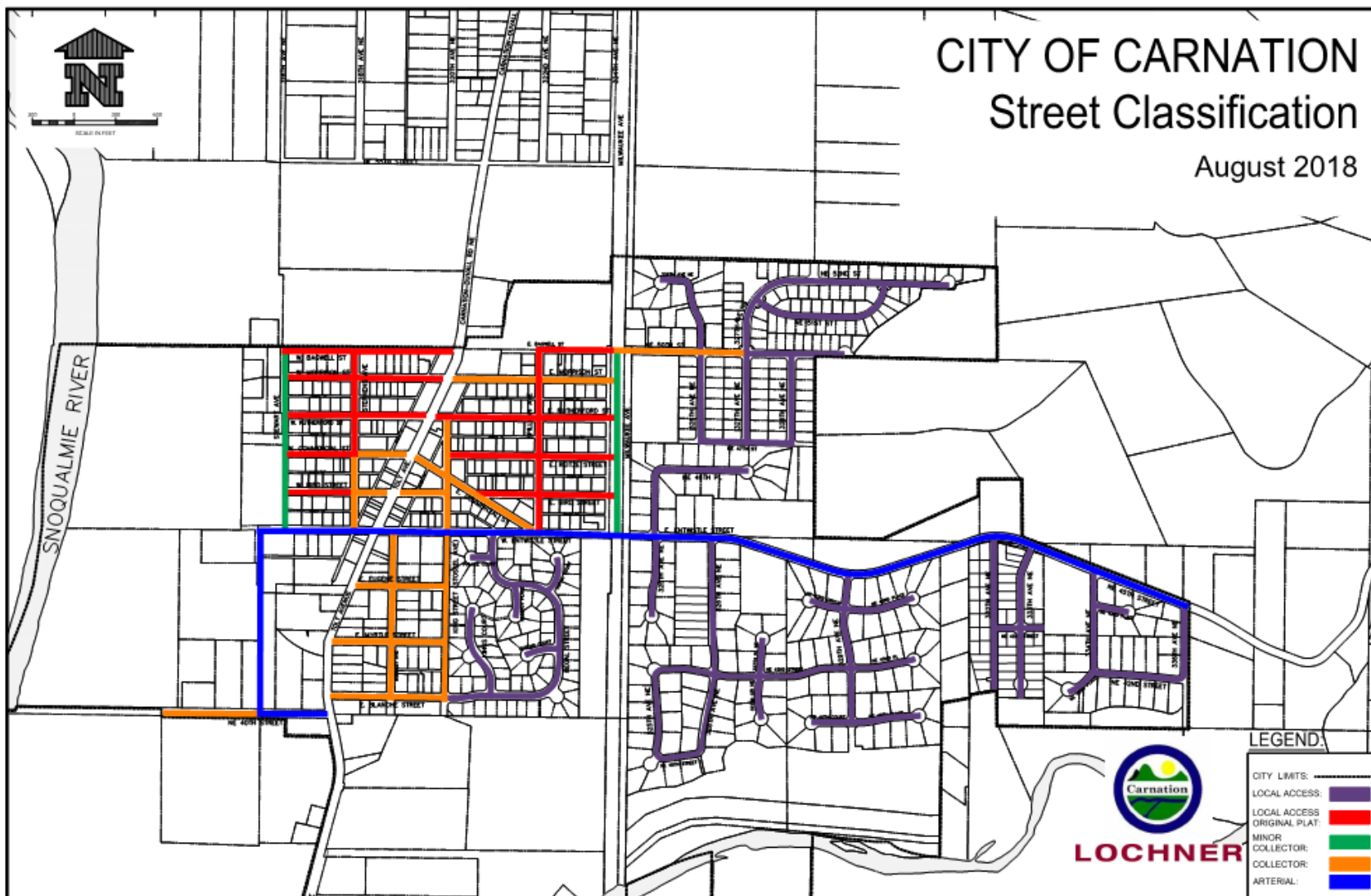


Figure T-3 – Pavement Condition Rating Map



Washington State Transportation Improvement Board (TIB)
Small City Street Inventory, PCR Scores July 2018

Transit Service

Transit service to Carnation is currently limited to shuttle service within the Snoqualmie Valley. The lack of direct METRO Transit service has resulted in a partnership with other transit providers in the Snoqualmie Valley. The Valley Shuttle provides service between the Valley cities from morning to evening on a 90-minute headway. Connections to employment and services located in population centers to the west are only available through shuttle connections to neighboring communities, where METRO service is available to Redmond, Bellevue and Issaquah. Transit service linking Carnation to centers outside the Valley is far from convenient. Carnation's transit stop is located at SR 203 (Tolt Avenue) and Bird Street. The transit stop has been enhanced through artwork provided by the students from Carnation Elementary School and the Snoqualmie Tribe.

In addition to fixed route transit provided within Snoqualmie Valley by the Shuttle, bus service is available for senior citizens through the Sno-Valley Senior Center Shuttle bus. Service is limited to the Snoqualmie Valley.

Pedestrian Circulation

Carnation enjoys an integrated system for non-motorized access that links the city's neighborhoods to each other, to public facilities such as parks and schools, to the downtown center and to open space and natural areas. The form and flat topography of the city creates an excellent opportunity to enjoy non-motorized travel. Most goods, services and public facilities within the city are located along SR 203. Higher density residential development is concentrated within a half mile of SR 203.

Sidewalks are present on both sides of Tolt Avenue (SR 203) within city limits, though they are relatively narrow. Bulb-outs and ADA ramps are added to the curbs in the Central Business District. The speed limit on SR 203/Tolt Avenue is 30 mph in city jurisdiction and 40 mph through the Potential Annexation Area to the north. Traffic on SR 203 works as a barrier to pedestrians, especially in the afternoon peak traffic hour. Non-motorized access for students to the Carnation Elementary School and Tolt Middle School, both located along SR 203, has been identified as a concern. The steep crown of the highway that is the result of many years of overlays exceeds the standard for accessibility. The signalization of the intersection at Entwistle and the cross-walk improvements at Morrison provide two improved pedestrian crossings.

Sidewalks are present on one or both sides of most of the city's arterials and collectors. Pedestrian amenities are present in most of the newer subdivisions, while much of the older portions of the city do not have sidewalks. Concern that curb, gutter and sidewalk improvements would not be consistent with the small town feel of the older portions of the City resulted in a local street standard that provides pedestrian pathways that are not grade separated from the roadway but are separated by drainage swales or parking. Most local streets have low average

daily traffic, and even if there are no sidewalks or bicycle lanes present, residents can generally safely walk or bicycle.

Much of Carnation's residential development is east of SR 203. Entwistle Street is the arterial which connects many of the City's neighborhoods to the downtown. Pedestrian access via Entwistle Street is provided for much of the city, but there are gaps in the sidewalk between 329th Avenue and 334th Avenue so pedestrian amenities are not available for the full length of East Entwistle Street within city limits. As Entwistle serves through traffic, traffic and speeds can be significantly higher than on other City streets.

Access to Carnation Elementary School for pedestrians on the west side of SR 203 is provided at Morrison Street. Currently there is no sidewalk north of Morrison on the east side of SR 203, and there is a non-standard pedestrian extruded curb walkway on the west side between Morrison and NE 55th Street. Spilman Avenue is used by students walking to Carnation Elementary School from neighborhoods to the south. It should be noted that the entry to the Elementary School is located on Morrison Street, not on Tolt Avenue. The City will coordinate with the Riverview School District if other crossings are necessary to serve Elementary School students.

Carnation has excellent trails for recreation in addition to the linkages provided by sidewalks and roadways. The Snoqualmie Valley Trail, which uses the abandoned Chicago, Milwaukee & Saint Paul Railroad right-of-way from Duvall to North Bend, is a 31.5-mile regional trail serving all of the Snoqualmie Valley. This trail provides a north-south "spine" through Carnation. The trail system in Tolt-MacDonald Park connects to both West Entwistle Street near the Wastewater Treatment Plant and the Snoqualmie Valley Trail at the Tolt River. The trail system continues along the Tolt levee upriver. The linkage is lost in the vicinity of 331st Avenue NE, where the levee does not include public access across two properties that are located in unincorporated King County. Other pedestrian amenities include a pedestrian path through Memorial Park that continues through the Regal Glen neighborhood to connect to Loutsis Park and the Snoqualmie Valley Trail; and the Evacuation Trail on a city-owned parcel in Tolt Highlands north-east of the city limits which can be accessed from NE 50th Street.

Bicycle Routes and Circulation

Bicycle access for residents is very good overall, despite the lack of bicycle lanes. The average daily traffic within the city neighborhoods is low and the terrain is flat. The scenic roads in the Carnation area are frequently utilized by bicycle touring groups and clubs. However, some of these routes are potentially dangerous due to traffic, winding roadways and poor visibility, particularly during peak weekday commuting periods. There is no separate bicycle lane in the SR 203 corridor; bicyclists share the travel lanes with vehicular traffic. ADA bulb-outs on Tolt Avenue in the downtown business district create barriers for bicyclists.

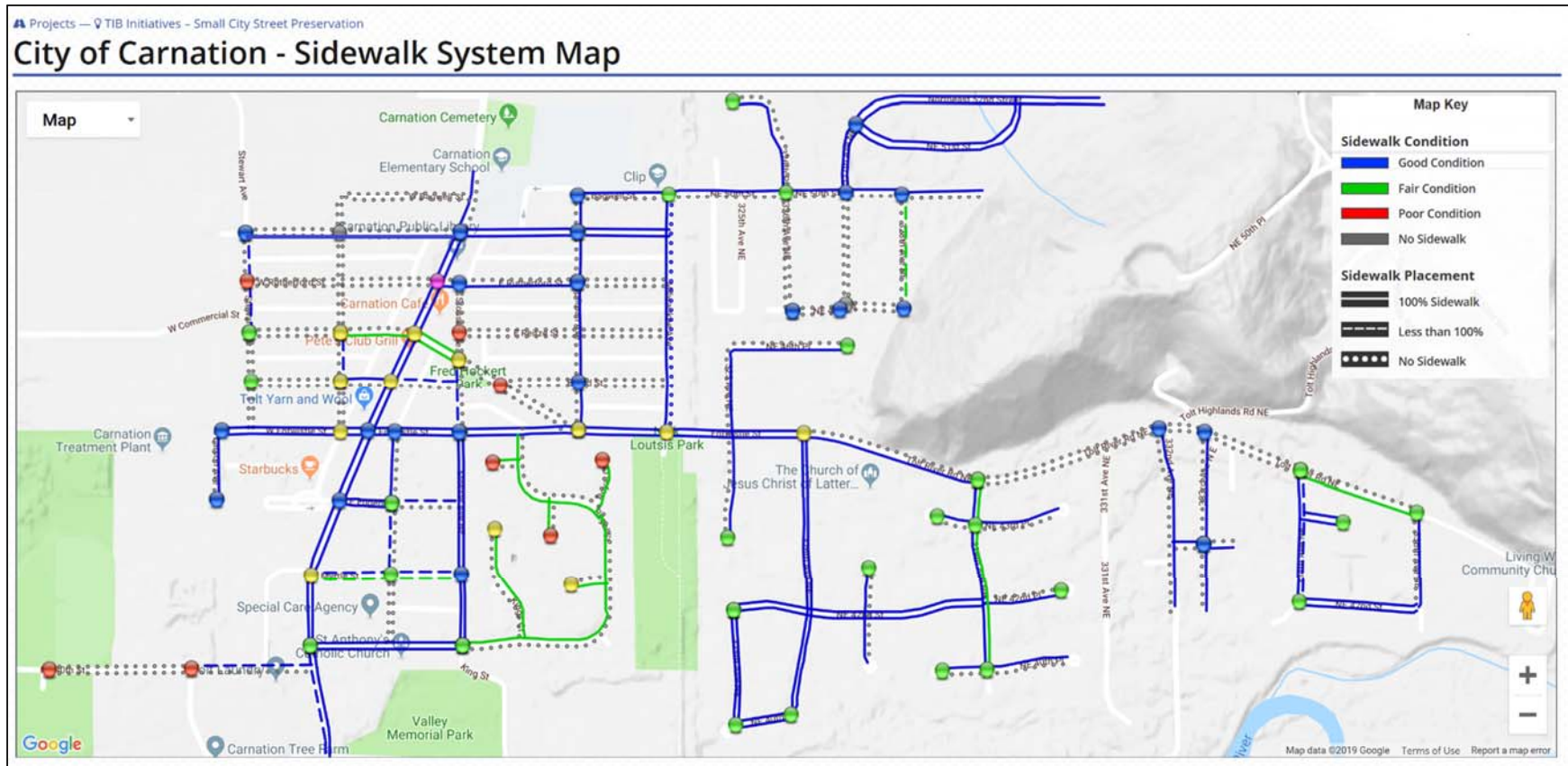
The Snoqualmie Valley Trail is also a very popular facility for bicyclists. Other mountain biking trails that bring visitors to the Carnation area include the off-road biking at Tolt-MacDonald Park.

A survey of bicyclists taken in March 2010 showed that Carnation is a popular destination for both mountain and road biking, with many respondents citing the “rural/serene/scenic” qualities and good trails as unique. Most respondents bike in the Carnation area one to five times a month. When asked how Carnation could better serve their needs, many called for more and improved trails, as well as adding a shoulder to SR 203.

The City should improve its system of linked access for pedestrians, bicyclists and equestrians. There are two components of the linked system: sidewalks within rights-of-way that also serve vehicular traffic, and non-motorized trails such as the Snoqualmie Valley Trail and the levee trail along the Tolt River. When combined with Entwistle Street, the local sidewalk/trail system links neighborhoods to each other and the rest of the city. Most neighborhoods are within a half-mile walk of Tolt Avenue with access to parks, schools, the library, etc. This trail and sidewalk system links Carnation to the region, through the state highway and through the Snoqualmie Valley Trail.

Figure T-4 shows a Map of Sidewalks.

Figure T-4 – Map of Sidewalks



Washington State Transportation Improvement Board (TIB)
Small City Street Inventory, July 2018

f. Previous Accomplishments

Capital projects completed between 2007 and 2019 include:

Year	Project Name	Total Cost		Grant Funds		City Funds	
2007	Morrison Intersection	\$266,453	TIB	\$218,254	81.91%	\$48,199	18.09%
2007	Blanche Street Reconstruction	\$757,611	TIB SCAP	\$695,350	91.78%	\$62,261	8.22%
2008	Tolt Corridor Redevelopment Study	\$200,000	PSRC RTCC	\$177,000	88.50%	\$23,000	11.50%
2008	Stossel Avenue Reconstruction	\$1,029,350	TIB SCAP	\$850,000	82.58%	\$179,350	17.42%
2008	Carnation Elementary Tolt Ave Safe Routes to School Improvements	\$150,651	WSDOT SRTS	\$140,141	93.02%	\$10,510	6.98%
2010	Entwistle Traffic Signal	\$721,519	TIB PSRC BIA Tribe	\$704,000	97.57%	\$17,519	2.43%
2014	Spilman Ave Safe Route to School	\$330,286	WSDOT SRTS	\$290,000	87.80%	\$40,286	12.20%
2015	NE 50 th Street Overlay by developer						
2015-2016	East Rutherford Reconstruction	\$316,948	TIB SCAP	\$285,170	89.97%	\$31,778	10.03%
2016	326 th Ave NE Overlay by developer						
2017	East Entwistle Overlay (Stossel to Spilman)	\$128,069	TIB SCPP	\$128,069	94.90%	\$6,537	5.10%
2018	Morrison Street Improvements (East and West, Stewart to Milwaukee)	\$808,470	TIB SCAP	\$740,727	91.62%	\$68,198	8.44%
2015-2019	Tolt Avenue CBD Design Phase	\$850,000	PSRC TAP	\$735,250	86.50%	\$114,750	13.50%
TOTAL		\$5,559,357		\$4,957,424	89.17%	\$602,388	10.84%

3. Traffic Level of Service

a. Traffic Volumes

Tolt Avenue (SR 203) is designated as a regionally significant state highway, which is the classification for all state transportation facilities that are not designated as Highways of Statewide Significance (HSS). WSDOT currently classifies Tolt Avenue as an “Urban Minor Arterial”. Tolt Avenue has the functional characteristics of a “Class 5” highway, as defined in the WSDOT Design Manual.

The review in this Plan is based in part on traffic data from WSDOT using traffic count data reported from 2007, 2009, 2012, 2016, and 2017. In addition, traffic count data from May, 2016, was collected at the intersections of Morrison Street, Entwistle Street, and Blanche Street. Data was also collected at five study intersections on Tolt Avenue in January, 2017. The 2017 data actually showed lower vehicle volumes when compared to the 2016 intersections. The difference can be explained, in part, due to the different time of year the data was collected. For purposes of this study, it was decided that the larger 2016 counts be used, supplemented with 2017 data where needed, to develop more conservative estimates of future performance. The actual traffic count studies are provided in the Tolt Avenue Corridor Traffic Study (*August 2017*). The summarized existing counts are shown in Table T-1.

2017 traffic counts show that the truck traffic comprises an average of about 10% of total traffic on SR 203 during the peak hours. The same percentage was used for the future condition analyses.

Table T-1: Existing 2016 and 2017 Peak Hour Traffic Volumes

2016 Existing Traffic Hour Flow Rates (Existing)-PM													
Intersection	Eastbound			Westbound			Northbound			Southbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
E Morrison St	3	1	2	28	1	45	4	704	34	41	460	3	1,326
W Entwistle St	24	17	18	86	10	63	11	669	72	23	411	13	1,417
Blanche St				11	0	12	1	805	44	19	453	1	1,346

2017 Existing Traffic Hour Flow Rates (Existing)-AM													
Intersection	Eastbound			Westbound			Northbound			Southbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
E Morrison St	2	0	1	5	0	16	0	181	5	11	296	1	518
W Commercial St	1	0	2	10	2	15	1	168	3	15	292	2	511
W Entwistle St	3	3	8	82	3	4	3	116	22	3	278	3	528
E Eugene St	17	2	46	4	1	2	25	166	2	1	336	41	643
Blanche St				7	0	19	0	177	6	10	372	0	591
2017 Existing Traffic Hour Flow Rates (Existing)-PM													
Intersection	Eastbound			Westbound			Northbound			Southbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
E Morrison St	4	1	0	10	2	32	3	528	29	39	276	4	928
W Commercial St	5	1	6	6	0	22	4	524	9	17	271	1	866
W Entwistle St	19	22	4	71	10	36	6	496	93	22	273	3	1,055
E Eugene St	33	7	33	3	4	9	49	550	19	1	272	51	1,031
Blanche St				9	0	11	0	606	22	19	291	0	958

b. Concurrency

Levels of service provide a measurement of the quality of service provided by the transportation system. The Growth Management Act (GMA) requires the establishment of a Level of Service (LOS) Standard as a guideline for evaluating the performance of the existing transportation system. It is also used to determine whether transportation improvements or services will be available to serve proposed development at the time of development or within six years of the development. This requirement is called Concurrency. If services which will operate at the adopted LOS standard will not be concurrent with a proposed development, then either funding for the improvements must be identified or the development cannot be granted approval as proposed. The Concurrency management system will be implemented and enforced by ordinance.

The Puget Sound Regional Council (PSRC) adopted LOS standards for all Highways of Regional Significance in 2003, which included SR 203. To be consistent with the PSRC, the City has adopted a standard of LOS D for signalized intersections.

c. Level of Service Analysis

Within city limits, Tolt Avenue has a posted speed limit of 30 miles per hour. The intersection of Tolt Avenue and Entwistle Street is controlled by a traffic signal. All other intersections along Tolt Avenue within the city are stop-controlled on the minor (east-west) legs. The intersection of Morrison Street is approximately 1,250 feet north of Entwistle Street, at Carnation Elementary school, and has a pedestrian activated crossing beacon on the southern approach. Blanche Street is located approximately 1,250 feet south of Entwistle Street, with a marked crosswalk on the southern approach connecting transit stops. Morrison Street and Blanche Street are almost ¼ mile from Entwistle Street, which makes them the most viable locations for considering controls such as traffic signals or roundabouts on Tolt Avenue.

This review and evaluation looked at peak period traffic for the following five intersections:

1. Tolt Avenue (SR 203) at E Morrison Street
2. Tolt Avenue (SR 203) at W Commercial Street
3. Tolt Avenue (SR 203) at Entwistle Street
4. Tolt Avenue (SR 203) at E Eugene Street
5. Tolt Avenue (SR 203) at Blanche Street

Four of these intersections (Morrison Street, Commercial Street, Entwistle Street, and NE 40th Street/Blanche Street) are defined as key intersections in the transportation element of the City's Comprehensive Plan. Eugene Street is included as an intersection for this analysis because it provides access to and from a small shopping center that also serves as a downtown activity center. It should be noted that the west leg of this intersection is not a public street; it is an access driveway for the shopping center.

Intersection Level of Service (LOS) for each study intersection was determined by using methodologies contained in the Highway Capacity Manual (Transportation Research Board, 2010). Synchro 9.1 software was used for calculations to determine delay and LOS performance measurements all intersections except for roundabouts. Intersections controlled with a roundabout were analyzed using Sidra software version 7.

The Highway Capacity Manual uses formulas to calculate delay. Evaluating the transportation arterial system, particularly at intersections, is typically described in terms of congestion, which can be measured by average vehicle delay or travel speed, vehicular density, or volume-to-capacity ratio. The volume-to-capacity ratio (V/C) is the ratio of existing or forecasted traffic volumes to the traffic capacity of the roadway or intersection.

Table T-2: Intersection Level of Service (LOS) Criteria

LOS	Signalized Intersection Delay (sec)	Unsignalized Intersection Delay (sec)
A	≤10 sec	≤10 sec
B	10–20 sec	10–15 sec
C	20–35 sec	15–25 sec
D	35–55 sec	25–35 sec
E	55–80 sec	35–50 sec
F	≥80 sec	≥50 sec

Source: 2010 Highway Capacity Manual

However, this formula methodology may not accurately reflect the impacts due to traffic delays and queuing from nearby intersections. Therefore, SimTraffic 9.1 software was used to simulate traffic operations on the Tolt Avenue corridor and record corridor performance measures, including travel time, average speed, and queuing. The SimTraffic model uses random numbers to generate vehicles entering the system, so it produces different values each model run. For this analysis, the SimTraffic model was run five times for each scenario and the results were averaged together. Based on traffic data collected in January 2017, Table T-3 summarizes existing traffic operations for both AM and PM peak periods.

Table T-3: 2017 LOS Summary

Intersection	AM Peak			PM Peak		
	LOS ₁	Delay ₂	V/C ₃ or WM ₄	LOS ₁	Delay ₂	V/C ₃ or WM ₄
Tolt Ave and Blanche St	B	11	WB	C	17	WB
Tolt Avenue and Eugene St	B	14	WB	C	23	EB
Tolt Ave and Entwistle St	A	5	0.3	A	6	0.6
Tolt Ave and Commercial St	B	13	EB	C	17	EB
Tolt Ave and Morrison St	B	12	EB	D	26	EB

1. Level of Service as defined in the *Highway Capacity Manual* (TRB, 2010)
2. Average delay per vehicle in seconds.
3. Volume to capacity ratio reported for signalized or All-Way Stop Control (AWSC) intersections.
4. Worst movement reported for Two-Way Stop Control (TWSC) intersections

The City has adopted LOS D for signalized intersections. As shown in Table T-3, the only signalized study intersection is at Entwistle Street, and it is currently operating at LOS A in both AM and PM peak hours. The other four study intersections are unsignalized, and the worst movement approaches are operating at LOS D or better under existing conditions. In addition, after reviewing the summarized results, intersection delays were found to be longer at all the study intersections during the PM peak compared to the AM peak hour. Therefore, this analysis focused on only reviewing the PM peak hour performance.

4. Future Needs

a. Land Use Assessment and Trip Generation Projections.

The land use assumptions used to determine the 2035 traffic volumes within the City were based on the City's proposed Land Use Map including the docket request to change the land use designation for 34 acres from commercial and industrial to high density residential development. These land use assumptions include a commercial core located between Rutherford and Myrtle Streets, with mixed use development allowed to the north and south along SR 203; higher density residential development allowed between the Mixed-Use Zone and Stossel Avenue and east of SR 203 in the Potential Annexation Area; single family development in the Potential Annexation Area west of SR 203 and in lands not yet platted east of the Snoqualmie Valley Trail. In addition, substantial infill residential development may occur in the original platted areas; plus, continued and expanded non-residential uses west of the SR 203 corridor.

b. Traffic Volume Forecasts

In order to evaluate future transportation needs, forecasts must be made of future travel demand. Developing traffic forecasts for existing streets based on future land use allows the adequacy of the street system to be evaluated.

- **Annual Growth Rate:** While growth rates fluctuate between positive and negative over shorter analysis periods (three to five years), it appears that the overall traffic growth over longer periods (15 to 20 years) has been closer to 1% per year, on average. It is our opinion that using a 2% or higher annual growth rate for background traffic will overstate volumes, so a 1% annual growth rate was used in both in the near-term (2022) and long term (2035) forecast scenarios. This is supported by some of the Puget Sound Regional Council (PSRC) estimates of traffic growth in the region.
- **Land Use Trip Generation:** Land use trip calculations are in accordance with the ITE Trip Generation Manual, 9th Edition. Trips were generated by considering the partial build-out of undeveloped land in 2022 based on anticipated near-term projects and consistency with the Land Use Element of this Comprehensive Plan. For the design year of 2035, this

report assumed 60% of full build-out of all undeveloped land based on the City's current land use zoning.

- **Forecast Volumes:** For this analysis, we used the 2016 traffic count data, which showed higher volumes, supplemented with 2017 data, which included additional intersections, to develop the background traffic volumes. A 1% annual growth rate was applied to generate 2022 and 2035 background traffic. Then trips based on the local land use development forecast were added into the background traffic to complete the future values used in the analysis models and the build alternatives. The final forecasted volumes are shown in the Tolt Avenue Corridor Traffic Study (*August 2017*).
- **Future Traffic Signals:** Tolt Avenue is classified as a state route and a Class 5 roadway. According to RCW 47.24.020(13), WSDOT is responsible for controlling, operating, and maintaining Tolt Avenue (SR 203) as long as the population of the City of Carnation is less than 25,000.

WSDOT design manual chapter 540 defines the characteristics and requirements for a Class 5 roadway. It discusses the need for a minimum of ¼ mile spacing for controlled intersections, and any proposed “signalization or other control type needs an engineering analysis signed and sealed by a qualified professional engineer”. A traffic signal warrant analysis is needed prior to deciding to install traffic signal controls at an intersection. Traffic signal warrants are found in the Manual on Uniform Traffic Control Devices (MUTCD), published by FHWA. A traffic signal should meet at least one of the warrants before proceeding with installation.

