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**ORDINANCE NO. 834**

AN ORDINANCE OF THE CITY OF CARNATION, WASHINGTON, AMENDING THE CARNATION COMPREHENSIVE PLAN; INCORPORATING RECENT CENSUS DATA AND UPDATING REFERENCES TO ENSURE CONSISTENCY WITH RECENT AMENDMENTS TO THE LAND USE ELEMENT, THE FUTURE LAND USE MAP, MULTI-COUNTY PLANNING POLICIES AND COUNTYWIDE PLANNING POLICIES IN CHAPTER 5 HOUSING ELEMENT; UPDATING CAPITAL IMPROVEMENT AND LAND ACQUISITION COST ESTIMATES IN CHAPTER 6 PARKS AND RECREATION ELEMENT; INCORPORATING AND UPDATING REFERENCES TO REFLECT THE TOLT CORRIDOR ACTION PLAN AND ADDRESSING VARIOUS PEDESTRIAN IMPROVEMENTS IN CHAPTER 7 TRANSPORTATION ELEMENT; SETTING FORTH LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

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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 5 Housing Element, Chapter 6 Parks and Recreation Element, Chapter 7 Transportation Element, of the Comprehensive Plan for purposes of updating and revising various policies, provisions, estimates and references therein, including; 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 May \_\_, 2013, 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 May 28, 2013, and recommended adoption by the City Council. The City Council held a public hearing on this ordinance on July 2, 2013.

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 1. Amendment of Comprehensive Plan Chapter 5. Chapter 5 Housing 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 2. Amendment of Comprehensive Plan Chapter 6. Chapter 6 Parks and Recreation 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 3. 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 C, 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 Planning Director 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 16th day of July, 2013.

CITY OF CARNATION

  
MAYOR, JIM BERGER

ATTEST/AUTHENTICATED:

  
CITY CLERK, MARY MADOLE

FILED WITH THE CITY CLERK: ..... 05/03/2013  
PASSED BY THE CITY COUNCIL: .... 07/16/2013  
PUBLISHED: ..... 07/24/2013  
EFFECTIVE DATE:..... 07/29/2013  
ORDINANCE NO. .... 834

## CHAPTER 5 – HOUSING ELEMENT

### I. INTRODUCTION

A Housing Element is one of the required elements of a Comprehensive Plan that cities must prepare in accordance with the Growth Management Act (GMA), codified at RCW 36.70A. Goal 4 of the GMA is for communities to “encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock” (RCW 36.70A.020.4). The Housing Element is the basis for ensuring new housing is available to accommodate increases in the population over the next twenty years, including housing opportunities for the full range of households.

#### Affordable Housing

Housing is defined as *affordable* if its occupants pay no more than 30% of their income for rent or mortgage payments plus utility costs. Households that pay more than 30% of their income on housing are considered “cost-burdened”, and households that pay more than 50% are considered “severely cost-burdened”. In evaluating housing affordability, the cost of housing is compared to the Area Median Income (AMI) of three segments of the population:

1. Moderate income households – those earning from 50% to 80% of the AMI. Typically these households can afford rentals without cost burden, but may have difficulty purchasing a home.
2. Low income households – those households who earn up to 50% of the AMI. Even rental housing may create cost burden for these households.
3. Very low income households – these households earn up to 30% of the AMI, and may be severely cost burdened by the price of housing.

Providing housing at costs that do not burden these households is a great challenge to communities. New housing is often priced beyond the affordability of these households, for a variety of reasons, such as limited land availability, the cost of construction, expensive utility and land development costs, etc. Land use and building code regulations can also add to the cost of new housing. Jurisdictions have undertaken a wide range of actions to promote affordable housing, including increases in density, allowing innovative housing types, fee waivers, incentive zoning, etc.

Since the last update of the Housing Element which was adopted in 2005, Carnation has increased allowed density in several zones and neighborhoods, adopted an

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ordinance which provides a density bonus for affordable housing, and adopted an ordinance which allows Accessory Dwelling Units (ADUs). Perhaps the most significant action taken by the City was the installation of a public sewer system which allows development to achieve the densities identified in the Comprehensive Plan and Zoning Map. However, economic conditions since the sewer system was completed significantly impacted the housing market. As a result, very little new housing has been built since the last update of the Housing Element. Carnation neighborhoods experienced a significant number of foreclosures during the economic downturn, resulting in higher vacancy rates and a 6.7% decrease in population between 2000 and 2010, from 1,906 to 1,786.

In addition to strategies related to promoting development of new housing at affordable prices, preservation of existing housing stock is another way to ensure that a range of housing types can be provided. This is especially true for Carnation, where much of the existing older housing stock has traditionally been a source of affordable housing for moderate and low income households. Strategies that preserve the affordability and safety of existing housing stock will be important to Carnation in meeting its housing affordability goals.

#### **Vitality and Character of existing neighborhoods**

The requirements for the housing element as outlined in RCW 36.70A.070.2 include “ensuring the vitality and character of established residential neighborhoods”. The Carnation community takes great pride in its “small town” character, including the wealth of nearby open space and recreation opportunities, the scale and walkability of the community, views of the rural areas which surround the City, and the residential design characteristic of the original historic plat of the City. In addition to the Housing Element, other elements of the Comprehensive Plan identify and seek to preserve the desired qualities of Carnation while allowing for future growth consistent with this Plan. Goals and policies of the Housing Element will incorporate actions that preserve the community by:

- Providing for open spaces and natural landscapes that enhance the built environment;
- Minimizing conversion of undeveloped land into sprawling, low density housing
- Providing residential development at a scale that promotes non-vehicular access between neighborhoods and the commercial center;
- Preserving vistas;
- Maintaining compatibility between wildlife habitat and residential development.

While Carnation will grow and is, in fact, an “urban” area, our vision is a rural scale “small town” community that integrates residential neighborhoods with the city’s commercial area and civic institutions. The city will encourage infill housing development that is compatible with the older parts of town and that seeks to preserve

Carnation's identity. In addition, Carnation's housing goals will seek to maintain and strengthen its neighborhoods as closely-knit places where people can know their neighbors and feel that they have a degree of control over their surroundings.

At present there is a small supply of vacant land within the city limits available for residential development. Future growth within the City limits will consist of infill development, relatively small residential subdivisions, and the redevelopment of parcels not built currently to capacity.

This section addresses the requirements of the Growth Management Act as they pertain to the Housing Element of the Comprehensive Plan. The Growth Management Act (RCW 36.70A.070) states that the housing element of the Comprehensive Plan must recognize "the vitality and character of established neighborhoods that:

- (a) includes an inventory and analysis of existing and projected housing needs;
- (b) includes a statement of goals, policies, and objectives for the preservation, improvement, and development of housing;
- (c) identifies sufficient land for housing, including, but not limited to government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities; and
- (d) makes adequate provisions for existing and projected needs of all economic segments of the community."

### **Consistency with Multi-county and County Planning Policies**

The Growth Management Act requires counties to create planning policies in cooperation with the cities located within them, and the cities' comprehensive plans are required to be consistent with the adopted Countywide Planning Policies (CPPs). Similarly, Multi-county Planning Policies (MPPs) are required to be developed by two or more counties with contiguous urban populations. In our region, the Puget Sound Regional Council (PSRC) created VISION 2040, the MPPs for the Puget Sound region, in cooperation with the counties and cities. Both the King County CPPs and the PSRC MPPs have policies related to housing, especially affordable housing.

VISION 2040, in its chapter on housing, identifies the responsibilities of local jurisdictions to "...plan for housing that meets the varied needs of their diverse communities and residents to ensure they are providing sufficient zoned land capacity for housing to accommodate 20-year growth targets." As they possess the regulatory control over new housing development, local jurisdictions can also promote affordable housing by allowing for a wider array of housing densities and types, by streamlining permitting processes and reducing the costs of development as much as possible, by

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providing for adequate infrastructure, and "...by encouraging the use of emerging best practices in the areas of green building and universal design." 'Universal design' is a term used to describe housing design that is usable to the greatest extent possible by everyone, regardless of their age, ability or status in life.

In its Comprehensive Plan and Development Regulations, Carnation is complying with these policies by increasing lands zoned for a variety of housing densities and types, by working to reduce the costs of development through efficient infrastructure provision and permitting processes, and by providing density bonuses and subsidizing impact fees for housing that meets the definition of "affordable" over the long term for low and moderate income households. Carnation's zoning provides increased densities and various housing types within close proximity to the identified center and to transit service on SR203.

In terms of jobs/housing balance, a key concept in VISION 2040, Carnation is "housing rich" as opposed to "jobs rich". Economic development strategies on the part of the City seek to expand local economic opportunities; however, proximity to regional job centers in Redmond, Issaquah and elsewhere in east King County may make provision of improved transit service a more efficient way to provide for employment opportunities. Transit service to Carnation and within the Snoqualmie Valley is somewhat limited, but Carnation is committed to working with other Valley cities, the Snoqualmie Tribe, and King County Metro to improve transit service for the Snoqualmie Valley as a whole.

While Carnation does not have specific programs to require green building, re-use of recycled materials or universal design, city policies allow permit applicants maximum flexibility within the regulatory framework of the adopted technical codes (International Building, Fire codes, etc.) and the 2012 Department of Ecology Stormwater Manual. As on-site infiltration is required due to the lack of a public stormwater system, stormwater management in Carnation is low impact. One way to promote green practices as well as provide affordable housing is to maintain existing housing stock where possible. Carnation's existing housing stock is aging, and can benefit from regional providers of assistance to home-owners. The City provides information to citizens on such programs as the King County Housing Repair Programs and the Home Repair Program provided by Habitat for Humanity. However, individual property owners will make the decision whether to remodel or retrofit existing housing, and in many cases the condition of the existing housing may not lend itself to preservation.

The King County chapter on housing in the CPPs identifies an unmet need in the County for housing that is affordable to households earning less than 80% of the Area Median Income (AMI). Cities within King County are encouraged to develop strategies to increase the amount of affordable housing provided in the future, as well as to preserve existing affordable housing.

Policy H-1 of the CPPs calls for the cities within King County to work together to

address the countywide need for affordable housing by percentage of AMI, as reflected in the following projected housing needs:

50 – 80% AMI (moderate)	16% of total housing supply
30 – 50% AMI (low)	12% of total housing supply
30% and below AMI (very low)	12% of total housing supply

As stated in the CPP's, "[m]eeting the county's affordable housing needs will require actions by a wide range of private for profit, non-profit and government entities, including substantial resources from federal, state and local levels." In concert with the CPPs, local jurisdictions are required to provide zoning capacity for a range of housing types and densities, to meet housing targets and to promote housing development within designated centers and within proximity to employment opportunities, and to preserve existing affordable housing units. The CPPs call for cities to "plan for residential neighborhoods that protect and promote the health and well-being of residents by supporting active living and healthy eating, and by reducing exposure to harmful environments". As stated above, Carnation's zoning provides for a range of zoning densities and housing types. The Parks and Trails plan, the scale of the City, and adopted policies that promote non-motorized access in the Transportation Element provide excellent opportunities for residents to walk and bicycle. Carnation's location within an agriculturally rich valley also provides access to healthy eating, and a very active local Farmer's Market is held weekly in an open air shelter built in cooperation with the Sno-Valley Tilth on city owned land.

## **II. INVENTORY AND ANALYSIS**

### **Housing Supply**

The existing housing stock in Carnation consists predominantly of single-family homes. Mobile homes, multi-family duplexes and apartments make up the remaining portion of the housing stock in Carnation. Within the current city limits, there are approximately 660 dwelling units, of which 60 are multifamily and 42 are mobile homes. Most of the multi-family units are in smaller buildings, primarily 3 to 4 units per building. Single-family homes account for almost 91% of the housing in the city, while multi-family housing accounts for 9% of the total stock. The multi-family dwellings are located in the western portion of the city, primarily within the older neighborhoods that are within a few blocks of SR203 (Tolt Avenue). The Mobile Home Park is located in the northeastern portion of the City, just east of the Snoqualmie Valley Trail. The rest of the City's neighborhoods are exclusively single family, especially east of the Trail.

Carnation's home ownership rate is relatively high; 73.5% of the homes in the city are owner-occupied, as compared to a King County average of 59.1% owner occupied

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**Table H-1**  
**Owner Occupied vs. Renter Occupied in City Limits**

Housing Type	Units	% of Total
Owner Occupied	464	73.5%
Renter Occupied	167	26.5%

*Source: U.S. Bureau of the Census, 2010.*

Carnation's housing stock is aging, with half of Carnation's existing housing stock at least 30 years in age. Approximately 28% of Carnation's housing was built prior to 1960, and another 22% between 1960 and 1980. The remaining 50% was built in the 1990s, including the Swiftwater and River's Edge subdivisions, as well as several smaller developments such as Cascade View, Carnation Meadows, and the Tallman subdivision. Development since 2000 has been limited to very few new homes, due to lack of infrastructure until 2008 when the sewer system became operational, and then as a result of the significant downturn in the economy that left little demand for new housing. Conditions of housing vary, with many of the older houses in the original plat in poor shape. Conditions of foreclosed homes were especially poor while vacant, but many were repaired once they were purchased.

Carnation housing stock has an average of 6.2 rooms. Less than 20% of the housing stock has 4 or fewer rooms, while 65% have 6 or more rooms. King County housing stock has an average of 5.3 rooms. While Carnations' homes tend to be larger than the King County average, housing size varies within the city. The older neighborhoods tend to have smaller homes, especially the original plat near SR203. Homes in that neighborhood were built over a one hundred year period, and are quite varied as to size, design, etc. The newer neighborhoods were platted in the 1980s through early 2000, with the houses built at the same time, and these newer homes tend to be larger and to have more modern amenities.

The vacancy rate provided by the Selected Housing Characteristics table from the 2010 Census is 5.1%. King County vacancy rate is given as 6.4% in the same table. Vacancy rates have likely varied over the past few years, with higher vacancy rates in evidence during the recent economic downturn while many homes were in foreclosure. As of spring 2013, there appear to be very few homes for sale and/or rent within city limits, so it can be assumed that the vacancy rate is low at this time.

Housing prices in Carnation are less expensive than is typical for northeast King County. The majority of Carnation's owner occupied houses are valued between \$300,000 and \$499,000 according to the 2010 US Census, as shown by Table H-2 below. Approximately 20% are valued between \$200,000 and \$299,000. The median value of an owner-occupied home in Carnation is estimated at \$354,000. For purposes of comparison, the King County median value for an owner-occupied house is \$402,300.

**Figure H-2  
Value of Owner-Occupied Housing - 2010**

VALUE OF OWNER- OCCUPIED UNITS		% OF TOTAL
less than \$50,000	30	5.3%
\$50,000 - \$99,999	0	0.0%
\$100,000 - \$149,999	9	1.6%
\$150,000 - \$199,999	2	0.4%
\$200,000 - \$299,999	113	20.1%
\$300,000 - \$499,999	325	57.8%
\$500,000 - \$999,999	83	14.8%
\$1,000,000 or More	0	0.0%
<b>TOTAL</b>	<b>562</b>	
<b>MEDIAN VALUE</b>		<b>\$354,000</b>

*Source: U.S. Bureau of the Census, 2010. Selected Housing Characteristics 2007-2011*

Housing values vary within the city due to size, age and amenities of the housing stock. In general, housing in the older neighborhood nearer to SR203 tends to be older, smaller homes on smaller lots. Discussions with local realtors indicate that as of spring 2013, recent house sales in the older neighborhoods were on the order of \$250,000 or slightly less, whereas houses in newer neighborhoods have recently sold for \$350,000 and above. Actual housing prices depend of course on the condition and amenities of individual homes.

Table H-3 shows the distribution of rental prices in the City according to the 2010 Census. The median monthly cash rent in Carnation is shown as \$979. King County median monthly cash rental is \$1,060.

**Table H-3  
Monthly Cash Rent for Rental Units - 2000**

CASH RENT	# OF UNITS	% OF TOTAL
\$500 - \$749	14	9.1%
\$750 - \$999	76	49.4%
\$1,000 - \$1,499	32	20.8%
\$1,500 or more	32	20.8%
<b>Total Occupied Units</b>	<b>154</b>	
<b>MEDIAN RENT</b>		<b>\$979</b>

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#### Housing Needs

As described above, Carnation's 2010 population of 1,786 represents a reduction from the 2000 population, due most likely from the economic downturn and the lack of new housing starts within that decade. The average household size is 2.83 persons per household according to the 2010 Census. This is significantly higher than the King County average household size of 2.40 and is likely due to the prevalence of families with young children. There are no data available on overcrowding of housing within Carnation, as 98.2% of occupied housing units have one person per room or less, and no households are reported as having more than 1.51 persons per room.

In general, Carnation neighborhoods are great places for families with children. Of Carnation's households, 32.1% have household members 19 year or younger. For all households in King County, 23.9% have household members 19 or younger.

The US Census collects statistics on race. Within Carnation, 87.5% identify as white, 1.2% as black or African American, 1.2% as American Indian or Alaskan Native, 4.3% as Asian, 0.2% as Native Hawaiian and 7.8% as "some other race".

At this time there are no group housing facilities in Carnation.

Table H-4 shows the King County Income levels by household size as used by the federal Housing and Urban Development (H.U.D.) to determine what is affordable to households of different income levels. Low income households are identified as households with income at the 50% of Area Median Income (AMI). Moderate income households are above 50% but less than 80% of the AMI. According to Table H-4, the average King County household consists of 2.4 persons. A household income of \$35,970 is 50% of the median County income. Households with incomes of \$54,130 are at the moderate level. The median household income is \$71,940.

Census data on 2011 income (inflation adjusted) indicates that 17.6% of Carnation households have incomes of \$34,999 or less (close to the low income range) while 16.6% have incomes in the range between \$35,000 and \$49,999 which is just slightly lower than the average moderate income limit). According to this data, slightly more than one third of Carnation's households are at the moderate or less income level. Of the remaining households, 17% have incomes from \$50,000 to \$74,999, which close to or slightly lower than the median income, and 48.7% have incomes above \$74,999. Median household income in Carnation is \$73,269 according to the 2010 Census, which is slightly higher than that of King County.

