

APPENDIX B2: PARKING TECHNICAL MEMORANDUM





TECHNICAL MEMORANDUM

DATE: September 17, 2012

TO: Ken Carter
City of Carnation
City Manager

FROM: Jennifer Barnes, PE, Heffron Transportation *JAB*
Marni Heffron, PE, PTOE, Heffron Transportation

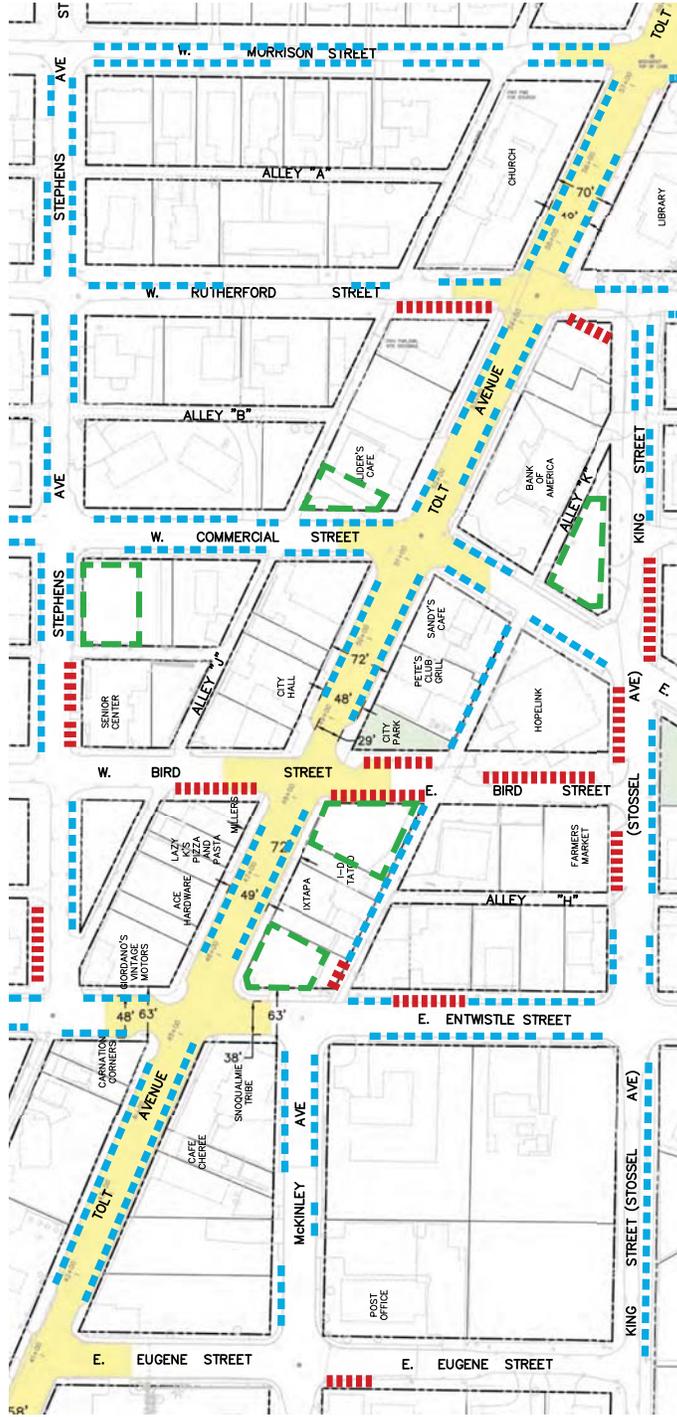
RE: **Parking Technical Memorandum**
Tolt Avenue/SR 203 Corridor Plan
SvR Project No. 11033

The Tolt Avenue/SR 203 Corridor Plan project will set a comprehensive 2030 vision for the corridor and provide an action plan for implementation and funding. The purpose of this memorandum is to present the existing parking conditions on State Route (SR) 203 (Tolt Avenue) in downtown Carnation, and to assess the potential effect that the proposed concepts defined in the corridor study and action plan would have on parking in the downtown area.

Existing Parking in Downtown Carnation

For the purpose of this assessment downtown Carnation is defined as the area bounded by Morrison Street to the north, Eugene Street to the south, Stephens Avenue to the west, and Stossel Avenue to the east. Figure 1 shows the public parking that is available in this area, which is within one to two blocks of Tolt Avenue. As shown, on-street parking has both parallel and angle configurations. There are also a few small surface parking lots in the downtown area on private property that are used for public use.

The City's parking rules are codified in the City of Carnation Municipal Code, Chapter 10.12. The city code states that on streets that intersect Tolt Avenue, it is unlawful to park a vehicle within 20 feet of the intersection curb return. It also prohibits parking on Tolt Avenue within 25 to 55 feet of the curb return (depending on location); however, the existing downtown curb bulbs provide a physical barrier that prohibits drivers from parking too close to intersecting streets. The City code also indicates that parking on Tolt Avenue between Rutherford Street and Eugene Street is restricted to 2 hours between 9:00 A.M. and 5:00 P.M.; however, no signs that indicate this restriction are provided on Tolt Avenue.