2022 Forecast Volumes

The five-year land use trip values were estimated using a combination of formulas from the ITE Trip Generation Manual and discussions with City staff. Using this methodology results in 484 trips generated during the PM peak hour from anticipated development. Applying a 10% internal capture rate, this leaves 436 external trips to be distributed on Tolt Avenue. These 436 external trips were distributed to Tolt Avenue based on existing traffic patterns and using the entering and exiting percentages from the ITE Trip Generation Manual for each land use type. Lastly, we assumed that 60% of traffic came to and from the south of the City and 40% came to and from the north of Carnation.

The results are summarized in Table T-4A.1, and also in the Tolt Avenue Corridor Traffic Study (*August 2017*). These values are used in the various alternatives reviewed that did not involve northbound and southbound left turn restrictions.

For the scenarios that include left turn restrictions, the affected northbound and southbound left turn trips were manually reassigned to be added to the next intersection with a left turn opportunity. The five-year volume forecast adjusted for left turn restrictions is summarized in Table T-4A.2 and included in the Tolt Avenue Corridor Traffic Study (*August 2017*).

Table T-4A.1: 2022 Forecast Volumes

2022	Vehicle Type	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Morrison Street	Vehicle	3	1	2	30	1	48	4	747	36	44	488	3
	Land Use Trips	0	4	0	12	2	20		62	21	14	79	0
	total	3	5	2	42	3	68	4	809	57	58	568	3
Commercial Street	Vehicle	8	2	10	10	0	35	6	778	13	31	456	2
	Land Use Trips	0	6	0	3	2	17	2	66	35	46	45	0
	total	8	8	10	13	2	52	8	844	48	76	501	2
Entwistle Street	Vehicle	25	18	19	91	11	67	12	710	76	24	436	14
	Land Use Trips	0	16	0	87	12	25	0	76	56	0	49	0
	total	25	34	19	178	23	92	12	786	132	24	485	14
Eugene Street	Vehicle	31	11	50	5	6	14	58	754	37	2	459	86
	Land Use Trips	0	3	0	3	2	7	0	125	14	24	96	0
	total	31	13	50	7	8	20	58	879	51	26	570	86
Blanche Street	Vehicle	--	--	--	12	0	13	1	855	47	20	481	1
	Land Use Trips	--	--	--	20	0	14	0	126	14	9	105	0
	total	--	--	--	32	0	26	1	980	61	29	586	1

Table T-4A.2: 2022 Forecast Volumes with Adjustments for Left Turn Restrictions

2022	Vehicle Type	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Morrison Street	Vehicle	3	1	2	30	1	48	4	747	36	44	488	3
	Land Use Trips	0	4	0	12	2	20		62	21	14	79	0
	total	3	5	2	42	3	68	4	809	57	58	568	3
Commercial Street	Vehicle	8	2	10	10	0	35	6	778	13	31	456	2
	Land Use Trips	0	6	0	3	2	17	2	66	35	46	45	0
	total	8	8	10	13	2	52	0	864	48	76	501	2
Entwistle Street	Vehicle	25	18	19	91	11	67	12	710	76	24	436	14
	Land Use Trips	0	16	0	87	12	25	0	76	56	0	49	0
	total	25	34	19	178	23	92	0	798	132	0	509	14
Eugene Street	Vehicle	31	11	50	5	6	14	58	754	37	2	459	86
	Land Use Trips	0	3	0	3	2	7	0	125	14	24	96	0
	total	31	13	50	7	8	20	58	879	51	50	570	86

2022	Vehicle Type	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Blanche Street	Vehicle	--	--	--	12	0	13	1	855	47	20	481	1
	Land Use Trips	--	--	--	20	0	14	0	126	14	9	105	0
	total	--	--	--	32	0	26	1	980	61	29	586	1

2035 Forecast Volumes

The same methodology used above was applied to the design year of 2035. The design year land use trips were derived assuming that 60% of the full build-out of all undeveloped land based on the City's current land use zoning. This results in an increase of approximately 900 PM peak-hour trip ends to, from, or within the city of Carnation. Assuming a 10% internal capture rate, this results in 810 external trips, with 60% of traffic to and from the south of the City and 40% to and from the north of Carnation.

The results are summarized in Table T-4B.1, and also in the Tolt Avenue Corridor Traffic Study (*August 2017*). These values are used in the various alternatives reviewed that did not involve northbound and southbound left turn restrictions.

For the scenarios that include left turn restrictions, the affected northbound and southbound left turn trips were manually reassigned to be added to the next intersection with a left turn opportunity. The design year volume forecast adjusted for left turn restrictions is summarized in Table T-4B.2 and included in the Tolt Avenue Corridor Traffic Study (*August 2017*).

Table T-4B.1: 2035 Forecast Volumes

2035	Vehicle Type	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Morrison Street	Vehicle	4	1	2	34	1	54	5	851	41	50	556	4
	Land Use Trips	0	7	0	23	3	39	0	119	38	25	143	0
	total	4	8	2	57	4	93	5	969	79	75	699	4
Commercial Street	Vehicle	9	2	11	11	0	40	7	885	15	35	519	2
	Land Use Trips	0	12	0	6	4	32	2	124	63	82	83	0
	total	9	14	11	17	4	73	0	1,032	78	117	640	2
Entwistle Street	Vehicle	29	21	22	104	12	76	13	808	87	28	497	16
	Land Use Trips	0	19	0	167	24	48	0	140	101	0	130	0
	total	29	39	22	270	36	124	0	961	188	0	655	16
Eugene Street	Vehicle	36	12	56	5	7	15	66	858	42	2	522	98
	Land Use Trips	0	5	0	5	3	13	0	228	25	44	186	0
	total	36	17	56	11	10	28	66	1,086	68	74	768	98
Blanche Street	Vehicle	--	--	--	13	0	14	1	973	53	23	547	1
	Land Use Trips	--	--	--	39	0	26	0	227	25	17	201	0
	total	--	--	--	52	0	40	1	1,200	78	40	748	1

Table T-4B.2: 2035 Forecast Volumes with Adjustments for Left Turn Restrictions

2035	Vehicle Type	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Morrison	Vehicle	4	1	2	34	1	54	5	851	41	50	556	4
	Land Use Trips	0	7	0	23	3	39	0	119	38	25	143	0
	total	4	8	2	57	4	93	5	969	79	75	699	4
Commercial	Vehicle	9	2	11	11	0	40	7	885	15	35	519	2
	Land Use Trips	0	12	0	6	4	32	2	124	63	82	83	0
	total	9	14	11	17	4	73	9	1,032	78	117	640	2
Entwistle	Vehicle	29	21	22	104	12	76	13	808	87	28	497	16
	Land Use Trips	0	19	0	167	24	48	0	140	101	0	130	0
	total	29	39	22	270	36	124	13	961	188	28	655	16
Eugene Street	Vehicle	36	12	56	5	7	15	66	858	42	2	522	98
	Land Use Trips	0	5	0	5	3	13	0	228	25	44	186	0
	total	36	17	56	11	10	28	66	1,086	68	46	768	98
Blanche	Vehicle	--	--	--	13	0	14	1	973	53	23	547	1
	Land Use Trips	--	--	--	39	0	26	0	227	25	17	201	0
	total	--	--	--	52	0	40	1	1,200	78	40	748	1

c. Traffic Build Alternatives

This analysis developed a baseline condition Synchro model, then modified the model with different configurations to examine the impacts of various changes to the roadway operation. The Build alternatives include various combinations of the following intersection capacity improvements and traffic controls:

- **Tolt Avenue and Morrison Street**
 - Northbound left-turn lane
 - Traffic Signal (included in TIP)
- **Tolt Avenue and Rutherford Street**
 - Northbound left-turn lane
- **Tolt Avenue and Commercial Street**
 - Southbound left-turn lane
 - Northbound Left Turn Restriction
- **Tolt Avenue and Bird Street**
 - Northbound Left Turn Restriction
- **Tolt Avenue and Entwistle Street**
 - Eastbound left-turn lane

- Westbound left-turn lane
- Northbound left-turn lane
- Southbound left-turn lane
- Northbound and Southbound Left Turn Restrictions
- **Tolt Avenue and Eugene Street**
 - Northbound left-turn lane
 - Southbound left-turn lane
- **Tolt Avenue and Blanche Street**
 - Southbound left-turn lane
 - Traffic Signal or roundabout (included in TIP)

There are many possible combinations of left turn lanes and intersection traffic controls that can be used to develop alternative options. For this report, we limited our study to the following build alternatives based on review of the baseline models and discussions with City staff. Descriptions of the various Build Alternatives modeled are as follows:

- Baseline - the baseline condition includes the following left-turn pockets; northbound at Eugene Street, southbound at Blanche Street, and southbound at Commercial Street.
- Build Alternative 1A - Includes the Baseline condition with northbound, southbound, eastbound and westbound left turn lanes at Entwistle Street.
- Build Alternative 1B - Includes the Baseline condition with only north and southbound left-turn lanes at Entwistle Street.
- Build Alternative 2A - Includes the Baseline condition with east and westbound left-turn lanes at Entwistle Street. The traffic signal at Entwistle Street does not have turn lanes on Tolt Avenue, and allows permissive northbound and southbound left turn movements.
- Build Alternative 2B - Includes Build Alternative 2A condition. The traffic signal at Entwistle Street configured to use a “split phase” operation, allowing for protected northbound and southbound left turn movements
- Build Alternative 3A - Includes the Baseline condition with additional southbound left turn lane at Eugene Street and northbound left turn lane at Rutherford Street. Entwistle Street has northbound and southbound left turn restrictions, and a westbound left turn lane. Northbound left turns are also restricted at Bird Street and Commercial Street.
- Build Alternative 3B - Includes the Build Alternative 3A condition and an eastbound left turn lane at Entwistle Street.
- Build Alternative 4A - Includes the Build Alternative 3A condition with the addition of a traffic signal at Morrison St and a roundabout at Blanche Street.

- Build Alternative 4B - Includes the Build Alternative 4A condition and an eastbound left turn lane at Entwistle Street.
- Build Alternative 5A - Includes the Baseline condition with a continuous two-way left-turn lane in the center of Tolt Ave from Eugene Street to Morrison Street, a traffic signal at Morrison Street, and a westbound left turn lane at Entwistle Street.
- Build Alternative 5B - Includes the Build Alternative 5A condition and an eastbound left turn lane at Entwistle Street.

d. Future Level of Service Summaries

2022 Level of Service Summary

Table T-4C summarizes the results of the baseline and select Build Alternative models. A complete summary of the model results is located in the Tolt Avenue Corridor Traffic Study (*August 2017*). Following are a few observations from the LOS analysis:

- Adding Eastbound and Westbound left turn pockets at Entwistle St (Build Alternative 2A) reduces the overall intersection baseline delay from 15.9 seconds to 13.6, (LOS B).
- Adding North and Southbound left turn pockets combined with eastbound and westbound left turn pockets (Build Alternative 1A) reduces overall intersection delay to 14.2 seconds (LOS B).
- "Split Phase" signal operation (Build Alternative 2B) added significant overall delay (LOS F) at Entwistle Street, and is not recommended.
- Adding Eastbound and Westbound left turn pockets at Entwistle St and restricting Northbound and Southbound left turns (Build Alternative 3A) shows the best performance of the options reviewed, reducing the overall intersection baseline delay from 15.9 seconds to 11.5, (LOS B).
- Adding a traffic signal at Morrison Street (Build Alternative 4A) results in an intersection delay at Morrison Street of 6.8 seconds (LOS A). Entwistle Street has an intersection delay of 14.4 seconds (LOS B), which appears to be due to synchronization with the traffic signal at Morrison Street.
- Build Alternative 5A model results for Entwistle Street intersection are 14.4 seconds (LOS B). This scenario includes a continuous two-way left turn lane on Tolt Avenue. In order to have room for the center turn lane, this option needs parking to be removed on the corridor. Removing all the parking is contrary to the goals of this project. Given that there is reasonably equivalent performance with other build alternatives in this study, it appears that removing parking would not be necessary. Therefore, this alternative is not recommended.

Table T-4C: 2022 LOS Summary

2022		Base 2022		Build Alt 1A		Build Alt 2A		Build Alt 2B		Build Alt 3A		Build Alt 4A		Build Alt 4B		Build Alt 5A	
		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹	
Morrison St	Overall	13.6	-	13.6	-	13.6	-	13.6	-	13.6	-	6.8	A	7.2	A	6.9	A
	EB	85.8	F	85.8	F	85.8	F	85.8	F	85.8	F	38.3	D	42.8	D	38.3	D
	WB	145	F	145	F	145	F	145	F	145	F	43.9	D	49	D	43.9	D
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	2.3	A	2.2	A	2.5	A
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	3.7	A	3.6	A	3.7	A
Commercial St	Overall	5.9	-	5.9	-	5.9	-	5.9	-	5.9	-	5.9	-	5.9	-	5.8	-
	EB	93.9	F	93.9	F	93.9	F	93.9	F	93.9	F	93.9	F	93.9	F	93.9	F
	WB	64	F	64	F	64	F	64	F	64	F	64	F	64	F	62.3	F
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
Entwistle St	Overall	15.9	B	14.2	B	13.6	B	125.1	F	11.5	B	14.4	B	15.8	B	14.2	B
	EB	24.5	C	25.4	C	25	C	68.7	E	23.9	C	33.3	C	35.8	D	33.3	C
	WB	31.8	C	28.4	C	28	C	124.6	F	25.5	C	36.1	D	40.8	D	36.1	D
	NB	15	B	13	B	12.3	B	118.5	F	9.8	A	13	B	14.4	B	12.5	B
	SB	7.3	A	6.9	A	6.3	A	147.6	F	4.9	A	1.8	A	1.2	A	2.1	A
Eugene St	Overall	15.2	-	15.2	-	15.2	-	15.2	-	15.2	-	15.2	-	15.2	-	14.5	-
	EB	262	F	262	F	262	F	262	F	262	F	262	F	262	F	249	F
	WB	61.1	F	61.1	F	61.1	F	61.1	F	61.1	F	61.1	F	61.1	F	59.3	F
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
Blanche St	Overall	4.9	-	4.9	-	4.9	-	4.9	-	4.9	-	18.3	B	18.3	B	18.3	B
	EB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WB	104	F	104	F	104	F	104	F	104	F	12.3	B	12.3	B	12.3	B
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	23.6	C	23.6	C	23.6	C
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	9.9	A	9.9	A	9.9	A

1. Level of Service as defined in the *Highway Capacity Manual* (TRB 2010)
2. Average delay per vehicle in seconds.
3. Worst movement reported for TWSC intersections

2035 Level of Service Summary

Table T-4D summarizes the results of the baseline and alternative models in the design year. Following are a few observations:

- Adding Eastbound and Westbound left turn pockets at Entwistle St (Build Alternative 2A) reduces the overall intersection baseline delay from 55.2 seconds (LOS E) to 35.0, (LOS C).
- Adding North and Southbound left turn pockets when combined with eastbound and westbound left turn pockets (Build Alternative 1A) reduces delay to 35.1 seconds (LOS D).
- "Split Phase" signal operation (Build Alternative 2B) added significant overall delay (LOS F) at Entwistle Street, and is not recommended.
- Adding Eastbound and Westbound left turn pockets at Entwistle St and restricting Northbound and Southbound left turns (Build Alternative 3A) reduced the overall intersection baseline delay from 55.2 seconds to 40.3, (LOS D).
- Adding a traffic signal at Morrison St (Build Alternative 4A) results in an intersection delay of 10.3 seconds (LOS B). Entwistle Street has an intersection delay of 38.6 seconds (LOS D) due to coordination with the traffic signal at Morrison Street.
- Similar to the five year model results, Build Alternative 5A model results show reasonably equivalent performance with other build alternatives (37.2 seconds, LOS D at Entwistle Street). Given this scenario requires removing all parking, which is contrary to project objectives, this alternative is not recommended.

Table T-4D: 2035 LOS Summary

2035		Base 2035		Build Alt 1A		Build Alt 2A		Build Alt 2B		Build Alt 3A		Build Alt 4A		Build Alt 4B		Build Alt 5A	
		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹		Delay ² (sec)/ LOS ¹	
Morrison St	Overall	89.4	-	89.4	-	89.4	-	89.4	-	89.4	-	10.3	B	10.3	B	10.2	B
	EB	527	F	527	F	527	F	527	F	527	F	45.2	D	45.2	D	41	D
	WB	877	F	877	F	877	F	877	F	877	F	52.6	D	52.6	D	48.2	D
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	5.1	A	5.1	A	5.8	A
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	5.8	A	5.8	A	5.7	A
Commercial St	Overall	80.7	-	80.7	-	80.7	-	80.7	-	80.7	-	80.7	-	80.7	-	80.7	-
	EB	818	F	818	F	818	F	818	F	776	F	776	F	776	F	818	F
	WB	1120	F	1120	F	1120	F	1120	F	1120	F	1120	F	1120	F	1120	F
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
Entwistle St	Overall	55.2	E	35.1	D	35	C	262	F	40.3	D	38.6	D	35.7	D	37.2	D
	EB	27.8	C	40.1	D	38.7	D	68.8	E	37	D	36.6	D	37.8	D	33.1	C
	WB	68.4	E	84	F	70.4	E	171	F	56.3	E	54.3	D	63.2	E	47.5	D
	NB	76.5	E	32.1	C	36.4	D	304	F	52.3	D	54.3	D	45.2	D	51.8	D
	SB	15.8	B	9.8	A	10.6	B	280	F	10.7	B	2.5	A	2.3	A	6.7	A
Eugene St	Overall	123	-	123	-	123	-	123	-	137.5	-	137.5	-	137.5	-	104	-
	EB	2352	F	2352	F	2352	F	2352	F	2629	F	2629	F	2629	F	2021	F
	WB	553	F	553	F	553	F	553	F	688	F	688	F	688	F	389	F
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a
Blanche St	Overall	44.3	-	44.3	-	44.3	-	44.3	-	44.3	-	51.9	D	51.9	D	51.9	D
	EB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WB	771	F	771	F	771	F	771	F	771	F	25.9	C	25.9	C	25.9	C
	NB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	76.1	E	76.1	E	76.1	E
	SB	-	n/a	-	n/a	-	n/a	-	n/a	-	n/a	15.7	B	15.7	B	15.7	B

1. Level of Service as defined in the *Highway Capacity Manual* (TRB, 2010)
2. Average delay per vehicle in seconds.
3. Worst movement reported for TWSC intersections

Arterial Performance Summary

Table T-4E summarizes the five year and design year results of the SimTraffic models for the baseline and select alternative build conditions for vehicles traveling northbound and southbound on Tolt Avenue between Morrison Street and Blanche Street. The performance measures considered include the total driver delay (lower values are better), travel time (lower values are better), and average speed (higher values are better). A few observations are as follows:

- in 2022 and 2035, Build Alternatives 4B and 5A have the lowest similar combined vehicle delays.
- in 2022 and 2035, Build Alternative 3A has the lowest travel time in each direction.
- in 2022 and 2035, Build Alternative 3A has the highest average vehicle speed in each direction.

Table T-4E Arterial Performance - Tolt Avenue between Morrison St and Blanche St

2022	Base 2022		Build Alt 1A		Build Alt 2A		Build Alt 2B		Build Alt 3A		Build Alt 4A		Build Alt 4B		Build Alt 5A	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Delay (sec/veh)	74	278	36	29	52	168	173	230	38	119	68	26	63	28	68	23
Travel Time (sec)	159	543	102	98	119	320	473	354	104	87	372	94	273	95	315	90
Arterial Speed (MPH)	15	6	20	22	17	9	9	7	20	24	15	23	15	22	15	24
2035	Base 2035		Build Alt 1A		Build Alt 2A		Build Alt 2B		Build Alt 3A		Build Alt 4A		Build Alt 4B		Build Alt 5A	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Delay (sec/veh)	128	495	75	97	103	439	197	276	94	27	83	46	79	38	78	37
Travel Time (sec)	446	1,829	169	177	316	1,466	1,058	674	207	96	839	121	822	106	794	104
Arterial Speed (MPH)	10	4	14	13	12	4	8	6	13	22	13	19	14	20	14	20

NOTE: red numbers highlight best results in each performance category

95th percentile Queuing Summary

Tables T-4F and G summarize the five year and design year results of the SimTraffic models for the baseline and select alternative build conditions looking at vehicles traveling in each direction at study intersections. A few observations are as follows:

- Vehicle queues from the traffic signal at Entwistle St extend north and south through adjacent intersections, making east and westbound left turns more difficult.
- Queuing on Tolt Avenue is increased by vehicles waiting to make left turns from the "through" traffic lane in the baseline and Alternative Build 2A scenarios.

- Queuing is reduced in the northbound and southbound directions due to left turn restrictions in Build Alternatives 3A, 4A, and 4B.
- The only difference between build alternatives is the addition of an eastbound left turn lane at Entwistle Street. The random numbers generated in each model run may account for some of the differences in the queues lengths.

Table T-4F: 2022 95% Queue Length Summaries (feet) using SimTraffic Model

2022		Baseline 2022	Build Alt 1A	Build Alt 2A	Build Alt 2B	Build Alt 3A	Build Alt 4A	Build Alt 4B	Build Alt 5A
Morrison St	EB	64	80	68	109	84	51	46	41
	WB	658	591	632	680	651	113	102	110
	NB	84	47	58	49	39	210	223	215
	SB	799	70	700	717	101	267	300	239
Commercial St	EB	261	94	196	212	131	95	83	74
	WB	403	163	312	401	281	87	136	111
	NB	94	37	125	62	24	19	10	37
	SB	346	109	335	269	120	102	114	106
Entwistle St	EB	100	95	66	113	89	115	70	117
	WB	362	198	177	556	186	201	213	194
	NB	413	375	399	346	377	347	327	356
	SB	659	272	690	532	242	231	246	219
Eugene St	EB	428	448	409	393	446	471	406	463
	WB	190	170	230	407	161	87	103	96
	NB	847	338	585	774	366	88	73	156
	SB	281	306	267	71	107	91	110	53
Blanche St	EB	--	--	--	--	--	--	--	--
	WB	292	268	320	699	213	50	53	51
	NB	409	19	139	496	8	496	528	472
	SB	141	210	136	32	33	103	102	102

Table 4G: 2035 95% Queue Length Summaries (feet) using SimTraffic Model

2035		Baseline 2035	Build Alt 1A	Build Alt 2A	Build Alt 2B	Build Alt 3A	Build Alt 4A	Build Alt 4B	Build Alt 5A
Morrison St	EB	238	144	193	100	141	60	62	53
	WB	626	651	643	647	616	226	199	180
	NB	32	55	55	18	69	244	242	227
	SB	786	369	746	722	160	494	406	307
Commercial St	EB	441	305	439	331	371	193	164	201
	WB	365	367	404	382	388	287	256	270
	NB	38	178	74	9	19	150	19	27
	SB	307	275	282	268	123	121	114	120
Entwistle St	EB	118	161	152	198	158	141	100	132
	WB	467	433	514	439	482	339	377	397

2035		Baseline 2035	Build Alt 1A	Build Alt 2A	Build Alt 2B	Build Alt 3A	Build Alt 4A	Build Alt 4B	Build Alt 5A
	NB	352	396	352	345	366	364	370	361
	SB	590	572	558	529	308	443	398	423
Eugene St	EB	385	369	385	379	379	411	392	386
	WB	400	530	470	579	545	224	242	229
	NB	889	909	907	775	903	144	142	134
	SB	271	455	329	94	167	120	65	51
Blanche St	EB	--	--	--	--	--	--	--	--
	WB	831	820	845	837	798	70	64	67
	NB	581	472	597	459	609	458	456	457
	SB	56	526	28	59	376	234	198	204

e. Traffic Signals

Based on the 2022 and the 2035 forecast traffic volumes at the Tolt Avenue and Morrison Street intersection, a review of Warrant #3: Peak Hour Volume indicates that this warrant may be met as early as 2022. However, it is important to note that just because a warrant is satisfied, meeting this criteria not require that a traffic signal or other control be installed. In fact, exploration of other mitigations and less restrictive traffic controls should be considered before installation of traffic signal controls. In any event, the traffic signal analysis study would need to be completed using current traffic data at that time instead of data from a forecast model.

An option for an intermediate step prior to installing a traffic signal could be to replace the pedestrian activated warning beacons with a High-intensity Activated crossWalk beacon (HAWK). This is a higher degree of traffic control compared to existing controls, and requires drivers to stop when the HAWK beacon is activated. Other options are defining additional right or left turn pockets to help increase capacity at the intersection.

f. Traffic Analysis & Needs

Review of the previous traffic study reports and an independent traffic analysis indicates that:

- As of 2017, the intersections along Tolt Avenue operate at LOS “C” or better during the peak hours. For design year 2035, the baseline scenario indicates that traffic demand at four unsignalized intersections will exceed capacity. Without the improvements, the LOS will deteriorate to unacceptable level for the east and west approaches during the PM peak hour. The signalized intersection at Entwistle Street will operate at LOS E, which is below the City of Carnation adopted LOS D.
- Northbound left-turn lanes are recommended for the intersections at Eugene Street and Rutherford Street. Southbound left-turn lanes are recommended at Commercial Street, Eugene Street, and Blanche Street intersections. Left turn pockets can improve

intersection capacity, enhance safety, and reduce delay to through-vehicles by providing space to separate out turning vehicles. Left turn pocket space can also help reduce vehicle queues spilling back to the downstream intersections during the peak periods.

- Due to the relative low traffic volumes on Eugene Street and the approximate location to Tolt Avenue and Entwistle Street intersection, traffic signals are not recommended for Tolt Avenue and Eugene Street intersection. In 2035, the further degrading of operation of left and through turn traffic on east and west approaches is expected. Additional traffic demand management measures may be needed, such as east and westbound Right-Turn only operations, to address the level of service issue at this intersection.
- Due to the relative low traffic volumes on Commercial Street and the approximate location to Tolt Avenue and Entwistle Street intersection, traffic signals are not recommended for this intersection either. In 2035, the further degrading of operation of left and through turn traffic on east and west approaches is expected. Additional traffic demand management measures may be needed, such as east and westbound Right-Turn only operations, to address the level of service issue at this intersection.
- Build Alternatives 3A, 4A, and 4B include northbound and southbound left turn restrictions on Tolt Avenue. These left turn restrictions combined with the left turn lanes recommended above provide the overall best performances of the feasible scenarios reviewed.
- The difference between build alternative 3A and 4A is the addition of a future traffic signal at Morrison Street. Based on the model results and that a traffic signal is not in the city's six-year plan, build scenario 3A is recommended over 4A at this time.
- Build Alternatives 3B and 4B include an eastbound left turn lane at Entwistle Street. While the added left turn lane slightly improves overall intersection performance, it also reduces the space available for pedestrians at corners and parking. The geometrics of the intersection and accommodating all turning movements will help determine which build alternative to use.
- A traffic signal or roundabout is desirable at Blanche Street to serve future growth. Of the two alternatives, a roundabout may be able to provide better operational and safety improvement, but this option would likely require more right-of-way. A traffic signal will require a traffic signal analysis study, and approval by WSDOT.
- A traffic signal may desirable at Morrison Street to serve future growth in the design year 2035. A traffic signal will require a traffic signal analysis study, and approval by WSDOT. Interim measures should be considered prior to installing a full signal.
- Pedestrian crossings south of Morrison Street and Blanche Street could be upgraded with HAWK beacons to help improve pedestrian safety near the adjacent schools.