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**Table H-4**

<b>2010 H.U.D. Income Levels by Household Size</b>							
Percent of Median Income	One Person Household	Two Person Household	Average Household (2.4 Persons)*	Three Person Household	Four Person Household	Five Person Household	Six Person Household
<b>30%</b>	\$ 18,000	\$ 20,600	\$ 21,620	\$ 23,150	\$ 25,700	\$ 27,800	\$ 29,850
<b>Affordable Hsg Payment***</b>	\$ 375	\$ 429	\$ 450	\$ 482	\$ 535	\$ 579	\$ 622
<b>Affordable House Price***</b>	\$77,600	\$88,800	\$93,200	\$99,800	\$110,800	\$119,900	\$128,700
<b>40%</b>	\$ 24,000	\$ 27,400	\$ 28,776	\$ 30,840	\$ 34,240	\$ 37,000	\$ 39,120
<b>Affordable Hsg Payment</b>	\$ 500	\$ 571	\$ 600	\$ 643	\$ 713	\$ 771	\$ 815
<b>Affordable House Price</b>	\$103,500	\$118,200	\$124,100	\$133,000	\$147,600	\$159,500	\$168,700
<b>50%</b>	\$ 30,000	\$ 34,250	\$ 35,970	\$ 38,550	\$ 42,800	\$ 46,250	\$ 49,650
<b>Affordable Hsg Payment</b>	\$ 625	\$ 714	\$ 749	\$ 803	\$ 892	\$ 964	\$ 1,034
<b>Affordable House Price</b>	\$129,400	\$147,700	\$155,100	\$166,200	\$184,600	\$199,400	\$214,100
<b>60%</b>	\$ 36,000	\$ 41,100	\$ 43,164	\$ 46,260	\$ 51,360	\$ 54,600	\$ 59,580
<b>Affordable Hsg Payment</b>	\$ 750	\$ 856	\$ 899	\$ 964	\$ 1,070	\$ 1,138	\$ 1,241
<b>Affordable House Price</b>	\$155,200	\$177,200	\$186,100	\$199,500	\$221,500	\$235,400	\$256,900
<b>70%</b>	\$ 42,000	\$ 47,950	\$ 50,358	\$ 53,970	\$ 59,920	\$ 64,750	\$ 69,510
<b>Affordable Hsg Payment</b>	\$ 875	\$ 999	\$ 1,049	\$ 1,124	\$ 1,248	\$ 1,349	\$ 1,448
<b>Affordable House Price</b>	\$181,100	\$206,800	\$217,100	\$232,700	\$258,400	\$279,200	\$299,700
<b>80% (capped)**</b>	\$ 45,100	\$ 51,550	\$ 54,130	\$ 58,000	\$ 64,400	\$ 69,600	\$ 74,750
<b>Affordable Hsg Payment</b>	\$ 940	\$ 1,074	\$ 1,128	\$ 1,208	\$ 1,342	\$ 1,450	\$ 1,557
<b>Affordable House Price</b>	\$194,500	\$222,300	\$233,400	\$250,100	\$277,700	\$300,100	\$322,300
<b>80% (not capped)</b>	\$ 48,000	\$ 54,800	\$ 57,552	\$ 61,660	\$ 68,480	\$ 74,000	\$ 79,440
<b>Affordable Hsg Payment</b>	\$ 1,000	\$ 1,142	\$ 1,199	\$ 1,285	\$ 1,427	\$ 1,542	\$ 1,655
<b>Affordable House Price</b>	\$207,000	\$236,300	\$248,200	\$266,000	\$295,300	\$319,100	\$342,600
<b>100%</b>	\$ 60,000	\$ 68,500	\$ 71,940	\$ 77,100	\$ 85,600	\$ 92,500	\$ 99,300
<b>Affordable Hsg Payment</b>	\$ 1,250	\$ 1,427	\$ 1,499	\$ 1,606	\$ 1,783	\$ 1,927	\$ 2,069
<b>Affordable House Price</b>	\$258,700	\$295,400	\$310,200	\$332,500	\$369,100	\$398,900	\$428,200
<b>115%</b>	\$ 69,000	\$ 78,775	\$ 82,731	\$ 88,665	\$ 98,440	\$ 106,375	\$ 114,195
<b>Affordable Hsg Payment</b>	\$ 1,438	\$ 1,641	\$ 1,724	\$ 1,847	\$ 2,051	\$ 2,216	\$ 2,379
<b>Affordable House Price</b>	\$297,500	\$339,700	\$356,700	\$382,300	\$424,500	\$458,700	\$492,400
<b>120%</b>	\$ 72,000	\$ 82,200	\$ 86,328	\$ 92,520	\$ 102,720	\$ 111,000	\$ 119,160
<b>Affordable Hsg Payment</b>	\$ 1,500	\$ 1,713	\$ 1,799	\$ 1,928	\$ 2,140	\$ 2,313	\$ 2,483
<b>Affordable House Price</b>	\$310,500	\$354,500	\$372,300	\$399,000	\$442,900	\$478,600	\$513,800

\*Since the average KC household is about 2.4 persons, this column approximates the median for all households in the County.

\*\*\*Affordable housing costs are based on 30% of monthly income. An affordable housing payment (principle and interest only) is calculated at 25% of monthly income. Taxes, utilities and/or condo fees are estimated to account for an additional 5%. Affordable rent is calculated at 30% of monthly income assuming the inclusion of utilities in this amount. The current affordable home price assumes a 30 year fixed mortgage at 5.00% interest with 10% down.

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#### **The Affordable Housing Gap: current housing costs compared with Income**

Housing affordability is determined as 25% of monthly income for mortgages (the assumption is that taxes, condo fees and utilities will comprise the remaining 5%). Rents are calculated at 30% of income. At 50% of median income (low income threshold), a family of 3 would need to find housing that costs no more than \$803 per month, or a house that costs \$166,200. The 2010 Census data indicates that only approximately 7% of Carnation's current housing stock would be affordable for ownership to these households, and approximately 10% of rentals would be affordable.

For moderate income households (80% of median income), a family of three could afford to own a house that costs \$250,100, or could make a monthly payment of \$1,208 for rent or mortgage plus other expenses. The Census data for 2010 indicates 20% of houses in the \$200,000 to \$299,000 range. Median housing costs for households with a mortgage was calculated as \$2,189 per month, which is considerably higher than \$1,208. Although there is evidence of a gap of almost \$1,000 in Carnation between what is affordable for owner occupied housing and the price of available housing, Carnation's median housing costs for home ownership are slightly less than the King County median, which was calculated at \$2,262.

This evidence of an affordability gap for home ownership is consistent with data collected on the number of households that pay more than 30% of household income for housing. According to the 2010 Census, approximately 45% of Carnation's home owning households pay more than 30%, and are considered "cost burdened" for housing.

While there are very few houses available for sale as of Spring 2013, recent housing sales within the older portion of the city do include several houses that sold for \$250,000 or less, which is affordable or close to affordable for households in the moderate income percentile.

Rentals in Carnation however would appear to be at more affordable levels, at least for moderate income households. A three person moderate income household is calculated to be able to afford a rental of \$1,208 (see Table H-4). According to the 2010 Census data, Carnation's median rent is calculated at \$979, and approximately 60% of Carnation's rentals under \$1,000. Again, the Census data corroborates this finding as fewer households that rent were cost burdened. The 2010 Census calculates that 29.9% of renting households pay 30% or more of their household income for housing costs. While this is still a significant number of households, it is less than 45% of home owning households that are cost burdened for housing.

The supply of housing for sale or rent in Carnation is relatively low at this time. During the drop in the housing market that occurred since the last update of the Housing Element, there were many foreclosures which resulted in numerous houses for sale.

Since that time, many of the foreclosed homes were purchased, and as of Spring 2013, there are very few houses on the market. Similarly, there are very few rentals available at this time as well.

### **III. FUTURE HOUSING NEEDS**

#### **Population Trends**

The population of Carnation from the 2010 Census represented a slight reduction from 2000, as noted above. However, this trend is not expected to continue for future years, as the housing market picks up and new development occurs in Carnation. The population projections contained in the Land Use Element form the basis for the projections Housing Element. Future population growth was projected by estimating the number of new dwelling units that can be built over the next twenty years based on the Zoning Map adopted by the City in 2011, multiplied by the average number of persons per household.

**Table H-5  
Projected Housing Units**

	Existing Number of Dwelling Units	Projected Dwelling Units	Projected population
Year	2010	2031	2031
Carnation UGA	720	1,416	4,037*

*\*This is slightly lower population than calculated in Table 3-4 of the Land Use Element updated in 2011, due to lower average persons per household derived from the 2010 Census. The Land Use Element used an average household size of 2.98 from the 2000 Census to project population, as the 2010 Census was not available at that time.*

Carnation is an excellent place to raise a family. Seniors are another important demographic group in Carnation, although the percentage of households with individuals 65 years of age or older is less than that of King County: 13.9% of Carnation’s households as opposed to 19.5% of King County’s households. While future projections that are specific to Carnation are not available for specific demographic groups, it is safe to assume that Carnation will continue to attract families with young children. Similarly, given the general aging of the population, and Carnation’s attractive qualities of rural scale, walkability and the presence of the Sno-Valley Senior Center, households with seniors present will continue to be an important segment of Carnation’s population. The City will want to make sure that its policies encourage development of housing and neighborhoods that will be healthy and sustainable for young families and seniors.

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Future growth within the City also depends upon economic conditions. While there are not that many employment opportunities within the City, a strong local economy and job centers within a close commute support future housing development within Carnation. Retirees who do not need to be within commuting distance to a job may also find Carnation an attractive location to live, given its amenities and services that are well suited to seniors.

#### **Residential Capacity**

Carnation has the capacity within its Urban Growth Area (UGA) for approximately 780 new homes. Based on the land uses allowed by the Zoning Map which was adopted in 2011, approximately 62% of Carnation's new dwellings would be in single family houses at densities ranging from 3 to 6 units per acre. The remaining 38% of new dwellings would be in higher density multi-family, townhouses or cottage developments, at densities ranging from 12 to 24 units per acre. The zoning map indicates a departure from existing conditions, where less dense development constitutes 90% of residential use.

The Growth Management Act requires that local jurisdictions' comprehensive plans be consistent with targets for new households developed by counties and adopted in countywide planning policies (CPPs). The King County CPPs include a target for new residential development that is assigned to each city. Carnation's target for new residential growth between 2006 and 2031 is 330 new dwelling units. Carnation has more than double the capacity for new residential development to meet its housing target.

#### **Affordable Housing**

The Growth Management Act, Vision 2040 (the Multi-county Planning Policies developed by the Puget Sound Regional Council), the King County Countywide Planning Policies and the City of Carnation housing policies all require the city to provide zoning for a range of housing to serve all segments of the future population. Carnation has taken action in a variety of ways to comply with this policy directive, including providing infrastructure to support future housing growth, providing for a range of housing densities and types, reducing costs of infrastructure where possible, and providing incentives for affordable housing.

In 2008, Carnation was able to install a public sewer system to serve the City limits, thus allowing development at the densities identified in the city's Zoning Map. Carnation provides both water and sewer to its residents. Both water and sewer systems have adequate capacity to serve future growth. Recently the City reduced its General Facilities Charges as well as its impact fees.

Currently the majority of Carnation's housing is provided in single family neighborhoods

with allowed densities ranging from 2.5 units per acre to 6 units per acre. Future development allowed by the Zoning Map provides a significant increase in capacity in both non-single family housing types as well as single family development at higher densities. Of the projected new development allowed by the zoning map, 24% is in the R12 zone and 14% in the R24 zone. The R12 zone allows densities at approximately 12 units per acre, and would support cottage housing or townhouse development. The R24 zone allows housing at a maximum density of 24 units per acre, and allows apartments and townhouse in addition to single family detached housing on very small lots. Given the relatively inexpensive price of land in Carnation, even the R6 zone, which allows housing with a minimum lot size of 5,000 square feet, could provide housing affordable to those in the moderate income bracket. The R6 zone comprises 22% of the total future housing capacity. While there is no method of guaranteeing that housing at any of these densities will be affordable to low or moderate income households, decreased land costs per dwelling units combined with Carnation's other strategies to reduce housing costs can be expected to result in housing that is more affordable to a range of households.

In addition to increased densities, Carnation also supports a variety of housing types. The city's development regulations allow for apartments, townhomes, small lot single family detached housing (similar to cottage housing) and accessory dwelling units, which are also allowed in all single family zones. A density bonus is available for housing that meets the definition of affordable to low and moderate income households. The density bonus was recently used by Habitat for Humanity to enable future development of 14 new owner occupied homes for low income families. The Habitat project, Carnation Cottages, is currently in the permit phase with construction expected in the near term.

Finally, Carnation has taken actions to reduce housing costs by waiving impact fees for housing that meets the definition of affordable for low and moderate income families, and by reducing impact fees and General Facilities Charges for all new housing, whether market rate or affordable. Infrastructure costs are significantly reduced for infill development, by not requiring frontage improvements.

The CPPs identify the countywide needs for affordable housing as follows: 16% of the new housing capacity should be affordable for moderate income households; 12% for low income and another 12% for very low income households. Applied to Carnation's projected capacity for new housing units, 125 new units should be affordable for moderate income families; 94 new units for low and another 94 units for very low income households. It is likely that new development in the R12 zone and perhaps even the R6 zone may provide affordable housing for moderate income households. A total of 192 new dwelling units are projected in those two zones. At 24 units per acre, the R24 zone may well be able to provide housing at rents that are affordable at the low income range; 107 new dwelling units are projected for this zone. However, it is more likely that public or private providers of affordable housing will be needed to build

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housing affordable to low and very low income households; the density bonus for affordable housing makes this type of development more feasible. The 14 new homes provided by Habitat for Humanity is an example of the use of the density bonus by a non-profit entity.

In summary, Carnation's zoning, regulations and policies combined with localized housing market conditions may be effective at lowering housing costs. Given the relatively low prices for land when compared with other cities in northeast King County, it is likely that at least some of Carnation's new housing will be affordable or close to affordable to moderate income households. Housing for low and very low income households is more of a challenge, and Carnation will continue to work with public and private entities that develop housing for low income households.

#### ***IV. GOALS AND POLICIES***

An analysis of existing housing and projected needs in the previous sections highlighted the areas of concern and opportunities for Carnation. The inventory and analysis contained in the Element provides information from which to develop goals and policies to achieve the City's housing needs.

#### **GOAL H1**

**Ensure adequate housing for all current and future residents of Carnation by achieving and maintaining a high quality residential housing stock.**

Policy H1.1 Encourage a mixture of dwelling unit types in appropriate areas.

Policy H1.2 Preserve the city's existing housing stock through code enforcement, appropriate zoning, and participation in rehabilitation programs.

Policy H1.3 Encourage the installation of appropriate supporting infrastructure including transit service in areas that are designated for higher density housing.

Policy H1.4 Endorse efforts by others such as the Senior Center to secure federal and/or state funds to provide housing for elderly and disabled citizens.  
Policy H1.5 Work with preservation partners for the protection of historically significant housing sites and structures, including structures that are significant examples of the architectural design of their period.

#### **GOAL H2**

**Encourage the provision of housing in a wide range of costs, with primary emphasis on housing units provided to low and moderate-income households.**

- Policy H2.1 Review residential development regulations and revise as necessary to encourage a variety of housing densities and types.
- Policy H2.2 Encourage new residential development in and near the downtown area.
- Policy H2.3 Encourage multi-family development where it can serve as a buffer between higher density uses and surrounding low-density residential development.
- Policy H2.4 Encourage Accessory Dwelling Units in single-family residential zones.
- Policy H2.5 Compile, and make available, housing and housing agency services information to assist both low- and moderate-income families in finding housing rehabilitation programs and to assist non-profit developers in locating suitable sites for affordable housing.
- Policy H2.7 Encourage public, private and non-profit associations and joint public-private partnerships to enter the low and moderate-income housing market.
- Policy H2.8 Enact local development standards and regulations which are in keeping with the city's vision, but do not unnecessarily add to housing costs.
- Policy H2.9 Encourage local participation in public and private programs that facilitate home ownership by low and moderate-income families.

**GOAL H3**

**Encourage residential design and development that strengthens the Carnation community and its rural city identity.**

- Policy H3.1 Encourage infill development that is consistent with traditional structural design and building materials.
- Policy H3.2 Encourage preservation of visual landscapes.
- Policy H3.3 Maintain compatibility between wildlife habitat and residential development.
- Policy H3.4 Encourage neighborhood design that promotes connectivity between neighborhoods and links residential development to the downtown in a walkable community.

## CHAPTER 6 – PARKS AND RECREATION ELEMENT

### *I. INTRODUCTION*

Carnation is a small city in a rich agricultural valley surrounded by forests, pastoral fields, rivers and mountains. Open space and recreational opportunities are abundant within and adjacent to the city limits. Carnation's character is derived from a variety of assets including the familiarity and care of community that comes with a small city, a verdant natural and historic landscape which includes two rivers that flow near the city limits, nearby forests, views of the neighboring Cascade foothills and a considerable amount of farmland near the city and within its Urban Growth Boundary. State Route 203, which runs through the center of the City, has increasing traffic flows every year, with significant noise and congestion that affects the community. The separation created by this corridor inhibits access to trails and recreation services for City of Carnation residents.

#### **Purpose and outline of Element**

The Parks and Recreation Element is designed to guide the development of the City of Carnation's future investments in parks, trails and open space as Carnation grows over the next twenty years. The Element seeks to implement the goals and objectives of the Parks Master Plan that was developed in 2009 in order to insure that park facilities are integrated into the new neighborhoods that will be created by development. A Parks and Recreation Element adopted in the Comprehensive Plan in accordance with the Growth Management Act allows the City legal standing to impose a Parks and Recreation Impact fee as part of the development process, as well as the ability to preserve land needed for parks and trails.

The Parks Element is organized as follows: an Introductory section, which contains information on the City as a whole, on the regulatory aspects of parks planning, and on the public participation that was incorporated into the Parks Element; an inventory of the existing parks and trails facilities owned by the City and by other entities, organized according to a classification of park facilities used to describe national parkland levels of service; an analysis of future needs for parks and recreation based on levels of service for park and recreation opportunities that is tied to both stated desires of the community as well as population forecasts for the City. The parks inventory is then examined in light of this level of service analysis and a Capital Improvements Plan is presented which is designed to address the deficiencies in the level of service that will result from new growth. The last section contains the goals and policies used to guide the

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Element which were developed from the public participation efforts.

**Regulatory considerations**

In accordance with Washington State's Growth Management Act (GMA) (RCW 36.70A), local jurisdictions are required to include a parks and recreation element in their comprehensive plans. Comprehensive Plans must meet the following Goal of the GMA:

*"Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities."*

The GMA requires that a parks and recreation element implement and be consistent with the parks and recreation facilities identified in the Capital Facilities Element. The element must also include three components:

1. Estimates of park and recreation demand for at least a 10-year period;
2. An evaluation of facilities and service needs; and
3. An evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreational demand.