- Build Alternatives 5A and 5B scenarios include a continuous two-way left turn lane on Tolt Avenue. In order to have room for the center turn lane, parking to be removed on both side of Tolt Avenue between Eugene Street and Morrison Street. Removing all this parking is contrary to the goals of this project. Given that there is reasonably equivalent performance with other build alternatives in this study, it appears that removing parking would not be necessary in order to meet the City of Carnation criterial of LOS D or better. Therefore, this alternative is not recommended.

g. Parking Needs

Adequate parking in the downtown commercial core is important to the community. Increases in development will create added pressures on parking availability. In addition, existing public parking should be better identified and improved.

A City of Carnation goal for the downtown commercial area is to create an attractive pedestrian environment and to link Carnation's parks and neighborhoods with the downtown area through trails and pathways. Transportation demand management (TDM) strategies may be used to encourage people to use alternative modes of transportation to access the downtown commercial area.

h. Transit Needs

Level of Service for Transit is projected to be poor due to Carnation's small population in comparison with other cities in King County. Given that the regional employment base will likely continue to be located west of the Snoqualmie Valley, METRO feeder service to transit and employment centers such as Redmond or Issaquah may have the most potential to improve transit availability for Carnation citizens. Long-range planning for regional transit service includes high capacity transit to Redmond, so feeder service to Redmond may be the most crucial service for Carnation policy makers to pursue.

i. Bicycle and Pedestrian Access Needs

In general, the pedestrian and bicycle experience of SR 203/Tolt Avenue could be improved. Carnation is just over one square mile in size, with a compact urban form and centralized business district that creates an opportunity for excellent pedestrian access, both within the downtown and linking the nearby neighborhoods to the downtown area. In addition, important regional activities are located in the southern portion of the City, such as Remlinger Farms and Tolt-MacDonald Park. These attractions draw an estimated half million people to the Carnation area over the course of a year. Encouraging these visitors to shop in Carnation's downtown is integral to the City's economic development strategy.

Pedestrian crossings south of Morrison Street and Blanche Street could be upgraded with HAWK beacons to help improve pedestrian safety near Carnation Elementary and Tolt Middle School. Several projects identified in the Tolt Avenue Action Plan would improve pedestrian and bicycle safety around the north and south entrances to town. The Greenway shared paths would be available for bicyclists who desire separation from motorized traffic, while the overall effect of the Plan would slow vehicular traffic, thus improving safety for bicyclists who use the travel lanes. The Action Plan provides for bicycle racks in the Central Business District.

The East Entwistle Street and McKinley Avenue Pedestrian Improvements projects have been identified to complete the missing sidewalk links on East Entwistle between 329th and 332nd Avenues and on McKinley Avenue between Eugene and Blanche Streets.

The Tolt River levee is a King County flood control facility which has access for the public. However, there is a section of trail along the Tolt River levee east of the Snoqualmie Valley Trail which does not have an access easement, and the access along the levee is lost. This segment of the trail is outside City jurisdiction in rural King County. The City should work cooperatively with the property owners and with King County to try to close this missing link.

The planned improvements to East Entwistle and Tolt Avenue will provide the city with a connected system for pedestrian and bicycle traffic that serves each neighborhood and connects to the wider Snoqualmie Valley. The Tolt Avenue Action Plan, when implemented, will create safe, convenient and welcoming pedestrian and bicycle access to Tolt Avenue and will be crucial to achieving the goal of an attractive and lively downtown. Carnation's flat topography and compact urban form allow access within a square mile that is safe and convenient for residents, including the elderly, persons with disabilities, youth and low-income populations. The linked sidewalk/trail system promotes physical activity; connects neighborhoods to each other and to schools, libraries and the Senior Center; to goods and services available in the commercial center; and to the natural areas along the rivers and hillsides to the east and west. As such it is one of Carnation's most valuable amenities.

j. Electric Vehicle Needs

The City of Carnation has been working to be a more sustainable city with better economics, environment, and quality of life. When compared to internal combustion engine vehicles, electric vehicles significantly reduce air pollution and have lower fuel costs. Given their benefits, the City anticipates that more people will want to use electric vehicles. However, electric vehicles require unique electric infrastructure, and Carnation can provide for a more successful and sustainable future by supporting electric vehicles. To help ensure that people in Carnation can conveniently recharge electric vehicles, the City should consider installing electric vehicle battery charging stations in key public locations—either at certain public properties or at certain street right of way areas (or both), as funds become available.

k. Transportation Demand Management

Transportation Demand Management (TDM) consists of strategies that seek to maximize the efficiency of the transportation system by reducing demand on the system. The results of successful TDM can include:

- Travelers switch from single-occupancy-vehicle (SOV) to HOV modes such as transit, vanpools or carpools,
- Travelers switch from driving to non-motorized modes such as bicycling or walking,
- Travelers change the time they make trips from more congested to less congested times of day,
- Travelers eliminate trips altogether through such means as compressed workweeks, consolidation of errands, or use of telecommunications.

Within the State of Washington, alternative transportation solutions are further necessitated by the objectives of the Commute Trip Reduction (CTR) Law which seeks to reduce workplace commute trips in the nine most populous counties in the state. The purpose of CTR is to help maintain air quality in metropolitan areas by reducing congestion and air pollution. The City can promote TDM through policy and/or investments that may include, but are not limited to, the following:

- Public education about the benefits of TDM and individual actions to reduce vehicle trips
- Commute Trip Reduction (CTR) Ordinances
- Voluntary Compliance with CTR requirements by the city
- Managed access to facilities and activity centers
- Transit-oriented and pedestrian-friendly design
- Parking management

l. SR 203 Corridor Improvements / Tolt Avenue Action Plan

In 2013, the City completed a conceptual planning effort for a streetscape redevelopment project including improved non-motorized safety and access on SR 203 (Tolt Avenue). The planning effort incorporated an extensive public process that included public workshops as well as input from several stakeholders groups representing local businesses, community members and partners such as the Riverview School District, the Washington State Department of Transportation, Puget Sound Energy, the Snoqualmie Tribe, and others. This extensive public process resulted in a Tolt Avenue Action Plan for redevelopment of the Tolt Avenue corridor from the bridge over the Tolt River to NE 60th Street.

Implementation of the Tolt Avenue Action Plan over future years will move Carnation towards fulfilling its goals for creating a more inviting and integrated use of the City's main street. The final concept of the Tolt Avenue Action Plan includes:

- Full street improvements to the Central Business District (CBD) from Eugene Street to Rutherford Street, including placing the overhead power lines underground, providing wider sidewalks, street furnishings, landscaping and wayfinding to provide an enhanced pedestrian experience.
- Improvements to Bird Street to support its role as a central civic space and festival street.
- A South Greenway which provides a shared use path along the eastern portion of the right-of-way from the Tolt River Bridge to Entwistle Street. The greenway would bring pedestrians and bicyclists into the downtown from the south.
- Continuation of the North Greenway from the CBD from just south of Rutherford Street to NE 55th, providing a link for pedestrians and bicyclists from the north of the City to the downtown.
- Retrofits to the South Entry pedestrian facilities along the west side of Tolt Avenue from the Tolt River Bridge to Eugene Street
- A pedestrian walkway in the Garden Tracts on the eastside of Tolt Avenue from NE 55th to NE 60th to serve existing and future residential development.
- Connections to looped pedestrian paths just outside the Tolt corridor.

In addition, the Tolt Avenue Action Plan provides for wayfinding throughout the Tolt corridor, and connections to looped pedestrian paths just outside the Tolt corridor. Signage is proposed to prevent conflicts between bicyclists and pedestrians within the greenways, and will assist the transitions for bicyclists between the greenways and the downtown. Signage along the Tolt Avenue Corridor will be coordinated with WSDOT. Other projects called for include identification of the need for a traffic signal at Tolt Hill Road, and for aesthetic improvements to the Tolt River Bridge.

The Tolt Avenue Action Plan presents the improvements to SR 203 as a series of discrete segments to assist the City in its implementation efforts towards its goals for integrated pedestrian and bicycle access and safety, and an improved downtown streetscape. The first segment undertaken by the City is the Central Business District segment. Construction of the Central Business District is listed in Table CF-4 in the Capital Facilities Element.

The projects that comprise the Tolt Avenue Action Plan are included in the Transportation Improvement Plan of this Transportation Element. The Plan meets many of the City's goals for non-motorized transportation, recognizing and promoting pedestrian and bicycle movement as a basic means of circulation, and assuring adequate and safe accommodation of pedestrians, bicycles and handicapped persons' needs.

5. Transportation Improvement Plan (TIP)

a. Transportation Improvement Plan Development

The Transportation Element provides an evaluation of existing conditions, future needs, and the concurrency standards and priorities stated by the City to establish a list of recommended transportation improvement projects. Planning level cost estimates (in current dollars) were prepared for each of the projects under consideration and are included in the funding plan, the Transportation Improvement Plan (TIP), which is incorporated into the Capital Facilities Element as Table CF-4.

The City's Street Plan includes projects identified from many sources including planning documents, accident data, traffic analysis, modeling, forecasting, and commissioned studies. New projects are considered for inclusion in the TIP based on review of scope, priority, schedule, and anticipated revenue funding. Each project in the previously adopted TIP is reviewed to determine if it has been completed. The projects not completed are assessed to determine if either site conditions and / or improvement needs have changed. From this assessment, these previously identified projects carry over to the new TIP and the anticipated costs for the project are updated, the project is re-scheduled, priorities are re-evaluated, and the anticipated funding is checked.

Annual updates of the TIP include development of revenue forecasts to provide a reasonable estimate of funding available to accomplish the transportation improvement needs. The likelihood of receiving federal or state grants for various improvements, community interests and values are also considered. Following a project evaluation that includes reviewing the listed projects and transportation priorities, recognizing commitments to projects already underway, and consideration of new opportunities to partner with other jurisdictions and agencies, a draft TIP is created.

The total number of projects and their associated cost to design and construct typically exceed the available revenue forecast and therefore it is necessary to establish a means of prioritizing the projects. Once the draft TIP has been developed, a public hearing is held to provide an opportunity for the community to comment. Based on the results of the public hearing and comments from the City Council a final version of the TIP is developed. This final version is then adopted by the City Council.

Federal grant funded projects from the first three years of the City's TIP are included in the Regional Transportation Planning Organization (RTPO) plan, assembled by the Puget Sound Regional Council for King, Kitsap, Pierce, and Snohomish Counties. This regional transportation plan is combined with other regional plans from around the State and is combined to form the State TIP, which is approved by the Governor. The approved State TIP is then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

b. Transportation Budget Development

Project Funding and Expenditures

The source of funding and planned expenditures for projects in the TIP reflects the amount of funds currently anticipated for each project over the next six years. The total funding and expenditures for all projects are shown including those projects that either, 1) started prior to the first year covered in the TIP or, 2) planned to continue beyond the final year covered in the TIP. The funding, or revenue sources for projects or programs are identified in the following three categories:

Local Funds:

- **Real Estate Excise Tax (REET):** The portion of the City revenue collected from real estate excise tax (REET) that the City has elected to use to fund capital improvements. The City is now reserving most near-term REET revenue to use as a match for the Tolt Avenue CBD reconstruction project. Policy needs to recognize that the Tolt Ave CBD Reconstruction Project will have priority over other street repairs/reconstruction from approximately 2018-2020 as the various other projects compete for City REET and any State grant dollars.
- **Traffic Impact Fees:** The GMA allows local governments to impose a Transportation Impact Fee to raise the revenues for transportation improvements in order to meet concurrency standards. The transportation improvements necessary to meet concurrency standards as required by the GMA are identified in the Transportation Improvement Plan. In 2006, the City adopted a Transportation Impact Fee Program (codified under Chapter 3.50 CMC) to fund improvements to the transportation system that will be needed to serve new development. Through the imposition of impact fees, new development pays its proportionate share of traffic impacts based on the amount of traffic generated.
- **Gas tax:** Revenue that is shared by the State based on a per capita distribution. Carnation's gas tax receipts average about \$40,000 in an average year. The tax revenue is used for basic street related expenses including salaries, supplies, etc.
- **Developer Contribution:** Dedications in the form of constructed street and sidewalk frontage improvements along development projects.

Grant Funds:

Carnation relies on grant programs to fund transportation improvements. Capital funding is available through a variety of programs that utilize state and/or federal funds. These programs may provide grants and/or low interest loans. The City must compete for these funding sources, and state revenue shortfalls and state budgeting processes are variables that determine funding levels for these programs. It is not possible to predict grant funding revenues with certainty.

- **Secured:** The portion of the project cost in the TIP planned for the six-years, or beyond, in which grant funding has been approved.
- **Unsecured:** The portion of the project cost in the TIP planned for the six-years, or beyond, that are currently without approved funding

Each of the grant funding sources will require some local match, which may vary from 5% up to 20%. For projects that will add capacity to the City's roadway network, local match can be provided by the Transportation Impact Fee. For non-capacity projects, Real Estate Excise Tax (REET) is a typical revenue source for the local match.

Other Funds:

Funds contributed from partnerships with other jurisdictions and organizations in support of one or more projects.

Contingency Plans in the Event of Revenue Shortfall

Some of the revenue forecasts are for revenues that are very secure, and highly reliable. However, other revenue forecasts are for sources that are volatile, and therefore difficult to predict with confidence, including grants, joint agency funding, motor vehicle registration fees, general obligation bonds, and impact mitigation fees which fluctuate with the amount of new development.

In the event that revenues from one or more of these sources is not forthcoming, the city has several options: add new sources of revenue or increase the amount of revenue from existing sources; require developers to provide such facilities at their own expense; reduce the number of proposed projects; change the Land Use Element to reduce the travel demand generated by development; or change and/or lower the LOS standard.

Project Cost Estimates

The level of detail for estimated project expenditures in the TIP vary based on how well the project is defined. A project's scope-detail get more defined as it progresses from "planning" to "design" and therefore costs can more reliably be estimated. The following order of increasing detail is typically used for cost estimates in the TIP:

- **Pre-Project Planning Estimate:** Costs are “placeholders” budget allocations for funds used where a project need is identified and listed but many of the project’s scope-details have not yet been defined. A contingency factor, ranging between 25%-40%, depending on type of project, is typically applied to these estimates that are appropriate and are more commonly used for projects programed in the fourth year, or beyond, of the TIP.
- **Planning Level Estimate:** Costs generally based on a limited defined scope, usually involving some field work, to identify needs and requirements but project detail may require further assessment of potential alternatives. Costs can still significantly change as design work begins, however it is more refined than Pre-Project Planning. This typically will include a contingency factor, albeit smaller, and is commonly used for estimating cost in the TIP.
- **Design-Level Estimate:** Costs generally based from actual conceptual or preliminary design work, where the scope of the project is fairly defined. The significant aspects of a project details are known and cost of these items can more reliably be estimated (commonly at this stage these are based on unit costs from previous construction projects). This type of estimate is generally available for projects starting in prior year(s), and may be obtainable for those programed in the first couple years, of the TIP.

Capital Expenditure costs for projects are reflected for each of the following three significant development-phases of a project:

- **Design Phase:** Estimated costs of engineering and other professional services necessary to design and prepare construction documents which may, depending on the type of project, also include special pre-design studies and obtaining environmental permit approvals.
- **Right-of-Way Acquisition Phase:** Estimated costs of real property and/or easements needed to complete a project, typically including appraisals, negotiations, and other associated acquisition costs. Not all projects require this acquisition phase.
- **Construction Phase:** Estimated costs to construct the improvements which typically would include a percentage factor for construction management and observation.

c. Transportation Project Categories

The Street Plan identifies the projects and programs into the following five categories in which projects are then prioritized:

TIER I. Capacity/LOS Projects (CP):

Projects involving construction of new streets and intersections to increase capacity or level of service.

TIER II. Street Improvements (SI):

Projects involving significant reconstruction of existing streets/intersections to address one or more identified problem; including severe pavement/sub-base failure, insufficient capacity to meet current or anticipated traffic conditions and to incorporate safety enhancements. These projects may also include other elements like drainage and utility upgrades, sidewalk and non-motorized improvements, and landscaping or amenity enhancements.

TIER III. Street Pavement Preservation (SP):

Projects intended to preserve and extend a street's existing pavement service-life. Projects typically involve surface preparation and installing an additional "wearing-course" of material on top of the existing cracking or worn pavements that otherwise, in time, would require more costly reconstruction.

TIER IV. Street Repair & Maintenance (SR):

Programmed budget to perform regular maintenance of various streets by crack sealing, asphalt patching, or performing emergency spot repairs on streets citywide.

Non-motorized Improvement (NM):

Projects intended to focus on enhancing the City's non-motorized network of pedestrian and bicycle facilities, including filling-in and connect "missing gaps" of sidewalks, bike paths, or trails. Incorporating safety enhancement and retrofitting facilities for American Disability Act (ADA) compliance and developing and installing route designations and wayfinding signage for enhancing community experience.

Other/Joint-Agency Improvement (JA):

Identified projects or improvements where the City would support as a partner to the state and/or other municipal agencies whom, because of proximity and/or ownership-authority, would act as lead agency.

d. Transportation Improvement Project List (Table T-5)

Project worksheets, containing the project name, brief description, funding/expenditure forecast, and TIP priority number have been developed and included for projects in each project category along with project priority summary, reflected in Tables T-5 through Table T-5.6.

Table T-5: Transportation Improvement Projects List

Type	Project No.	STIP Priority	PCR Score	Project Name	Actual Prior Years	Estimated 2019	2020	2021	2022	2023	2024	2025	Six-Year Period Total	Beyond 2025	Project Total	Total Grant Funds	Total Local Funds
Tier I CAPACITY/LOS (CP)	CP1	1		Tolt Ave (SR203) Central Business District (CBD) Improvements (Eugene to Rutherford)	\$ 946,373	\$ 1,036,427	\$ 4,850,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,850,580	\$ -	\$ 6,833,380	\$ 5,384,309	\$ 1,449,071
	CP2	4		Larson Avenue Connector (NE 40th to Entwistle St.)	\$ -	\$ -	\$ -	\$ -	\$ 392,200	\$ -	\$ 184,125	\$ 1,411,625	\$ 1,987,950	\$ -	\$ 1,987,950	\$ 1,196,813	\$ 791,138
	CP3			Tolt Ave (SR 203) - South Greenway (East side: Bridge to Entwistle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,758,300	\$ 4,758,300	\$ 3,549,975	\$ 1,208,325
	CP4			Tolt Ave (SR 203) - South Entry (West side: Tolt McDonald Pk to Eugene)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,339,000	\$ 1,339,000	\$ 1,004,250	\$ 334,750
	CP5			Milwaukee Avenue Connector (NE 50th to 55th St.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,835,500	\$ 1,835,500	\$ 917,750	\$ 917,750
	CP6			316th (Stewart) Avenue Connector (Morrison to NE 55th St.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,115,000	\$ 2,115,000	\$ 1,057,500	\$ 1,057,500
	CP7			Tolt Ave (SR203) and Morrison St. Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 644,000	\$ 644,000	\$ 483,000	\$ 161,000
	CP8			Tolt Ave (SR203) and Blanche St. Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,884,969	\$ 1,884,969	\$ 1,413,727	\$ 471,242
		Project No.	STIP Priority	PCR Score	SUBTOTAL CAPACITY PROJECTS	\$ 946,373	\$ 1,036,427	\$ 4,850,580	\$ -	\$ 392,200	\$ -	\$ 184,125	\$ 1,411,625	\$ 6,838,530	\$ 12,576,769	\$21,398,099	\$15,007,323
Tier II STREET IMPROVEMENT (SI)	SI1	5	48	NE 40th St. Arterial Reconstruction (Tolt to Larson Ave)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97,800	\$ 749,800	\$ 847,600	\$ -	\$ 847,600	\$ 741,650	\$ 105,950
	SI2	7	36	E Bird St. Reconstruction (Commercial to Milwaukee - 950 LF)	\$ -	\$ -	\$ -	\$ 60,990	\$ 467,590	\$ -	\$ -	\$ -	\$ 528,580	\$ -	\$ 528,580	\$ 462,508	\$ 66,073
	SI4	11	40	W Rutherford St. Reconstruction (Tolt to Stewart - 1,050 LF)	\$ -	\$ -	\$ -	\$ -	\$ 67,410	\$ 516,810	\$ -	\$ -	\$ 584,220	\$ -	\$ 584,220	\$ 511,193	\$ 73,028
	SI3	13	40	E Reitze St. Reconstruction (Milwaukee to Stossel - 1,150 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 73,830	\$ 566,030	\$ -	\$ 639,860	\$ -	\$ 639,860	\$ 559,878	\$ 79,983
	SI7	15	50	Bird St. "Festival Street" Reconstruction (Stossel to Stephens - 575 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 174,000	\$ 1,334,000	\$ 1,508,000	\$ -	\$ 1,508,000	\$ 1,131,000	\$ 377,000
	SI5			Tolt Ave (SR 203) - North Greenway (East side: Rutherford to NE 55th)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,652,000	\$ 2,652,000	\$ 1,989,000	\$ 663,000
	SI6			Tolt Ave (SR 203) - North Entry (West side: Rutherford to NE 55th)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,190,100	\$ 2,190,100	\$ 1,586,325	\$ 603,775
		Project No.	STIP Priority	PCR Score	SUBTOTAL STREET IMPROVEMENT PROJECTS	\$ -	\$ -	\$ -	\$ 60,990	\$ 535,000	\$ 590,640	\$ 837,830	\$ 2,083,800	\$ 4,108,260	\$ 4,842,100	\$ 8,950,360	\$ 6,981,553
Tier III STREET REPAIR (SR)	SR1	6	44	NE 40th St. Overlay (Larson Ave to Park Entry - 1,150 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,500	\$ 80,500	\$ 91,000	\$ -	\$ 91,000	\$ 79,625	\$ 11,375
	SR2	8	52	W Bird St. Chip Seal (Tolt to Stephens Ave - 280 LF)	\$ -	\$ -	\$ -	\$ 1,605	\$ 12,305	\$ -	\$ -	\$ -	\$ 13,910	\$ -	\$ 13,910	\$ 12,171	\$ 1,739
	SR3	9	54	W Commercial St. Overlay (Tolt to Stephens Ave - 400 LF)	\$ -	\$ -	\$ -	\$ 7,050	\$ 51,700	\$ -	\$ -	\$ -	\$ 58,750	\$ -	\$ 58,750	\$ 51,406	\$ 7,344
	SR4	10	60	Myrtle St. Overlay (Tolt to King/Stossel Ave - 820 LF)	\$ -	\$ -	\$ -	\$ 14,475	\$ 106,150	\$ -	\$ -	\$ -	\$ 120,625	\$ -	\$ 120,625	\$ 105,547	\$ 15,078
	SR5	12	52	Stossel Ave. Overlay (Entwistle to Rutherford - 1,180 LF)	\$ -	\$ -	\$ -	\$ -	\$ 16,050	\$ 123,050	\$ -	\$ -	\$ 139,100	\$ -	\$ 139,100	\$ 121,713	\$ 17,388
	SR6	14	45-54	Regal Glen Cul-de-Sacs Overlay (1,531 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,400	\$ 172,700	\$ -	\$ 204,100	\$ -	\$ 204,100	\$ 178,588	\$ 25,513
	SR7	16	54	E Entwistle St. Overlay (Spilman to 329th - 2,325 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,600	\$ 376,000	\$ 413,600	\$ -	\$ 413,600	\$ 361,900	\$ 51,700
	SR8	17	54 & 63	Stephens Ave. Overlay (W Entwistle to Morrison - 1,825 LF)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,500	\$ 21,500	\$ 232,200	\$ 253,700	\$ 221,988	\$ 31,713
				SUBTOTAL STREET PAVEMENT PRESERVATION PROJECTS	\$ -	\$ -	\$ -	\$ 23,130	\$ 186,205	\$ 154,450	\$ 220,800	\$ 478,000	\$ 1,062,585	\$ 232,200	\$ 1,294,785	\$ 1,132,937	\$ 161,848
Tier IV MAINTENANCE (SM)				Preventative Street Repair & Maintenance (crack sealing, pothole filling)	\$ 10,800	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000			
				SUBTOTAL PREVENTATIVE STREET REPAIR & MAINTENANCE PROJECTS	\$ 10,800	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ -			
NON-MOTO PROJECTS (NM)	NM1	2		E Entwistle Sidewalk (329th to 332nd Ave - 910 LF)	\$ -	\$ -	\$ -	\$ 401,830	\$ -	\$ -	\$ -	\$ -	\$ 401,830	\$ -	\$ 401,830	\$ 301,373	\$ 100,458
	NM2	3		McKinley Ave. Sidewalk (Eugene to Blanche St.)	\$ -	\$ -	\$ -	\$ 433,420	\$ -	\$ -	\$ -	\$ -	\$ 433,420	\$ -	\$ 433,420	\$ 379,243	\$ 54,178
	*			City Wayfinding Signage Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,000	\$ 190,000	\$ 142,500	\$ 47,500
				SUBTOTAL NON-MOTORIZED IMPROVEMENT PROJECTS	\$ -	\$ -	\$ -	\$ 835,250	\$ -	\$ -	\$ -	\$ -	\$ 835,250	\$ 190,000	\$ 1,025,250	\$ 823,115	\$ 202,135
JOINT-AGENCY PROJECTS (JA)	JA1			Tolt Ave. (SR 203) - Garden Tracts Walkway (55th to 60th)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 377,000	\$ 377,000	\$ 282,750	\$ 94,250
	JA2			Tolt Hill Road/SR 203 Intersection Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 670,000	\$ 670,000	\$ -	\$ -
	JA3			Tolt River Bridge Painting and Walkway Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,540,000	\$ 1,540,000	\$ -	\$ -
				SUBTOTAL JOINT-AGENCY PROJECTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,587,000	\$ 2,587,000	\$ 282,750	\$ 94,250
TOTAL ALL PROJECTS					\$ 957,173	\$ 1,048,427	\$ 4,862,580	\$ 931,370	\$ 1,125,405	\$ 757,090	\$ 1,254,755	\$ 3,985,425	\$ 12,844,625	\$ 20,428,069	\$35,255,494	\$24,227,678	\$ 8,817,816

Figure T-5 – Transportation Improvement Projects Map

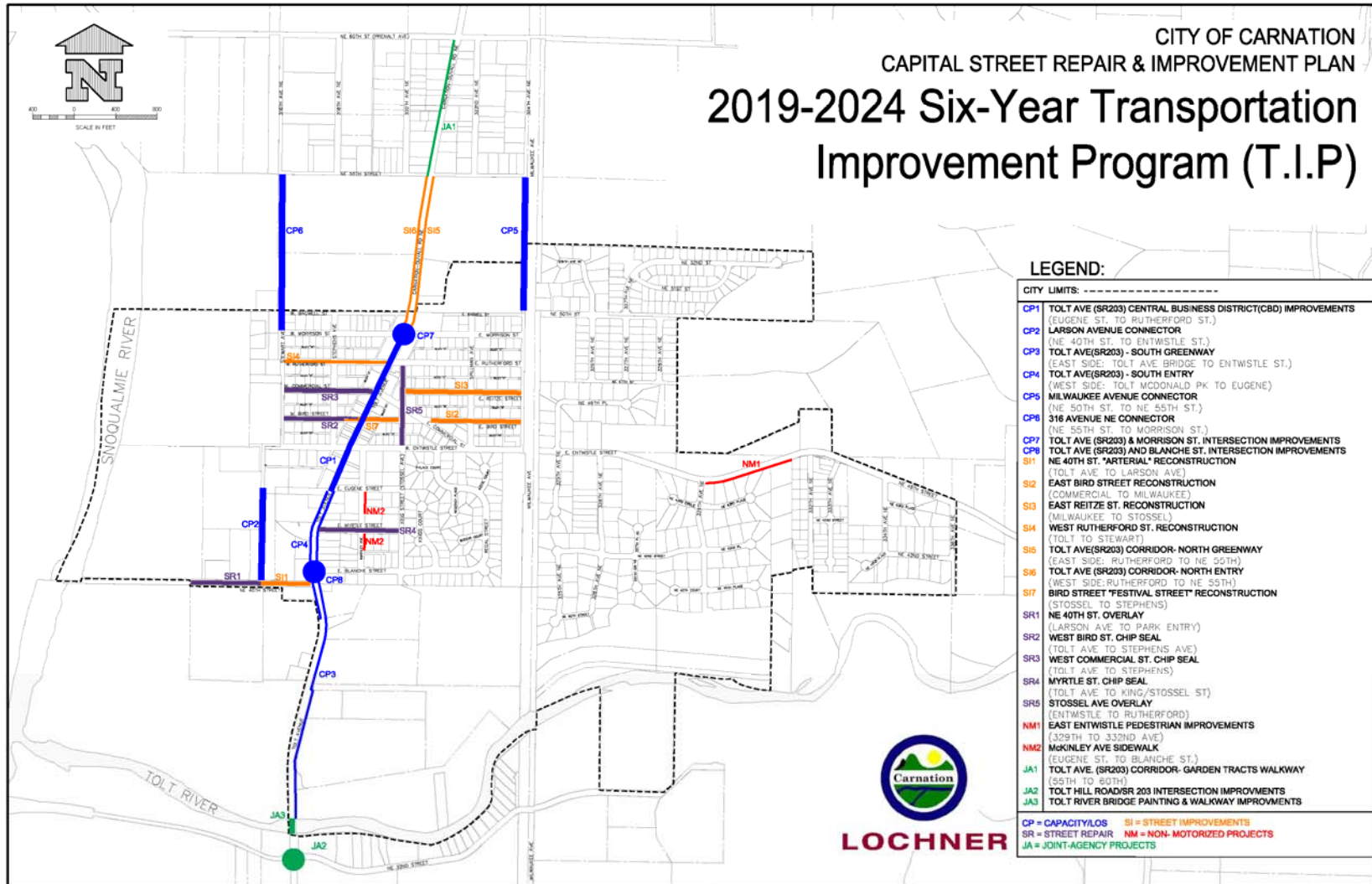


Table T-5.1 - LOS/Capacity Improvement Projects
major projects, new streets, level of service improvements

Project included in 6-Yr TIP

<i>STIP Priority Number</i>	<i>STIP Project ID No.</i>	<i>Project Name</i>	<i>Estimated Project Costs</i>	
			<i>Total Project</i>	<i>Local Funds</i>
1	CP1	Tolt Ave (SR203) Central Business District (CBD) Improvements (Eugene to Rutherford)	\$ 6,833,380	\$ 1,449,071
4	CP2	Larson Avenue Connector (NE 40th to Entwistle St.)	\$ 1,987,950	\$ 791,138
	CP4	Tolt Ave (SR 203) - South Entry (West side: Tolt McDonald Pk to Eugene)	\$ 1,339,000	\$ 334,750
	CP3	Tolt Ave (SR 203) - South Greenway (East side: Bridge to Entwistle)	\$ 4,758,300	\$ 1,208,325
	CP5	Milwaukee Avenue Connector (NE 50th to 55th St.)	\$ 1,835,500	\$ 917,750
	CP6	316th (Stewart) Avenue Connector (Morrison to NE 55th St.)	\$ 2,115,000	\$ 1,057,500
	CP8	Tolt Ave (SR203) and Blanche St. Intersection Improvements	\$ 1,884,969	\$ 471,242
	CP7	Tolt Ave (SR203) and Morrison St. Intersection Improvements	\$ 644,000	\$ 161,000
LOS Project Totals =			\$ 21,398,099	\$ 6,390,776

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-03830

Project Title: Tolt Ave (SR203) Central Business District (CBD) Improvements (Eugene to Rutherford)	Project Worksheet
<i>Project No:</i> CP1	TIP Start Year = 2020
<i>Project Type:</i> Street Improvements - Capacity	

DESCRIPTION & PRIMARY PROJECT COMPONENTS:
 Construct approximately 1450 LF of full street improvements through the City's Central Business District with hardscape improvements, including: street re-grading and paving; aerial-to-underground utility conversion; street and pedestrian lighting; storm drainage infrastructure; street trees and planting; and site furnishings. Widen to three lanes for left turns.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:
 The project will create places to stop, places to gather, and to sit downtown. The appearance of the CBD will be improved with new lighting, trees and plantings, new drainage and underground power and utilities. With the addition of these improvements we hope to see an infill of new businesses in the CBD. The benefit to the community comes from additional tax revenues that can be invested in our parks and streets and for additional police services.

The City Council, residents, and business owners have been involved for several years with the goal of making the downtown a more pleasant, attractive place to visit and conduct business. The purpose of this project is to construct improvements and amenities that will make our downtown area a destination rather than something that travelers just drive through on their way to somewhere else. Project identified in the Tolt Avenue Action Plan and should be coordinated and developed consistent with details/elements of other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ 669,136	\$ 779,935	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,449,071
301 Fund - REET(1&2)	\$ 469,956	\$ 301,017							\$ 770,973
109 Fund - TIF	\$ 199,180	\$ 300,000							\$ 499,180
001 Fund - Sales & Property Taxes		\$ 178,918							\$ 178,918
GRANT FUNDS	\$ 1,392,630	\$ 3,370,645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,763,275
Secured Grant - PSRC	\$ 735,250								\$ 735,250
Secured Grant - DOE EAGL	\$ 157,380	\$ 671,995							\$ 829,375
Secured Grant - DOC Direct Grant		\$ 1,498,650							\$ 1,498,650
Secured Grant TIB SCAP		\$ 750,000							\$ 750,000
Secured Grant - TIB Complete Streets	\$ 500,000								\$ 500,000
Unsecured Grant - PSRC RTCC		\$ 450,000							\$ 450,000
OTHER FUNDS	\$ 421,034	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 621,034
Other - WSDOT 2014 Partner		\$ 200,000							\$ 200,000
Other - PSE Schedule 74	\$ 421,034								\$ 421,034
TOTAL FUNDING SOURCES =	\$ 2,482,800	\$ 4,350,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,833,380
CAPITAL EXPENDITURES									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)	\$ 1,033,000								\$ 1,033,000
Right of Way Acquisition (RW)	\$ 200,000								\$ 200,000
Construction (CN)	\$ 749,800	\$ 4,380,765							\$ 5,130,565
Construction Management (CM)		\$ 469,815							\$ 469,815
TOTAL EXPENDITURES =	\$ 1,982,800	\$ 4,850,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,833,380

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Larson Avenue Connector (NE 40th to Entwistle St.)

Project Worksheet

Project No: CP2

Project Type: Capacity

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Minor Collector

Construct approximately 1,000 LF of new arterial roadway between NE 40th Street and West Entwistle Street to include 2-12' travel lanes with 10' parking lanes; curb, gutter, and sidewalk; new storm drainage, illumination, and signing/stripping. A parking lane could be replaced with two bicycle lanes or a sharrow lane.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This arterial connection will allow traffic to access the lands zoned for commercial and industrial use west of SR203 and south of the wastewater treatment plan. Larson Avenue will connect Entwistle Street to NE 40th which provides alternate access to SR203 and be designated a truck route providing truck access to the businesses on the west side of Tolt Avenue.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ 392,200	\$ -	\$ 46,031	\$ 352,906	\$ -	\$ 791,138
301 Fund - REET(1&2)									\$ -
109 Fund - TIF				\$ 392,200		\$ 46,031	\$ 352,906		\$ 791,138
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 138,094	\$ 1,058,719	\$ -	\$ 1,196,813
Secured Grants									\$ -
Un-secured Grants						\$ 138,094	\$ 1,058,719		\$ 1,196,813
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ 392,200	\$ -	\$ 184,125	\$ 1,411,625	\$ -	\$ 1,987,950
CAPITAL EXPENDITURES									
		Capital Expenditure Reflect 2019 Dollars							
Design (PE)						\$ 184,125			\$ 184,125
Right of Way Acquisition (RW)				\$ 392,200					\$ 392,200
Construction (CN)				\$ -			\$ 1,227,500		\$ 1,227,500
Construction Management (CM)							\$ 184,125		\$ 184,125
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ 392,200	\$ -	\$ 184,125	\$ 1,411,625	\$ -	\$ 1,987,950

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Ave (SR 203) - South Greenway (East side: Bridge to Entwistle)

Project Worksheet

Project No: CP3

Project Type: Street & Pedestrian Improvements

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construct approximately 3,450 LF of improvements on the eastside of the existing travel lanes to include new curbs, gutters, planting strip, and paved pathway; storm drainage improvements; partial aerial-to-underground utility conversion; illumination; planting and site furnishing. Project also includes construction of 1200 LF improvements on the westside of Tolt Ave between the bridge and pedestrian crossing at the fire station to include new curb, gutter, landscape restoration, and portions of roadway widening for on-street parking. Widen to three lanes for left turns.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The Greenway project creates a planting strip buffer from the roadway to provide a safe and pedestrian-friendly place for walking and biking. Elements are proposed to slow bicyclists and alert users approaching from the south they are transitioning from a shared-use path to the wide urban sidewalk entering the commercial core. Project identified in the Tolt Avenue Action Plan and should be coordinated and developed consistent with details/elements of other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,208,325	\$ 1,208,325	
301 Fund - REET(1&2)								\$ 1,183,325	\$ 1,183,325	
109 Fund - TIF								\$ 25,000	\$ 25,000	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,549,975	\$ 3,549,975	
Secured Grants									\$ -	
Un-secured Grants								\$ 3,549,975	\$ 3,549,975	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,758,300	\$ 4,758,300	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 546,150	\$ 546,150	
Right of Way Acquisition (RW)								\$ 25,000	\$ 25,000	
Construction (CN)								\$ 3,641,000	\$ 3,641,000	
Construction Management (CM)								\$ 546,150	\$ 546,150	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,758,300	\$ 4,758,300	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Ave (SR 203) - South Entry (West side: Tolt McDonald Pk to Eugene)

Project Worksheet

Project No: CP4

Project Type: Street & Pedestrian Improvements

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construct approximately 1,900 LF of improvements to enhance pedestrian network on the westside of Tolt Avenue (SR203). Widen roadway for left turns and on-street parking; new curb, gutter, planting strip, and sidewalk; storm drainage improvements; and street trees and site furnishings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The South Entry project enhances the pedestrian network on the westside of Tolt Avenue (SR203) from Tolt-McDonald park property to downtown Carnation. Improvements replace the existing sidewalk to provide a continuous, accessible sidewalk with plantings and street trees to buffer the pedestrian and create a more comfortable, welcoming street environment. Project identified in the Tolt Avenue Action Plan and should be coordinated and developed consistent with details/elements of other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 334,750	\$ 334,750	
301 Fund - REET(1&2)								\$ 334,750	\$ 334,750	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,004,250	\$ 1,004,250	
Secured Grants									\$ -	
Un-secured Grants								\$ 1,004,250	\$ 1,004,250	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,339,000	\$ 1,339,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 154,500	\$ 154,500	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 1,030,000	\$ 1,030,000	
Construction Management (CM)								\$ 154,500	\$ 154,500	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,339,000	\$ 1,339,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Milwaukee Avenue Connector (NE 50th to 55th St.)

Project Worksheet

Project No: CP5

Project Type: Street Improvements - Capacity

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PAA

Construct approximately 1,500 LF of new roadway between NE 50th St and NE 55th St. to include 2-12' travel lanes with a parking lane; curb, gutter, and sidewalk; new storm drainage, illumination, and signing/stripping.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This project will accommodate future north-south travel as a parallel route to the State highway on the east side of the SR-203 for future development of Potential Annexation Area and connection to the existing roadway network. This street extension is development-driven and portions lie outside current City Limits within the UGA.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 917,750	\$ 917,750	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF								\$ 917,750	\$ 917,750	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Secured Grants									\$ -	
Un-secured Grants									\$ -	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 917,750	\$ 917,750	
Other								\$ 917,750	\$ 917,750	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,835,500	\$ 1,835,500	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 200,250	\$ 200,250	
Right of Way Acquisition (RW)								\$ 100,000	\$ 100,000	
Construction (CN)								\$ 1,335,000	\$ 1,335,000	
Construction Management (CM)								\$ 200,250	\$ 200,250	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,835,500	\$ 1,835,500	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: 316th (Stewart) Avenue Connector (Morrison to NE 55th St.)

Project Worksheet

Project No: CP6

Project Type: Street Improvements - Capacity

TIP Start Year = **2020**

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PAA

Construct approximately 1,400 LF of new roadway between W. Morrison St and NE 55th Street to include 2-12' travel lanes with a parking lane; curb, gutter, and sidewalk; new storm drainage, illumination, and signing/stripping. The parking lane could be replaced with two bicycle lanes or a sharrow lane.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This project will accommodate future north-south travel as a parallel route to the State highway on the west side of the SR-203 for future development of Potential Annexation Area and connection to the existing roadway network. This street extension is development-driven and portions lie outside current city limits within the UGA.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,057,500	\$ 1,057,500	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF								\$ 1,057,500	\$ 1,057,500	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Secured Grants									\$ -	
Un-secured Grants									\$ -	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,057,500	\$ 1,057,500	
Other								\$ 1,057,500	\$ 1,057,500	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,115,000	\$ 2,115,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 232,500	\$ 232,500	
Right of Way Acquisition (RW)								\$ 100,000	\$ 100,000	
Construction (CN)								\$ 1,550,000	\$ 1,550,000	
Construction Management (CM)								\$ 232,500	\$ 232,500	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,115,000	\$ 2,115,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-06524

Project Title: Tolt Ave (SR203) and Morrison St. Intersection Improvements

Project Worksheet

Project No: CP7

Project Type: Intersection Improvements - Capacity

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construction of improvements to the un-signalized intersection at Tolt Avenue (SR-203) and Morrison Street to interconnect with the signal at Tolt Ave and Entwistle St, and to include pavement reconstruction with curbs, gutters, and ADA compliant sidewalk ramps; illumination upgrades; drainage modifications; and signing/striping.
An option for an intermediate step prior to installing a traffic signal or roundabout could be to replace the pedestrian activated warning beacons with a High-intensity Activated crossWalk beacon (HAWK) to help improve pedestrian safety near the adjacent school. This is a higher degree of traffic control compared to existing controls, and requires drivers to stop when the HAWK beacon is activated. Other options are defining additional right or left turn pockets to help increase capacity at the intersection.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Crosswalk improvements were completed in 2011. A traffic signal or roundabout at Morrison Street will improve operations and meet level of service capacity needs of future growth and build-out of the north part of Carnation. Of the two alternatives, a roundabout may be able to provide better operational and safety improvement, but this option would likely require more right-of-way. Project details/elements should to be developed consistent with other planned Tolt Ave Corridor improvement projects.
Based on the 2022 and the 2035 forecast traffic volumes at the Tolt Avenue and Morrison Street intersection, a review of Warrant #3: Peak Hour Volume indicates that a traffic signal warrant may be met as early as 2022. However, it is important to note that just because a warrant is satisfied, meeting this criteria does not require that a traffic signal or other control be installed. In fact, exploration of other mitigations and less restrictive traffic controls should be considered before installation of traffic signal controls. In any event, the traffic signal analysis study would need to be completed using current traffic data at that time instead of data from a forecast model.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161,000	\$ 161,000	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF								\$ 161,000	\$ 161,000	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 483,000	\$ 483,000	
Secured Grant - TIB									\$ -	
Un-secured Grants								\$ 483,000	\$ 483,000	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <_____>		\$ -	\$ -						\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 644,000	\$ 644,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 115,000	\$ 115,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 460,000	\$ 460,000	
Construction Management (CM)								\$ 69,000	\$ 69,000	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 644,000	\$ 644,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-08868

Project Title: Tolt Ave (SR203) and Blanche St. Intersection Improvements

Project Worksheet

Project No: CP8

Project Type: Intersection Improvements - Capacity

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construction of improvements to the un-signalized intersection at Tolt Avenue (SR- 203) and Blanche Street to interconnect with the signal at Tolt Ave and Entwistle St, and to include pavement reconstruction with curbs, gutters, and ADA compliant sidewalk ramps; installation of traffic signal or circle; illumination upgrades; drainage modifications; and signing/stripping.
 An option for an intermediate step prior to installing a roundabout or traffic signal could be to upgrade the pedestrian crossing south of Blanche Street with a high-intensity activated crosswalk beacon system to help improve pedestrian safety near the adjacent school. Other options are defining right or left turn pockets on Blanche Street and/or NE 40th Street to help increase capacity at the intersection.
 Traffic signal estimated cost: \$630K. Crosswalk beacon system estimated cost: \$385K.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

A traffic signal or roundabout at Blanche Street will serve future growth. Of the two alternatives, a roundabout may be able to provide better operational and safety improvement, but this option would likely require more right-of-way. A traffic signal will require a traffic signal analysis study, and approval by WSDOT. Project details/elements should be developed consistently with other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 471,242	\$ 471,242	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF								\$ 471,242	\$ 471,242	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,413,727	\$ 1,413,727	
Secured Grants									\$ -	
Un-secured Grants								\$ 1,413,727	\$ 1,413,727	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,884,969	\$ 1,884,969	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2017 Dollars</i>								
Design (PE)								\$ 196,035	\$ 196,035	
Right of Way Acquisition (RW)								\$ 186,000	\$ 186,000	
Construction (CN)								\$ 1,502,934	\$ 1,502,934	
Construction Management (CM)									\$ -	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,884,969	\$ 1,884,969	

Table T-5.2 - Street Improvement Projects

Tier II Projects (SI): significant reconstruction with pedestrian and drainage facilities

Project included in 6-Yr TIP

STIP Priority Number	STIP Project ID No.	Project Name	Estimated Project Costs	
			Total Project	Local Funds
5	SI1	NE 40th St. Arterial Reconstruction (Tolt to Larson Ave)	\$ 847,600	\$ 105,950
7	SI2	E Bird St. Reconstruction (Commercial to Milwaukee - 950 LF)	\$ 528,580	\$ 66,073
11	SI4	W Rutherford St. Reconstruction (Tolt to Stewart - 1,050 LF)	\$ 584,220	\$ 73,028
13	SI3	E Reitze St. Reconstruction (Milwaukee to Stossel - 1,150 LF)	\$ 639,860	\$ 79,983
15	SI7	Bird St. "Festival Street" Reconstruction (Stossel to Stephens - 575 LF)	\$ 1,508,000	\$ 377,000
	SI5	Tolt Ave (SR 203) - North Greenway (East side: Rutherford to NE 55th)	\$ 2,652,000	\$ 663,000
	SI6	Tolt Ave (SR 203) - North Entry (West side: Rutherford to NE 55th)	\$ 2,190,100	\$ 603,775
Street Improvement Totals =			\$ 8,102,760	\$ 1,862,858

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: NE 40th St. Arterial Reconstruction (Tolt to Larson Ave)

Project Worksheet

Project No: SI1

Project Type: Street Improvements

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 48 Arterial

Reconstruct and widen approximately 500 LF of NE 40th Street to include 2-12' asphalt travel lanes; a turn lane at the intersection with Tolt; a parking lane; a bicycle lane; curb, gutter, and sidewalks on both sides of the street; new storm drainage facilities; illumination upgrades; and signing/stripping.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This project will rehabilitate and improve the "arterial" portion of roadway that is narrow and has a "poor" pavement-condition rating. Benefits include upgraded paved roadway, stormwater management, and safer street for vehicles and pedestrian on this portion of NE 40th which provides access to the planned "Larson Ave Connector" project and Tolt-McDonald Park. Project can be coordinated with the planned "Tolt Ave/Blanche St. intersection" project relative to alignment/configuration of Tolt Ave intersection.

The City could also consider combining this Reconstruction project with the overlay of the final 500' of road surface from Larson to the park entrance.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,225	\$ 93,725	\$ -	\$ 105,950
301 Fund - REET(1&2)						\$ 12,225	\$ 93,725		\$ 105,950
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 85,575	\$ 656,075	\$ -	\$ 741,650
Secured Grants									\$ -
Un-secured Grants (TIB SCAP)						\$ 85,575	\$ 656,075		\$ 741,650
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97,800	\$ 749,800	\$ -	\$ 847,600
CAPITAL EXPENDITURES									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)						\$ 97,800			\$ 97,800
Right of Way Acquisition (RW)									\$ -
Construction (CN)							\$ 652,000		\$ 652,000
Construction Management (CM)							\$ 97,800		\$ 97,800
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97,800	\$ 749,800	\$ -	\$ 847,600

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-08870

Project Title: E Bird St. Reconstruction (Commercial to Milwaukee - 950 LF)

Project Worksheet

Project No: SI2

Project Type: Street Reconstruction

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 36

Local Access - Original Plat

Reconstruct and widen approximately 950 LF of East Bird Street to include 2-10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Bird Street serves as a local road linking the central residential neighborhoods to the east side of downtown and the pavement has a "poor" condition rating. Benefits include safer, ADA-compliant, sidewalk ramps/crossings, enhanced drive-ability, upgraded pavement section, a paved street width that meets standards, stormwater management, and safer street for vehicles and pedestrians.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ 7,624	\$ 58,449	\$ -	\$ -	\$ -	\$ -	\$ 66,073
301 Fund - REET(1&2)			\$ 7,624	\$ 58,449					\$ 66,073
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ 53,366	\$ 409,141	\$ -	\$ -	\$ -	\$ -	\$ 462,508
Secured Grants									\$ -
Un-secured Grants - TIB SCAP			\$ 53,366	\$ 409,141					\$ 462,508
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 60,990	\$ 467,590	\$ -	\$ -	\$ -	\$ -	\$ 528,580
CAPITAL EXPENDITURES									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)			\$ 60,990						\$ 60,990
Right of Way Acquisition (RW)									\$ -
Construction (CN)				\$ 406,600					\$ 406,600
Construction Management (CM)				\$ 60,990					\$ 60,990
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 60,990	\$ 467,590	\$ -	\$ -	\$ -	\$ -	\$ 528,580

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-08872

Project Title: W Rutherford St. Reconstruction (Tolt to Stewart - 1,050 LF)

Project Worksheet

Project No: SI4

Project Type: Street Reconstruction

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 40

Local Access - Original Plat

Reconstruct and widen approximately 1050 LF of West Rutherford Street to include 2-10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

West Rutherford Street serves as a local road extending from Stewart (collector street on the west side of downtown) linking to central residential neighborhoods and the pavement has a "poor" condition rating. Benefits include safer, ADA-compliant, sidewalk ramps/crossings, enhanced drive-ability, an upgraded pavement section, a paved street width that meets standards, stormwater management, and safer street for vehicles and pedestrians.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ 8,426	\$ 64,601	\$ -	\$ -	\$ -	\$ 73,028	
301 Fund - REET(1&2)				\$ 8,426	\$ 64,601				\$ 73,028	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ 58,984	\$ 452,209	\$ -	\$ -	\$ -	\$ 511,193	
Secured Grants									\$ -	
Un-secured Grants - TIB SCAP				\$ 58,984	\$ 452,209				\$ 511,193	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ 67,410	\$ 516,810	\$ -	\$ -	\$ -	\$ 584,220	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)				\$ 67,410					\$ 67,410	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)					\$ 449,400				\$ 449,400	
Construction Management (CM)					\$ 67,410				\$ 67,410	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ 67,410	\$ 516,810	\$ -	\$ -	\$ -	\$ 584,220	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-08871

Project Title: E Reitze St. Reconstruction (Milwaukee to Stossel - 1,150 LF)

Project Worksheet

Project No: SI3

Project Type: Street Reconstruction

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 40

Local Access - Original Plat

Reconstruct and widen approximately 1150 LF of East Reitze Street to include 2-10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

East Reitze Street serves as a local road extending from Stossel (collector street on the east side of downtown) linking to central residential neighborhoods and the pavement has a "poor" condition rating. Benefits include safer, ADA-compliant, sidewalk ramps/crossings, enhanced drive-ability, an upgraded pavement section, a paved street width that meets standards, stormwater management, and safer street for vehicles and pedestrians.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ 9,229	\$ 70,754	\$ -	\$ -	\$ 79,983
301 Fund - REET(1&2)					\$ 9,229	\$ 70,754			\$ 79,983
109 Fund - TIF					\$ -	\$ -			\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ 64,601	\$ 495,276	\$ -	\$ -	\$ 559,878
Secured Grants					\$ -	\$ -			\$ -
Un-secured Grants - TIB SCAP					\$ 64,601	\$ 495,276			\$ 559,878
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ 73,830	\$ 566,030	\$ -	\$ -	\$ 639,860
CAPITAL EXPENDITURES									
<i>Capital Expenditure Reflect 2019 Dollars</i>									
Design (PE)					\$ 73,830				\$ 73,830
Right of Way Acquisition (RW)									\$ -
Construction (CN)						\$ 492,200			\$ 492,200
Construction Management (CM)						\$ 73,830			\$ 73,830
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ 73,830	\$ 566,030	\$ -	\$ -	\$ 639,860

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Bird St. "Festival Street" Reconstruction (Stossel to Stephens - 575 LF)