The City of Carnation adopted a Parks and Recreation Element as part of its Comprehensive Plan Update adopted in 2005. Subsequent annual amendments were made to the Comprehensive Plan, and 2011 the City began a multi-year Update process with Land Use Element, future Land Use and Transportation Element Updates. An annual amendment was last made to the Parks and Recreation Element in 2009 in order to incorporate the Parks Master Plan that was developed using a grant from the Washington State Department of Commerce

This Update of the Parks Element is based on the new population projections derived from the Update of the Land Use Element as well as public input as described below. In addition, the Carnation community has successfully undertaken several improvements to parks and recreation facilities since 2009; these are reflected in the Inventory section. The Update also reflects new guidance on determining parks levels of service developed by the State of Washington Recreation and Conservation Office (RCO).

In addition to its requirements under the GMA, the City of Carnation is also subject to the requirements of the Countywide Planning Policies (CPPs) for King County as well as the Multi-county Planning Policies (MPPs) developed by the Puget Sound Regional Council (PSRC) and published in VISION 2040. Both the CPPs and MPPs require jurisdictions to identify, establish and protect

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recreational, open space and critical environmental areas. The CPPs encourage cities within King County to establish policies and programs that contribute to the protection and stewardship of open space lands and corridors within their Urban Growth Areas. Policy MPP-En-8 requires local governments within the four-county PSRC jurisdiction to “Identify, preserve and enhance significant regional open space networks and linkages across jurisdictional boundaries”. Carnation’s Parks Element incorporates these policies in Framework Goal B, and in the Parks Improvement Plan, which calls for the City to work cooperatively with King County to expand trails and trail linkages along the Tolt and Snoqualmie Rivers.

Finally, the Parks and Recreation Element must meet the State of Washington Recreation and Conservation Office (RCO) requirements in order for the City to be eligible for RCO funding. The RCO oversees and provides funding for a variety of open space, habitat and recreation efforts, and oversees the activities of five boards:

1. Recreation and Conservation Funding Board (RCFB)
2. Salmon Recovery Funding Board (SRFB)
3. Forum on Monitoring Salmon Recovery and Watershed Health
4. Washington Biodiversity Council
5. Invasive Species Council

RCO programs are a major source of funding and technical assistance to communities to assist them in providing recreation opportunities, habitat enhancement, and open space preservation.

**Public Process and Coordination with other Providers of Recreation Opportunities**

As required by the GMA, an extensive public participation process was incorporated into the development of the Parks Element Update. The process included an Open House held in March of 2012. Participants were given an opportunity to mark up aerial maps of Valley Memorial, Loutsis, Hockert, River’s Edge and West Side Park to show desired improvements, and to write out comments on specific parks or more general comments on the City’s trails, parks and recreation needs. The meeting was well attended, with 15 members of the public. In addition to the standard notice for meetings, specific invitations were sent to Parks “stakeholders”, including local parks groups and people who participated in the development of the Parks Master Plan in 2009. The stakeholders were also invited to attend a Planning Board Special Meeting on June 18<sup>th</sup> where the proposed Parks Improvement Plan was presented for public input. In addition to the public input sought during the drafting of the Parks Element, the public were also invited to two Public Hearings, one held by the Planning board prior to their recommendation to the Council, and one held by the City Council prior to adoption.

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Since King County is a significant public recreation and open space landowner in the Carnation area, we have coordinated this plan with King County land managers and planners. Non-motorized trail connections between the city and county parks, riverfront access and cooperative recreation planning were discussed.

**Quadrants of the City**

At slightly over one square mile in size, much of the City of Carnation is a great example of a walkable community with compact development and a pedestrian scale. However, the north-south state highway corridor (SR203) which bisects the city creates a barrier during high traffic portions of the day. Entwistle Street, which is the main east-west arterial, also bisects the city, resulting in relatively distinct Northwest, Southwest, Northeast and Southeast quadrants. Most residents live in the Northwest, Northeast, and Southeast zones. The Southwest zone has more commercial than residential development, but is adjacent to the extensive King County regional parklands. As many residents take advantage of the city's walkable scale, busy roadways tend to act as de facto barriers to park and recreation opportunities. In order to better understand Carnation's park, open space and recreation needs, these facilities should be assessed in terms of their locations within the four quadrants of the town.

The Northwest quadrant is bounded by the city limits on the north and west, by Entwistle on the south, and by SR203 on the east. In the Northwest quadrant, Carnation's oldest residential neighborhood has an early 1900's character. West Side, an undeveloped pocket park, is located in this quadrant. Further north, a large block of agricultural land currently produces fruits and vegetables. This area is within the City's Potential Annexation Area (PAA), and this area will be zoned for residential and mixed use development upon annexation. At the northern extent of the PAA, single family UR-7.5 zoning will provide in-fill housing opportunities for new residents, but no city parks exist in this neighborhood either. The northwestern corner of this neighborhood is also constrained by the Snoqualmie River floodway.

The Southwest quadrant is bounded by Entwistle on the north, the city limits on the south and west, and SR203 on the east. This neighborhood is the smallest quadrant with the most commercial development and the least residential areas. No city parks exist in this neighborhood, although a regional King County facility, Tolt McDonald Park, is located partially within and bordering this quadrant. In 2011, local citizens worked with the City to establish an off-leash dog park on the City-owned parcel located south of the Wastewater Treatment Plan.

The Northeast quadrant is bounded by SR203 on the west, the city limits on the north and east, and Entwistle on the south. The 32 mile Snoqualmie Valley trail divides the newer residential area to the east from older residential area to the

west. This sector is primarily residential. The Northeast quadrant currently has a mix of housing developments, including a large portion of the original 1913 plat of the City, a mobile home park, an older subdivision with relatively small lots, and several small subdivisions that are more recently developed and have larger lots. Hockert Park is located in this quadrant.

The Southeast quadrant is bounded by Entwistle on the north, the Tolt River and city limits on the south and east, and SR203 on the west. The Snoqualmie Valley trail divides the newer residential area east from the older residential area to the west. This area has two significant suburban developments (River's Edge and Swiftwater) that contain larger lots and new homes, as well as older homes between the highway and the Snoqualmie Valley Trail. The Southeast quadrant contains many of the developed parks within city limits, such as Valley Memorial and Loutsis Park, as well as River's Edge Park, a portion of the Snoqualmie Valley trail, and portions of Tolt McDonald Park.

## ***II: PARKS INVENTORY***

Parks standards such as those developed by the National Recreation and Park Association have typically relied on the ratio of acres of developed parks per population for five different types of parks:

1. Mini-parks
2. Neighborhood Parks
3. Community Parks
4. Special Use Park
5. Linear Parks

The first portion of the inventory of parks facilities available to City of Carnation residents presented in this section is organized according to these categories, including city-owned parks and those owned by other public entities.

However, recent work done by the State of Washington Recreation and Conservation Office (RCO) has resulted in a new set of tools to evaluate parks and recreation levels of service (LOS), based on recreation function rather than classification of parks. To support Carnation's use of these new tools for evaluating LOS for parks, the inventory is also presented of the various types of recreational opportunities that serve the range of the community's needs, whether owned and operated by the City or by other public entities,.

## **INVENTORY BY TYPES OF PARKS**

### **Mini-park**

Mini-parks are generally small (less than one acre) and characterized by passive recreation or specialized facilities that serve a concentrated or limited population or specific group, such as children or senior citizens. Mini-parks are sometimes called “pocket parks”. In general, mini-parks are designed to serve residents within a quarter mile radius. Especially where these parks provide facilities for young children, safe access is an important issue for mini-parks. The majority of the city is within one quarter mile of a mini-park, although some of the City’s mini-parks are undeveloped.

Hockert Park. City-owned mini parks include Hockert Park, a small (0.2 acre) park located in the NE quadrant between the commercial area and the older residential neighborhood. A well-loved and much used centrally located park, also known as the Yellow Park for its yellow play equipment, Hockert Park has play equipment for younger children, including a play structure with slides, a merry-go-round, swing set and climbing bars. While this play equipment is very well used by the community, much of it is in poor repair and does not meet current standards for play equipment. Other facilities at Hockert Park include picnic tables and benches. The neighborhoods within a quarter mile radius of Hockert Park include most of the original plat of the Tolt Townsite, most of Regal Glen, and a small portion each of the Cascade View and Carnation Meadows neighborhoods. Hockert Park is very centrally located within the City, and many families with young children enjoy Hockert Park. However, SR203 creates a barrier to access to Hockert Park for families west of SR203.

River’s Edge Park is located in the SE quadrant within the Rivers’ Edge neighborhood. River’s Edge Park is 0.35 acres in size, and located at the very northeast of the River’s Edge neighborhood. Most of River’s Edge Park is open space and there is a picnic area with tables and grills. Neighborhoods within a quarter mile of this park include the River’s Edge community and the parcels located west of River’s Edge, the City’s eastern Potential Annexation Area and portions of King County. As this park does not have many facilities, it does not get a great deal of use. Should this park be developed, families within the quarter mile should be able to access this park with few barriers for pedestrians or bicyclists.

West Side Park, which is currently undeveloped, is the City’s only park west of SR203, and is located in the NW quadrant. West Side Park is 0.56 acres in size. Neighborhoods within a quarter mile radius of West Side Park include the original plat west of SR203, a small portion of the Potential Annexation Area north of the City, and some King County residents. As these areas are all west of SR203, there are few barriers to pedestrian or bicycle access to West Side Park from the

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adjoining neighborhoods.

There are no mini-parks owned by other entities that serve City residents, although facilities owned by the Riverview School District and the Swiftwater Homeowner's Association also provide children's play equipment, and children's play equipment is also located in Tolt McDonald Park.

### **Neighborhood Park**

Neighborhood Parks are designed to serve the nearby residential population or employment base; the service area typically includes adjoining neighborhoods within a half mile. Generally several acres in size, they often include areas for active recreational activities, such as ball fields and courts, as well as passive recreation areas. In addition to play apparatus for pre-school and school age children, facilities are likely to include open lawn and paved court areas, shelters, wading pools, outdoor ice rinks, and some off-street parking. Trees, open fields, and undeveloped natural areas are also desirable components of this type of park. Ideally a Neighborhood Park should be suitable for intense development and easily accessible to the neighborhood population that it serves. If possible, Neighborhood Parks should be geographically centered within the neighborhood and safe walking and bike access should be provided. Such parks may be developed as a school- park facility.

The service area for neighborhood parks is generally 1/4 to 1/2 mile radius to serve a population of 1,000 to 5,000 persons. The desirable size is considered 5 to 10 acres. The standard for this type of park facility is generally 1 to 2 acres per 1,000 people.

The City has two parks that fit at least some of the definition of a Neighborhood Park, Valley Memorial Park and Loutsis Park.

Valley Memorial Park ("Memorial" or "Skatebowl" Park), which is located in the Southeast quadrant, is 7 acres in size. Memorial Park provides recreation for a variety of users, including a skatebowl, tennis courts, picnic area with grills, BMX Track and also a World War II Memorial. There is an off-street parking lot which is in poor shape with many potholes. The City was able to construct the skatebowl with funds from a grant received in 2004. While the location of Memorial Park is not central within the City, the types of recreation provided and the location next to the Tolt Middle School make Memorial Park a significant facility to much of the population within the City.

Recently a citizens group, the Friends of Valley Memorial Park, undertook extensive clean up of this park and raised funds to put a in children's play structure. Future plans for the Friends include a covered picnic area. In addition to the skate bowl, tennis courts, BMX track the and new play structure, much of

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Valley Memorial is well-treed open space with a trail through it. RCO standards typically cite a half mile as the service area for Neighborhood Parks. Most of the existing City is located within a half mile of Valley Memorial Park; with the exception of River's Edge, some portions of Swiftwater Carnation Meadows, and the Brumbaugh neighborhoods. Pedestrian and bicycle access to Memorial Park are excellent for residents east of SR203, but the state highway does create a barrier to access for residents west of SR203. This is somewhat ameliorated by the new signal at Entwistle and SR203.

Loutsis Park is the other City-owned park that, to some extent, fits the definition of a Neighborhood Park. Located centrally to the City and adjacent to the Snoqualmie Valley Trail, Loutsis Park is within ½ mile of most of the City's population with the exception of the River's Edge neighborhood. Loutsis Park is very heavily treed, and there are trails through the trees providing passive recreation. An off-street parking lot provides parking both for the park and for the Snoqualmie Valley Trail. The City's well-head is located near the parking lot in the northerly section of Loutsis Park. A 100-foot sanitary control area is required around the well-head, which must be considered when improvements are planned for Loutsis Park.

While the location and size (Loutsis Park is 6 acres) match the definition of a Neighborhood Park, Loutsis Park does not currently have the range of opportunities for active recreation that are generally associated with a Neighborhood Park. However, a Disc Golf course was developed at Loutsis Park recently, which brings many people to Carnation. Other than the Disc Golf, Loutsis Park primarily provides passive recreation.

There are no neighborhood parks owned by other entities that serve City residents.

### **Community Park**

Community Parks are designed to serve the surrounding community. Such parks are often larger in size and often consist of significant natural features, such as large tracts of open space or natural areas, and areas of diverse environmental quality. Community parks may contain special amenities attractive to visitors throughout the area, including intense recreational facilities such as athletic complexes and large swimming pools. Community Parks may include an area of natural quality for outdoor recreation, such as walking, viewing, sitting, and picnicking, and may include bodies of water. Depending on the site and community need, Community Parks may provide a combination of passive and active recreational opportunities and may also contain special amenities attractive to visitors throughout the area. Desirable facilities in Community Parks include those listed above in the section on Neighborhood Parks, along with swimming facilities, lighted ball fields, and tennis courts, a community center, and

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adequate off- street parking. It is important that Community Parks be located on or near major thoroughfares, and also be easily accessible by foot.

Community Parks typically have a service area consisting of several neighborhoods, and a 1 to 2 mile radius. The desirable size is over 10 acres, with 15 to 40 acres being most common. The National Standard for acres per 1,000 people is generally 5 to 8 acres.

While it would appear that Carnation lacks a Community park, it is worth noting that Tolt McDonald Park, a Regional park owned by King County, is located adjacent to the City and provides much of the function of a Community Park. Tolt McDonald Park is over 500 acres in size, with approximately 50 acres located within the city's boundaries and another 88 acres located immediately adjacent to the City. Tolt McDonald offers a wide variety of active and passive recreation, including ball fields, play equipment, picnic shelters, as well as hiking, mountain biking, camping, river access and fishing, and many Carnation residents as well as visitors take advantage of these recreation opportunities.

In general, to be counted as a park, a facility needs to meet the following criteria:

1. Is this land a dedicated park?
2. Is this land a developed park, or developable?
3. Can the parkland provide active recreation?
4. Can the city control the use, scheduling, level of maintenance of the recreational land or facility?

Tolt McDonald does meet the first three criteria, and does function both as a Community Park for the City, as well as a Regional Park for households outside the City. While the City does not control the use or scheduling at Tolt McDonald Park, the recreational opportunities it affords city residents do meet many of the functions of a Community Park. See discussion of Levels of Service in Section III below.

### **Special Use Park**

Special use parks are devoted to specialized or single purpose activities, such as golf courses, arenas, plazas, squares, boulevards, etc.

Tolt Commons is a Special Use Park owned by the City. Located in the Northeast quadrant, within the downtown area, Tolt Commons is a small parcel (.08 acres) landscaped in xeric (low water use) plants, with a pathway and benches. Another city owned parcel located on Bird Street in the Northeast Quadrant contains a newly constructed picnic shelter that will be used for the Carnation Farmer's Market as well as other activities.

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There are no Special Use Parks owned by other entities that serve City residents.

**Linear Parks**

Linear Parks are developed for different modes of recreational transportation such as hiking, biking, horseback riding, etc.

The Tolt River Trail along the river levee south of the Swiftwater neighborhood in the SW quadrant is an example of a linear park. The King County owned Snoqualmie Valley Trail is a significant linear park that serves not only the Carnation area but the entire Snoqualmie Valley. Once a railroad track for the Milwaukee railroad, the trail is now a popular regional facility much used by runners, hikers, bikers and equestrians.

**Other recreation opportunities in the community**

**Publicly Owned Park Land.** Facilities owned by the, Riverview School District and King County offer area residents sports fields, bicycling trails, walking trails, playgrounds, campgrounds, and picnic sites. There is public access to both the Tolt and Snoqualmie Rivers as well as Lake Langlois offering substantial opportunity for swimming, boating and fishing.

King County owns much of the open space and parklands accessible to Carnation residents, such as Tolt McDonald Park (see description of Tolt McDonald Park above).

The Riverview School District and the King County Parks Department have entered into a variety of fee based, cooperative agreements with youth organizations for use of park and school facilities within Carnation. There is a charge for the use of some of these facilities.

At present, the City operates no recreation programs. However, it does provide limited support to the King County Library and non-profit groups including the Sno-Valley Senior Center and Friends of Youth. Other recreation programs are sponsored through youth sports organizations.

In addition to these non-city owned parks and programs, indoor community gathering places include the Senior Center, churches, school facilities and the King County Library System.

**Private & Non-Profit Recreation.** There are privately held farms within and adjacent to the city that offer You-pick opportunities, family activities, a petting zoo, amusement rides, additional picnicking and fresh, locally grown produce. In addition, there are three private youth camps within a few miles of town which

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take good advantage of the area lakes, rivers and forests.