Project Worksheet

Project No: SI7

Project Type: Street Improvements - "Festival Street"

TIP Start Year = **2020**

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 50

Collector

Reconstruction of approximately 575 LF of Bird Street between Stephens Ave and Stossel Ave as a "festival street" to include special paving and a "curb-less" facility accommodating two travel lanes, parking, and sidewalk/furnishing zone; underground stormwater facilities; planters, lighting, and other pedestrian amenities; and signing/stripping.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Bird Street is the central public space in Carnation, connecting the Sno-Valley Senior Center, City Hall, downtown businesses, City Park, Hopelink, the Carnation Farmers Market, and Fred Hockert Park. Street prioritizes pedestrians with flexibly to accommodate a variety of functions, such as community gathering, pedestrian movement, resting, parking, events, and bus stop access. Project identified as an opportunistic project in the Tolt Ave. Action Plan and details/elements should be consistent with planned Tolt Ave CBD improvements.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,500	\$ 333,500	\$ -	\$ 377,000	
301 Fund - REET(1&2)						43,500	333,500		377,000	
109 Fund - TIF									-	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,500	\$ 1,000,500	\$ -	\$ 1,131,000	
Secured Grants									-	
Un-secured Grants (STP/R:RTCC)						130,500	1,000,500		1,131,000	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									-	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 174,000	\$ 1,334,000	\$ -	\$ 1,508,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)						\$ 174,000			\$ 174,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)							\$ 1,160,000		\$ 1,160,000	
Construction Management (CM)							\$ 174,000		\$ 174,000	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 174,000	\$ 1,334,000	\$ -	\$ 1,508,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Ave (SR 203) - North Greenway (East side: Rutherford to NE 55th)

Project Worksheet

Project No: SI5

Project Type: Street & Pedestrian Improvements

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construct approximately 2,200 LF of improvements east of the existing travel lanes, including new curb, gutter, and formalized sections of on-street parking; minimum 4.5-foot planting strip and paved pathway; storm drainage improvements; partial aerial-to-underground utility conversion; illumination; planting and site furnishings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The North Greenway extends the Tolt Avenue Greenway to provide improved pedestrian and bicycle access between downtown Carnation, Carnation Elementary School, and residential areas north of NE 55th Street. Portions of this project lie outside current City Limits within the UGA. Project identified in the Tolt Avenue Action Plan and should be coordinated and developed consistent with details/elements of other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 663,000	\$ 663,000	
301 Fund - REET(1&2)								\$ 663,000	\$ 663,000	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,989,000	\$ 1,989,000	
Secured Grants									\$ -	
Un-secured Grants (TAP)								\$ 1,989,000	\$ 1,989,000	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,652,000	\$ 2,652,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 306,000	\$ 306,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 2,040,000	\$ 2,040,000	
Construction Management (CM)								\$ 306,000	\$ 306,000	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,652,000	\$ 2,652,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Ave (SR 203) - North Entry (West side: Rutherford to NE 55th)

Project Worksheet

Project No: SI6

Project Type: Street & Pedestrian Improvements

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construct approximately 1,875 LF of improvements to retrofit the westside of Tolt Ave (SR 203) with a new curb, gutter, planting strip, and sidewalk; storm drainage improvements; portions of street widening with a center landscaped median within the existing roadway; street trees and site furnishings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The North Entry project creates an identity for people entering Carnation and signals that they have left the rural highway and entered an urban area. The existing, unimproved rural road is replaced with a tree-lined central median, and on-street parking to provide traffic calming to slow vehicles as they approach the downtown. Portions of this project lie outside current City Limits within the UGA. Project identified in the Tolt Avenue Action Plan and should be coordinated and developed consistent with details/elements of other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 603,775	\$ 603,775	
301 Fund - REET(1&2)								\$ 528,775	\$ 528,775	
109 Fund - TIF								\$ 75,000	\$ 75,000	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,586,325	\$ 1,586,325	
Secured Grants									\$ -	
Un-secured Grants (TAP)								\$ 1,586,325	\$ 1,586,325	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,190,100	\$ 2,190,100	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 244,050	\$ 244,050	
Right of Way Acquisition (RW)								\$ 75,000	\$ 75,000	
Construction (CN)								\$ 1,627,000	\$ 1,627,000	
Construction Management (CM)								\$ 244,050	\$ 244,050	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,190,100	\$ 2,190,100	

Table T-5.3 - Street Repair & Pavement Preservation Projects

Tier III Projects (SR): chip seal, full-depth reclamation (asphalt grind), and overlays

Project included in 6-Yr TIP

STIP Priority Number	STIP Project ID No.	Project Name	Estimated Project Costs	
			Total Project	Local Funds
6	SR1	NE 40th St. Overlay (Larson Ave to Park Entry - 1,150 LF)	\$ 91,000	\$ 11,375
8	SR2	W Bird St. Chip Seal (Tolt to Stephens Ave - 280 LF)	\$ 13,910	\$ 1,739
9	SR3	W Commercial St. Overlay (Tolt to Stephens Ave - 400 LF)	\$ 58,750	\$ 7,344
10	SR4	Myrtle St. Overlay (Tolt to King/Stossel Ave - 820 LF)	\$ 120,625	\$ 15,078
12	SR5	Stossel Ave. Overlay (Entwistle to Rutherford - 1,180 LF)	\$ 139,100	\$ 17,388
14	SR6	Regal Glen Cul-de-Sacs Overlay (1,531 LF)	\$ 204,100	\$ 25,513
16	SR7	E Entwistle St. Overlay (Spilman to 329th - 2,325 LF)	\$ 413,600	\$ 51,700
17	SR8	Stephens Ave. Overlay (W Entwistle to Morrison - 1,825 LF)	\$ 253,700	\$ 31,713
		East Commercial Overlay (Tolt to Entwistle - 950 LF, PCR 63-68)		
		East Entwistle Overlay (329th to 336th St - 4,150 LF, PCR 68)		
Street Pavement Preservation Totals =			\$ 1,294,785	\$ 161,848

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: NE 40th St. Overlay (Larson Ave to Park Entry - 1,150 LF)

Project Worksheet

Project No: SR1

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 44

Collector

Construction of a 2" HMA overlay for approximately 1,150 LF of NE 40th Street including construct new ADA-compliant sidewalk ramps, where required, and install pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This portion of NE 40th Street serves as a collector local road that extends to park properties. The pavement has a "poor" condition rating and an overlay will enhanced drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruct.

The City could consider combining this overlay of the final 500' of road surface with the NE 40th Street Reconstruction project from Tolt to Larson.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,313	\$ 10,063	\$ -	\$ 11,375
301 Fund - REET(1&2)						\$ 1,313	\$ 10,063		\$ 11,375
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,188	\$ 70,438	\$ -	\$ 79,625
Secured Grants									\$ -
Un-secured Grants - TIB SCPP						\$ 9,188	\$ 70,438		\$ 79,625
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,500	\$ 80,500	\$ -	\$ 91,000
CAPITAL EXPENDITURES									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)						\$ 10,500			\$ 10,500
Right of Way Acquisition (RW)									\$ -
Construction (CN)							\$ 70,000		\$ 70,000
Construction Management (CM)							\$ 10,500		\$ 10,500
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,500	\$ 80,500	\$ -	\$ 91,000

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: W Bird St. Chip Seal (Tolt to Stephens Ave - 280 LF)

Project Worksheet

Project No: SR2

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 52

Collector

Construction of a 2" HMA chip seal for approximately 280 LF of W. Bird Street including reclamation of existing asphalt, construct new ADA-compliant sidewalk ramps where required, and install pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

West Bird Street serves as a collector road west of Tolt Ave linking residential neighborhoods and the Senior Center to downtown businesses. A chip seal will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer, ADA-compliant, sidewalk ramps/crossings.

Construction of the Tolt Avenue CBD Improvements Project includes installation of a stormwater facility underneath this portion of West Bird Street. This road segment is also part of the Bird Street "Festival Street" project.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ 201	\$ 1,538	\$ -	\$ -	\$ -	\$ -	\$ 1,739	
301 Fund - REET(1&2)			\$ 201	\$ 1,538					\$ 1,739	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ 1,404	\$ 10,767	\$ -	\$ -	\$ -	\$ -	\$ 12,171	
Secured Grants									\$ -	
Un-secured Grants - TIB SCPP			\$ 1,404	\$ 10,767					\$ 12,171	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 1,605	\$ 12,305	\$ -	\$ -	\$ -	\$ -	\$ 13,910	
<u>CAPITAL EXPENDITURES</u>										
				<i>Capital Expenditure Reflect 2019 Dollars</i>						
Design (PE)			\$ 1,605						\$ 1,605	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)				\$ 10,700					\$ 10,700	
Construction Management (CM)				\$ 1,605					\$ 1,605	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 1,605	\$ 12,305	\$ -	\$ -	\$ -	\$ -	\$ 13,910	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: W Commercial St. Overlay (Tolt to Stephens Ave - 400 LF)

Project Worksheet

Project No: SR3

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 54

Collector

Construction of a 2" HMA overlay for approximately 400 LF of West Commercial Street including reclamation of existing asphalt, and construction of new ADA-compliant sidewalk ramps and pavement markings where required.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

West Commercial Street serves as a collector road west of Tolt Ave linking residential neighborhoods to downtown businesses. An overlay or chip seal will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer, ADA-compliant, sidewalk ramps/crossings.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ 881	\$ 6,463	\$ -	\$ -	\$ -	\$ -	\$ 7,344	
301 Fund - REET(1&2)			\$ 881	\$ 6,463					\$ 7,344	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ 6,169	\$ 45,238	\$ -	\$ -	\$ -	\$ -	\$ 51,406	
Secured Grants									\$ -	
Un-secured Grants - TIB SCPP			\$ 6,169	\$ 45,238					\$ 51,406	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 7,050	\$ 51,700	\$ -	\$ -	\$ -	\$ -	\$ 58,750	
<u>CAPITAL EXPENDITURES</u>										
				<i>Capital Expenditure Reflect 2019 Dollars</i>						
Design (PE)			\$ 7,050	\$ -					\$ 7,050	
Right of Way Acquisition (RW)				\$ -					\$ -	
Construction (CN)				\$ 47,000					\$ 47,000	
Construction Management (CM)				\$ 4,700					\$ 4,700	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 7,050	\$ 51,700	\$ -	\$ -	\$ -	\$ -	\$ 58,750	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Myrtle St. Overlay (Tolt to King/Stossel Ave - 820 LF)

Project Worksheet

Project No: SR4

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 60

Collector

Construction of a 2" HMA overlay for approximately 820 LF of Myrtle Street including reclamation of existing asphalt, and construction of new ADA-compliant sidewalk ramps where required, and install pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Myrtle Street serves as a collector road east of Tolt Ave linking residential neighborhoods and downtown businesses. A chip seal will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer, ADA-compliant, sidewalk ramps/crossings.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ 1,809	\$ 13,269	\$ -	\$ -	\$ -	\$ -	\$ 15,078	
301 Fund - REET(1&2)			\$ 1,809	\$ 13,269					\$ 15,078	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ 12,666	\$ 92,881	\$ -	\$ -	\$ -	\$ -	\$ 105,547	
Secured Grants			\$ -	\$ -					\$ -	
Un-secured Grants - TIB SCPP			\$ 12,666	\$ 92,881					\$ 105,547	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 14,475	\$ 106,150	\$ -	\$ -	\$ -	\$ -	\$ 120,625	
<u>CAPITAL EXPENDITURES</u>										
			<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)			\$ 14,475						\$ 14,475	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)				\$ 96,500					\$ 96,500	
Construction Management (CM)				\$ 9,650					\$ 9,650	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 14,475	\$ 106,150	\$ -	\$ -	\$ -	\$ -	\$ 120,625	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-08873

Project Title: Stossel Ave. Overlay (Entwistle to Rutherford - 1,180 LF)

Project Worksheet

Project No: SR5

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 52

Collector

Construction of a 2" HMA overlay for approximately 1,180 LF of Stossel Avenue including construction of new ADA-compliant sidewalk ramps, and installation of pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Stossel Avenue serves as a collector road east of Tolt Ave linking residential neighborhoods to downtown businesses. An overlay will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer, ADA-compliant, sidewalk ramps/crossings.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ 2,006	\$ 15,381	\$ -	\$ -	\$ -	\$ 17,388	
301 Fund - REET(1&2)				\$ 2,006	\$ 15,381				\$ 17,388	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ 14,044	\$ 107,669	\$ -	\$ -	\$ -	\$ 121,713	
Secured Grants									\$ -	
Un-secured Grants - TIB SCPP				\$ 14,044	\$ 107,669				\$ 121,713	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ 16,050	\$ 123,050	\$ -	\$ -	\$ -	\$ 139,100	
<u>CAPITAL EXPENDITURES</u>										
				<i>Capital Expenditure Reflect 2019 Dollars</i>						
Design (PE)				\$ 16,050					\$ 16,050	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)					\$ 107,000				\$ 107,000	
Construction Management (CM)					\$ 16,050				\$ 16,050	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ 16,050	\$ 123,050	\$ -	\$ -	\$ -	\$ 139,100	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Regal Glen Cul-de-Sacs Overlay (1,531 LF)

Project Worksheet

Project No: SR6

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 45-54 Local Access

Construction of a 2" HMA overlay with reclamation of existing asphalt for approximately 1,531 LF of the Regal Glen cul-de-sacs Regency Place (217 LF), Palace Court (153 LF), Royal Court (264 LF), King Court (676 LF), and Queen Court (222 LF).

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Most of the cul-de-sacs in the Regal Glen neighborhood have "poor" pavement condition ratings. An overlay will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
<u>FUNDING SOURCES</u>									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ 3,925	\$ 21,588	\$ -	\$ -	\$ 25,513
301 Fund - REET(1&2)					\$ 3,925	\$ 21,588			\$ 25,513
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ 27,475	\$ 151,113	\$ -	\$ -	\$ 178,588
Secured Grants									\$ -
Un-secured Grants - TIB SCPP					\$ 27,475	\$ 151,113			\$ 178,588
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ 31,400	\$ 172,700	\$ -	\$ -	\$ 204,100
<u>CAPITAL EXPENDITURES</u>									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)					\$ 31,400				\$ 31,400
Right of Way Acquisition (RW)									\$ -
Construction (CN)						\$ 157,000			\$ 157,000
Construction Management (CM)						\$ 15,700			\$ 15,700
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ 31,400	\$ 172,700	\$ -	\$ -	\$ 204,100

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: E Entwistle St. Overlay (Spilman to 329th - 2,325 LF)

Project Worksheet

Project No: SR7

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 54 Arterial

Construction of a 2" HMA overlay for approximately 0.44 miles of East Entwistle Street including construction of new ADA-compliant sidewalk ramps where required, and installation of pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

East Entwistle Street serves as an arterial road east of Tolt Ave linking residential neighborhoods to downtown businesses. An overlay will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer ADA-compliant sidewalk ramps/crossings.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
<u>FUNDING SOURCES</u>									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,700	\$ 47,000	\$ -	\$ 51,700
301 Fund - REET(1&2)						\$ 4,700	\$ 47,000		\$ 51,700
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,900	\$ 329,000	\$ -	\$ 361,900
Secured Grants									\$ -
Un-secured Grants - TIB SCPP						\$ 32,900	\$ 329,000		\$ 361,900
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,600	\$ 376,000	\$ -	\$ 413,600
<u>CAPITAL EXPENDITURES</u>									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)						\$ 37,600			\$ 37,600
Right of Way Acquisition (RW)									\$ -
Construction (CN)							\$ 376,000		\$ 376,000
Construction Management (CM)							\$ 30,080		\$ 30,080
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,600	\$ 376,000	\$ -	\$ 413,600

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Stephens Ave. Overlay (W Entwistle to Morrison - 1,825 LF)

Project Worksheet

Project No: SR8

Project Type: Pavement Preservation

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

PCR: 54 & 63

Collector & LA Original Plat

Construction of a 2" HMA overlay for approximately 1,825 LF of Stephens Avenue including construction of new ADA-compliant sidewalk ramps as required, and installation of pavement markings.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Stossel Avenue serves as a collector road east of Tolt Ave linking residential neighborhoods to downtown businesses. An overlay will enhance drive-ability and extend pavement life by preventing further deterioration leading to the need for full reconstruction. Benefits include enhanced drive-ability and safer, ADA-compliant, sidewalk ramps/crossings.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
<u>FUNDING SOURCES</u>									
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,688	\$ 29,025	\$ 31,713
301 Fund - REET(1&2)							\$ 2,688	\$ 29,025	\$ 31,713
109 Fund - TIF									\$ -
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,813	\$ 203,175	\$ 221,988
Secured Grants									\$ -
Un-secured Grants - TIB SCPP							\$ 18,813	\$ 203,175	\$ 221,988
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,500	\$ 232,200	\$ 253,700
<u>CAPITAL EXPENDITURES</u>									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)							\$ 21,500		\$ 21,500
Right of Way Acquisition (RW)									\$ -
Construction (CN)								\$ 215,000	\$ 215,000
Construction Management (CM)								\$ 17,200	\$ 17,200
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,500	\$ 232,200	\$ 253,700

Table T-5.4 - Street Maintenance Projects
Pothole Repair, Crack Sealing, and Pavement Seal Coat

2020 Crack sealing		<i>PCR</i>	<i>Total linear feet:</i>	<i>7756.32</i>
ENTWISTLE ST	TOLT AVE to LARSON AVE	95	Arterial/Collector	654.72
LARSON AVE	W ENTWISTLE ST to SOUTH END	95	Arterial/Collector	264
BIRD ST	STEPHENS AVE to STEWART AVE	72	Tolt	533.28
STEPHENS AVE	COMMERCIAL ST to MORRISON ST	63	Tolt	1293.6
STEWART ST	COMMERCIAL ST to MORRISON ST	90	Tolt	707.52
STEWART ST	COMMERCIAL ST to WEST ENTWISTLE	77	Tolt	586.08
BLANCHE ST	STOSSEL ST to TOLT AVE	86	Tolt Replat	834.24
EUGENE ST	MCKINLEY AVE to STOSSEL AVE	95	Tolt Replat	369.6
MCKINLEY AVE	BLANCHE ST to MYRTLE ST	86	Tolt Replat	475.2
MCKINLEY AVE	EUGENE ST to ENTWISTLE ST	95	Tolt Replat	348.48
MCKINLEY AVE	MYRTLE ST to EUGENE ST	86	Tolt Replat	475.2
STOSSEL ST	MYRTLE ST to BLANCHE ST	95	Tolt Replat	422.4
STOSSEL ST	MYRTLE ST to EAST ENTWISTLE ST	95	Tolt Replat	792
2021 Crack sealing		<i>PCR</i>	<i>Total linear feet:</i>	<i>8785.92</i>
ENTWISTLE ST	TOLT AVE to STOSSEL AVE	95	Arterial/Collector	1108.8
NE 50TH ST	326TH AVE NE to 328TH AVE NE	90	Arterial/Collector	649.44
NE 50TH ST	326TH AVE NE to MILWAUKEE AVE	90	Arterial/Collector	633.6
NE 50TH ST	328TH AVE NE to EAST END	100	Arterial/Collector	475.2
326TH AVE NE	NE 47TH ST to NE 50TH ST	95	Brumbaugh's	623.04
327TH AVE NE	NE 47TH ST to NE 50TH ST	95	Brumbaugh's	623.04
328TH AVE NE	NE 47TH ST to NE 50TH ST	95	Brumbaugh's	623.04
BAGWELL ST	MILWAUKEE AVE to SPILMAN AVE	95	Tolt	475.2
RUTHERFORD ST	SPILMAN AVE to MILWAUKEE AVENUE	95	Tolt	475.2
RUTHERFORD ST	STOSSEL ST to SPILMAN AVE	95	Tolt	633.6
RUTHERFORD ST	TOLT AVE to STOSSEL ST	95	Tolt	52.8
SPILMAN AVE	E BIRD ST to MORRISON STREET	95	Tolt	897.6
SPILMAN AVE	ENTWISTLE ST to E BIRD ST	95	Tolt	1304.16
SPILMAN AVE	MORRISON STREET to SCHOOL	54	Tolt	211.2

Table T-5.5 - Non-motorized Improvement Projects

Non-Motorized Improvement Project Priority Summary

Project included in 6-Yr TIP

STIP Priority Number	STIP Project ID No.	Project Name	Estimated Project Costs	
			Total Project	Local Funds
2	NM1	E Entwistle Sidewalk (329th to 332nd Ave - 910 LF)	\$ 401,830	\$ 100,458
3	NM2	McKinley Ave. Sidewalk (Eugene to Blanche St.)	\$ 433,420	\$ 54,178
	*	City Wayfinding Signage Improvements	\$ 190,000	\$ 47,500
		Stossel Avenue Sidewalk (Entwistle to Rutherford)		
Non-Motorized Improvement Totals =			\$ 1,025,250	\$ 202,135

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP # WA-03839

Project Title: E Entwistle Sidewalk (329th to 332nd Ave - 910 LF)

Project Worksheet

Project No: NM1

Project Type: Non-Motorized

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Installation of approximately 910 LF of 5' wide sidewalk, curb, gutter and stormwater collection and infiltration facilities on the south side of the street between the Swiftwater and Brooktree neighborhoods; installation of ADA compliant curb ramps; and adding three light standards to better illuminate the roadway and pedestrian sidewalk. Low Impact Development (LID) features will be incorporated where technically feasible to reduce runoff and provide water quality treatment.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This project would fill in gaps on the south side of the road between an existing sidewalk from the city center to 329th Ave and new pathways installed by developers between 332nd Avenue and 334th Avenue. This is the only available pedestrian route to City services for more than 100 homes. Parents and children living along this roadway have united and expressed their concern to the City regarding the lack of a safe pedestrian access route along this roadway. The completed improvements will create a safer roadway and complete a walkway gap in support of a "walkable" community.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS
FUNDING SOURCES									
LOCAL FUNDS	\$ -	\$ -	\$ 100,458	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,458
301 Fund - REET(1&2)									\$ -
109 Fund - TIF			\$ 100,458						\$ 100,458
GRANT FUNDS	\$ -	\$ -	\$ 301,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 301,373
Secured Grants									\$ -
Un-secured Grants (WSDOT P&B)			\$ 301,373						\$ 301,373
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other <____>									\$ -
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 401,830	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 401,830
CAPITAL EXPENDITURES									
		<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)			\$ 46,365						\$ 46,365
Right of Way Acquisition (RW)									\$ -
Construction (CN)			\$ 309,100						\$ 309,100
Construction Management (CM)			\$ 46,365						\$ 46,365
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 401,830	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 401,830

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: McKinley Ave. Sidewalk (Eugene to Blanche St.)

Project Worksheet

Project No: NM2

Project Type: Non-Motorized

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construction of approximately 400 lineal feet of cement concrete sidewalk, curb, gutter and stormwater collection and infiltration facilities along the west side of the street. This project fills in sidewalk gaps along McKinley Avenue.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

This project would fill in gaps on the east side of the road between an existing sidewalk from East Entwistle Street to Valley Memorial Park.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ 54,178	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,178	
301 Fund - REET(1&2)			\$ 54,178						\$ 54,178	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ 379,243	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379,243	
Secured Grants									\$ -	
Un-secured Grants			\$ 379,243						\$ 379,243	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ 433,420	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 433,420	
<u>CAPITAL EXPENDITURES</u>										
			<i>Capital Expenditure Reflect 2019 Dollars</i>							
Design (PE)			\$ 50,010						\$ 50,010	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)			\$ 333,400						\$ 333,400	
Construction Management (CM)			\$ 50,010						\$ 50,010	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ 433,420	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 433,420	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: City Wayfinding Signage Improvements

Project Worksheet

*Project No. **

Project Type: Non-Motorized

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Project consists of developing and installing wayfinding directional signs; en-route markers; information kiosks & gateways; and other signage to formalize and mark wayfinding for motorist and creating pedestrian-oriented walking routes within the City.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The wayfinding elements create a unified system that helps people know where they are, where they want to go, and how to get there. It serves the dual purpose of reinforcing Carnation's unique identity through materials, color, and design, as well as by calling out Carnation's assets. Project identified in the Tolt Avenue Action Plan. Planning/design for this project should precede, or be performed in conjunction with, the first implemented Action Plan project to both guide uniformity and implementing wayfinding elements with other future planned Tolt Ave corridor projects, as appropriate.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
<u>FUNDING SOURCES</u>										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,500	\$ 47,500	
301 Fund - REET(1&2)								\$ 47,500	\$ 47,500	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 142,500	\$ 142,500	
Secured Grants									\$ -	
Un-secured Grants								\$ 142,500	\$ 142,500	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,000	\$ 190,000	
<u>CAPITAL EXPENDITURES</u>										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 45,000	\$ 45,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 145,000	\$ 145,000	
Construction Management (CM)									\$ -	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,000	\$ 190,000	

Table T-5.6 - Non-motorized Improvement Projects

Other/Joint-Agency Improvement Project Priority Summary

Project included in 6-Yr TIP

Priority Number	Project ID No.	Project Name	Estimated Project Costs	
			Total Project	Local Funds
	JA1	Tolt Ave. (SR 203) - Garden Tracts Walkway (55th to 60th)	\$ 377,000	\$ 94,250
	JA2	Tolt Hill Road/SR 203 Intersection Improvements	\$ 670,000	
	JA3	Tolt River Bridge Painting and Walkway Improvements	\$ 1,540,000	
Other/Joint-Agency Improvement Totals =			\$ 2,587,000	\$ 94,250

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Ave. (SR 203) - Garden Tracts Walkway (55th to 60th)

Project Worksheet

Project No: JA1

Project Type: Non-Motorized

TIP Start Year = 2020

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Construction of approximately 1300 LF of asphalt path along the east side of Tolt Ave (SR 203). Improvements include a 6-foot asphalt path with 10-foot wide landscaping/planting in a buffer strip between the path and roadway shoulder.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Tolt Avenue (SR 203) does not have a pedestrian route between NE 55th Street and NE 60th Street. Wide travel lanes and narrow, roadway shoulders result in high travel speeds and few pedestrian trips. This new pedestrian walkway will connect the adjacent residential areas with downtown Carnation. Project is outside current City Limits within the UGA and is identified in the Tolt Avenue Action Plan as a project "subsequent" to planned "Tolt Ave. North Entry" project. Improvements should be coordinated and developed consistent with details/elements of the other planned Tolt Ave corridor improvement projects.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,250	\$ 94,250	
301 Fund - REET(1&2)								\$ 94,250	\$ 94,250	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 282,750	\$ 282,750	
Secured Grants									\$ -	
Un-secured Grants								\$ 282,750	\$ 282,750	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 377,000	\$ 377,000	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 43,500	\$ 43,500	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 290,000	\$ 290,000	
Construction Management (CM)								\$ 43,500	\$ 43,500	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 377,000	\$ 377,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt Hill Road/SR 203 Intersection Improvements

Project Worksheet

Project No: JA2

Project Type: Capacity

TIP Start Year = **2020**

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

Install a traffic signal or roundabout on SR 203 at Tolt Hill Road intersection. This project is outside the UGA boundary. This is a partnership-project in which the City, if desired, could be a financial participant to a WSDOT and/or King County lead project. Requires WSDOT warrant justification for signalization of the intersection.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

The Tolt-Hill Rd intersection at SR 203 is an existing stop-control. During summer and fall weekends thousands of visitors converge on Remlinger's Farm, Tolt-McDonald Park, and other local destinations and generate heavy traffic hindering turning movements onto SR 203 (Tolt Avenue) and into Carnation. This project is not within the City limit nor within current City UGA boundary, but is identified in the Tolt Avenue Action Plan as an opportunistic project. Tolt Hill Road is within unincorporated King County and therefore this project is consider a partnership-project in which the City, if desired, could be a financial participant to a WSDOT and/or King County lead project. Requires WSDOT warrant justification for signalization of the intersection.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Secured Grants									\$ -	
Un-secured Grants									\$ -	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 110,000	\$ 110,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 560,000	\$ 560,000	
Construction Management (CM)									\$ -	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 670,000	\$ 670,000	

City of Carnation Transportation Improvement Plan

Six Year Transportation Improvement Program (STIP)

TIP #

Project Title: Tolt River Bridge Painting and Walkway Improvements

Project Worksheet

Project No: JA3

Project Type:

TIP Start Year = **2020**

DESCRIPTION & PRIMARY PROJECT COMPONENTS:

This project consists of painting the bridge and installing accent lighting to enhance character in creating a "gateway" at the south end of the City. Additional improvements include modifying the existing channelization across the bridge structure to provide an additional sidewalk to the eastside of the bridge.