**Table P-1  
 City Owned Parks and Recreational Facilities**

Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
Hockert Park	City	0.20	0.20	0		Children's Play Equipment	Mini-Park	Popular 2-5 yr. old play area  Not ADA or safety compliant  Needs play equipment for toddlers
Valley Memorial Park	City	7.15	3	4.15		2 Tennis Courts, Picnic Area, Skateboard bowl, BMX Track, Children's Play Equipment, World War II Valley Memorial	Neighborhood Park	Playground not ADA or safety compliant. Parking area potholed and not ADA. Improvements needed to trail access, paths, BMX track, and play areas/structures.
Loutsis Park	City	6.10	1	5.10		Open Fields, Forested Area, Direct Access to Sno Valley Trail	Neighborhood Park	Wooded area needs forest management.
West Side Park	City	0.56	0	0.56		Undeveloped	Mini Park	Needs Picnic tables, signage, landscaping improvements, play equipment

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Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
Rivers Edge Park	City	0.35	0.15	0.2		Picnic Area	Mini Park	New picnic tables, signage, landscaping improvements, play equipment needed
Farmer's Market Site	City	0.17	0	0.17		Tolt Commons Plaza	Special use	
Tolt Commons	City	0.08	0.08	0		Landscaping, benches, info. about xeric gardens and water conservation	Special Use	Needs follow-up maintenance.
Tolt River Levee Trail	City	1.43	1.43			existing crushed rock trail along Tolt River	Linear park	
Carnation Meadows	City	1.63			1.63	Undeveloped, Open Space, Recreation Area/Facility	Mini Park	Steep forested hillside
Evacuation Hill	City	20.4			20.4	Evacuation Trail through property with Conservation Easement	Open Space	City has TDR's to sell in return from Conservation Easement from KC
Swiftwater Open Space along the Tolt River	City	0.06			0.06	Open Space, Undeveloped	Open Space	
Total Acreage		38.13	5.85	10.18	22.09			

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Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
Level of Service: Ac/1000 pop.		20 ac/1000	3.07 ac/1000			NRPA Standard = 10 acres of developed parkland per 1000		Demonstrates sufficient current supply of total parkland, deficient supply of developed parks

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Table 2 Non-City owned Parks and Recreational Facilities Within the Carnation Area

PARK FACILITY	OWNERSHIP	ACREAGE	FEATURES	CLASSIFICATION	COMMENTS/NEEDS
Tolt Middle School	Riverview School District	19	Football Field, Track, Baseball Field, Softball Fields, Soccer Fields, Indoor Facilities	Public School Facilities	Field upgrades underway
Carnation Elementary School	Riverview School District	5	Multi-use Field, Baseball diamond, Toddlers & Youth Play Equipment, 1 full & ½ size basketball court, outdoor shelter, Indoor Facilities	Public School Facilities	
King County Library System	County		Library Facility	Library	New library building completed 2009
Snoqualmie River Boat Launch	State		Boat Launching, Public Fishing	Boat Launch	
Lake Langlois Boat Launch	State		Boat Launch, Public Fishing	Boat Launch	
Mariners Field	County	3.5	Baseball Field	Regional Park	
Tolt MacDonald Park	County	48.8 within City limits  500 acres overall	Campsites, Soccer Field, Baseball Field, Softball Field, Picnic Shelter, River Access, Wetland & Wildlife, Hiking & Mountain Biking Trails, Suspension Bridge, Public Fishing	Regional Park	

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Snoqualmie Valley Trail	County		Walking, bicycling, Equestrian, Wetlands & Wildlife	Linear Park	
Swiftwater Open Space	Home Owners Assoc	1.5	Potential trail connections	Open Space, Undeveloped, Future Connection to River	Future development of parcel to the north may provide opportunity for trail connection
Tolt River Beach site	Seattle City Light	20.38	Riparian/wetland site along Tolt River	River access, beach site	Very constrained for development potential

## **INVENTORY BY RECREATION OPPORTUNITY**

In 2010, the Washington State Recreation and Conservation Office (RCO) published a new Level of Service (LOS) tool for local communities to use in developing parks and recreation plans as an alternative to the acres per 1,000 population standard (see Section III below for more discussion of Levels of Service). This new tool looks at quantity, quality and accessibility of recreation opportunities and places an emphasis on recreation needs that are specific to the local jurisdiction. To support the City's use of this new tool for parks planning, an inventory is presented on types of recreation needs specific to Carnation.

### **Population and Categories of Recreation**

The Parks Element provides the planning context for future parks improvements to serve the existing city residents as well as new residents expected over the next twenty years. Carnation's small-town scale and beautiful setting make it a great place for families with children, and the 2010 Census indicates that 45% of Carnation's households include children less than 18 years of age. Senior citizens are another important component of Carnation's population; households with individuals 65 years of age and over constitute 13.9 percent of Carnation's households. Future growth patterns of the City as determined by the Future Land Use Map will provide continued opportunities for both elders and families with children to live in and enjoy Carnation. As the baby boomers continue to age, seniors will be a growing segment of the population, and the City's amenities and walkability will be attractive to seniors.

The new Level of Service standards provide for a more in-depth evaluation of different recreation functions that are specific to the different segments of the community. Under this method of evaluating levels of service, the demographic make-up of Carnation's households and the range of activities that the community supports form the basis for the categories of recreation to be evaluated. For example, families with elementary school and younger children benefit from play structures, swing sets, etc., and ideally these are both within walking distance (one-quarter mile) and are safely accessible by foot or bicycle. Many older children participate in organized sporting activities such as little league and soccer; play fields and places to practice will be important to serve these needs. Recreation opportunities geared to teens include the skatebowl and BMX track. Many teens and adults as well enjoy a variety of specialized recreation that the city offers or could offer, including tennis, disc golf, basketball, etc. Picnic areas can be enjoyed by all ages, and provide great places for families and friends to gather. Overhead shelters at picnic areas and grills are amenities that enhance enjoyment and usefulness of these areas. Finally, trails that provide opportunities for walking, biking and equestrians are a valued amenity in the community and provide opportunities to all segments of the

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population. Taken together, these recreation opportunities are essential to quality of life and a healthy community, and for purposes of this analysis, are classified into the following types of recreation:

1. Children's play structures
2. Sports fields including baseball, soccer, football, etc.
3. Specialized recreation, including tennis, skatebowl, BMX Tracks, etc.
4. Picnic areas, including grills and/or covered structures
5. Trails, natural areas and open space

Children's play structures

Whether in a city-owned park or located in a facility owned and operated by others, play structures provide recreation for families with young children within close proximity. Generally a quarter mile is assumed to be a reasonable walking distance. There are five play structures within City limits, two of which are within city-owned parks (Hockert Park and Memorial Park). The remaining three are located in King County's Tolt McDonald Park near the ball-fields, at the Carnation Elementary School and in the Swiftwater neighborhood. (This play structure is owned and maintained by the Homeowner's Association for the use of Swiftwater residents and their guests.) Most residents of the city are within a quarter mile of a play structure, with the exception of the River's Edge neighborhood, portions of Carnation Meadows and Brumbaugh neighborhoods, and the location of future development in the northeast of the City. The play structure at Hockert Park which is centrally located and very popular is in poor condition and out of date. The play structure at Valley Memorial was recently added by the Friends of Memorial Park. The play structures not owned by the City appear to be in good shape.

Sports fields including baseball, soccer, football, etc.

There are a total of nine ball-fields within Carnation, three located at Tolt Middle School, one at Carnation Elementary School and five located in Tolt McDonald Park. Of these nine fields, five are baseball diamonds, one is a football field which can also be used for field hockey, and the remaining are open fields which can be used for soccer or for practice. Ball-fields are generally used by organized sports such as Little League and by older kids, and they do not tend to serve specific neighborhoods. All of the ball-fields are located west of the Snoqualmie Valley Trail.

Specialized recreation, such as Tennis, skatebowl, BMX Tracks and other activities

Carnation offers a variety of specialized recreation, much of it centered on activities that are enjoyed by teenagers and adults alike. Carnation's teen

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centered recreation opportunities include a skatebowl and BMX track, both of which are also located within Valley Memorial Park. There are two tennis courts also located in Valley Memorial Park. There is a disc golf course set up at Loutsis Park, an off-leash dog park on city-owned property south of the Wastewater Treatment Plant, and Tolt McDonald Park includes extensive off-road bicycling opportunities that draw both local and visiting off-road bicycle enthusiasts.

Picnic areas, especially those with grills and/or covered structures

There are seven places with picnic tables within or close by the City, all but one of which are located west of the Snoqualmie Valley Trail. Most of these only include picnic tables, with just a few of these offering nearby grills (at River's Edge Park and Valley Memorial). At this time none are protected by a structure, although the Friends of Memorial Park have plans to build a covered structure for picnic tables in Memorial Park, and the recently completed Community Shelter on city-owned property on Bird Street could be used for this purpose.

Trails, natural areas and open space

Carnation residents through-out the City are within close proximity (half mile or less) to trails and natural areas. The Snoqualmie Valley Trail bisects the City, and there are trails along the Tolt River on the City's southern boundary which connects to a trail along the Snoqualmie River in Tolt McDonald Park. Northeast of the City is the Evacuation Trail in Lot 'W', a city-owned parcel just outside city limits. Carnation has many natural areas in open space or park designations, along both rivers, on the hillside along the city's eastern boundary including Lot 'W', as well as in City parks (Loutsis and Memorial Parks both have treed areas with trails through them). The trails are especially popular and well-used by local and visiting pedestrians and bicyclists, and even equestrians. While the trail system forms a loop through-out the City, there are some missing segments in the trail system: Entwistle/NE 45<sup>th</sup> Street between Swiftwater and River's Edge; along SR203 between the Tolt Levee Trail and just south of NE 40<sup>th</sup>; and along the Tolt Levee Trail in King County. Where these missing links are within King County, the City must look for opportunities to work with the County. Other links to trails that are outside the City would also require cooperation with King County, for example, a trail along the Snoqualmie River in city limits could be linked to the north to access the recreation area at Chinook Bend.

### **III. DETERMINING FUTURE PARKS NEEDS**

The Washington State Growth Management Act requires plans to forecast future needs for capital facilities, including parks. To this end, a guideline must be developed for the level of service a community desires and can be reasonably expected to fund.

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**National Recreation and Park Association Standards.**

The National Recreation and Park Association provides service standards for each type of park. This set of standards has traditionally been used to evaluate whether the existing supply of recreational facilities and land is adequate to meet the demands of the residents of Carnation. Figure P-3 describes the park categories, and the recommended park standards per 1,000 population.

**Table P-3  
Park Categories and Service Standards**

<b>CATEGORY</b>	<b>DESCRIPTION</b>	<b>SERVICE AREA</b>	<b>DESIRABLE SIZE</b>	<b>SERVICE STANDARD</b>
<b>Mini-Park</b>	A mini-park is characterized by passive recreation or specialized facilities that serve a concentrated or limited population or specific group, such as children or senior citizens	Approximately 1/4 mile radius	No minimum to approximately one acre	Approximately 0.5 acres per 1,000 population
<b>Neighborhood Park.</b>	Neighborhood parks are designed to serve nearby residential population or employment base. They often include areas for active recreational activities, such as ball fields and courts, as well as passive recreation areas.	Approximately 1/4 - 1/2 mile radius	2 - 7 acres	1 to 2 acres per 1,000 population
<b>Community Park</b>	Community parks are designed to serve the surrounding community. Community parks may contain special amenities attractive to visitors throughout the area. Such parks often consist of significant natural features, such as large tracts of open space or natural areas.	Approximately 1 - 2 mile radius	15 acres	8 acres per 1,000 population
<b>Special Use Park</b>	Special use parks are devoted to specialized or single purpose activities, such as golf courses, arenas, plazas, squares, boulevards, and parkways.	No applicable standard	Variable	No applicable standard
<b>Linear Park</b>	Linear Parks are developed for varying modes of recreational transportation such as hiking, biking, cross-country skiing, horseback riding, etc.	No applicable standard	Sufficient width to provide maximum use and protect the resource	No applicable standard

Another standard for parks facilities is often expressed as a ratio of total parklands to 1,000 people. The National Recreation and Park Association standard is 6 to 10 acres of developed parklands per 1,000.

As the National Recreation and Park Association standards (National Standards)

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is given in acres of improved parklands per 1,000, jurisdictions can choose the amount of parklands that they wish to provide for their current and projected populations. As described above, to be counted as parklands, properties must meet the following criteria:

1. Is this land a dedicated park?
2. Is this land a developed park, or developable?
3. Can the parkland provide active recreation?
4. Can the city control the use, scheduling, level of maintenance of the recreational land or facility?

While Tolt McDonald Park clearly meets the first 3 criteria, there is some debate as to whether it can be counted as it is owned and operated by King County and is not under city control. However, the County has worked collaboratively with the City on parks planning, and much of Tolt McDonald Park's recreation development is well-established. Given these circumstances, it is credible to count at least the portion of Tolt McDonald Park that is within City limits as part of the park acreage that serves the City's population. While Tolt McDonald Park is a regional park, it makes most sense to count the 48.8 acres that are within City limits as a Community Park. These acres can be counted as developed (useful) parklands as they include established ball fields, a play structure, park offices, parking, etc. as well as access along the Snoqualmie and Tolt Rivers.

Figure P-4 below shows the number of acres of park land per 1,000 population within the planning area for the years 2012, 2018 and 2031 using the 10 acres of developed parklands per 1,000 standard. The existing and forecasted populations for 2012 population and 2031 respectively are based on the Land use Element updated in 2011. The 2012 population is 1,786 (source: 2010 US Census) and the forecasted build-out population for 2031 is 4,222. An interim year of 2018 is used for planning purposes, with an estimated population of 3,500. The needs for parklands for the existing and projected population were compared to the existing park acreage, including parklands owned by the city in 2012 along with the portion of Tolt McDonald Park that is within City jurisdiction, in order to determine the surplus or deficit of parklands for each type of park

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**Table P-4  
Carnation Recreational Land Needs  
Years 2012-2031**

	<b>Mini-Park</b>	<b>Neighborhood Parks</b>	<b>Community Park</b>	<b>Total Acres</b>	<b>Acres per 2012 Pop</b>	<b>2012 Surpluses/ Deficit</b>	<b>Acres per 2018 Pop</b>	<b>2018 Surplus / Deficit</b>	<b>Acres per 2031 Pop</b>	<b>2031 Surplus/ Deficit</b>
Total Acres	2.74	13.25	48.8	64.79	36	26	19	9	15	5
Developed	0.34	4.00	48.8	53.14	30	20	15	5	12	2
Undeveloped	2.40	14.36	0	16.76						

As can be seen from Table P-4, based on this standard, the City has adequate parklands to meet the standard of 10 acres of developed parkland per 1,000 population, through build-out of the City projected to occur by 2031.

**Level of Service Recommendation from the Washington Recreation and Conservation Office**

The Washington Recreation and Conservation Office (RCO) has developed a new tool for parks and recreation planning to replace the “one size fits all” standard of park acreage per population. The level of service for parks and recreation is measured based on three categories of criteria: 1) quantity (number of parks and recreation facilities compared with the population served), 2) quality of recreation facilities, measured both by an agency assessment and by public satisfaction with the facilities, and 3) distribution and access, which looks at the ability of people to access park and recreation facilities by foot, bicycle or public transit. How local jurisdictions apply these criteria is flexible.

To help determine Carnation’s parks and recreation needs, the following recreation types were evaluated:

- Children’s play structures
- Sports fields including baseball, soccer, football, etc.
- Specialized recreation such as Tennis, skatebowl, BMX Tracks, etc.
- Picnic areas
- Trails, natural areas and open space

Children’s play structures

Carnation’s population includes many families with young children, and access to a play structure within a quarter mile is a typical standard for this type of facility. Carnation’s five play structures are within a quarter mile of most residential areas, with the exception of the eastern and northeastern portions of the City,

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such as River's Edge and portions of the Brumbaugh and Carnation Meadow's neighborhoods.

Quantity – there are adequate numbers to serve most of the city's population except for the eastern (River's Edge) and northeastern (Brumbaugh, portions of Carnation Meadows, and potential new development) neighborhoods. However, larger backyards and privately owned play structures in the eastern portion of the City may be an adequate substitution. Future development of the Potential Annexation Area (PAA) to the north would also be further than a quarter mile from any existing play structures.

Quality – Hockert Park has play equipment that is out of date and in very poor condition, according to both City staff and public input. The play structure at Memorial Park is new. Comments at the Open House from the public included the need for play equipment designed for toddlers and younger children. Most of the other play structures within the City appear to be in good repair.

Distribution and access – Hockert Park which is the most centrally located and most widely used of these facilities is easily accessed by pedestrians or bicyclists originating east of SR203, primarily due to the low average daily traffic on local streets. However, SR203 creates a barrier for pedestrians, especially with young children, impedes access for families who live to the west of the highway. Access across SR203 has recently improved with completion of the new signal at Entwistle and the lighted cross-walk at Morrison, but is still not optimal. While there is one play structure west of SR203 located in Tolt McDonald Park, it is further than a quarter mile from most of the residents west of SR203. Development of West Side Park to provide play structures would ameliorate this deficiency as West Side Park is very accessible for most residents west of SR203.

The eastern and northeastern neighborhoods of the City are underserved for this type of recreation. However, in general these neighborhoods have larger backyards, and many families have their own play structures. Public outreach to these neighborhoods would help determine local needs for more play structures in River's Edge Park or in a new mini-park.

Summary of needs for play structures:

- Replace play equipment at Hockert Park
- More play equipment designed for younger children at Hockert and Memorial Parks
- Develop West Side Park with a play structure
- Provide for a pocket park with play equipment in the PAA west of SR203
- Provide for a pocket park with play equipment at River's Edge Park and/or a new park in the northeast of the City.

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Sports fields

None of the ball-fields that serve the City's residents are provided by the City, but are owned and operated by King County (Tolt McDonald Park) or by the Riverview School District. Primarily used by organized leagues, ball-fields are accessible on an as available basis for residents.

Quantity – The nine ballfields appear to meet most needs for the community. However, a local soccer association has identified the need for more soccer fields to meet demand within Carnation and vicinity. This association has approached the City to study the feasibility of leasing an 8 acre city-owned parcel to develop two regulation soccer fields for use by the soccer league. When not in use by the soccer league, the fields would be open to the public. The City Council has agreed in principal to lease the property to the association and the City is assisting with the feasibility study. .

Quality – The fields at Tolt McDonald Park have been well maintained, and the School District has recently improved the ball-fields at Tolt Middle School. In general, the ballfields used by City residents are in good repair.

Distribution and Access – Pedestrian and bicycle access to the ball-fields at Tolt Middle School are adequate via the sidewalks along SR203. Pedestrian access to Carnation Elementary School is provided by local streets, some of which have sidewalks. Improved access to Carnation Elementary School via Spilman Avenue is addressed in the City's Six-Year Transportation Plan (STIP). Pedestrian and bicycle access to the fields at Tolt McDonald are not as good, and the City will need to address these shortfalls by improving pedestrian access along SR203 between NE 40<sup>th</sup> and the new trail at Tolt McDonald park, and by improvements to NE 40<sup>th</sup>.

There are currently no ball-fields east of the Snoqualmie Trail. There have been some suggestions of adding waffle ball, kickball or soccer goals to River's Edge Park.

Summary of needs for ball-fields

- Work with organized leagues to examine possible new ball-fields on city-owned property
- Reach out to the River's Edge community to determine if a small ballfield would be desirable at River's Edge Park.

Specialized recreation such as tennis, skatebowl, BMX tracks, etc.

Carnation residents can enjoy a variety of recreational opportunities, including

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tennis courts, skatebowl, and a BMX Track at Valley Memorial, Disc golf at Loutsis Park, an off-leash dog-park on city-owned land, and off-road trails for bicyclists at Tolt McDonald Park.

Quantity – While there are a good variety of recreation opportunities already present, several more ideas have been suggested by the public, including:

- A basketball court at Valley Memorial park
- Fitness track at Loutsis Park
- Horseshoes
- Climbing wall

Quality – The tennis courts in Memorial Park are in poor shape and need re-finishing. Another comment was to add a deck and rails to enhance the skatebowl.

Distribution and Access – Most of these special recreational activities are accessible to pedestrians and bicyclists, although the entrance to Valley Memorial Park off of SR203 is small and difficult to find. Residents west of SR203 have the barrier of the state highway to access many of these facilities.

Summary of needs for recreation opportunities:

- Repair tennis courts in Memorial Park
- Add a half basketball court in Memorial Park
- Add a Fitness Course to Loutsis Park
- Improvements to Skatebowl

Picnic areas

Picnic tables are located in various parks, but as there is only one east of the Snoqualmie Valley Trail at River's Edge Park. In addition to picnic tables, grills and an overhead structure make these facilities most useful.

Quantity – While there are picnic tables in many areas, it was felt that more picnic tables centrally located in the Bird Street/Hockert Park area would be welcome as well as also west of SR203.

Quality – Adding grills and especially overhead structures in various places would make these amenities more useful. The Friends of Valley Memorial Park are planning to build a shelter for the picnic tables, and a shelter for the picnic tables was also suggested for River's Edge Park.

Distribution and Access – Most of these amenities are accessible to pedestrians

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and bicyclists, although the entrance to Valley Memorial Park off of SR203 is small and difficult to find.

Summary of Needs for Picnic areas:

- Build shelter for picnic tables in Memorial park
- Add picnic tables and barbecue to Community Shelter on Bird Street
- Provide a shelter for the picnic tables in River's Edge park
- Add another picnic table at Hockert Park
- Provide picnic table(s) with shelter and grills at West Side Park

Trails, natural areas and open space

Carnation residents enjoy excellent regional and local trails and open space. Most residents are within close proximity (half mile) of trails and/or open space.

Quantity – Between the Snoqualmie Valley Trail, the trails along the Tolt River and some portions of the Snoqualmie River, as well as Evacuation Trail, and the trails and open space within Loutsis Park and Valley Memorial Park, Carnation residents are well-served by trails and open space.

Quality – Most of the trails are well-maintained. Pedestrian improvements as part of City street improvements would help improve the overall quality of pedestrian environment in the City. Improvements are also needed to complete the missing links as described below. The trails within City parks are in some cases not well developed or could be improved.

Distribution and Access – As noted above, most City residents are within walking distance of the City's looped trail system and/or open space. Access improvements to the trails for equestrians have also been requested.

Summary of needs for Trails, natural areas and open space:

- Create a paved trail in the eastern treed portion of Valley Memorial park. The trail should be ADA compliant and designed for stroller and tricycles, with benches at strategic locations.
- Develop a pedestrian pathway along Entwistle/NE 45<sup>th</sup> Street between River's Edge and 329<sup>th</sup> Ave NE
- Improve the pedestrian access along the western side of SR203 between NE 40<sup>th</sup> Street and the pathway in Tolt McDonald Park in front of Mariner's Field.
- Work with King County to close the gap in access along the Tolt Levee
- Work with King County to complete a trail system along the Snoqualmie River to link to the Chinook Bend natural area.
- Signage to show horse trailer parking along Milwaukee would also

improve access to the trails for equestrians.

#### **IV PARKS CAPITAL IMPROVEMENT PLAN (CIP)**

A Parks Capital Improvements Program (CIP), is shown in Table P-5 and was developed based on input from the public regarding what recreational and parks facilities the community members want, coupled with the levels of service deficiencies that were in evidence based on the RCO Standards and the inventory of parks. The CIP provides preliminary costs of needed parks improvements to provide adequate parklands and facilities to serve the City's projected growth of the next twenty years.

##### **Summary of Needs by Park Type**

General descriptions are provided of required improvements for each type of park facility that would be necessary to meet the parks and recreation needs to serve future development, as determined in the above Level of Service analysis.

##### **Mini-parks**

**FRED HOCKERT PARK:** Hockert Park is in the center of town, adjacent to the Farmer's Market and near Tolt Commons, and is the most popular play area in the City. The play equipment is in poor condition and requires replacement. The site also needs play equipment that is specifically designed for toddlers as the City's demographic profile shows a significant presence of families with young children. The playground is not currently ADA or safety compliant, which will require replacement of the surfacing and the creation of ADA compliant access ramps as well as changes in fall zones and the dimensions between structures and hard surfaces. While Hockert Park is located within the Northeast Quadrant, its central location maximizes access for the community as a whole. However, SR203 provides a significant barrier to pedestrians, especially for families with small children, which makes the requirement for a mini-park to serve the western quadrants more important.

Planned improvements:

- New play structures
- Toddler play structure
- New swing set
- New surfaces under the play structures
- Replace merry-go-round

**WEST SIDE PARK:** This small undeveloped site is ideal for a small pocket play

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and picnic park within the western side of the City. Minimal grading would be required on this flat site. This is the only mini-park west of SR203; play structures for toddlers would provide families with small children an opportunity for recreation without crossing SR203. As West Side Park is also close to the Senior Center, recreation opportunities attractive to seniors was also a consideration.

Planned improvements:

- fence
- small shelter with picnic tables, barbeque grill
- toddler play structure
- horseshoe play area

**RIVER'S EDGE PARK:** This mini-park primarily serves the River's Edge neighborhood. A small picnic shelter could be added to the picnic tables and grills. Planned improvements

- shelter for picnic tables
- new fence
- other as desired by the neighborhood

#### FUTURE PARKS IN THE PAA AND NORTHEASTERN PART OF THE CITY

These parks will become necessary as new areas of the City are developed.

Planned improvements:

- play structures
- picnic tables

#### **Neighborhood parks**

**VALLEY MEMORIAL PARK:** This 7 acre park is beautifully forested, and has a strong historic character including a memorial to veterans. Recent improvements by a citizens group, the Friends of Valley Memorial Park, include a major clean up and a new play structure. The Friends also plan to build a shelter over the picnic tables. Further improvements include re-surfacing the tennis courts, adding a basketball court, adding some improvements to the skatebowl, adding play structures for toddlers, adding a swing set, providing a more formal treatment of the Memorial, with a paved area and landscaping, and improving the access way and reconfiguring and paving the parking lot. Plans for the treed

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area to the south include some selective clearing of trees and adding a 5' asphalt pathway with pull-outs and benches. The loop would be ADA compliant and would be easily used by families with strollers and kids on tricycles.

Planned improvements:

- Shelter for picnic tables
- Re-finish tennis courts
- Add a basketball court
- Toddler structure
- Looped trail
- Reconfigure and pave parking lot
- Skatebowl improvements

**LOUTSIS PARK:** Loutsis Park will require substantial thinning of the trees, as well as improvements to the parking area and landscaping along the western boundary to provide better screening for abutting residences. A fitness Course could be added along the Snoqualmie Trail.

Planned improvements:

- Pave parking lot
- Landscaping along western property line
- Fitness course

### **Special Use Parks**

**CARNATION MARKET SQUARE:** The City has partnered with the USDA and the Sno-Valley Tilth to develop the city-owned 7,500 square foot parcel at the corner of Bird Street and Stossel Avenue for a Community shelter. The project allows the Farmer's Market to extend later into the fall and perhaps be used in the winter. The shelter is open to the public on non-market days and could provide picnic and outdoor cooking opportunities.

**TOLT COMMONS.** Renovation of this small public garden across the street from City Hall was done by volunteers in the spring of 2008. Further planting improvements should be implemented. The plantings for this park should continue to model water wise gardening by using xeriscape.

With important community facilities anchoring it (the Senior Center at one end and Hockert Park at the other) Bird Street has been identified as a possible location for town center type facilities. The Farmer's Market, July 4<sup>th</sup> celebration

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and Christmas in Carnation make use of Bird Street as the City's festival location. As several properties along Bird Street are vacant, land acquisition in the area would be possible to support the town center concept.

Planned improvements:

- Add picnic tables and grill at Community Shelter
- Acquire land along Bird Street between Tolt Commons and the Community Shelter

### **Linear Parks and Trail System**

**TOLT RIVER LEVEE TRAIL.** Carnation has an opportunity to create an outstanding river trail with a continuous connected trail along King County parklands to the Snoqualmie River and all along the City UGA and connecting to the Entwistle trail on the east. Acquisition or an easement crossing 2 private parcels of land (where the levee is currently gated) would be required. It is noted that the current landowner's are not interested in selling or allowing an easement for public access, but public access across this blockage has been supported by the public and the City should work cooperatively with King County towards completing this trail.

**SNOQUALMIE RIVER TRAILS.** The existing King County parks provide great trails that should be better connected to the City's existing and proposed non motorized trail system. Recently the City completed the connection to the public pathway along the northern boundary of the wastewater treatment plant. This existing trail meets a recently completed trail on property owned by the City of Carnation that connects to Tolt McDonald Park.

Planned Trail improvements:

- Pedestrian pathway on Entwistle/NE 45<sup>th</sup>
- Sidewalk on SR203 south of NE 40<sup>th</sup>
- Signage
- Bicycle parking
- Work with King County to complete access along the Rivers

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**Table P-5  
Capital Improvements Plan**

	2012 Cost Estimates	Phase 1 2012-2018	Phase 2 2019- 2025	Phase 3 2026- 2031
<b>Hockert Park</b>				
Replace play structure	\$150,000	\$163,500		
Toddler structure	\$20,000	\$21,800		
New swing set	\$10,000	\$10,900		
New Climbing structure	\$6,000	\$6,540		
Merry go round	\$10,000		\$13,000	
Add a picnic table	\$3,000		\$3,900	
	<b>\$199,000</b>			
<b>Valley Memorial Park</b>				
Re-finish tennis/basketball courts	\$20,000	\$21,800		
Picnic structure	\$64,000	\$69,760		
Looped trail	\$37,500	\$40,875		
Basketball hoop	\$3,000	\$3,270		
Toddler structure	\$20,000	\$21,800		
Reconfigure/pave parking lot 18 spaces	\$40,600		\$52,780	
Skatebowl improvements	\$40,000		\$52,000	
BMX viewing/picnic area	\$4,000	\$4,360		
	<b>\$229,100</b>			
<b>Tolt Commons/Community Shelter</b>				
Picnic tables	\$6,000	\$6,540		
Grills	\$2,000	\$2,180		
Land acquisition between Commons + Shelter	\$56,250	\$61,313		
Land acquisition between Commons + Shelter	\$142,650		\$185,445	
	<b>\$183,125</b>			
<b>River's Edge Park</b>				
New Fence	\$10,000		\$13,000	
Other improvements desired by neighborhood	\$50,000		\$65,000	
	<b>\$60,000</b>			
<b>Loutsis Park</b>				
Landscape screen along western boundary	\$15,000	\$16,350		
Fitness course	\$40,000		\$52,000	
Pave parking lot	\$44,000		\$57,200	
	<b>\$99,000</b>		\$109,200	
<b>West Side Park</b>				
Site work	\$10,000		\$13,000	
Fence:	\$12,160		\$15,808	
Play structure(s)	\$50,000		\$65,000	
Picnic table	\$3,000			\$4,440
Grill	\$1,000			\$1,480
Open sided structure	\$16,000			\$23,680
	<b>\$92,160</b>			

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<b>Trails system</b>				
Pathway on Entwistle/NE 45th				
Sidewalk on SR203 west side s. of NE 40th	\$20,000	\$21,800		
Work with King County on Tolt Levee Trail				
Work with King County on Snoqualmie River Trail				
Signage	\$50,000	\$54,500		
Bicycle racks 10 in CBD/SC zones	\$12,000	\$13,080		
	<b>\$82,000</b>			
<b>New Mini-parks</b>				
	<b>\$300,000</b>			
In PAA west of SR203	\$150,000		\$222,000	
Northeastern development	\$150,000		\$222,000	
		<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
Total in 2012 Dollars	<b>\$1,268,160</b>			
Totals	<b>\$1,711,301</b>	<b>\$540,368</b>	<b>\$697,333</b>	<b>\$473,600</b>

**FUNDING OPTIONS**

City of Carnation revenue is obtained from a combination of taxes, license and permit fees, state and federal grants, user service charges, fines and forfeits, miscellaneous interest earnings and sales, and pass-through federal revenue sharing monies. Major funding sources for park and recreation facilities can include property taxes, general obligation bonds, real estate excise taxes, grants, and pass-through monies. The City also imposes a park impact fee of a specified dollar amount on residential developers for each residential unit constructed.

**Potential Revenue Sources**

Some of the potential funding sources for new park and recreation development in Carnation may include the following:

Park Impact Fees – Park impact fees are typically collected when a new residential development is constructed (to provide for recreational opportunities for new residents of the development). The City of Carnation imposes an impact fee for each new residential unit built in the city. Impact fees may be spent only on system improvements needed to serve new growth and development.

User/Concession Fees – User fees (e.g., daily, league, seasonal, annual, and/or resident fees, among others) are typically charged for use of park and recreation facilities. Concession fees are collected from private businesses (concessionaires) who operate recreation-support services (e.g., food/beverage stands, equipment rentals, etc.) at park and recreation facilities. User and/or concession fees may be used to purchase land, develop, operate, and maintain facilities.

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Special Use Agreements — Special use agreements are encouraged such as property agreements that could be used instead of property purchases to secure public use rights for land or property at no cost or for a nominal fee. This is particularly beneficial where public use is of benefit to the private landowner. Some forms of special use agreements can provide favorable tax benefits if the use agreement can be shown to have an assigned value.

Public-Private Partnerships – Public-private partnerships are typically defined as cooperative ventures between the public and private sectors (e.g., corporations, non-profit organizations, citizen groups, etc.). For park and recreation departments, public-private partnerships may include corporate sponsorships, staffing, and/or facility management, among others.

Public/Private Service Contracts Private market skills and capital may be employed in a variety of ways including the use of public/privates service contracts where a private party can be contracted to operate and maintain a facilitate for a fixed fee cost. Service contracts can be very efficient where the activities are small, scattered in location, seasonal, expert or experimental. Service contracts are also relatively easy to initiate or terminate if the area demand fails to provide sufficient use or revenue to justify continued operation. Service contracts may be flexible and can include agreements with the school district or local user groups who can or would be interested in sustaining the activity on a subsidized or sweat-equity basis in exchange for the facility.

Public/Private Concessions – Cities may lease a portion of a site or facility to a private party in exchange for a fixed fee or a percentage of gross receipts. The private operator assumes operation and maintenance responsibilities and costs in exchange for a profit. A city's portion of the profits may be used to help pay facility development costs at the same of for similar facility developments. Concessions can save the City considerable monies where the activities are specialized, seasonal, experimental or unproven. Concessions can be easily initiated, provide direct user benefit/cost reimbursements and relieve the city of a capital risk should market or user interest fail to materialize to a least break-even levels.

Public/Private Joint Development Ventures – Cities may enter into an agreement with a private or public developer to jointly own or lease land for an extended period of time to allow the development, operation and maintenance of a major recreational facility or activity in exchange for a fixed lease cost or a percentage of gross receipts. A developer would assume development and operations and maintenance responsibilities and related costs and all of the market risk in exchange for a market opportunity providing a profitable return, which may or may not otherwise be available. A city would realize the desired development of

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a facility, which may or may not be realized otherwise, in exchange for a low minimum capital return and little or no capital risk.

Joint development agreements represent an ultimate benefit/cost resolution which may also provide public revenue which a city could use for other development opportunities.

Land Leases – There are instances where an activity is so specialized in appeal, or has a service area so broad in scope, that it cannot be equitably financed using general public funds. Specialized user groups may be provided options for developing and/or maintaining specific recreation facilities in ways that provide an equitable distribution of public and private costs. User groups or clubs may assume the responsibility for the development and/or operation and maintenance of a facility. User groups or clubs may provide volunteer help. Land lease agreements may also be used to accommodate organized athletics such as soccer, baseball, football, softball and rugby; or unique, specialized facilities like horse stables or equestrian centers.

Taxation –

*Special Improvement Districts (SID) Park District* – Funds for these districts may be generated through property tax assessments and/or financed through bonds. These funds may be used for specific projects or improvements to parkland. This type of district is often created as part of a subdivision process.

*General Obligation Bonds* – General obligation bonds may be used to generate funds for use in acquiring land, improving/enhancing existing facilities, and developing new park facilities. Bonds often enable a city to utilize local funds to match state and federal grant funding and are one of the most common funding sources for new and/or improved park and recreation facilities.

Sales Tax – Funds from increased sales and local option taxes can be used to fund park and recreation improvements and for land acquisition.

Real Estate Excise Tax (REET) – The State of Washington is authorized to levy a real estate excise tax on all sales of real estate, measured by the full selling price, including the amount of any liens, mortgages and other debts given to secure the purchase at a rate of 1.28 percent (RCW 82.45.060). A locally-imposed tax may also be authorized. All cities may levy a quarter percent tax (described as "the first quarter percent of the real estate excise tax" or "REET 1") (RCW 82.46.010). Cities that are conducting planning under GMA also have the authority to levy a second quarter percent tax (known as "REET 2") (RCW 82.46.035(2)).

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Grants – There are some park and recreation-specific grant opportunities available to local communities. However, funding for these grants changes on an annual basis, based on state and federal budgets. Most grants require a local funding match. In Washington, many grants are administered by the RCO.

Donations - Donations to municipalities may provide tax deductions equivalent to 501(c)3 corporations. Life estates and reverse mortgages are examples of other donation strategies that may help fund park and recreation facilities.

### **Funding Strategies**

In considering various park and recreation revenue sources as described above, funding sources should generally be matched to specific needs in order to avoid duplication and to take advantage of each fund's specific possibilities. For example, specific funding strategies may include:

Park and Recreation Program Services - Individual user fees and charges should generally be used to help finance recreation programs or services to the maximum extent practicable to provide cost/benefit equities and efficiencies. General funds may be used to help cover situations where fees cannot be readily collected, as in most special events; or where fees do not cover all operating costs of a program or service.

Facility Operation, Maintenance and Minor Construction - General funds should typically be used to help fund the operations and maintenance costs for park facilities and recreation activities that cannot be financed by user fees and charges, or be financed with other funding methods. General funds are flexible and can be adjusted to meet annual programming variations or priorities.

Facility Development - Capital improvements, including property acquisition, can be funded through the general fund, real estate excise taxes, park impact fees, or other funding sources as discussed above.