JUSTIFICATION, BENEFITS, & SUSTAINABILITY:

Creates a "gateway" at the City's southern boundary. The existing bridge surface is rarely cleaned and an eyesore for people entering Carnation. Painting the bridge and incorporating lighting will enhance the character. The creation of a sidewalk on the eastside of the bridge strengthens the connection with other City planned Tolt Ave. corridor improvement projects. Only a portion of this project is within the City limit and is identified in the Tolt Avenue Action Plan as an opportunistic project. Maintenance and any modification to the bridge on SR 203 are under WSDOT authority, therefore this is consider a partnership project in which the City, if desired, could be a financial participant to a WSDOT lead project. Bridge alteration or modification require WSDOT approval.

Activity:	Prior Year(s)	2020	2021	2022	2023	2024	2025	Beyond 2025	TOTALS	
FUNDING SOURCES										
LOCAL FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
301 Fund - REET(1&2)									\$ -	
109 Fund - TIF									\$ -	
GRANT FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Secured Grants									\$ -	
Un-secured Grants									\$ -	
OTHER FUNDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other <____>									\$ -	
TOTAL FUNDING SOURCES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CAPITAL EXPENDITURES										
		<i>Capital Expenditure Reflect 2019 Dollars</i>								
Design (PE)								\$ 290,000	\$ 290,000	
Right of Way Acquisition (RW)									\$ -	
Construction (CN)								\$ 1,250,000	\$ 1,250,000	
Construction Management (CM)									\$ -	
TOTAL EXPENDITURES =	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,540,000	\$ 1,540,000	

6. Six Year Transportation Improvement Program (STIP)

State law (RCW 35.77.010) requires that each City prepare and adopt a transportation program for the ensuing six calendar years. A copy of the adopted program must be filed with Secretary of Transportation on an annual basis. This program represents a forecast of the transportation related improvements to meet locally defined levels of service and policies as identified in the Transportation Element.

Capital improvement projects and street repair programs are considered, updated, and prioritized for the TIP on an annual basis by the City Council with staff recommendations. From this review, the Six-Year Transportation Improvement Program (STIP) is developed. The STIP represents a prioritized short-range planning document that identifies the revenues (secured or expected) and estimated expenditures needed to ensure the City can accomplish the projects or programs listed for the next six years. Funding for some of these projects is secured, while funding for other projects is not. Detailed evaluation of future conditions should assume completion only of financially committed projects.

a. STIP Resolution

MLM
05/16/2019

RESOLUTION NO. 435

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CARNATION, WASHINGTON, ADOPTING A SIX-YEAR TRANSPORTATION IMPROVEMENT PROGRAM FOR THE YEARS 2020 THROUGH 2025 AND DIRECTING THE SAME TO BE FILED WITH THE STATE SECRETARY OF TRANSPORTATION AND THE TRANSPORTATION IMPROVEMENT BOARD.

WHEREAS, it is the responsibility of the City Council of the City of Carnation to provide suitable and adequate street improvements and maintenance on dedicated streets within the city limits to the extent possible with available funds; and

WHEREAS, the Carnation City Council is committed to short and long range planning to protect, preserve, and enhance the roadways within the city; and

WHEREAS, the Six-Year Transportation Improvement Program is based on the City's 20-Year Comprehensive Transportation Improvement Plan; and

WHEREAS, a SEPA Determination of Nonsignificance (DNS) for the Six Year Transportation Improvement Program (STIP) 2020-2025 was issued on April 19, 2019; and

WHEREAS, a public hearing was held on May 7, 2019, on the Six-Year Transportation Improvement Program as required by RCW 35.77.010; NOW, THEREFORE,

IT IS HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CARNATION AS FOLLOWS:

Section 1. Program Adopted. The Six-Year Transportation Improvement Program for the City of Carnation for the ensuing six (6) calendar years (2020-2025, inclusive) and the 2020

Transportation Improvement Plan, attached hereto as Exhibits A and B respectively, and incorporated herein by this reference as if fully set forth, which set forth the project location, type of improvement and estimated cost thereof, are hereby adopted and approved.

Section 2. Filing of Program. Pursuant to Chapter 35.77 RCW, within 30 days of the adoption of this resolution the City Clerk is hereby authorized and directed to file a copy of this resolution, together with the Exhibit A attached hereto, with the Secretary of Transportation and the Transportation Improvement Board for the State of Washington.

ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF THIS
21ST DAY OF MAY, 2019.

CITY OF CARNATION



MAYOR, KIMBERLY LISK

ATTEST/AUTHENTICATED:



CITY CLERK, MARY MADOLE

RESOLUTION NO.:.....435

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
02	1	<p>SR 203/Tolt Avenue Central Business District Improvements</p> <p>Tolt Avenue (SR 203)</p> <p>Eugene Street to Rutherford Street</p> <p>The SR 203/Tolt Avenue Central Business District Improvements project includes constructing sidewalks and bike lanes and/or shared-use facilities along with adjacent street improvements in the City of Carnation's Central Business District (CBD) zone along SR 203/Tolt Avenue between Eugene Street and Rutherford Street. The project element details include all hardscape improvements, including widened shared-use sidewalks, curb bulbs to shorten street crossings, street re-grading and paving, undergrounding overhead utilities, installation of street and pedestrian lighting, storm drainage infrastructure improvements, street trees and plantings, and site furnishings. Widen to three lanes for left turns. The project will also include striping, signage, and wayfinding.</p>	WA-03830	05/07/19	05/21/19		435	28	C G P S T W	0.270	DCE	Yes

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
S	CN	2020		0	OTHER	2,170,645	168,000	2,338,645
S	CN	2020		0	TIB	750,000	132,353	882,353
S	CN	2020		0	WSDOT	200,000	0	200,000
S	CN	2020		0	TIB	500,000	0	500,000
P	CN	2020	STP(R)	450,000		0	80,000	530,000
S	CN	2020		0		0	399,582	399,582
Totals				450,000		3,620,645	779,935	4,850,580

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
CN	4,850,580	0	0	0	0
Totals	4,850,580	0	0	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
02	2	E Entwistle St. Sidewalk Entwistle Street 329th Avenue NE to 332nd Avenue NE Installation of approximately 910 LF of 5' wide sidewalk, curb, gutter and stormwater collection and infiltration facilities on the south side of the street between the Swiftwater and Brooktree neighborhoods; installation of ADA compliant curb ramps; and adding three light standards to better illuminate the roadway and pedestrian sidewalk. Low Impact Development (LID) features will be incorporated where technically feasible to reduce runoff and provide water quality treatment.	WA-03839	05/07/19	05/21/19		435	28	C G P S T W	0.170	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	Ped/Bike Program	34,774	11,591	46,365
P	CN	2021		0	Ped/Bike Program	266,599	88,866	355,465
Totals				0		301,373	100,457	401,830

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	46,365	0	0	0
CN	0	355,465	0	0	0
Totals	0	401,830	0	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	3	McKinley Ave. Sidewalk McKinley Avenue East Entwistle Street to Blanche Street Construction of approximately 400 lineal feet of cement concrete sidewalk, curb, gutter and stormwater collection and infiltration facilities along the west side of the street. This project fills in sidewalk gaps along McKinley Avenue.	NM2	05/07/19	05/21/19		435	28	C G P S T W	0.080	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	43,759	6,251	50,010
P	CN	2021		0	TIB	335,484	47,926	383,410
Totals				0		379,243	54,177	433,420

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	50,010	0	0	0
CN	0	383,410	0	0	0
Totals	0	433,420	0	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
06	4	Larson Avenue Connector Larson Avenue West Entwistle Street to NE 40th Street Construct approximately 1,000 LF of new arterial roadway between NE 40th Street and West Entwistle Street to include 2-12' travel lanes with 10' parking lanes; curb, gutter, and sidewalk; new storm drainage, illumination, and signing/stripping. A parking lane could be replaced with two bicycle lanes or a sharrow lane.	CP2	05/07/19	05/21/19		435	01	C G P S T W	0.200	EIS	Yes

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024		0	WSDOT	138,094	46,031	184,125
P	RW	2021		0		0	392,200	392,200
P	CN	2025		0	WSDOT	1,058,719	352,906	1,411,625
Totals				0		1,196,813	791,137	1,987,950

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	184,125
RW	0	0	392,200	0	0
CN	0	0	0	0	1,411,625
Totals	0	0	392,200	0	1,595,750

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
		G. Structure ID										
06	5	<p>NE 40th St. Arterial Reconstruction</p> <p>NE 40th Street</p> <p>Tolt Ave (SR 203) to Larson Avenue</p> <p>Reconstruct and widen approximately 500 LF of NE 40th Street to include 2-12' asphalt travel lanes; a turn lane at the intersection with Tolt; a parking lane; a bicycle lane; curb, gutter, and sidewalks on both sides of the street; new storm drainage facilities; illumination upgrades; and signing/stripping.</p>	SI1	05/07/19	05/21/19		435	04	C G P S T W	0.100	DCE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024		0	TIB	85,575	12,225	97,800
P	CN	2025		0	TIB	656,075	93,725	749,800
Totals				0		741,650	105,950	847,600

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	97,800
CN	0	0	0	0	749,800
Totals	0	0	0	0	847,600

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	6	NE 40th St. Overlay NE 40th Street Larson Avenue to park entry Construction of a 2" HMA overlay for approximately 710 LF of NE 40th Street including construct new ADA-compliant sidewalk ramps, where required, and install pavement markings.	SR1	05/07/19	05/21/19		435	05	C G P S T W	0.130	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024		0	TIB	9,188	1,312	10,500
P	CN	2025		0	TIB	70,438	10,062	80,500
Totals				0		79,626	11,374	91,000

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	10,500
CN	0	0	0	0	80,500
Totals	0	0	0	0	91,000

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
09	7	E Bird St. Reconstruction Bird Street Commercial Street to Milwaukee Avenue Reconstruct and widen approximately 950 LF of East Bird Street to include 2-10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	WA-08870	05/07/19	05/21/19		435	04	C G P S T W	0.180	DCE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	53,366	7,624	60,990
P	CN	2022		0	TIB	409,141	58,449	467,590
Totals				0		462,507	66,073	528,580

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	60,990	0	0	0
CN	0	0	467,590	0	0
Totals	0	60,990	467,590	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	8	W Bird St. Chip Seal Bird Street Tolt Avenue (SR 203) to Stephens Avenue Construction of a 2" HMA chip seal for approximately 280 LF of W. Bird Street including reclamation of existing asphalt, construct new ADA-compliant sidewalk ramps where required, and install pavement markings.	SR2	05/07/19	05/21/19		435	05	C G P S T W	0.050	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	1,404	201	1,605
P	CN	2022		0	TIB	10,767	1,538	12,305
Totals				0		12,171	1,739	13,910

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	1,605	0	0	0
CN	0	0	12,305	0	0
Totals	0	1,605	12,305	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
			G. Structure ID									
07	9	W Commercial St. Overlay Commercial Street Tolt Ave (SR 203) to Stephens Avenue Construction of a 2" HMA overlay for approximately 400 LF of West Commercial Street including reclamation of existing asphalt, and construction of new ADA-compliant sidewalk ramps and pavement markings where required.	SR3	05/07/19	05/21/19		435	05	C G P S T W	0.170	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	6,169	881	7,050
P	CN	2022		0	TIB	45,238	6,462	51,700
Totals				0		51,407	7,343	58,750

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	7,050	0	0	0
CN	0	0	51,700	0	0
Totals	0	7,050	51,700	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	10	Myrtle St. Overlay Myrtle Street Tolt Ave (SR 203) to Stossel/King Street Construction of a 2" HMA overlay for approximately 820 LF of Myrtle Street including reclamation of existing asphalt, and construction of new ADA-compliant sidewalk ramps where required, and install pavement markings.	SR4	05/07/19	05/21/19		435	05	C G P S T W	0.160	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	12,666	1,809	14,475
P	CN	2022		0	TIB	92,881	13,269	106,150
Totals				0		105,547	15,078	120,625

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	14,475	0	0	0
CN	0	0	106,150	0	0
Totals	0	14,475	106,150	0	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
09	11	W Rutherford St. Reconstruction Rutherford Street Tolt Ave (SR 203) to Stewart Avenue Reconstruct and widen approximately 1050 LF of West Rutherford Street to include 2 -10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	WA-08872	05/07/19	05/21/19		435	05	C G P S T W	0.220	DCE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2022		0	TIB	58,984	8,426	67,410
P	CN	2023		0	TIB	452,209	64,601	516,810
Totals				0		511,193	73,027	584,220

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	67,410	0	0
CN	0	0	0	516,810	0
Totals	0	0	67,410	516,810	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	12	Stossel Ave. Overlay Stossel Avenue East Entwistle Street to Rutherford Street Construction of a 2" HMA overlay for approximately 1,180 LF of Stossel Avenue including construction of new ADA-compliant sidewalk ramps, and installation of pavement markings.	WA-08873	05/07/19	05/21/19		435	05	C G P S T W	0.210	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2022		0	TIB	14,044	2,006	16,050
P	CN	2023		0	TIB	107,669	15,381	123,050
Totals				0		121,713	17,387	139,100

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	16,050	0	0
CN	0	0	0	123,050	0
Totals	0	0	16,050	123,050	0

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
09	13	E Reitze St. Reconstruction Reitze Street Milwaukee Avenue to Stossel Avenue Reconstruct and widen approximately 1150 LF of East Reitze Street to include 2-10' asphalt travel lanes; gravel parking shoulder; landscaped rain gardens and a five-foot asphalt walkway on one side and ADA compliant sidewalk ramps.	WA-08871	05/07/19	05/21/19		435	04	C G P S T W	0.210	DCE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2023		0	TIB	64,601	9,229	73,830
P	CN	2024		0	TIB	495,276	70,754	566,030
Totals				0		559,877	79,983	639,860

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	73,830	0
CN	0	0	0	0	566,030
Totals	0	0	0	73,830	566,030

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
			G. Structure ID									
09	14	Regal Glen Cul-de-Sacs Overlay Regency Pl, Palace Ct, Royal Ct, King Ct, Queen Ct Regal Street to cul-de-sac Construction of a 2" HMA overlay with reclamation of existing asphalt for approximately 1,531 LF of the Regal Glen cul-de-sacs Regency Place (217 LF), Palace Court (153 LF), Royal Court (264 LF), King Court (676 LF), and Queen Court (222 LF).	SR6	05/07/19	05/21/19		435	05	C G P S T W	0.290		No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2023		0	TIB	27,475	3,925	31,400
P	CN	2024		0	TIB	151,112	21,588	172,700
Totals				0		178,587	25,513	204,100

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	31,400	0
CN	0	0	0	0	172,700
Totals	0	0	0	31,400	172,700

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
07	15	Bird St. "Festival Street" Reconstruction Bird Street Stossel Avenue to Stephens Avenue Reconstruction of approximately 575 LF of Bird Street between Stephens Ave and Stossel Ave as a "festival street" to include special paving and a "curb-less" facility accommodating two travel lanes, parking, and sidewalk/furnishing zone; underground stormwater facilities; planters, lighting, and other pedestrian amenities; and signing/stripping.	SI7	05/07/19	05/21/19		435	04	C G P S T W	0.110	DCE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024	STP(R)	130,500		0	43,500	174,000
P	CN	2025	STP(R)	1,000,500		0	333,500	1,334,000
Totals				1,131,000		0	377,000	1,508,000

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	174,000
CN	0	0	0	0	1,334,000
Totals	0	0	0	0	1,508,000

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
			G. Structure ID									
06	16	E Entwistle St. Overlay East Entwistle Street Spilman Avenue to 329th Avenue NE Construction of a 2" HMA overlay for approximately 2,325 LF of East Entwistle Street including construction of new ADA-compliant sidewalk ramps where required, and installation of pavement markings.	SR7	05/07/19	05/21/19		435	05	C G P S T W	0.440		No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024		0	TIB	32,900	4,700	37,600
P	CN	2025		0	TIB	329,000	47,000	376,000
Totals				0		361,900	51,700	413,600

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	37,600
CN	0	0	0	0	376,000
Totals	0	0	0	0	413,600

Six Year Transportation Improvement Program From 2020 to 2025

Agency: Carnation

County: King

MPO/RTPO: PSRC

Y Inside

N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
			G. Structure ID									
08	17	Stephens Ave. Overlay Stephens Avenue Entwistle Street to Morrison Street Construction of a 2" HMA overlay for approximately 1,825 LF of Stephens Avenue including construction of new ADA-compliant sidewalk ramps as required, and installation of pavement markings.	SR8	05/07/19	05/21/19		435	05	C G P S T W	0.350	CE	No

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2025		0	TIB	18,812	2,688	21,500
Totals				0		18,812	2,688	21,500

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	0	21,500
Totals	0	0	0	0	21,500

	Federal Funds	State Funds	Local Funds	Total Funds
Grand Totals for Carnation	1,581,000	8,703,064	2,560,561	12,844,625



Six Year Transportation Improvement Program (STIP) 2020-25 Financial Forecast and Analysis

	Actual 2015-18	Estimated 2019	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Six-Year Period Total	Beyond 2025
			2020	2021	2022	2023	2024	2025		
301 CAPITAL IMPROVEMENT FUND										
Available Cash Balance - 301 Fund		\$ 372,721	\$ 1,018,336	\$ 340,319	\$ 447,804	\$ 470,653	\$ 485,517	\$ 434,438		
Revenues - 301 Fund										
REET (1 & 2)	\$ 772,994	\$ 125,000	\$ 125,000	\$ 120,000	\$ 115,000	\$ 110,000	\$ 105,000	\$ 100,000	\$ 675,000	
IFT/IFL: 001/002 Fund		\$ -	\$ 178,918	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 178,918	\$ -
Transfer-In: 109 Fund		\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ -
Tolt Ave CBD PSRC TAP CAR-8 (PE)	\$ 647,900	\$ 87,350	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave CBD DOE EAGL SW (PE/CN)		\$ 157,380	\$ 671,995	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 671,995	\$ -
Tolt Ave CBD PSE Schedule 74 (CN)		\$ 421,034	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave CBD WSDOT Partner Commitment (CN)		\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -
Tolt Ave CBD DOC WA Cap Budget (CN)		\$ -	\$ 1,498,650	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,498,650	\$ -
Tolt Ave CBD TIB SCAP (CN)		\$ -	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ -
Tolt Ave CBD TIB Complete Streets (CN)		\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave CBD UNSECURED PSRC RTCC (CN)		\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000	\$ -
NE 40th St. Arterial Reconstruction (Tolt to Larson Ave)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 85,575	\$ 656,075	\$ 741,650	\$ -
NE 40th St. Overlay (Larson Ave to Park Entry - 1,150 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,188	\$ 70,438	\$ 79,625	\$ -
E Bird St. Reconstruction (Commercial to Milwaukee - 950 LF)		\$ -	\$ -	\$ 53,366	\$ 409,141	\$ -	\$ -	\$ -	\$ 462,508	\$ -
W Bird St. Chip Seal (Tolt to Stephens Ave - 280 LF)		\$ -	\$ -	\$ 1,404	\$ 10,767	\$ -	\$ -	\$ -	\$ 12,171	\$ -
W Commercial St. Overlay (Tolt to Stephens Ave - 400 LF)		\$ -	\$ -	\$ 6,169	\$ 45,238	\$ -	\$ -	\$ -	\$ 51,406	\$ -
Myrtle St. Overlay (Tolt to King/Stossel Ave - 820 LF)		\$ -	\$ -	\$ 12,666	\$ 92,881	\$ -	\$ -	\$ -	\$ 105,547	\$ -
W Rutherford St. Reconstruction (Tolt to Stewart - 1,050 LF)		\$ -	\$ -	\$ -	\$ 58,984	\$ 452,209	\$ -	\$ -	\$ 511,193	\$ -
Stossel Ave. Overlay (Entwistle to Rutherford - 1,180 LF)		\$ -	\$ -	\$ -	\$ 14,044	\$ 107,669	\$ -	\$ -	\$ 121,713	\$ -
E Reitze St. Reconstruction (Milwaukee to Stossel - 1,150 LF)		\$ -	\$ -	\$ -	\$ -	\$ 64,601	\$ 495,276	\$ -	\$ 559,878	\$ -
Regal Glen Cul-de-Sacs Overlay (1,531 LF)		\$ -	\$ -	\$ -	\$ -	\$ 27,475	\$ 151,113	\$ -	\$ 178,588	\$ -
Bird St. "Festival Street" Reconstruction (Stossel to Stephens - 575 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,500	\$ 1,000,500	\$ 1,131,000	\$ -
E Entwistle St. Overlay (Spilman to 329th - 2,325 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,900	\$ 329,000	\$ 361,900	\$ -
Stephens Ave. Overlay (W Entwistle to Morrison - 1,825 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,813	\$ 18,813	\$ 203,175
Morrison Street Improvements (PE & CN)	\$ 505,078	\$ 235,649	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other (Investment & Bond Interest)		\$ 1,100	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 6,000	
Total Revenues		\$ 1,527,513	\$ 4,175,563	\$ 194,605	\$ 747,054	\$ 762,954	\$ 1,010,551	\$ 2,175,825	\$ 9,066,552	\$ 3,778,500
Expenses - 301 Fund										
Tolt Ave. CBD Improvements (PE)	\$ (817,542)	\$ (32,458)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave. CBD (PE Phase Prof Svcs)	\$ (20,985)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave. CBD Stormwater (PE & CN)	\$ (86,260)	\$ (96,740)	\$ (885,100)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (885,100)	\$ -
Tolt Ave. CBD Underground Conv. (CN)		\$ (749,800)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tolt Ave. CBD Improvements (CN)	\$ (820)	\$ -	\$ (3,965,480)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,965,480)	\$ -
NE 40th St. Arterial Reconstruction (Tolt to Larson Ave)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ (97,800)	\$ (749,800)	\$ (847,600)	\$ -
NE 40th St. Overlay (Larson Ave to Park Entry - 1,150 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ (10,500)	\$ (80,500)	\$ (91,000)	\$ -
E Bird St. Reconstruction (Commercial to Milwaukee - 950 LF)		\$ -	\$ -	\$ (60,990)	\$ (467,590)	\$ -	\$ -	\$ -	\$ (528,580)	\$ -
W Bird St. Chip Seal (Tolt to Stephens Ave - 280 LF)		\$ -	\$ -	\$ (1,605)	\$ (12,305)	\$ -	\$ -	\$ -	\$ (13,910)	\$ -
W Commercial St. Overlay (Tolt to Stephens Ave - 400 LF)		\$ -	\$ -	\$ (7,050)	\$ (51,700)	\$ -	\$ -	\$ -	\$ (58,750)	\$ -
Myrtle St. Overlay (Tolt to King/Stossel Ave - 820 LF)		\$ -	\$ -	\$ (14,475)	\$ (106,150)	\$ -	\$ -	\$ -	\$ (120,625)	\$ -
W Rutherford St. Reconstruction (Tolt to Stewart - 1,050 LF)		\$ -	\$ -	\$ -	\$ (67,410)	\$ (516,810)	\$ -	\$ -	\$ (584,220)	\$ -
Stossel Ave. Overlay (Entwistle to Rutherford - 1,180 LF)		\$ -	\$ -	\$ -	\$ (16,050)	\$ (123,050)	\$ -	\$ -	\$ (139,100)	\$ -
E Reitze St. Reconstruction (Milwaukee to Stossel - 1,150 LF)		\$ -	\$ -	\$ -	\$ -	\$ (73,830)	\$ (566,030)	\$ -	\$ (639,860)	\$ -
Regal Glen Cul-de-Sacs Overlay (1,531 LF)		\$ -	\$ -	\$ -	\$ -	\$ (31,400)	\$ (172,700)	\$ -	\$ (204,100)	\$ -
Bird St. "Festival Street" Reconstruction (Stossel to Stephens - 575 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ (174,000)	\$ (1,334,000)	\$ (1,508,000)	\$ -
E Entwistle St. Overlay (Spilman to 329th - 2,325 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ (37,600)	\$ (376,000)	\$ (413,600)	\$ -
Stephens Ave. Overlay (W Entwistle to Morrison - 1,825 LF)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (21,500)	\$ (21,500)	\$ (232,200)
Other (Bond Fees, Prof Svcs)		\$ (2,900)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ (3,000)	\$ (18,000)	\$ -
Total Expenses		\$ (881,898)	\$ (4,853,580)	\$ (87,120)	\$ (724,205)	\$ (748,090)	\$ (1,061,630)	\$ (2,564,800)	\$ (10,039,425)	\$ (5,074,300)
Ending Cash Balance - 301 Capital Improvement		\$ 1,018,336	\$ 340,319	\$ 447,804	\$ 470,653	\$ 485,517	\$ 434,438	\$ 45,463		