## ***IV. GOALS AND POLICIES***

### **FRAMEWORK GOALS**

In discussions with the community, City Council and the Park Board at several meetings, the following broad themes were described as priorities to guide this plan:

- A. Promote community interaction by supporting gathering places, open spaces, and parks and recreation.
- B. Expand trail linkages to further connect neighborhoods to regional public

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- open spaces, farms, rivers and lakes.
- C. Explore creation of a Park & Recreation District with neighboring municipalities to enable funding mechanisms for park, trail and open space system enhancement.

**GOAL P1**

**Assure that park and recreation land and improvements are provided to accommodate the demand of the future**

- Policy P1.1 The City will protect and conserve its existing park lands to assure that there is an adequate supply of park and recreation facilities to meet current and future park needs.
- Policy P1.2 The City will continue to implement a park impact fee ordinance. Emphasis should be placed on payment in lieu of receipt of undeveloped land.
- Policy P1.3 The City will apply for appropriate, available grants to develop needed park, recreational and trail facilities, and park programs.
- Policy P1.4 The City will endeavor to develop multi-use parks to serve a broad range of interests and demands.
- Policy P1.5 The City will continue cooperation with King County and other public and private entities to encourage and promote the development of needed park facilities and open space. The City will work to secure cooperative agreements with King County if they elect to surplus major regional facilities or real property.
- Policy P1.6 The City shall facilitate and encourage public input for park development.
- Policy P1.7 The City shall pursue a network of paths, trails, and sidewalks to connect public spaces.
- Policy P1.8 To meet the needs for current and future residents, emphasize the need to develop existing undeveloped parkland rather than obtaining new small parcels, unless these are used appropriately for pocket parks to serve new or underserved residential areas.

**GOAL P2**

**To assure that parks are adequately maintained and operated to meet the interests and needs of Carnation residents.**

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- Policy P2.1 The City will endeavor to maintain the City's park system to assure that parks remain clean, safe, inviting and usable.
- Policy P2.2 The City will encourage the use of volunteers and community support in the care and development of city parks.

**GOAL P3**

**Encourage the development of parklands that reflect and promote the vision for Carnation which values its natural environment, rural heritage and sense of community.**

- Policy P3.1 Encourage the use of design and landscaping that mimics the historic natural environment, and utilizes Best Conservation Practices (BMPs).
- Policy P3.2 Promote a strong sense of community through the development of pedestrian trails and paths that link neighborhoods to each other and to parks and open spaces.
- Policy P3.3 Offer a destination for visitors to Carnation to bike, walk and enjoy a respite from more urbanized areas.
- Policy P3.4 Pursue funding to acquire additional land for civic functions especially along Bird Street.
- Policy P3.5 Establish gateways into town at south (Tolt River Bridge) and north edge of UGA.
- Policy P3.6 Pursue enhanced public access from neighborhoods to existing parks, especially the Tolt MacDonald Park, the Snoqualmie Valley Trail, and Tolt and Snoqualmie Rivers.
- Policy P3.7 Seek partnerships to develop other recreation opportunities, possibly at the City owned parcel south of the new sewer plant.

**ACTION POLICIES**

- Policy PA.1 Review and modify the park & recreation mitigation program as necessary to comply with state law.
- Policy PA.2 Establish parks and recreational level of service guidelines based on total population, usage patterns, growth predictions and population densities.

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Policy PA.3 Update fees or charges for specialized services or programs and/or certain facilities on an annual basis.

Policy PA.4 Develop maintenance guidelines for use as a planning and budgetary tool to efficiently allocate resources (both labor and equipment).

Policy PA.5 Work with local citizen groups that have come together to improve Carnation's parks. Encourage the private sector and semi-public organizations to increase their expenditures for public recreation facilities and opportunities in Carnation.

Policy PA.6 Continue efforts to fund renovation and development of existing parkland.

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**CHAPTER 7 – TRANSPORTATION ELEMENT*****I. INTRODUCTION***

The Transportation Element is needed to satisfy Growth Management Act (GMA) requirements, and serves a critical role in updating the City's transportation improvement projects funding program. The Transportation Element also provides the City with documentation and justification to apply for funding grants for transportation improvement projects, and serves as a guideline for prioritizing the transportation projects needed to maintain adopted level of service standards necessary to support future development as planned for in the Land Use Element.

The development of the City of Carnation Transportation Element Update was first commissioned by the City Council in October 2003 for the 2004 Comprehensive Plan Update to address future land use growth and transportation needs to support the expected growth. The 2004 Transportation Plan Update provided a revised Transportation Improvement Plan through the year 2030, and recommended the adoption of a Traffic Impact Fee Program based on the report findings and concurrency objectives for the short term and long range land use.

Since the adoption of the 2004 Comprehensive Plan, the city's funding program has been supplemented by the adoption of a transportation impact fee program to assist in funding projects that will accommodate traffic growth associated with the future land use development of the City and its arterial system.

Most recently, the City updated the Transportation Element in 2011. This update continues a 2030 forecast year, fulfilling the GMA requirement for at least 10-year traffic forecast. The model used for the updated 2030 traffic forecast incorporated the land use assumptions from the Land Use Element and Zoning Map as amended in the current Comprehensive Plan since it was first adopted. This work was important in supporting the design of the signalized intersection at SR203 and Entwistle Street.

In 2012, the City initiated a planning effort for SR203 (Tolt Avenue) with assistance from a Rural Corridors grant from the Puget Sound Regional Council. After an extensive public process that included public workshops, input from several stakeholders groups including local businesses, community members and partners such as the Riverview School District, the Washington State Department of Transportation, Puget Sound Energy and others, the consultant team came up with an Action Plan for redevelopment of the Tolt Avenue Corridor from the bridge over the Tolt River to NE 60<sup>th</sup> Street. The final concept includes:

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- A Greenway which provides a shared use path along the eastern portion of the right-of-way from Tolt River Bridge to Entwistle Street. The Greenway would bring pedestrians and bicyclists into the downtown from the south.
- Retrofits to the west side of Tolt Avenue from the Tolt River Bridge to Eugene Street
- 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
- Continuation of the Greenway north of the CBD from just south of Rutherford Street to NE 55<sup>th</sup>, providing a link for pedestrians and bicyclists from the north of the city to the downtown.
- A pedestrian walkway from on the eastside of Tolt Avenue from NE 55<sup>th</sup> to NE 60<sup>th</sup> to serve existing residential development.

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 will also be in place to prevent conflicts between bicyclists and pedestrians within the Greenways, and will assist the transitions for bicyclists between the Greenways and the downtown. 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 projects that comprise the Tolt Action Plan are not generally included in the Transportation Improvements Plan of this Transportation Element as they would not increase the traffic carrying capacity of the City's transportation network. However, the Plan does meet many of the city's goals for non-motorized transportation, especially the goal of encouraging pedestrian and bicycle transportation modes, 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.

The Action Plan divides the improvements into various projects, and calls for the improvements to be made incrementally, depending upon grant funding. Implementation of the Tolt Action Plan over the next years will move Carnation in the direction of fulfilling its goals for integrated pedestrian and bicycle access and safety, improved downtown streetscape, and in general creating a more inviting and integrated use of the city's primary roadway.

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## **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 of the cities within those counties. The PSRC has developed its MPPs in VISION 2040. Carnation's Comprehensive Plan must show its consistency with the goals and policies of VISION 2040. The Transportation Element is consistent with VISION 2040 in that it advances cleaner and more sustainable mobility by promoting non-motorized trips through its compact urban form and goals for safe and attractive pedestrian and bicycle linkages to the designated City center (the downtown area along SR203). The Transportation Element encourages the development of a street system that provides adequate levels of service while also minimizing environmental impacts of roadway development. While transit service is provided by regional entities, the City is working to promote transit service to serve its citizens and other 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. The 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.

## **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. Running north-south, SR 203 connects Carnation with Duvall to the north and Fall City to the south. Maintained by WSDOT, this two lane rural highway has a general speed limit of 50 mph. 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. Due to the large volume of local and through traffic carried through the center of town, residents are concerned with pedestrian and bicycle safety, especially pedestrians and bicycles crossing SR203, as well as local automobile mobility. Roads surrounding the downtown business district are east-west oriented streets which are typically paved, have gravel shoulders or no shoulder at all, and are without road markings. Stop signs regulate traffic flow at intersections. A traffic signal is in design for the intersection of SR203 and Entwistle Street and is expected to be operational by the fall 2011; this will be Carnation's first signalized intersection.

SR203 has two travel lanes, curb, gutter and sidewalk on both sides and parking on one or both sides from Bagwell Street on the north to just beyond NE 40<sup>th</sup> on the west side and to the end of the Middle School on the east side on the south. A recent Transportation Improvement Board (TIB) project added bulb-outs and

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ADA ramps at key intersections in the downtown. The condition of SR203 varies from good to fair in some areas. The Washington State Department of Transportation (WSDOT) is responsible for maintenance of the roadway from the fog line inwards; the City is responsible for the area between fog line and the property lines.

Carnation streets are generally substandard in the older portions of the City, although roadways in the more recent subdivisions are newer and in better condition. The original plat of the City included 60 foot rights-of-way as well as 16 feet alleys. However, on the local access streets, pavement width varies from 12 feet to 40 feet, with 20 feet being the average. This is substandard for two lanes of traffic, and does not permit on-street parking. Very few residential streets in the older portions of the City have curb, gutter and sidewalk. Carnation also has an extensive system of alleys in the older parts of town. Sixteen foot alleys were dedicated and developed as part of the original plat of Tolt. A few of the alleys which receive heavy use have been paved.

Two Transportation Improvement Board (TIB) projects have been completed in recent years that improved to arterial standards Blanche Street between SR203 and Stossel Avenue, and Stossel Avenue (King Street) between Entwistle and Blanche Street. These streets now have curb, gutter and sidewalk on both sides and parking on one or both sides. Street lights and landscaping are also provided.

Entwistle Street, the city's east-west arterial, has curb, gutter and sidewalk on the south side from Larson Avenue to 329<sup>th</sup> Ave NE. The north side of the street has curb, gutter and sidewalk from Larson Avenue to 326<sup>th</sup> Ave NE.

The Brumbaugh Addition and Regal Glen are subdivisions that were completed in the 1970s and 1980s. The streets in the Brumbaugh neighborhood do not have curb, gutter or sidewalk, and are in poor shape. Regal Glen has curb and gutter on both sides and sidewalk on one side. In general, the streets are in fair or good condition.

The newer subdivisions which were completed in the 1990s generally have streets with curb, gutter and sidewalk on both sides.

Carnation's transportation network and an inventory of street conditions are depicted in more detail in the Inventory and Analysis section below.

### **CONCURRENCY**

The Levels of Service (LOS) Standards that are adopted in the Transportation Element are maintained through upkeep of the existing circulation system and expansion of transportation services where needed. The City has adopted Link (A-F) Level of Service standards for the arterials that handle the most significant

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volume of local traffic in the city. These standards provide measurable criteria to judge the adequacy of roadway service provision. General design standards for all road classifications within the City, including local streets, collectors and arterials are adopted in the City of Carnation Street and Storm Sewer Standards.

### **TRANSPORTATION PLAN ISSUES AND CHALLENGES**

Fortunately, Carnation has few traffic congestion problems when compared to other King County cities. There are, however, a number of unique issues and challenges that must be considered in order 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 fast moving through traffic. SR203 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 SR203 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 pedestrian environment within the downtown commercial area by promoting non-motorized access within the 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.
3. There is currently only limited public transit service linking Carnation to the rest of the Snoqualmie Valley or to nearby employment centers. There is one route that serves Carnation with a route from Fall City to the Redmond Transit Center.
4. Many of Carnation's existing streets are narrow and without sidewalks or pathways. Improved access and safety for pedestrians and bicyclists is an important goal for the City of Carnation. Additional pathways as well as amenities for pedestrians and bicycles are needed in order to achieve Carnation's goal of providing substantial opportunity for non-motorized travel throughout the City.

## **II. INVENTORY AND ANALYSIS**

This section of the Transportation Element presents an inventory and description

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of the existing transportation system, and begins to analyze current and projected needs. The inventory and analysis of services and facilities are intended to provide an assessment of the capability of the existing system to meet existing needs, as well as to correlate system needs with estimates of projected land use and growth in Carnation.

### **STREETS CLASSIFICATIONS**

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

*Arterial:* A highway or roadway connecting neighborhoods and facilities within the community and providing some access to abutting properties. The facility stresses mobility and circulation needs over providing specific access to properties.

*Collector:* A street connecting two or more neighborhoods as well as carrying traffic within neighborhoods. Collectors also channel traffic onto the arterials. Typically, they carry moderate traffic volumes, have relatively shorter trips than arterials, and carry very little through traffic.

*Local Access Street:* This category comprises all local roadways and streets not otherwise classified. Their main function is providing direct access to abutting properties, sometimes at the expense of traffic movements. Traffic generally moves slowly on these streets and delays are caused by turning vehicles.

*Alley:* A local access street, generally undeveloped and consisting of a 1 lane 16 foot ROW that provides access to such amenities or services as rear yards, garages, or refuse collection.

Figure T-1 shows a Street Classification Map for the City of Carnation.

City arterials identified in the Map include Tolt Avenue (SR203 within the City of Carnation) Entwistle Street, Larson Avenue and a segment of NE 40<sup>th</sup> Street. 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 (r-o-w) starting at the City limits at Bagwell Street to Entwistle Street. From Entwistle Street southward, the r-o-w is 60 feet. There are two travel lanes, shoulder, and sidewalk on both sides for most of Tolt Avenue. 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 329<sup>th</sup> Avenue NE in Swiftwater on the south side, and to opposite 326<sup>th</sup> Street on the north side. Larson Avenue is designed to be a north-south arterial that provides access to

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the industrial area west of SR203. 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 would link Entwistle to NE 40<sup>th</sup> with the purpose of providing access for industrial development. The segment of NE 40<sup>th</sup> from SR203 westerly to Larson Avenue (extended) is also classified as an arterial; its purpose is to link Larson Avenue to SR203 to serve existing and potential industrial development.

Collectors within the City include NE 40<sup>th</sup> from its intersection with the Larson Avenue (extended) corridor westerly to Tolt McDonald Park; Blanche Street and Stossel Avenue which serve the area of intense development (Mixed Use and/or high density residential) east of SR203; Commercial Street between Stephens and Entwistle Streets, which provide east west access in the commercial core, Milwaukee Avenue, which provides north south access between Entwistle and NE 50<sup>th</sup> and Stewart Street which provides north south access between Entwistle and Bagwell. Future development of the Potential Annexation Area north of the Carnation Elementary School would also be served by an extension of Milwaukee Avenue, in order to link residential development of that portion of the UGA to the rest of the city's street grid. East Morrison Street between Milwaukee and SR203 and NE 50<sup>th</sup> east of Milwaukee Avenue provide access for existing and future development of the northeastern part of the City. Some of these collector streets such as Blanche and a portion of Stossel Avenue have recently been improved, but other collectors are substandard.

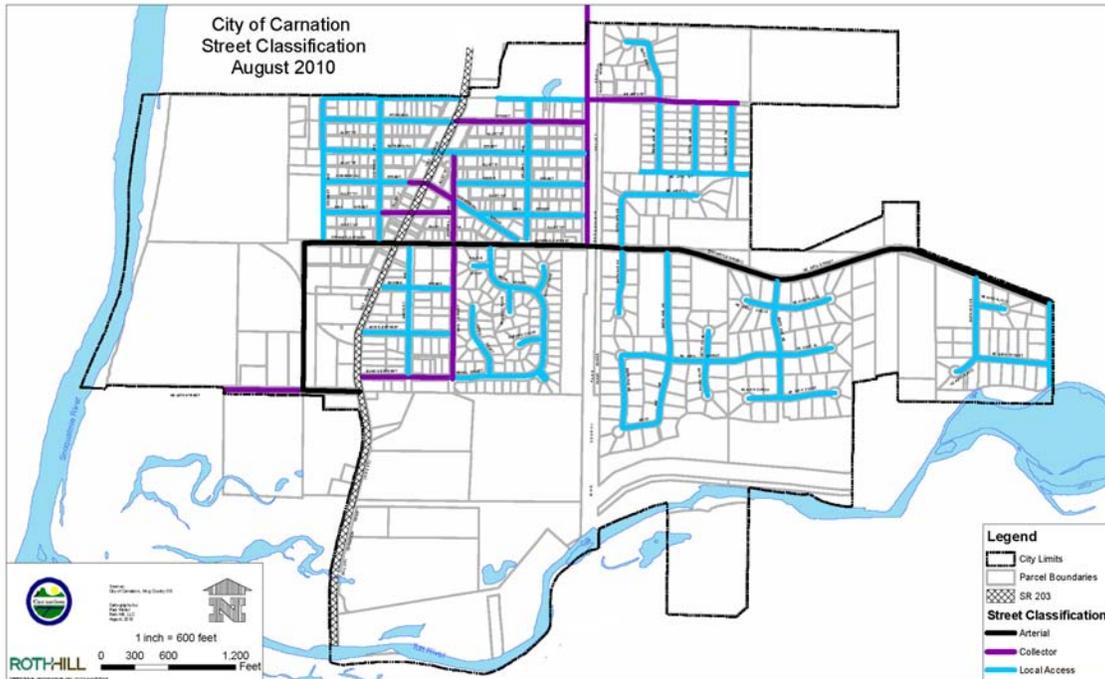
Other City streets are classified as Local Access. The main purpose of these streets is to provide access to the land uses that are adjacent. Current conditions and rights-of way for these roadways vary widely throughout the City. In most of the older portions of the City, 60 foot rights-of-way are typical, but by and large the streets consist of minimal pavement 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, but have newer roadway, and pedestrian amenities often include curbs and sidewalks. The City's goal is to provide pedestrian and bicycle access, but there is some concern that improvements to pedestrian amenities in the older portions of the City should be consistent with the design and scale of these areas. The City will develop alternative roadway profiles that seek to provide pedestrian and bicycle pathways that do not detract from the aesthetic appeal of older neighborhoods.

As development occurs within the city, the existing street system should be reviewed for the primary purpose of the roadway, the future volumes, and the spacing between similar use roadways. The review would be used to identify and designate the roadways which will carry the higher volumes for through traffic and provision as the gateway corridors into the city. The designation of these roadways will provide the City with the framework to guide city and developer capacity improvements to accommodate the future traffic demands.

# City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

The designated roadways would then be monitored for accessibility from adjacent properties and levels of service to ensure the capacity, efficiency, and safety of the regional arterial system within the city. The impact on downtown parking and pedestrian safety will need to be further addressed on a project by project basis.

Figure T-1 Street Classification Map



## City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

Recognizing the corridors that will carry the majority of traffic in and out of the city will allow the City to start planning for the preservation of right-of-way and management of the access locations to these corridors to maintain higher capacity conditions.

### STREET CONDITIONS

Table T-1 below contains an inventory of street conditions through-out the City. Note that street names with east or west refer to east or west of SR203.

**TABLE T-1: CARNATION STREET INVENTORY AND CONDITION ANALYSIS  
as of April 2011**

<b>STREET</b>	<b>SIDEWALK</b>	<b>CURB &amp; GUTTER</b>	<b>PAVEMENT CONDITION</b>	<b>COMMENTS</b>
<b>ARTERIALS</b>				
Tolt Ave. (SR 203)	Yes	Yes	Fair-Good	Sidewalk both side in most areas in City limits. Sidewalk 1 side from Morrison to NE 55 <sup>th</sup> in PAA
Entwistle Street/NE 45 <sup>th</sup> Street	Yes	Yes	Fair - Good	Sidewalk both sides from Larson to opposite 326 <sup>th</sup> on the north and slightly east of 329 <sup>th</sup> on the south
Larson Avenue	1 side (part)	1 side (part)	Good	Unimproved r-o-w from Vacuum station southward
NE 40 <sup>th</sup> between SR203 and Larson Avenue	1 side (part)	1 side (part)	poor	narrow
<b>COLLECTORS</b>				
Stossel Rutherford to Entwistle	No	No	Poor-Fair	Narrow uneven pavement
Stossel (King) Entwistle to Blanche	Yes	Yes	Good	TIB improvements completed in 2009
Milwaukee (Milwaukee to 326 <sup>th</sup> )	*One side	Yes	Good	*Pavement on east side has been extended and striped for walkway; even road surface.
NE 50 <sup>th</sup> Street	1 side	1 side	Fair	
East Morrison Street	Yes	Yes	Good	Pavement width sufficient for on-street parking
Commercial Street between Stossel and Alley 'J'	Yes	1 side	Fair	
Bird Street between	1 side	1 side	Fair	Angled parking between

## City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

<b>STREET</b>	<b>SIDEWALK</b>	<b>CURB &amp; GUTTER</b>	<b>PAVEMENT CONDITION</b>	<b>COMMENTS</b>
Stossel and Stephens Avenues				<i>SR203 and Stossel</i>
Blanche Street between Stossel and SR203	<i>Yes</i>	<i>Yes</i>	<i>Good</i>	<i>TIB improvements completed in 2009</i>
NE 40 <sup>th</sup> Street west of Larson Avenue	<i>no</i>	<i>no</i>	<i>poor</i>	<i>Narrow pavement</i>
<b>LOCAL STREETS</b>				
<b>Tolt Townsite Plat of Tolt</b>				
Bagwell (west of SR203)	<i>No</i>	<i>No</i>	<i>Poor or non-existent</i>	<i>30 Ft. ROW; Undeveloped from Stephens West; 1 lane from Stephens to Tolt. Pavement width less than 12 ft.</i>
Bagwell (east of SR 203) to be re-named NE 50th	<i>1 side (part)</i>	<i>1 side (part)</i>	<i>Good</i>	<i>Recent improvements for Riverview School project</i>
West Morrison	<i>No</i>	<i>No</i>	<i>Poor</i>	<i>Narrow pavement.</i>
Rutherford	<i>No</i>	<i>No</i>	<i>Poor-Fair</i>	<i>Narrow pavement</i>
Commercial (except between Alley 'J' and Stossel)	<i>Partial</i>	<i>Yes</i>	<i>Fair</i>	<i>Curb in very poor condition</i>
Reitze	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>Narrow pavement width</i>
Bird (Stewart to Stephens)	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>Narrow pavement</i>
Stewart Avenue	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>Narrow pavement</i>
Stephens Avenue	<i>No</i>	<i>No</i>	<i>Fair</i>	
Spillman Avenue	<i>No</i>	<i>No</i>	<i>Poor</i>	<i>Narrow pavement</i>
<b>Hamilton Re-plat</b>				
Eugene	<i>Yes (partial)</i>	<i>Yes (partial)</i>	<i>Good</i>	
Myrtle	<i>No</i>	<i>No</i>	<i>Poor</i>	
McKinley (Entwistle to Eugene)	<i>One side</i>	<i>Yes</i>	<i>Good</i>	<i>on-street parking on 1 side</i>
McKinley (Eugene to Blanche)	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>Narrow</i>
<b>Regal Glen</b>				
<i>Regal Street</i>	<i>One side</i>	<i>Yes</i>	<i>Good</i>	<i>Pavement wide enough for on-street parking 1 side</i>
<i>Palace Ct.</i>	<i>One side</i>	<i>Yes</i>	<i>Fair</i>	<i>Pavement wide enough for on-street parking 1 side</i>
<i>King Ct.</i>	<i>One side</i>	<i>Yes</i>	<i>Fair</i>	<i>Pavement wide enough for on-street parking 1 side</i>

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<b>STREET</b>	<b>SIDEWALK</b>	<b>CURB &amp; GUTTER</b>	<b>PAVEMENT CONDITION</b>	<b>COMMENTS</b>
Queens Ct.	One side	Yes	Fair	Pavement wide enough for on-street parking 1 side
Regency Place	One side	Yes	Fair	Pavement wide enough for on-street parking 1 side
Royal Ct.	One side	Yes	Fair	Pavement wide enough for on-street parking 1 side
<b>Swiftwater</b>				
325th Ave NE	1 side	Yes	Fair	
NE 40 <sup>th</sup> Street	Both sides	Yes	Fair	
326 <sup>th</sup> Ave NE (Swiftwater)	Both sides	Yes	Fair	
327th Pl. NE (Swiftwater)	1 side	Yes	Fair	
NE 40th Circle	1 side	Yes	Fair	
NE 40th Place	1 side	Yes	Fair	
NE 42nd Street	Both sides	Yes	Fair	
NE 42nd Place	1 side	Yes	Fair	
NE 43rd Circle	1 side	Yes	Fair	
NE 43rd Place	1 side	Yes	Fair	
329th Ave NE	Both sides	Yes	Fair	
<b>River's Edge</b>				
334 <sup>th</sup> Ave NE	1 side	Yes	Fair	Rolled curbs
336 <sup>th</sup> Ave NE	1 side	1 side	Fair	
NE 42 <sup>nd</sup> St	Both sides	Yes	Fair	Rolled curbs
NE 42 <sup>nd</sup> Place	Both sides	Yes	Fair	Rolled curbs
NE 43 <sup>d</sup> Place	Yes	Yes	Fair	Rolled curbs
<b>Brumbaugh Addition</b>				
NE 47 <sup>th</sup> Street	No	No	Poor	Narrow pavement.; unpaved from 327th to 328th
NE 50 <sup>th</sup> Street (Brumbaugh)	No	No	Fair	Narrow (half street)
326 <sup>th</sup> Ave NE (Brumbaugh)	No	No	Fair	
327th Ave NE	No	No	Fair	
328th Ave NE	One side	Yes	Fair	
<b>Carnation Meadows II</b>				
326th (Carnation Meadows)	One side	Yes	Fair	

# City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

<b>STREET</b>	<b>SIDEWALK</b>	<b>CURB &amp; GUTTER</b>	<b>PAVEMENT CONDITION</b>	<b>COMMENTS</b>
<b>Cascade View</b>				
<i>325th Ave (Cascade View)</i>	<i>One side</i>	<i>Yes</i>	<i>Fair</i>	
<b>Carnation Meadows</b>				
<i>325th Ave (Carnation Meadows)</i>	<i>One side</i>	<i>Yes</i>	<i>Fair</i>	
<i>NE 46<sup>th</sup> Place</i>	<i>One side</i>	<i>Yes</i>	<i>Fair</i>	
<b>Unplatted</b>				
<i>331st Ave NE</i>	<i>No</i>	<i>No</i>	<i>Poor/None</i>	<i>Undeveloped private gravel road</i>
<i>332nd Ave NE</i>	<i>No</i>	<i>No</i>	<i>Poor/None</i>	<i>Undeveloped private gravel road</i>
<b>PAA (Garden Tracts)</b>				
<i>316th NE</i>	<i>No</i>	<i>No</i>	<i>None</i>	<i>Undeveloped ROW</i>
<i>318th NE</i>	<i>No</i>	<i>No</i>	<i>Good</i>	<i>NE 55th to NE56th only (road developed for 1 blk. only)</i>
<i>320th NE</i>	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>NE 55th to NE 60th</i>
<i>322nd NE</i>	<i>No</i>	<i>No</i>	<i>Fair</i>	<i>NE 55th to NE 60th</i>
<i>324th NE</i>	<i>No</i>	<i>No</i>	<i>None</i>	<i>Undeveloped ROW along Sno-Valley Trail (old RR ROW)</i>
<i>NE 55th</i>	<i>No</i>	<i>No</i>	<i>Fair-Good</i>	<i>Narrow</i>
<i>NE 60th</i>	<i>No</i>	<i>No</i>	<i>Fair-Good</i>	<i>Some unevenness and buckling</i>

**Notes:**

These are general assessments and some streets may have been placed one level up or down on the condition analysis.

**Good:** Pavement condition good, little or no lateral or parallel fractures, little or no raveling, no apparent sub grade failure. Minimum 22 foot pavement width.

If sidewalks exist, they are in good condition with little or no fractures or vertical deflection.

**Fair:** Pavement condition fair, pavement surface may have fracturing or raveling, pavement life can be extended with routine maintenance. Minimum 20 foot pavement width.

Sidewalks may exist in good to fair condition with limited fracture and vertical deflection.

**Poor:** Pavement condition poor, pavement may be asphalt concrete or chip seal, greater than 20% of roadway has fractures, raveling or sub grade failure. Pavement widths less than 20 feet, typically streets with this designation have 16 feet or less of pavement. Typically, these streets do not have sidewalks.

## INFLUENCE OF REGIONAL TRAFFIC

Regional traffic influences traffic volumes within the City, especially along SR203. The Puget Sound Regional Council (PSRC) Rural Town Centers and Corridors

## **City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT**

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Program studied overall corridor improvement concepts. Key corridor “hot spots” have been identified as strategic areas needing additional study to address short and long-term safety, development and mobility needs along the corridor. No immediate changes in regional traffic flow through the city are expected. However, the City will undertake a Rural Corridors study to evaluate reconstruction projects within Tolt Avenue (SR203) to improve pedestrian and bicycle safety and add amenities, especially safe crossings of SR203, to support non-motorized access.

### **NATURAL TRAFFIC BARRIERS**

A number of rivers and steep hills create natural barriers to an efficient traffic access to and circulation within Carnation. Motorized traffic originating in the eastern portion of the City, and wanting to move in a southerly direction must proceed west to SR203, proceed south on SR203 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. The only street providing eastern access to the unincorporated County in Carnation is Tolt River Road (NE 45th Street). SR203 forms a barrier for non-motorized traffic.

### **PARKING**

Parking has been an issue raised by the community during the planning process. The principal concern is adequate parking in the downtown commercial core. Increases in development will create added pressures on parking availability. In addition, it is felt that existing public parking should be better identified and located more conveniently for shops.

The City of Carnation goals for the downtown commercial area is to create an attractive pedestrian environment throughout the downtown area and to link Carnation's neighborhoods through trails and pathways with the downtown area. The goal is to encourage people to use alternative modes of transportation to access the downtown commercial area.

The community must strike a balance between parking shortages and parking supply. Too little available parking may contribute to stunting the downtown's economic growth. Excess parking wastes money as well as space that could more desirably be used for valuable development or environmentally useful open space, and contributes to impervious surface. Development Regulations should provide sufficient off-street parking to meet needs without creating deterrence to development.

# **City of Carnation Comprehensive Plan**

## **TRANSPORTATION ELEMENT**

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### **TRANSIT SERVICE**

There is limited public transit service available between Carnation and its more urban neighbors. Weekdays, Metro Transit has one bus route serving Carnation. This route runs twice a day at peak commute times, plus one off-peak time linking Carnation with downtown Seattle via a connection at the Redmond Park & Ride. Metro is considering reducing service on rural routes that do not carry significant passengers, and the existing route may not survive Metro's cuts. Carnation is currently discussing partnering with other entities that are considering providing transit service for the Snoqualmie Valley cities. Currently bus service is also provided to the Snoqualmie Valley through the Snoqualmie Valley Transportation operation, which is a Non-Profit Project of Mt Si Senior Center & the Snoqualmie Tribal Nation. SVT provides transportation for anyone ages 13+ within the Snoqualmie Valley on a request basis. SVT serves North Bend, Snoqualmie, Preston, Fall City, Carnation, Duvall and Monroe. Service is available during the weekdays but not on weekends. Transportation of seniors to medical appointments is also offered by SVT. The transit stop is located at SR203 (Tolt Avenue) and Bird Street. In recent years the transit stop has been enhanced through artwork provided by the Snoqualmie Tribe. Other improvements such as an informational kiosk, or newspaper and bicycle racks should also be considered. City goals to promote a pedestrian friendly environment and land use policies that channel denser land uses within walking distance of the downtown also work to make transit use more attractive for City residents.

In addition to fixed route transit provided by Metro and others, 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's compact urban form and centralized business district (the Town Center) create an opportunity for excellent pedestrian access, both within the downtown and linking the nearby neighborhoods to the downtown area. The Carnation Urban Growth Area is just over a square mile in size. Most goods, services and public facilities within the City are located along SR203, between Bagwell Street (the Carnation Elementary School and the Library) and important facilities just south of the Tolt Town Center, including the Tolt Middle School and Memorial Park. Higher density residential development is concentrated within a half mile of SR203, within the original development that was platted in the early twentieth century. In addition, important regional activities are located in the southern portion of the City, such as Remlinger Farms and Tolt McDonald Park, and in the northern portion of the Potential Annexation Area, such as the u-pick berry farms. These activities draw an estimated half million people to the Carnation area over the course of the year; ways to encourage these visitors to come into Carnation's downtown are integral to the City's economic development strategy.

## City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

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As described above, curbs and sidewalks are present throughout most of the SR203 corridor, and bulb-outs and ADA ramps were recently added to the curbs in the Central Business District. However, traffic on SR203 works as a barrier to pedestrians, especially in the afternoon peak traffic hour. The signalization of the intersection at Entwistle and the cross-walk improvements at Morrison have provided two improved pedestrian crossings, however, improved pedestrian safety through-out the SR203 corridor is necessary in order to improve pedestrian access to the downtown core. Continued attention to preventing speeding and other traffic violations on SR203 as well as better identified crosswalks will be important to maintaining pedestrian safety.

Concerns about how the downtown would develop lead the City to adopt Design Guidelines for new development along SR203 in 2005. The Guidelines promote an attractive pedestrian experience through attention to facades and amenities at the sidewalk. Public improvements to SR203 will also be crucial to achieving the goal of an attractive and lively downtown. The recently completed Tolt Action Plan includes full street improvements of Tolt Avenue through Carnation's downtown, including street re-grading and paving, landscaping, undergrounding power, street and pedestrian lighting, storm drainage improvements and street furnishings. These improvements would greatly improve the pedestrian experience in Carnation's downtown and would promote economic development.

Non-motorized access for students to the Carnation Elementary School and the Tolt Middle School, both located along SR203, has been identified as a concern. The proposed Tolt Action Plan, if implemented, would greatly improve safety for school children walking to these facilities. Currently there is no sidewalk north of Morrison on the east side of SR203, and there is a non-standard pedestrian extruded curb walkway on the west side between Morrison and NE 55<sup>th</sup> Street. Two projects identified in the Tolt Action Plan would improve pedestrian safety in this area: the North Entry project would retrofit the west side from Rutherford Street to NE 55<sup>th</sup> Street with a new curb, sidewalk and planting strip, while on the east side, the North Greenway project provides a pedestrian and bicycle shared use pathway with a five foot separation from the roadway. The shared path Greenway meets the American Association of State Highway and Transportation Officials (AASHTO) definition of a "sidepath", a facility that provides pedestrian and bicycle access adjacent to a roadway segment where high volume motor vehicle traffic discourages bicyclists and pedestrians. Further north, another project between NE 55<sup>th</sup> Street and NE 60<sup>th</sup> would provide a pedestrian walkway along the east side of Tolt Avenue. The recommended walkway is an at-grade facility separated from the roadway by a landscape buffer. A traffic median would be retrofitted into the existing road along the Harvold properties. These proposed improvements would work together to calm traffic coming from the rural roadway to the north, providing ample indication to south-bound traffic that they are now entering a more settled area and should reduce speed.

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Current access to the elementary School for pedestrians on the west side of SR203 is provided at Morrison Street. It should be noted that the entry to the Elementary School is located on Morrison Street, not on Tolt Avenue. The city will need to coordinate with the Riverview School District if other crossings are necessary to serve Elementary School students.

Spilman Avenue is a much used road for children walking to the Carnation Elementary School from the neighborhoods to the south. Spilman Avenue is in very poor shape, with less than the minimum drive surface required for two travel lanes. There is no sidewalk present. The road shoulders have many pot-holes, and poor drainage is evident during any rain event. The City intends to apply for a Safe Routes to School grant to install a pedestrian pathway and storm water facilities on the east side of Spilman Avenue. The proposed improvement to Spilman would not add capacity to the City's transportation network, and therefore the project is not included in the Transportation Improvement Plan in this Transportation Element; however it is in the City's Six Year Transportation Improvement Plan (STIP).

Similar to the improved access to Carnation Elementary School, the Tolt Action Plan includes projects to the south of the downtown that will improve pedestrian or bicycle access to the Tolt Middle School. The South Greenway is a shared pathway for walking and biking planned for the east side of SR203 between the Tolt River Bridge and Entwistle Street, where the downtown improvements begin. Similar to the North Greenway, the South Greenway improvement meets the AASHTO definition of a "sidepath", and the plan includes a buffer from the road by a traffic curb and a 4.5 foot planting strip. On the west side of SR203, the South Entry project provides a new curb, gutter, sidewalk and planting strip from the existing pedestrian crossing at the Fire Station northward to Eugene Street. This retrofit of Tolt Avenue south of the downtown replaces the existing sidewalk and provides plantings and street trees to buffer pedestrian and create a more welcoming street environment. In general these and other projects in the Tolt Action Plan, such as improvements at the bridge, would calm north-bound traffic on SR203.