	Estimated 2019*	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Six-Year Period Total	Beyond 2025
		2020**	2021	2022	2023	2024	2025		
109 TRAFFIC IMPACT FEE FUND									
Beginning Cash: 109 Fund	\$ 161,696	\$ 284,693	\$ 320,118	\$ 290,908	\$ 24,133	\$ 149,558	\$ 228,951		\$ 149,558
Revenues - 109 Fund									
Traffic Impact Fees	\$ 234,632	\$ 280,000	\$ 335,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 960,000	\$ 980,000
Larson Avenue Connector (NE 40th to Entwistle St.)		\$ -	\$ -	\$ -	\$ -	\$ 138,094	\$ 1,058,719	\$ 1,196,813	\$ -
E Entwistle Sidewalk (329th to 332nd Ave - 910 LF)		\$ -	\$ -	\$ 301,373	\$ -	\$ -	\$ -	\$ 301,373	\$ -
McKinley Ave. Sidewalk (Eugene to Blanche St.)		\$ -	\$ -	\$ 379,243	\$ -	\$ -	\$ -	\$ 379,243	\$ -
Other (Investment & Bond Interest)	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 425	\$ 2,550	\$ 5,950
Total Revenues	\$ 280,425	\$ 335,425	\$ 806,040	\$ 125,425	\$ 125,425	\$ 263,519	\$ 1,184,144	\$ 2,839,978	\$ 9,412,152
<i>2019 TIF estimate comprised of \$50K YTD + \$230K outstanding in deferred pmts a/o 4/1/19*</i>									
Expenses - 109 Fund									
Tolt Ave CBD Improvements (RW)	\$ (41,751)	\$ (157,429)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfer-Out to 301: Tolt Ave CBD Improvements (CN)		\$ -	\$ (300,000)	\$ -	\$ -	\$ -	\$ -	\$ (300,000)	\$ -
Larson Avenue Connector (NE 40th to Entwistle St.)		\$ -	\$ -	\$ (392,200)	\$ -	\$ (184,125)	\$ (1,411,625)	\$ (1,987,950)	\$ -
E Entwistle Sidewalk (329th to 332nd Ave - 910 LF)		\$ -	\$ -	\$ (401,830)	\$ -	\$ -	\$ -	\$ (401,830)	\$ -
McKinley Ave. Sidewalk (Eugene to Blanche St.)		\$ -	\$ -	\$ (433,420)	\$ -	\$ -	\$ -	\$ (433,420)	\$ -
Total Expenses	\$ (157,429)	\$ (300,000)	\$ (835,250)	\$ (392,200)	\$ -	\$ (184,125)	\$ (1,411,625)	\$ (3,123,200)	\$ (12,576,769)
Ending Cash Balance - 109 Traffic Impact	\$ 284,693	\$ 320,118	\$ 290,908	\$ 24,133	\$ 149,558	\$ 228,951	\$ 1,470		

Appendix A-I - Street Inventory

Alphabetical List

325TH AVE NE			Subtotal miles: 0.231
ENTWISTLE ST to CUL-DE-SAC	72	2019 Crack sealing	Cascade View (Cheve)
NE 42ND ST to NE 40TH ST	77	2019 Crack sealing	Swiftwater
325TH AVE NE/NE 46TH PL			Subtotal miles: 0.213
ENTWISTLE ST to CUL-DE-SAC	77	2019 Crack sealing	Carnation Meadows
326TH AVE NE			Subtotal miles: 0.602
ENTWISTLE ST to NE 40TH ST	77	2018 Crack sealing	Swiftwater
NE 47TH ST to NE 50TH ST	95	2021 Crack sealing	Brumbaugh's
NE 50TH STREET to CUL-DE-SAC	72	2018 Crack sealing	Carnation Meadows II
327TH AVE NE			Subtotal miles: 0.458
NE 47TH ST to NE 50TH ST	95	2021 Crack sealing	Brumbaugh's
NE 50TH ST TO CUL-DE-SAC	95	2015 Construction	The Estates at SVT
327TH PL NE			Subtotal miles: 0.109
CUL-DE-SAC to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater
328TH AVE NE			Subtotal miles: 0.118
NE 47TH ST to NE 50TH ST	95	2021 Crack sealing	Brumbaugh's
329TH AVE NE			Subtotal miles: 0.202
ENTWISTLE ST to NE 40TH PLACE	72	2018 Crack sealing	Swiftwater
332ND AVE NE			Subtotal miles: 0.2
ENTWISTLE TO SOUTH END	100	2016 Construction	Tolt Meadows

Appendix A-I - Street Inventory

Alphabetical List

333RD AVE NE			Subtotal miles: 0.19
ENTWISTLE TO SOUTH END	100	2016 Construction	Brooktree
334TH AVE NE			Subtotal miles: 0.138
ENTWISTLE ST to NE 42ND ST	72	2019 Crack sealing	River's Edge
336TH AVE NE			Subtotal miles: 0.167
ENTWISTLE ST to NE 42ND ST	72	2019 Crack sealing	River's Edge
51ST ST			Subtotal miles: 0.2
52ND ST TO 327TH AVE NE	100	2015 Construction	The Estates at SVT
BAGWELL ST			Subtotal miles: 0.09
MILWAUKEE AVE to SPILMAN AVE	95	2021 Crack sealing	Tolt
BIRD ST			Subtotal miles: 0.281
MILWAUKEE AVE to COMMERCIAL ST	36	2022 Reconstruction	Tolt
STEPHENS AVE to STEWART AVE	72	2020 Crack sealing	Tolt
BIRD ST (Festival Street)			Subtotal miles: 0.107
STOSSEL ST to TOLT AVE	56	2025 Reconstruction	Tolt
TOLT AVE to STEPHENS AVE	52	2020 Storm Facility 2022 Chipseal 2025 Reconstruction	Tolt
BLANCHE ST			Subtotal miles: 0.158
STOSSEL ST to TOLT AVE	86	2020 Crack sealing 2008 Reconstruction	Tolt Replat
COMMERCIAL ST			Subtotal miles: 0.353
ENTWISTLE ST to STOSSEL ST	68	2018 Crack sealing	Tolt
STEPHENS AVE to STEWART AVE	81	2018 Crack sealing	Tolt
TOLT AVE to STEPHENS ST	54	2022 Chipseal	Tolt
TOLT AVE to STOSSEL ST	63	2018 Crack sealing	Tolt

Appendix A-I - Street Inventory

Alphabetical List

ENTWISTLE ST			Subtotal miles: 1.67
326TH ST to 329TH AVE NE	54	2025 Overlay 2019 Crack sealing	Arterial/Collector
329TH ST to 334TH AVE NE	68	2017 Crack sealing	Arterial/Collector
334TH ST to 336TH AVE NE	68	2017 Crack sealing	Arterial/Collector
SPILMAN AVE to 326TH AVE	54	2025 Overlay 2019 Crack sealing	Arterial/Collector
STOSSEL AVE to SPILMAN AVE	100	2017 Overlay	Arterial/Collector
TOLT AVE to LARSON AVE	95	2020 Crack sealing	Arterial/Collector
TOLT AVE to STOSSEL AVE	95	2021 Crack sealing	Arterial/Collector
EUGENE ST			Subtotal miles: 0.13
MCKINLEY AVE to STOSSEL AVE	95	2020 Crack sealing	Tolt Replat
TOLT AVE to MCKINLEY AVENUE	95	2020 Storm Facility 2020 Crack sealing	Tolt Replat
KING CT			Subtotal miles: 0.128
REGAL ST to CUL-DE-SAC	54	2024 Chipseal 2017 Crack sealing	Regal Glen
LARSON AVE			Subtotal miles: 0.05
W ENTWISTLE ST to SOUTH END	95	2020 Crack sealing	Arterial/Collector
MCKINLEY AVE			Subtotal miles: 0.246
BLANCHE ST to MYRTLE ST	86	2020 Crack sealing	Tolt Replat
EUGENE ST to ENTWISTLE ST	95	2020 Crack sealing	Tolt Replat
MYRTLE ST to EUGENE ST	86	2020 Crack sealing	Tolt Replat
MILWAUKEE AVE			Subtotal miles: 0.249
ENTWISTLE ST to NE 50TH ST	68	2017 Crack sealing 2000 Reconstruction	Tolt

Appendix A-I - Street Inventory

Alphabetical List

MORRISON ST			Subtotal miles: 0.439
SPILMAN AVE to MILWAUKEE AVE	100	2018 Overlay	Tolt
TOLT AVE to SPILMAN AVE	100	2018 Overlay	Tolt
TOLT AVE to STEWART AVE	100	2018 Reconstruction	Tolt
MYRTLE ST			Subtotal miles: 0.159
TOLT AVE to STOSSEL ST	60	2022 Chipseal	Tolt Replat
NE 40TH CIRCLE			Subtotal miles: 0.055
329TH AVE NE to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater
NE 40TH PLACE			Subtotal miles: 0.093
329TH AVE NE to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater
NE 40TH ST			Subtotal miles: 0.26
325TH AVE NE to 326TH AVE NE	77	2019 Crack sealing	Swiftwater
PAVEMENT CHANGE to PARK ENTRANCE	44	2025 Overlay	Arterial/Collector
TOLT AVE to PAVEMENT CHANGE	48	2025 Reconstruction	Arterial/Collector
NE 42ND PLACE			Subtotal miles: 0.086
329TH AVE NE to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater
NE 42ND ST			Subtotal miles: 0.446
325TH AVE NE to 329TH AVE NE	77	2019 Crack sealing	Swiftwater
333RD AVE to 332ND AVE NE	100	2016 Construction	Brooktree
333RD AVE to EAST END	100	2016 Construction	Brooktree
334TH AVE NE to 336TH AVE NE	72	2019 Crack sealing	River's Edge
NE 43RD CIRCLE			Subtotal miles: 0.05
329TH AVE NE to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater

Appendix A-I - Street Inventory

Alphabetical List

NE 43RD PLACE			Subtotal miles: 0.143
329TH AVE NE to CUL-DE-SAC	77	2019 Crack sealing	Swiftwater
334TH AVE NE to CUL-DE-SAC	72	2019 Crack sealing	River's Edge
NE 47TH ST			Subtotal miles: 0.059
326TH AVE NE to 327TH AVE NE	52	half street (30')	Brumbaugh's
NE 50TH ST			Subtotal miles: 0.333
326TH AVE NE to 328TH AVE NE	90	2021 Crack sealing 2015 Overlay	Arterial/Collector
326TH AVE NE to MILWAUKEE AVE	90	2021 Crack sealing 2015 Overlay	Arterial/Collector
328TH AVE NE to EAST END	100	2021 Crack sealing 2015 Overlay	Arterial/Collector
PALACE CT			Subtotal miles: 0.029
REGAL ST to CUL-DE-SAC	45	2024 Chipseal 2017 Crack sealing	Regal Glen
QUEEN CT			Subtotal miles: 0.042
REGAL ST to CUL-DE-SAC	54	2024 Chipseal 2017 Crack sealing	Regal Glen
REGAL ST			Subtotal miles: 0.357
STOSSEL ST to ENTWISTLE ST	86	2017 Crack sealing	Regal Glen
REGENCY PLACE			Subtotal miles: 0.041
REGAL ST to CUL-DE-SAC	50	2024 Chipseal 2017 Crack sealing	Regal Glen
REITZE ST			Subtotal miles: 0.219
MILWAUKEE AVE to STOSSEL ST	40	2024 Reconstruction	Tolt

Appendix A-1 - Street Inventory

Alphabetical List

ROYAL CT			Subtotal miles: 0.05
REGAL ST to CUL-DE-SAC	45	2024 Chipseal 2017 Crack sealing	Regal Glen
RUTHERFORD ST			Subtotal miles: 0.42
SPILMAN AVE to MILWAUKEE AVENUE	95	2021 Crack sealing 2016 Reconstruction	Tolt
STOSSEL ST to SPILMAN AVE	95	2021 Crack sealing 2016 Reconstruction	Tolt
TOLT AVE to STEWART AVE	40	2020 Storm Facility 2023 Reconstruction	Tolt
TOLT AVE to STOSSEL ST	95	2021 Crack sealing 2016 Reconstruction	Tolt
SPILMAN AVE			Subtotal miles: 0.457
E BIRD ST to MORRISON STREET	95	2021 Crack sealing 2015 Reconstruction	Tolt
ENTWISTLE ST to E BIRD ST	95	2021 Crack sealing 2015 Reconstruction	Tolt
MORRISON STREET to SCHOOL	54	2021 Crack sealing	Tolt
STEPHENS AVE			Subtotal miles: 0.345
BIRD ST to COMMERCIAL ST	72	2026 Overlay 2018 Crack sealing	Tolt
COMMERCIAL ST to MORRISON ST	63	2020 Crack sealing 2026 Overlay 1996 Reconstruction	Tolt
WEST ENTWISTLE to BIRD ST	54	2026 Overlay 2018 Crack sealing	Tolt
STEWART ST			Subtotal miles: 0.245
COMMERCIAL ST to MORRISON ST	90	2020 Crack sealing	Tolt
COMMERCIAL ST to WEST ENTWISTLE	77	2020 Crack sealing	Tolt

Appendix A-I - Street Inventory

Alphabetical List

STOSSEL ST			Subtotal miles: 0.455
COMMERCIAL ST to RUTHERFORD ST	54	2022 Overlay	Tolt
ENTWISTLE ST to COMMERCIAL ST	52	2022 Overlay	Tolt
MYRTLE ST to BLANCHE ST	95	2020 Crack sealing 2008 Reconstruction	Tolt Replat
MYRTLE ST to EAST ENTWISTLE ST	95	2020 Crack sealing 2008 Reconstruction	Tolt Replat
			Total Miles: 11.073

Appendix A-2 - Street Inventory

Listed by Plat

		Notes	2018 PCR
Arterial/Collector			Subtotal miles: 2.253
ENTWISTLE ST	326TH ST to 329TH AVE NE	2025 Overlay 2019 Crack sealing	54
ENTWISTLE ST	329TH ST to 334TH AVE NE	2017 Crack sealing	68
ENTWISTLE ST	334TH ST to 336TH AVE NE	2017 Crack sealing	68
ENTWISTLE ST	SPILMAN AVE to 326TH AVE	2025 Overlay 2019 Crack sealing	54
ENTWISTLE ST	STOSSEL AVE to SPILMAN AVE	2017 Overlay	100
ENTWISTLE ST	TOLT AVE to LARSON AVE	2020 Crack sealing	95
ENTWISTLE ST	TOLT AVE to STOSSEL AVE	2021 Crack sealing	95
LARSON AVE	W ENTWISTLE ST to SOUTH END	2020 Crack sealing	95
NE 40TH ST	PAVEMENT CHANGE to PARK ENTRANCE	2025 Overlay	44
NE 40TH ST	TOLT AVE to PAVEMENT CHANGE	2025 Reconstruction	48
NE 50TH ST	326TH AVE NE to 328TH AVE NE	2021 Crack sealing 2015 Overlay	90
NE 50TH ST	326TH AVE NE to MILWAUKEE AVE	2021 Crack sealing 2015 Overlay	90
NE 50TH ST	328TH AVE NE to EAST END	2021 Crack sealing 2015 Overlay	100
Brooktree			Subtotal miles: 0.24
333RD AVE NE	ENTWISTLE TO SOUTH END	2016 Construction	100
NE 42ND ST	333RD AVE to 332ND AVE NE	2016 Construction	100
NE 42ND ST	333RD AVE to EAST END	2016 Construction	100
Brumbaugh's			Subtotal miles: 0.413
326TH AVE NE	NE 47TH ST to NE 50TH ST	2021 Crack sealing	95
327TH AVE NE	NE 47TH ST to NE 50TH ST	2021 Crack sealing	95
328TH AVE NE	NE 47TH ST to NE 50TH ST	2021 Crack sealing	95
NE 47TH ST	326TH AVE NE to 327TH AVE NE	half street (30')	52

Appendix A-2 - Street Inventory

Listed by Plat

			Notes	2018 PCR
Carnation Meadows			Subtotal miles:	0.213
325TH AVE NE/NE 46TH PL	ENTWISTLE ST to CUL-DE-SAC		2019 Crack sealing	77
Carnation Meadows II			Subtotal miles:	0.12
326TH AVE NE	NE 50TH STREET to CUL-DE-SAC		2018 Crack sealing	72
Cascade View (Cheve)			Subtotal miles:	0.111
325TH AVE NE	ENTWISTLE ST to CUL-DE-SAC		2019 Crack sealing	72
Regal Glen			Subtotal miles:	0.647
KING CT	REGAL ST to CUL-DE-SAC		2024 Chipseal 2017 Crack sealing	54
PALACE CT	REGAL ST to CUL-DE-SAC		2024 Chipseal 2017 Crack sealing	45
QUEEN CT	REGAL ST to CUL-DE-SAC		2024 Chipseal 2017 Crack sealing	54
REGAL ST	STOSSEL ST to ENTWISTLE ST		2017 Crack sealing	86
REGENCY PLACE	REGAL ST to CUL-DE-SAC		2024 Chipseal 2017 Crack sealing	50
ROYAL CT	REGAL ST to CUL-DE-SAC		2024 Chipseal 2017 Crack sealing	45
River's Edge			Subtotal miles:	0.479
334TH AVE NE	ENTWISTLE ST to NE 42ND ST		2019 Crack sealing	72
336TH AVE NE	ENTWISTLE ST to NE 42ND ST		2019 Crack sealing	72
NE 42ND ST	334TH AVE NE to 336TH AVE NE		2019 Crack sealing	72
NE 43RD PLACE	334TH AVE NE to CUL-DE-SAC		2019 Crack sealing	72
Swiftwater			Subtotal miles:	1.504
325TH AVE NE	NE 42ND ST to NE 40TH ST		2019 Crack sealing	77
326TH AVE NE	ENTWISTLE ST to NE 40TH ST		2018 Crack sealing	77
327TH PL NE	CUL-DE-SAC to CUL-DE-SAC		2019 Crack sealing	77
329TH AVE NE	ENTWISTLE ST to NE 40TH PLACE		2018 Crack sealing	72
NE 40TH CIRCLE	329TH AVE NE to CUL-DE-SAC		2019 Crack sealing	77
NE 40TH PLACE	329TH AVE NE to CUL-DE-SAC		2019 Crack sealing	77

Appendix A-2 - Street Inventory

Listed by Plat

		Notes	2018 PCR
NE 40TH ST	325TH AVE NE to 326TH AVE NE	2019 Crack sealing	77
NE 42ND PLACE	329TH AVE NE to CUL-DE-SAC	2019 Crack sealing	77
NE 42ND ST	325TH AVE NE to 329TH AVE NE	2019 Crack sealing	77
NE 43RD CIRCLE	329TH AVE NE to CUL-DE-SAC	2019 Crack sealing	77
NE 43RD PLACE	329TH AVE NE to CUL-DE-SAC	2019 Crack sealing	77
The Estates at SVT			Subtotal miles: 0.54
327th AVE NE	NE 50TH ST TO CUL-DE-SAC	2015 Construction	95
51ST ST	52ND ST TO 327TH AVE NE	2015 Construction	100
Tolt			Subtotal miles: 3.43
BAGWELL ST	MILWAUKEE AVE to SPILMAN AVE	2021 Crack sealing	95
BIRD ST	MILWAUKEE AVE to COMMERCIAL ST	2022 Reconstruction	36
BIRD ST	STEPHENS AVE to STEWART AVE	2020 Crack sealing	72
BIRD ST (Festival Street)	STOSSEL ST to TOLT AVE	2025 Reconstruction	56
BIRD ST (Festival Street)	TOLT AVE to STEPHENS AVE	2020 Storm Facility 2022 Chipseal 2025 Reconstruction	52
COMMERCIAL ST	ENTWISTLE ST to STOSSEL ST	2018 Crack sealing	68
COMMERCIAL ST	STEPHENS AVE to STEWART AVE	2018 Crack sealing	81
COMMERCIAL ST	TOLT AVE to STEPHENS ST	2022 Chipseal	54
COMMERCIAL ST	TOLT AVE to STOSSEL ST	2018 Crack sealing	63
MILWAUKEE AVE	ENTWISTLE ST to NE 50TH ST	2017 Crack sealing 2000 Reconstruction	68
MORRISON ST	SPILMAN AVE to MILWAUKEE AVE	2018 Overlay	100
MORRISON ST	TOLT AVE to SPILMAN AVE	2018 Overlay	100
MORRISON ST	TOLT AVE to STEWART AVE	2018 Reconstruction	100
REITZE ST	MILWAUKEE AVE to STOSSEL ST	2024 Reconstruction	40
RUTHERFORD ST	SPILMAN AVE to MILWAUKEE AVENUE	2021 Crack sealing 2016 Reconstruction	95
RUTHERFORD ST	STOSSEL ST to SPILMAN AVE	2021 Crack sealing 2016 Reconstruction	95
RUTHERFORD ST	TOLT AVE to STEWART AVE	2020 Storm Facility 2023 Reconstruction	40

Appendix A-2 - Street Inventory

Listed by Plat

		Notes	2018 PCR
RUTHERFORD ST	TOLT AVE to STOSSEL ST	2021 Crack sealing 2016 Reconstruction	95
SPILMAN AVE	E BIRD ST to MORRISON STREET	2021 Crack sealing 2015 Reconstruction	95
SPILMAN AVE	ENTWISTLE ST to E BIRD ST	2021 Crack sealing 2015 Reconstruction	95
SPILMAN AVE	MORRISON STREET to SCHOOL	2021 Crack sealing	54
STEPHENS AVE	BIRD ST to COMMERCIAL ST	2026 Overlay 2018 Crack sealing	72
STEPHENS AVE	COMMERCIAL ST to MORRISON ST	2020 Crack sealing 2026 Overlay 1996 Reconstruction	63
STEPHENS AVE	WEST ENTWISTLE to BIRD ST	2026 Overlay 2018 Crack sealing	54
STEWART ST	COMMERCIAL ST to MORRISON ST	2020 Crack sealing	90
STEWART ST	COMMERCIAL ST to WEST ENTWISTLE	2020 Crack sealing	77
STOSSEL ST	COMMERCIAL ST to RUTHERFORD ST	2022 Overlay	54
STOSSEL ST	ENTWISTLE ST to COMMERCIAL ST	2022 Overlay	52
Tolt Meadows			Subtotal miles: 0.2
332ND AVE NE	ENTWISTLE TO SOUTH END	2016 Construction	100
Tolt Replat			Subtotal miles: 0.923
BLANCHE ST	STOSSEL ST to TOLT AVE	2020 Crack sealing 2008 Reconstruction	86
EUGENE ST	MCKINLEY AVE to STOSSEL AVE	2020 Crack sealing	95
EUGENE ST	TOLT AVE to MCKINLEY AVENUE	2020 Storm Facility 2020 Crack sealing	95
MCKINLEY AVE	BLANCHE ST to MYRTLE ST	2020 Crack sealing	86
MCKINLEY AVE	EUGENE ST to ENTWISTLE ST	2020 Crack sealing	95
MCKINLEY AVE	MYRTLE ST to EUGENE ST	2020 Crack sealing	86
MYRTLE ST	TOLT AVE to STOSSEL ST	2022 Chipseal	60
STOSSEL ST	MYRTLE ST to BLANCHE ST	2020 Crack sealing 2008 Reconstruction	95
STOSSEL ST	MYRTLE ST to EAST ENTWISTLE ST	2020 Crack sealing 2008 Reconstruction	95



RIVERVIEW SCHOOL DISTRICT NO. 407
2019
CAPITAL FACILITIES PLAN



BOARD OF DIRECTORS

Carol Van Noy	President
Lori Oviatt	Vice-President
Danny L. Edwards	Director
Jodi Fletcher	Director
Sabrina Parnell	Director

SUPERINTENDENT

Dr. Anthony L. Smith

PREPARED BY

Ruby Perez
Director of Business and Operations
(425) 844-4505

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SECTION 1 -- INTRODUCTION

Purpose of the Capital Facilities Plan

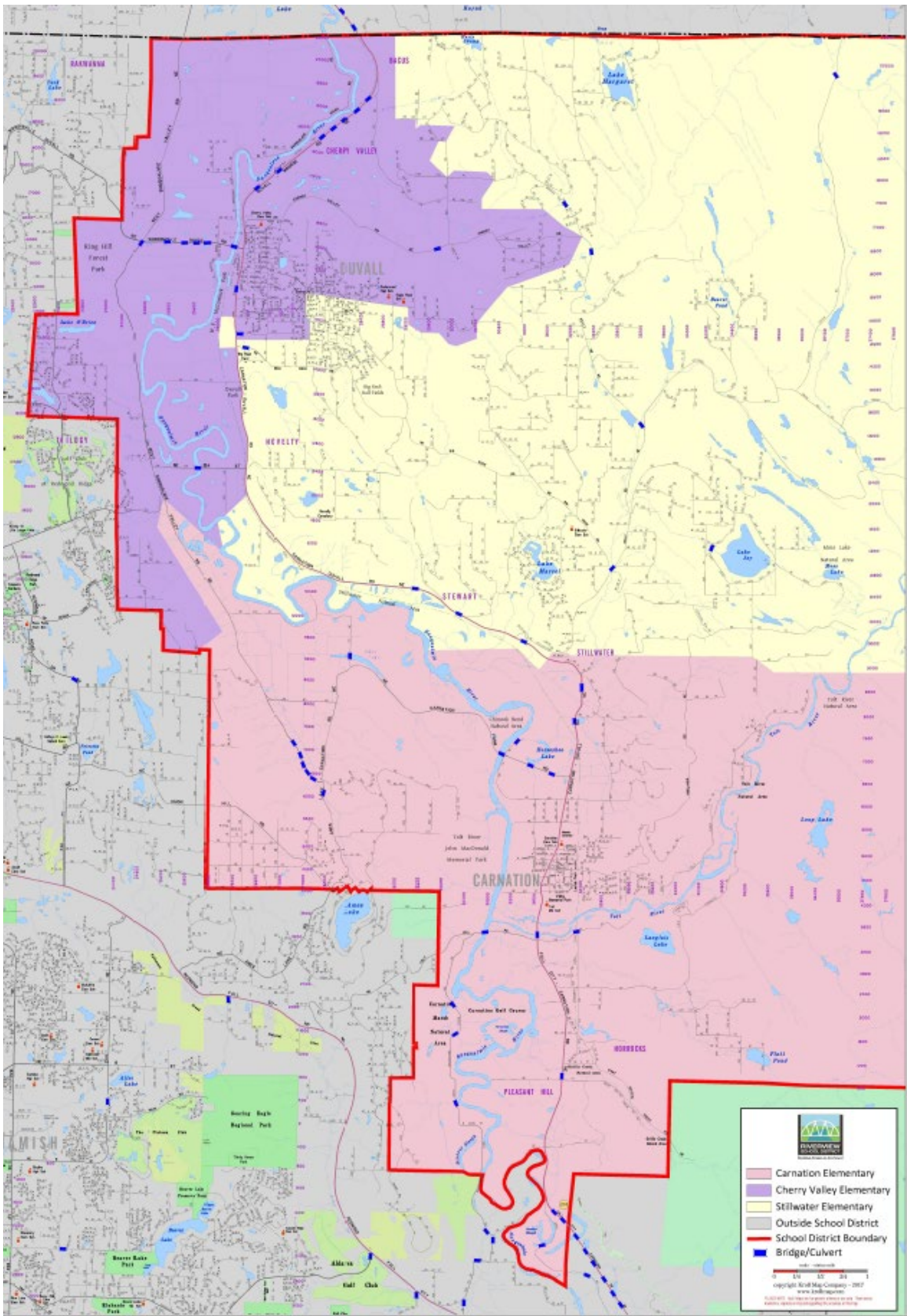
Presented herein, in conformance with the Growth Management Act and local county and municipal codes is the Capital Facilities Plan (CFP) of the Riverview School District.

This Capital Facilities Plan is intended to provide the City of Carnation, the City of Duvall, King County, other jurisdictions, and our own community with a description of facilities needed to accommodate projected student enrollment at acceptable levels of service over the next six years (2019 – 2025).

The Growth Management Act also requires reassessment of the land use element of local comprehensive plans if probable funding falls short of meeting existing needs, and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent. This Capital Facilities Plan is intended to provide local jurisdictions with information on the school district's ability to accommodate projected population and enrollment demands anticipated through implementation of various comprehensive plan land use alternatives. The role of impact fees in funding school construction is addressed in Section 8 of this report.

Overview of the Riverview School District

The Riverview School District services three jurisdictions: King County, the City of Carnation, and the City of Duvall. The district is 250 square miles and is located in northeast King County serving the Lower Snoqualmie Valley from the King/Snohomish County line south approximately 16 miles, and from the western ridge of the valley to the cascade foothills. The district currently serves an enrollment headcount of approximately 3,296 students, with three elementary schools, one middle school, one high school, three alternative high school programs, and one alternative elementary school programs, and a K-12 alternative parent partnership program. The grade configuration is kindergarten through fifth grade for elementary school, sixth through eighth for middle school, and ninth through twelfth for high school. Four of the alternative programs are housed at the Riverview Learning Center in Carnation.



SECTION 2 -- STUDENT ENROLLMENT TRENDS AND PROJECTIONS

Projected Student Enrollment 2019-2025

Enrollment projections are most accurate for the initial years of the forecast period. For later years, the review of enrollment patterns, housing trends, and other demographic changes are useful yearly indicators in evaluating and adjusting projections. This year's plan anticipates a 2% growth in student enrollment which is based on recent enrollment trends. Some of the trends are a result of: 1) transfers from private schools, 2) increases in kindergarten enrollment, 3) significant decreases in students attending school outside the district and 4) local growth in housing developments. Housing starts have increased in recent years and the district is experiencing slight enrollment growth. The City of Carnation estimates approximately 87 homes to be built in the next 2-3 years in addition to issuing recent permits for further housing developments. Based on preliminary data from the City of Duvall, over 200 housing starts are expected to be permitted within the next two years. In the event that enrollment growth slows, plans for new facilities can be delayed. It is much more difficult, however, to initiate new projects or speed projects up in the event that enrollment growth exceeds the projections.

The Riverview School District, like most school districts, projects enrollment using a modified "Cohort Survival" method combined with other enrollment factors, including local and surrounding housing growth. This method tracks groups of students through the K-12 system, and notes and adjusts the projections to account for year-to-year changes, including local population growth. For example, this year's eight grade student class is adjusted based on an average of prior year's survival trends in order to estimate next year's ninth grade enrollment.

Since the yearly figures for each grade are dependent on the previous year's grades, kindergarten projections are treated differently. Riverview projects its kindergarten enrollment based on historical kindergarten enrollment patterns and district enrollment growth patterns.

Table 2.1

Riverview School District Headcount Enrollment Projection

Grade	2018-19 Actual*	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	266	267	270	273	276	279	282
1	234	272	273	276	279	282	285
2	255	239	278	279	282	285	288
3	251	260	244	284	285	288	291
4	241	256	265	249	290	291	294
5	273	246	261	270	254	296	297
K-5	1,520	1,540	1,591	1,631	1,666	1,721	1,737
6	279	279	251	266	276	259	302
7	260	285	285	256	271	282	264
8	287	265	291	291	261	277	288
6-8	826	829	827	813	808	818	854
9	244	293	271	297	297	266	283
10	277	249	299	277	303	303	271
11	215	282	254	305	282	309	309
12	214	219	288	259	311	288	315
9-12	950	1,043	1,112	1,138	1,193	1,166	1,178
Total	3,296	3,412	3,530	3,582	3,667	3,705	3,769

* thru 5-2019 Growth rate of 2% with for variations at grades K, 1, 2, 11, 12

SECTION 3 -- DISTRICT STANDARD OF SERVICE

School facility and student capacity needs are dictated by the types and amounts of space required to accommodate the district's adopted educational program. The educational program standards which typically drive facility space needs include grade configuration, optimal facility size, optimal school enrollment size, class size, educational program offerings, classroom utilization and scheduling requirements, and use of portable classroom facilities.

In addition to factors which affect the amount of space required, government mandates, contractual requirements, and community expectations may affect how classroom space is used. For example, the state financed All-Day Kindergarten program and lower class sizes for kindergarten through 3rd grade is creating the need for additional classrooms at the elementary level. Traditional educational programs offered by school districts are often supplemented by nontraditional or special programs such as special education, expanded bilingual education, remediation, migrant education, alcohol and drug education, preschool and daycare programs, home school, computer labs, music programs, movement programs, etc. These special or nontraditional educational programs can have a significant impact on the available student capacity of school facilities.

Special teaching stations and programs offered by the Riverview School District at specific school sites include:

Elementary:

- Computer Labs
- Classroom Computers
- Group Activities Rooms
- Program for Academically Talented (Gifted/PAT)
- Special Education (The District attempts to integrate special education students and regular education students to as great an extent as possible. Most special education students are served both in a regular education classroom and a special education classroom.)
- Learning Assistance Program (LAP)
- English Language Learners (EL)
- Home School Alternative (PARADE)
- Preschool Education Program (ECEAP)
- Multi-Age (Eagle Rock /ERMA)

Secondary:

- Computer Labs
- Alternative (CLIP & CHOICE high school program)
- Special Education
- Learning Assistance Program (LAP)
- English Language Learners (EL)
- Career and Technical Education (CTE)
- School-to-Work

Variations in student capacity between schools are often a result of what special or nontraditional programs are offered at specific schools. These special programs require classroom space which can reduce the permanent capacity of some of the buildings housing these programs. Some students, for example, leave their regular classrooms for a short period of time to receive instruction in these special programs. Schools often require space modifications to accommodate special programs, and in some circumstances, these modifications may reduce the overall classroom capacities of the buildings.

The current Standard of Service data for Riverview, in terms of teaching station loading, is identified on Table 3.1. Class sizes are averages based on actual utilization as influenced by state funding and collective bargaining restrictions.

Riverview's Standard of Service also considers the different educational functions when considering student capacity needs. Those functions are as follows:

Elementary classrooms –

- regular, grades K-5
- self-contained learning center (special education)
- learning support classrooms (special education pullout, LAP, Title I, etc.)

Secondary –

- regular, grades 6-8
- special education, grades 6-8
- learning support, grades 6-8
- regular, grades 9-12
- learning support, grades 9-12 (special education pullout, LAP, Title I, etc.)

Involuntarily transferring students to a school with excess capacity is done rarely as a last resort and with Board of Directors' authorization. Involuntarily transferring of students can result in difficulties in the community, with staffing, and with transportation.

**Table 3.1
Riverview School District Standard of Service**

CLASS SIZE		Average
Elementary	Grade Level	
Regular	K	17
Regular	1	17
Regular	2	17
Regular	3	17
Regular	4	25
Regular	5	25
Regular	K-5 Weighted	19.7
Regular (portables)		24
Self-contained learning classrooms		12
Learning support classrooms		0
Middle School		
Regular	6 - 8	27
Regular (portables)		24
Self-contained learning classrooms		12
Learning support classrooms		0
High School		
Regular	9 - 12	27
Regular (portables)		24
Self-contained learning classrooms		12
Learning support classrooms		0
Vocational education		24

SECTION 4 -- CAPITAL FACILITIES INVENTORY

Under the Growth Management Act, public entities are required to inventory existing capital facilities. Capital facilities are defined as any structure, improvement, and piece of equipment or other major asset, including land, which has a useful life of at least ten years. The purpose of the facilities inventory is to establish a baseline for determining what facilities will be required to accommodate student enrollment in the future at established levels of service. This section provides an inventory of capital facilities of the Riverview School District including site-built schools, portable classrooms, developed school sites, undeveloped land and support facilities. School facility capacity figures are based on the inventory of current facilities and the district's adopted educational program standards as presented in the previous section.

Schools

The Riverview School District currently operates 3 elementary schools (grades K-5), one middle school (grades 6-8), and one high school (grades 9-12). The district also provides the Eagle Rock Multi-age Program, an elementary alternative program, sited adjacent to the Cedarcrest High School campus. In addition, the district supports the following alternative programs housed in the Riverview Learning Center facility: CLIP alternative high school; CHOICE alternative high school; and PARADE, a parent partnership program. ECEAP, a pre-school program, is housed again in yet another separate facility.

Individual school capacity has been determined using the number of teaching stations within each building and the space requirements of the district's adopted educational program. This capacity calculation is used to establish the district's baseline capacity and determine future capacity needs when considering projected student enrollment.

Classroom capacities have been determined for each school according to their usage. For the purpose of this Plan, classroom uses are: regular education, self-contained special-education, and learning support. The school facility inventory is summarized on Table 4.1. The current inventory of facilities indicates a permanent capacity of 2,537 students, with an additional 624 student capacity available in interim facilities.

The School Board of the Riverview School District is committed to serving students at small schools. Evidence suggests that this practice a significantly beneficial effect on student learning. Further, there are significant benefits to school culture and climate.

Table 4.1

Riverview School District Facility Inventory and Capacity Calculations 2019

School	Grade Levels Served	Site Size (acres)	Building Area (Sq. Ft.)	Permanent Teaching Stations	Self-Contained Special Education Classrooms	Stations Used for Learning Support Purposes*	Permanent Student Capacity	Interim Teaching Stations	Self-Contained Special Education Classrooms	Interim Stations Used for Learning Support Purposes*	Interim Student Capacity	Total Student Capacity	Year Built	Last Remodel
Carnation Elementary	K-5	8.81	50,567	26	1	11	308	2	0	2	0	308	1960	2011
Cherry Valley Elementary	K-5	12	56,252	28	0	7	414	6	0	2	96	510	1953	2011
Stillwater Elementary	K-5	19	49,588	27	0	11	315	2	0	0	48	363	1988	n/a
Multiage Program	K-5	@CHS	0	0	0	0	0	4	0	0	96	96	n/a	n/a
Subtotal K-5		39.81	156,407	81	1	29	1,037	14	0	4	240	1,277		
Tolt Middle School	6-8	37	85,157	37	1	15	606	6	0	0	144	750	1964	2009
Subtotal 6-8		37	85,157	37	1	15	606	6	0	0	144	750		
Cedarcrest High School	9-12	78	108,946	38	2	12	726	10	0	0	240	966	1993	2009
Subtotal 9-12		78	108,946	38	2	12	726	10	0	0	240	966		
Riverview Learning Center	K-12	2.08	14,545	8	0	1	168	0	0	0	0	168	2011	n/a
Subtotal 9-12		2.08	14,545	8	0	1	168	0	0	0	0	168		
Total K-12		159.89	365,055	164	4	57	2,537	30	0	4	624	3,161		

*There are teaching stations that are used for purposes other than as regular classrooms. E.g. computer labs, music classrooms, special-ed resource, libraries, and gyms.

Support Facilities	Site Size (acres)	Building Area (Sq. Ft.)	Support Facilities	Site Size (acres)	Building Area (Sq. Ft.)	Support Facilities	Site Size (acres)	Building Area (Sq. Ft.)	Support Facilities	Site Size (acres)	Building Area (Sq. Ft.)
Transportation Facility	adj. to Tolt MS	14,750	Stepping Stones (portable)	adj. to Cam. ES	1,500	District Office portables	adj. to Cam. ES	7,200	Extended day	adj. to CV. ES	1,910
Educational Service Center	1.25 acres	20,886	Maintenance bldg	adj. to Tolt MS	7,855	IT Center	inc with ESC	1,421			

SECTION 5 -- PROJECTED FACILITY NEEDS

Near-term Facility Needs

This Capital Facilities Plan has been organized to maintain adequate capacity of the District's facilities through the construction and/or expansion of permanent facilities. Table 5.1 is a summary by school level of projected enrollments, current capacities, and projected additional capacities. Based upon current enrollment projections, the district has permanent capacity needs at all grade levels. To meet these capacity needs in the near-term, the District is in the preliminary planning stages of a new K-5 elementary school in the Duvall area where the most substantial district population growth is occurring (Table 6.1). The district also anticipates that the site acquisition and construction of this school will be complete within the first six years of this planning period. New school construction will be contingent on a 2% average yearly student enrollment growth rate and voter approved funding. In addition, the District is planning on the acquisition of portables at all grade levels.

Table 5.1

School Enrollment and Capacity Projections 2019-20 through 2024-25

Elementary (K - 5)	2018-19 Actual*	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Projected enrollment	1,520	1,540	1,591	1,631	1,666	1,721	1,737
Capacity in permanent facilities	1,037	1,037	1,037	1,037	1,037	1,587	1,587
Added capacity new permanent	0	0	0	0	550	0	0
Total permanent capacity	1,037	1,037	1,037	1,037	1,587	1,587	1,587
Net Surplus or (Deficit) in Perm. Facilities	-483	-503	-554	-594	-79	-134	-150
Capacity in Relocatables	240	288	336	336	336	336	336
Number of Relocatables	14	16	18	18	18	18	18
Capacity with Relocatables	1,277	1,325	1,373	1,373	1,923	1,923	1,923
Net Surplus or (Deficit) in all Facilities	-243	-215	-218	-258	257	202	186

Middle School (6-8)	2018-19 Actual*	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Projected Enrollment	826	829	827	813	808	818	854
Capacity in permanent facilities	606	606	606	606	606	606	606
Added capacity new permanent	0	0	0	0	0	0	0
Total permanent capacity	606	606	606	606	606	606	606
Net Surplus or (Deficit) in Perm. Facilities	-220	-223	-221	-207	-202	-212	-248
Capacity in Relocatables	144	192	192	192	192	192	192
Number of Relocatables	6	8	8	8	8	8	8
Capacity with Relocatables	750	798	798	798	798	798	798
Net Surplus or (Deficit) in all Facilities	-76	-31	-29	-15	-10	-20	-56

High School (9-12)	2018-19 Actual*	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Projected Enrollment	950	1,043	1,112	1,138	1,193	1,166	1,178
Capacity in permanent facilities	894	894	894	894	894	1,094	1,094
Added capacity new permanent	0	0	0	0	200	0	0
Total permanent capacity	894	894	894	894	1,094	1,094	1,094
Net Surplus or (Deficit) in Perm. Facilities	-56	-149	-218	-244	-99	-72	-84
Capacity in Relocatables	240	240	240	240	240	240	240
Number of Relocatables	10	10	10	10	10	10	10
Capacity with Relocatables	1,134	1,134	1,134	1,134	1,334	1,334	1,334
Net Surplus or (Deficit) in all Facilities	184	91	22	-4	141	168	156

Surplus/Deficiency Capacity (K-12)	2018-19 Actual*	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Projected Enrollment	3,296	3,412	3,530	3,582	3,667	3,705	3,769
Capacity in Permanent Facilities	2,537	2,537	2,537	2,537	3,087	3,287	3,287
Capacity in Perm. Facil. and Relocatables	3,161	3,257	3,305	3,305	4,055	4,055	4,055
Surplus Capacity with Relocatables	-135	-155	-225	-277	388	350	286
Surplus Capacity without Relocatables	-759	-875	-993	-1,045	-580	-418	-482

* thru 5/2019

SECTION 6 - CAPITAL FACILITIES PLAN WITH GROWTH RELATED PROJECTS IDENTIFIED

Planned New Improvements - Construction to Accommodate Growth and Adequate Capacity

**Table 6.1
Planned New Projects**

Project	Location	Capacity Added	Source of Funds*	Growth related projects
2019-2020				
Classroom portables k-12	Duvall	96	Impact fees and local approved Capital Projects levy	100%
2020-2021				
Classroom portables k-12	Duvall	48	Impact fees and local approved Capital Projects levy	100%
2020-2025				
New K-5 school	Duvall	550	Impact Fees, State Match, and local approved bond issue	100%

Planned Improvements - To Existing Facilities

As summarized in Table 6.2, the district plans technology upgrades which are funded by a capital projects levy approved by the voters in February 2018 and 2022.

**Table 6.2
Planned Projects to Existing Facilities**

Project	Location	Capacity Added	Source of Funds	Growth related project? Yes or No
2019-2025				
Technology Upgrades	All	-0-	Technology Levy	No
Security Upgrades	All	-0-	2020 Bond Proceeds	No
High School Addition	Cedarcrest High School	200	2020 Bond Proceeds	Yes

SECTION 7 - CAPITAL FACILITIES FINANCING PLAN

Funding of school facilities is typically secured from a number of sources including voter-approved bonds, voter approved levies, state matching funds, impact fees, and mitigation payments. Each of these funding sources is discussed below.

General Obligation Bonds

Bonds are typically used to fund construction of new schools and other capital improvement projects. A 60% voter approval is required to pass a bond issue. Bonds are sold as necessary to generate revenue. They are retired through collection of property taxes. The district anticipates asking its voters to approve a bond measure to fund a new K-5 elementary, high school addition/remodel and security updates. Subject to Board approval, this proposal is expected to be on the ballot in 2020.

Capital Projects Levies

Capital Projects Levies are typically used to fund small construction projects and other capital improvements or acquisitions. A simple majority of voter approval is required to pass a levy. Money comes to the district through the collection of property taxes. The district passed a four-year capital improvement levy in February of 2018 for the upgrade of technology assets including new computers, upgrades to the network infrastructure, and software. In addition, the levy supports other capital improvements including the acquisition of sites and portables. The district is planning to run another levy in February of 2022.

State Financial Assistance

State financial assistance comes from the State's Common School Construction Fund. Bonds are sold on behalf of the fund then retired from revenues accruing predominantly from the sale of renewable resources (i.e. timber) from state school lands set aside by the Enabling Act of 1889. If these sources are insufficient to meet needs, the Legislature can appropriate funds or the State Board of Education can establish a moratorium on certain projects.

State matching funds can be applied to school construction projects only. Site acquisition and improvements are not eligible to receive matching funds from the state. Because availability of state matching funds has not kept pace with the rapid enrollment growth occurring in many of Washington's school districts, matching funds from the State may not be received by a school district until two to three years after a matched project has been completed. In such cases, the district must "front fund" a project. That is, the district must finance the complete project with local funds.

Impact Fees

Impact fees have been adopted by a number of jurisdictions as a means of supplementing traditional funding sources for construction of public facilities needed to accommodate new development. Impact fees are generally collected on new residential construction by the permitting agency at the time of final plat approval or when building permits are issued.

Budget and Financing Plan

Table 7.1 is a summary of the budget that supports the elements of this Capital Facilities Plan. Each project budget represents the total project costs which include: acquisition, construction, taxes, planning, architectural and engineering services, permitting, environmental impact mitigation, construction testing and inspection, furnishings and equipment, escalation, and contingencies. In addition, it includes financing that is separated into three components: estimated state financial assistance, estimated impact fees, and projected local revenues (i.e., interest income and local levies).

**Table 7.1
2019 Capital Facilities Plan Budget**

PROJECT	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	Local Funds	State Assistance	Impact Fees
Growth Related Projects										
New K-5 school	\$ -	\$ 35,640,000.00	\$ -	\$ -	\$ -	\$ -	\$ 35,640,000.00	\$ 32,640,000.00	\$ -	\$ 3,000,000.00
High school addition and remodel	\$ -	\$ 9,240,000.00	\$ -	\$ -	\$ -	\$ -	\$ 9,240,000.00	\$ 4,490,000.00	\$ 2,500,000.00	\$ 2,250,000.00
Other capital improvements including the acquisition of portables	\$ 1,000,000.00	\$ 500,000.00	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000.00	\$ 1,250,000.00	\$ -	\$ 250,000.00
Totals:	\$ 1,000,000.00	\$ 45,380,000.00	\$ -	\$ -	\$ -	\$ -	\$ 46,380,000.00	\$ 38,380,000.00	\$ 2,500,000.00	\$ 5,500,000.00

**Reflects costs of new capacity only*

SECTION 8 -- IMPACT FEES

School Impact Fees Under the Washington State Growth Management Act

The Growth Management Act (GMA) authorizes jurisdictions to collect impact fees to supplement funding of additional public facilities needed to accommodate new development. Impact fees cannot be used for the operation, maintenance, repair, alteration, or replacement of existing capital facilities used to meet existing service demands. The calculation contained in this Plan yields impact fees to be collected during calendar year 2019.

Methodology and Variables Used to Calculate School Impact Fees

Impact fees are calculated based on the district's estimated cost per new dwelling unit to purchase land for school sites, make site improvements, construct schools and purchase/install temporary facilities (portables).

Student Factors

The student factor (or student generation rate), a significant factor in determining impact fees, is the average number of students generated by each housing type - single-family dwellings and multiple-family dwellings.

The District was unable to obtain sufficient permit data to calculate its own student generation factors; it instead chose to use generation rates representative of unweighted averages based on neighboring school districts. In accordance with KCC 21A.06.1260, the definition for student factor, when such information is not available in the district, is the data from adjacent districts, districts with similar demographics, or countywide averages.

Table 8.1 and 8.2 set forth those student factors and the Impact fee schedule.

**Table 8.1
Student Generation Rates (1)**

Single Family Dwelling Unit

	Issaquah	Auburn	Lk Wash	Northshore	Average
Elementary	0.308	0.237	0.436	0.359	0.335
Middle	0.157	0.096	0.182	0.120	0.139
High	0.173	0.128	0.159	0.094	0.139
Total	0.638	0.461	0.777	0.573	0.613

Multi-Family Dwelling Unit

	Issaquah	Auburn	Lk Wash	Northshore	Average
Elementary	0.195	0.382	0.058	0.062	0.174
Middle	0.087	0.153	0.023	0.031	0.074
High	0.098	0.151	0.017	0.042	0.077
Total	0.380	0.686	0.098	0.135	0.325

The impact fee calculations in accordance with the formulas applicable to each jurisdiction are shown below:

Table 8.2
Impact Fee Schedule - City of Carnation and Duvall

Housing Type	Impact Fee per Unit
Single-family	\$15,406
Multi-family	\$8,635

Impact Fee Schedule - King County

Housing Type	Impact Fee per Unit
Single-family	\$10,271
Multi-family	\$5,757

- (1) The District's student generation rates are based on a selected school district average as provided for in King County Ordinances.

Table 8.3
SCHOOL IMPACT FEE CALCULATIONS

DISTRICT: Riverview School District #407
 YEAR: 2019
 JURISDICTION: King County, Cities of Carnation and Duvall

School Site Acquisition Cost:

Acres x Cost per Acre / Facility Capacity x Student Generation Factor

	Facility Acreage	Cost/ Acre	Facility Capacity	Student Factor SFR	Student Factor MFR	Cost/ SFR	Cost/ MFR
Elementary	0.0	\$0	0	0.335	0.174	\$0.00	\$0.00
Middle	0.0	\$0	0	0.139	0.074	\$0.00	\$0.00
Senior	0.0	\$0	0	0.139	0.077	\$0.00	\$0.00
TOTAL		\$0	0			\$0.00	\$0.00

School Construction Cost

Facility Cost / Facility Capacity x Student Generation Factor x Permanent/Total Sq. Ft

	% Perm/ Total Sq/Ft	Facility Cost	Facility Capacity	Student Factor SFR	Student Factor MFR	Cost/ SFR	Cost/ MFR
Elementary	93.11%	\$35,640,000	550	0.335	0.174	\$20,212.32	\$10,498.34
Middle	93.11%	\$0	0	0.139	0.074	\$0.00	\$0.00
Senior	93.11%	\$9,240,000	200	0.139	0.077	\$5,979.34	\$3,312.30
TOTAL		\$44,880,000	750			\$26,191.66	\$13,810.64

Table 8.3 continued

Temporary Facility Costs

Facility Cost / Facility Capacity x Student Generation Factor x Temporary/Total Sq. Ft

	%Temp/ Total Sq/Ft	Facility Cost	Facility Capacity	Student Factor SFR	Student Factor MFR	Cost/ SFR	Cost/ MFR
Elementary	6.89%	\$1,000,000	96	0.335	0.174	\$240.43	\$124.88
Middle	6.89%	\$500,000	48	0.139	0.074	\$99.76	\$53.11
Senior	6.89%	\$0	0	0.139	0.077	\$0.00	\$0.00
TOTAL		\$1,500,000	144			\$340.19	\$177.99

State Matching Credit

Boeckh Index x SPI Square Footage x District Match % x Student Factor

	Boeckh Index	SPI Footage	State Match %	Student Factor SFR	Student Factor MFR	Cost/ SFR	Cost/ MFR
Elementary	\$225.97	0	0.0%	0.335	0.174	\$0.00	\$0.00
Middle	\$225.97	0	0.0%	0.139	0.074	\$0.00	\$0.00
Senior	\$225.97	130	40.0%	0.139	0.077	\$1,633.31	\$904.78
TOTAL						\$1,633.31	\$904.78

Tax Payment Credit:

	SFR	MFR
Average Assessed Value	\$522,000	\$ 188,238.90
Capital Bond Interest Rate (Bond Payer's Index)	4.09%	4.09%
Years Amortized	10	10
Property Tax Bond Rate	1.0337	1.0337
Present Value of Revenue Stream	\$4,357.03	\$1,571.19

Fee Summary	Single Family	Multiple Family
Site Acquisition Cost	\$0	\$0
Permanent Facility Cost	\$26,192	\$13,811
Temporary Facility Cost	\$340	\$178
State Match Credit	(\$1,633.31)	(\$904.78)
Tax Payment Credit	(\$4,357.03)	(\$1,571.19)
FEE (AS CALCULATED)	\$20,541.66	\$11,513.03
25% FEE for Cities (AS DISCOUNTED)	\$5,135.42	\$2,878.26
FINAL City of Carnation and Duvall FEE	\$15,406.24	\$8,634.77
FEE (AS CALCULATED)	\$20,541.66	\$11,513.03
50% FEE for King County (AS DISCOUNTED)	\$10,270.83	\$5,756.52
FINAL King County FEE	\$10,270.83	\$5,756.51