Much of Carnation's existing and proposed residential development is east of SR203 and Entwistle Street is the arterial which connects many of the City's neighborhoods to the downtown. The signalization of the intersection of SR203 and Entwistle should improve pedestrian safety significantly. Pedestrian access via Entwistle Street is good for much of the City, but the River's Edge neighborhood does not have adequate pedestrian access, as there is no sidewalk between their neighborhood and Swiftwater. As Entwistle serves through traffic, traffic and speeds can be significantly higher than on other City streets.

Recent improvements to Blanche and Stossel as far north as Entwistle Street

## City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT

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provide an attractive pedestrian environment, although the wider improved roadways appear to have created some temptation for speeding. Other collectors, such as East Morrison and NE 50<sup>th</sup>, do at least provide curbs and sidewalks.

The condition and presence of pedestrian amenities on the local access streets within Carnation are quite varied, as described above. In general, traffic on many of the local streets is limited. However, certain roadways that are well used by school children to access the Carnation Elementary School are in especially poor condition; the City may need to address Spilman Avenue as an example of this concern. Some City residents have expressed concern that curb, gutter and sidewalk improvements would not be consistent with the small town feel of the older portions of the City. Alternatives to curb gutter and sidewalk for these areas should be considered, such as pedestrian pathways that are not grade separated from the roadway.

In general, pedestrian amenities are present in most of the newer subdivisions. Pedestrian linkages between neighborhoods and access to the downtown are more of a concern.

In addition to the linkages provided by sidewalks and roadways, Carnation has excellent trails for recreation. The 2009 Parks Master Plan outlines the city's trail facilities. The Snoqualmie Valley Trail, which uses the abandoned Chicago, Milwaukee & Saint Paul Railroad right-of-way from Duvall to North Bend, is a 315 mile regional trail serving all of the Snoqualmie Valley. This trail provides a north-south "spine" through the Carnation. Trails connections include the trail north of the Wastewater Treatment Plant which links Entwistle Street to trails along the Snoqualmie River that connect in Tolt McDonald Park with a new trail system along the Tolt Levee Setback project. While these trails are within King County jurisdiction, they help form the linked trail system and are well used by local residents. The trail system continues along the Tolt levee system, crossing under SR203 and connecting with the Snoqualmie Valley Trail, as well as continuing upriver. The linkage is lost between the Swiftwater and River's Edge communities, in King County, where the levee does not include public access. With the exception of this lost connection, Carnation's trail system combines with Entwistle Street. 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, through a city-owned parcel east of the City.

### **BICYCLE ROUTES**

The scenic roads in the Carnation area are frequently utilized by bicycle touring groups and clubs. However, some of these routes are dangerous with winding roadways and poor visibility, particularly during peak weekday commuting

## **City of Carnation Comprehensive Plan**

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periods. The Tolt Action Plan if implemented would greatly improve bicycle access and safety through the City. The Greenway shared paths would be available for bicyclists who desire separation from motorized traffic, while the traffic calming effects would slow vehicular traffic, thus improving safety for more seasoned bicyclists who would continue to use the travel lanes. The Action Plan provides for bicycle racks in the Central Business District to better support bicyclists, and to encourage them to take advantage of local businesses.

The King County Bicycle Plan: Focus 1990, was completed in 1975 and has been updated. The plan classifies bicycle facilities as Class I, II, or III. According to the Plan, Class I facilities are separate off-road paths or trails, Class II facilities are signed and have pavement markings, and Class III facilities are only signed. Within Carnation city limits, there are no roadways designated as bicycle paths by King County. King County has designated Carnation Farm Road NE as a Class III bicycle facility. Carnation-Fall City Road NE and SR 203 are designated bicycle facilities, but are not classified. Nonetheless, it is quite common to see many bicyclists along SR203 when weather conditions are favorable.

The Snoqualmie Valley Trail as described above is also a very popular facility for bicyclists. A planned safety repair to the bridge over the Tolt River will result in some short term closures.

Other mountain biking trails that bring visitors to the Carnation area include the off-road biking at Tolt McDonald 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 SR203.

### **ALLEYS**

Carnation also has an extensive system of alleys in the older parts of town. Sixteen foot alleys were dedicated and developed as part of the original plat of Tolt. A few of the alleys which receive heavy use have been paved but most are not paved.

### **EXISTING CONDITIONS**

#### *Traffic Volumes*

Traffic volume data was collected for the city arterial system from the City of Carnation Public Works Department and the Washington State Department of Transportation (WSDOT). The traffic data conducted in March 2004 was updated in 2008 at the critical intersections with SR203 for level of service analyses.

## **City of Carnation Comprehensive Plan TRANSPORTATION ELEMENT**

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The 2004 study included five intersections: SR-203 with Blanche Street, Entwistle Street, Commercial Street, and Morrison Street and the intersection of Entwistle Street and Milwaukee Avenue. The daily traffic volumes were estimated from the p.m. peak hour volumes assuming a K-factor of 10 for all approaches. The City provided 2003 p.m. peak hour counts for the SR-203 and Entwistle intersection.

The more recent study evaluated the same intersections with SR203 with the addition of NE40th, but did not include the Entwistle and Milwaukee intersection, as projected land use in the eastern portion of the City has not changed substantially from the 2004 Comprehensive Plan Update.

### **LEVEL OF SERVICE**

Levels of service provide a measurement of the quality of service provided by the transportation system. The Growth Management Act requires the establishment of a Level of Service 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 level of service standard may also be used to identify transportation funding priorities of planned improvements.

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. The level of service analysis conducted for existing and future conditions at the City's critical intersections were based on average vehicle delay and the methodology outlined in the 2000 Updated Highway Capacity Manual (2000 HCM), Third Edition, Special Report 209, Transportation Research Board. A summarized description for the various levels of service as outlined in the (1998 HCM) is shown in Table T-2.

# City of Carnation Comprehensive Plan

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**Table T-2  
Level of Service Description**

Level of Service	General Description	Average Delay at Intersections*	
		Signalized	Unsignalized
A	Free flow conditions. Vehicles have minimal or no delay at the intersection. V/C = 0.0 to 0.60	≤10	≤10
B	Stable traffic flow. Some minor delay may be experienced at intersections. V/C = 0.61 to 0.70	>10 and ≤20	>10 and ≤15
C	Stable traffic flow. Average delay can be expected at intersections with occasional signal cycle failure. V/C = 0.71 to 0.80	>20 and ≤35	>15 and ≤25
D	Traffic flow becoming unstable with noticeable traffic congestion. Delay is longer than average but generally tolerable. Cycle failure becoming noticeable. V/C = 0.81 to 0.90	>35 and ≤55	>25 and ≤35
E	Unstable traffic flow conditions. High delay can be expected with frequent cycle failure occurrence. Many agencies view this as the limit of tolerable or acceptable delay. V/C = 0.91 to 1.0	>55 and ≤80	>35 and ≤50
F	Forced traffic flow conditions. Delay is unacceptable to most drivers due to exceeded intersection capacity. V/C = 1.0 or greater	>80	>50

\*Delay is measured in terms of seconds per vehicle.

The Puget Sound Regional Council (PSRC) adopted LOS standards for all Highways of Regional Significance in 2003, which included SR203. To be consistent with the PSRC, the City of Carnation has adopted LOS D for SR203. This means in effect that all of the intersections along SR203 must meet or exceed LOS D, including all turning movements.

The level of service analyses conducted for the five critical intersections identified below were performed for the p.m. peak hour. Intersection level of service analyses are typically conducted for the p.m. peak hour since the traffic conditions usually represent the worst case scenario in terms of traffic volumes through an intersection or along the arterial street sections. Table T-3 summarizes the results of the LOS analysis conducted for the five intersections under Year 2004 traffic conditions.

The results of the level of service analysis indicate that all of the intersections with the exception of the SR-203 and Entwistle Street intersection is concurrent with City and State LOS standards under existing conditions.

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**Table T-3  
2004 Level of Service Summary**

<b>Intersection</b>	<b>Traffic Control</b>	<b>LOS*</b>	<b>Delay (sec/veh)</b>
SR-203 at Blanche Street	Stop Sign	D	33.3
SR-203 at Entwistle Street	Stop Sign	F	>60.0
SR-203 at Commercial Street	Stop Sign	C	22.0
SR-203 at Morrison Street	Stop Sign	D	28.1
Entwistle Street at Milwaukee Avenue	Stop Sign	A	9.5
*LOS reported for the worst case turn movement at unsignalized intersections			

The signalization project at Entwistle and SR203 was completed as scheduled. While an update of transportation modeling has not been performed to ascertain the levels of service with the additional signalization, previous modeling projected LOS C at the Entwistle intersection upon project completion. The City is expected to meet its concurrency goals, at least for the short term.

**LAND USE AND TRAFFIC VOLUME FORECASTS**

***Land Use and Trip Generation Projections.***

The land use assumptions used to determine the 2030 traffic volumes within the City were based on the City’s proposed Land Use Map. 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 SR203; higher density residential development allowed between the Mixed Use Zone and Stossel Avenue and east of SR203 in the Potential Annexation Area; new single family development in the Potential Annexation Area west of SR203 and in lands not yet platted east of the Snoqualmie Valley Trail, as well as substantial infill development, especially in the original platted areas; plus continued and expanded industrial uses west of the SR203 corridor and south of the Tolt Middle School.

The land use projections used to determine the future year 2030 traffic volumes within the City were based on the City’s current Land Use Map. The City is subdivided into 30 traffic analysis zones (TAZ) for determining trip generation and distribution. Trip generation calculations were then conducted for each TAZ based on trip rates and regression equations published in the Institute of Transportation Engineers (ITE) *Trip Generation* manual, 8<sup>th</sup> Edition. The trip generation assumes full build out of the City by the forecast year 2030.

A total of approximately 28,800 average daily trips (ADT) and 2,600 p.m. peak hour trips (approximately 1,300 inbound and outbound trips) were estimated for

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the development build out of the study area.

### ***Transportation Network and Trip Distribution Assumptions***

Trip distribution of the projected year 2030 trip generation was based on the existing transportation system and projected infrastructure improvements to determine intersection and corridor deficiencies. The transportation network improvements included the following roadway connection projects to provide additional north-south access and capacity through the City arterial system. The extension of 316<sup>th</sup> Avenue west of SR203 and the extension of Milwaukee Avenue east of SR203 are designed to connect projected development in the Potential Annexation Area to the existing roadway grid system. The extension of Larson Avenue improves north-south connectivity within the City, to serve the industrial area west of SR203. These three improvements are summarized below:

1. 316<sup>th</sup> Avenue NE from NE 55<sup>th</sup> Street to Morrison Street to tie into Stewart Avenue
2. Larson Avenue NE from Entwistle Street to NE 40<sup>th</sup> Street
3. Milwaukee Avenue from NE 50<sup>th</sup> Street to NE 55<sup>th</sup> Street, to tie into 324<sup>th</sup> Avenue NE.

No other network or significant capacity improvements are currently planned by the City. The distribution methodology used to assign future trips assumed just under ten percent of all trips would be captured internally between the residential and commercial land uses within City of Carnation city limits. The trips external to the City were assigned along SR203 per existing traffic patterns, with 40 percent heading north of the City and 60 percent heading south of the City.

## **FUTURE TRAFFIC CONDITIONS – YEAR 2030**

### ***Traffic Forecasts and Impacts***

The level of service analysis conducted for the year 2030 conditions at the critical arterial intersections was performed for the p.m. peak hour assuming existing traffic control and channelization with the inclusion of the proposed link connections on Milwaukee Avenue and Larson and 216<sup>th</sup> Avenues NE. The results of the LOS analysis are summarized in Table T-4.

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**Table T-4  
Existing and Year 2030 Level of Service Summary**

Intersection	Existing (2011)			2030 Baseline			2030 Build <sup>5</sup>		
	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup> or WM <sup>4</sup>	LOS	Delay	V/C or WM	LOS	Delay	V/C or WM
Tolt Ave/Blanche St	D	31	WB	F	>100	WB	C	32	1.01
Tolt Avenue/Entwistle St	F	75	WB	F	>100	WB	D	41	1.15
Tolt Ave/Commercial St	E	40	EB	F	>100	EB	F	>100	EB
Tolt Ave/Morrison St	D	30	EB	F	>100	WB	C	24	0.98

1. Level of Service as defined in the *Highway Capacity Manual* (TRB, 2000)
2. Average delay per vehicle in seconds.
3. Volume to capacity ratio reported for signalized intersections.
4. Worst movement reported for unsignalized intersections
5. See summary of improvements listed below.

The level of service analysis indicates that all of the critical study intersections would deteriorate to LOS F conditions under existing traffic conditions with the exception of the Entwistle Street and SR203, due to the planned intersection signalization project that is underway, and Entwistle and Milwaukee Avenue intersection that is projected to operate at LOS B under future conditions. Implementation of a traffic signal at each of the State highway (SR-203) intersections will improve their service grades to LOS D or better.

Implementation of a traffic signal at three State highway (SR-203) intersections will improve their service to meet the LOS D standard or better. However, the SR203/Commercial Street intersection retains a LOS F due exclusively to the left turn (eastbound and westbound) movements from Commercial Street onto SR203. While this LOS F for the minor street approaches are below the acceptable standard, it is projected that left turning traffic at Commercial Street would divert to either the Entwistle or Morrison Street intersections with SR203. Both of these signalized intersections have adequate capacity to take the additional traffic. The other alternative is to signalize Commercial Street, but this would result in four signalized intersections within a half-mile. Furthermore, the traffic volumes are not likely to reach a level that signal warrants would be met.

## DETERMINING EXISTING LOS - TRANSIT

Level of Service for Transit is projected to be poor if existing service is continued, or to deteriorate further if Metro reduces service. At this time, the City is endeavoring to work with other local transit providers, such as the Snoqualmie Tribe, to examine the feasibility of establishing fixed route transit service for the Snoqualmie Valley cities, including Carnation. Given that the regional employment base will likely continue to be located west of the Snoqualmie

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Valley, feeder service to transit centers in Redmond, Issaquah and North Bend for I-90 service will be important considerations.

### **III. FUTURE NEEDS AND ALTERNATIVES**

All study intersections were evaluated using existing channelization and traffic control to determine the buildout scenario traffic growth impacts and the capacity improvements needed to obtain the City level of service standard in 2030. Based on the results of the level of service analysis, a review of the improvement locations, and the estimated cost for the recommended improvements, , the proposed transportation system improvements were prioritized and described below.

#### ***Priority No. 1: Larson Avenue NE Connector***

This connection will allow traffic to access the lands zoned for industrial use west of SR203 and south of the wastewater treatment plan. Larson Avenue would connect Entwistle Street to NE 40<sup>th</sup> which provides access to SR203. The project is estimated to cost approximately \$1,521,605 if implemented in 2012..

#### ***Priority No. 2: SR-203 and Morrison Street Intersection***

This intersection is currently unsignalized, although pedestrian improvements are slated for completion in 2011. Currently this intersection operates at LOS D under existing conditions. The signalization of this intersection is proposed to primarily serve the future growth and build-out of the north part of Carnation and recommended improvement will improve the projected operations of the intersection with traffic growth to LOS A in 2030. The project is estimated to cost approximately \$540,000 if implemented as planned in 2015.

#### ***Priority No. 3: Milwaukee Avenue Connector***

This connection is designated to accommodate future north-south travel with a parallel route to the State highway on the east side of the SR-203 to complete the Milwaukee Avenue Corridor to the north City limits. The project is estimated to cost approximately \$2,187,900 if implemented as planned in 2017.

#### ***Priority No. 4: 316th Avenue NE Connector***

This connection will connect future development of the Potential Annexation Area to the existing roadway network. The project is estimated to cost approximately \$2,693,600 if implemented as planned in 2018.

### **TRANSPORTATION IMPROVEMENT PROGRAM**

The proposed signalization improvements and new roadway connections recommended within the City and PAA totals approximately \$7.9 million. The programmatic improvement program to supplement the City's current 6-Year Transportation Improvement Plan (TIP) is summarized in Table T-5 for an expected 20-year development implementation period.

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**Table T-5: Proposed Transportation Improvement Program**

<b>Improvement Project</b>	<b>Implementation Year</b>	<b>Grant Share (75%)</b>	<b>Grant Type</b>	<b>Impact Fees (25%)</b>	<b>Total in 2007 dollars</b>	<b>Total in Year of Implementation dollars</b>
Larson Avenue Connector	2012	1,146,4544	TIB-SC/ STP	382,151	1,314,000	\$1,528,605
SR-203/Morrison Street Signal	2015	562,500	TIB-SC	187,500	550,000	\$ 750,000
Milwaukee Avenue Connector	2017	1,640,925	TIB-SC/ STP	546,975	1,683,000	\$2,187,900
316 <sup>th</sup> Avenue Connector	2018	2,020,200	TIB-SC/ STP	673,400	1,924,000	\$2,693,600
20-Year Totals		\$5,370,079		\$1,790,026	\$5,271,000	\$7,160,105

In 2006, the City adopted a Transportation Impact Fee Ordinance (Ordinance No. 691) in order 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.

Ordinance 691 designates that 85% percent of the total system improvement costs shall be funded by new growth or development through the imposition of impact fees. Approximately 15 percent would be collected from several sources, including state and federal programs combined with local arterial improvement funds which could be collected through taxes, grants, special districts, loans, and private revenue. Revenues would be collected for the remaining funds through impact fees, or from developer investments for frontage and access improvements, in accordance with the City's development standards. In general, most roadway improvements are funded far more through grant programs such as the Transportation Improvement Board (TIB) than through local funds, and impact fees are used to generate the local match, which is generally 25% for TIB grants. To recognize the more typical grant/local division, it is proposed that impact fees be used to generate 25% of the total cost of the Transportation

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Improvement Plan in order to be consistent with the amount of local match that is typical for transportation grants. The City will need to amend its Transportation Impact Fee Ordinance to be consistent with this policy.

This study has identified a total trip generation of 28,800 new daily trips associated with the build-out of the Land Use Element. The transportation improvements necessary to meet concurrency standards as required by the GMA are identified in the Transportation Improvements Plan, which has a total cost of approximately 7.1 million dollars. The GMA allows local governments to impose a Transportation Impact Fee to raise the revenues for transportation improvements in order to meet concurrency standards. An impact fee that provides the local match of 25% would be calculated at \$60 per trip or approximately \$603 per new single family dwelling.

#### ***IV. 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.
- 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.

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- 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 on going 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 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

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- 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.
- Policy T2.8 The City will include the need to accommodate bicycles 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

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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, enhancing 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:

- 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,

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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 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

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(> 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 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.

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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.
- 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 develop 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.

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### **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.