LEGEND

- - - - - Parallel Parking
- - - - - Angle Parking
- - - - - Surface Parking Lot

SvR Design Company
MAKERS
 Heffron Transportation



EXISTING PARKING



FIGURE 1



Table 1 summarizes the estimated number of spaces that are available in the area shown on Figure 1. As shown, approximately 454 parking spaces are estimated within the vicinity of the Tolt Avenue corridor. The parallel parking supply was estimated using guidelines provided in the City of Seattle’s Client Assistance Memorandum 117, which includes conversion rates from the unobstructed distance along which parking is available to an estimated number of parking spaces. This document was used because it is the best available resource for estimating parallel parking supply based on available curb length. It should be noted that these estimates are approximate and are intended only to provide an order of magnitude estimate; the actual number of cars that can park along a given length will depend on the size of the cars parked, and the space between them.

Table 1. Public Parking in Downtown Carnation

Location	Approximate Parking Supply
On-Street Parking	
Tolt Avenue	75
Morrison Street	40
Rutherford Street	30
Commercial Street	30
Bird Street	35
Entwistle Street	30
Eugene Street	5
Stephens Avenue	60
McKinley Avenue/Alley	30
Stossel Avenue	65
Surface Lots	
Commercial Street/Stephens Avenue	18
Bird Street/Tolt Avenue	12
Entwistle Street/Tolt Avenue	24
Total	454

Source: Heffron Transportation, Inc. based on field estimation. The parallel parking supply was estimated using guidelines provided in the City of Seattle’s Client Assistance Memorandum 117, which includes conversion rates from the unobstructed distance along which parking is available to an estimated number of parking spaces, and is the best available resource for estimating parallel parking supply.



Field observation on a typical weekday indicates that there is ample parking available on-street (parking conditions were observed on Thursday March 8 and Thursday, May 24, 2012). Typically there are spaces available on Tolt Avenue, as well as many spaces available along the adjacent streets. However, City staff has indicated that during special events (such as the Farmer’s Market on Tuesday afternoons, and other less frequent events), parking in the downtown area can fill up.

The existing street has two locations equipped with bicycle parking. The library has three, U-shaped bicycle racks that can accommodate a total of six bikes. The second location is just south of the Ace Hardware property; however, the bike rack is installed adjacent to the building and only allows parking for two bikes.

No existing dedicated parking is provided for motorcycles for scooters. There is no on-street designated handicapped-accessible parking, as defined under the Americans with Disabilities Act (ADA), in downtown Carnation.

Potential Effect of Corridor Plan on Parking Supply

Concepts under consideration in the Tolt Avenue/SR 203 Corridor Plan may remove on-street parking from portions of Tolt Avenue to accommodate wide sidewalks, landscaping, pedestrian amenities, and bicycle facilities. As shown in Table 1, approximately 75 on-street parking spaces are located on Tolt Avenue between Morrison Street and Eugene Street, which is about 17% of the total estimated public parking supply in the downtown area. Depending on the concept that is ultimately adopted for the corridor study and action plan, all or some of these spaces could potentially be eliminated. Table 2 summarizes the approximate breakdown of on-street parking supply between each block.

Table 2. Breakdown of Parking Supply Along Downtown Tolt Avenue

Tolt Avenue Segment	Approximate Parallel Parking Supply	
	Northbound	Southbound
Morrison Street – Rutherford Street	4	7
Rutherford Street – Commercial Street	8	6
Commercial Street – Bird Street	7	7
Bird Street – Entwistle Street	7	6
Entwistle Street – Eugene Street	13	10
Total	39	36

Source: Heffron Transportation, Inc, based on field estimation.



Strategies to Address Reduced Parking on Tolt Avenue

In the transportation element of the City *Comprehensive Plan*¹, Goal T-4 defined policies that seek to ensure adequate parking is provided in the downtown Carnation. The following strategies could be implemented to minimize the effects of reduced parking along Tolt Avenue:

- **Formalize and sign on-street parking on streets adjacent to Tolt Avenue** – Provide striping and signage that directs and encourages people to use available on-street parking in the areas to the east and to the west of Tolt Avenue. Part of the implementation of the action plan may need to include strategies that emphasize the concept that a pedestrian-oriented downtown typically includes longer acceptable walking distances between parking areas and downtown destination(s). Rather than having an expectation of always parking right in front of a business, signage and other pedestrian improvements help indicate that parking within one or two blocks is viable, and that walking between destinations is part of the “downtown experience”.
- **Expand existing public/private relationships to increase off-street parking** – Explore opportunities to expand off-street parking on nights and weekends in downtown Carnation. Explore joint parking agreements with area businesses and institutional facilities, in which the City would lease private surface lots for public use during the times that the businesses or facilities are closed. For example, the Bank of America parking lot (at Tolt Avenue/Commercial Street) has about 27 parking spaces, and the Hopelink parking lot (at Commercial Street/Stossel Avenue) has about 13 parking spaces. The bank is closed on evenings and Sundays; Hopelink is closed on evenings and also Friday through Sunday. Together, these two parking lots could provide over half of the total parking spaces that could potentially be removed from Tolt Avenue during the times that these businesses are closed.
- **Implement time restrictions** – Install signage at key locations near the main corridor so that long-term parkers (such as business employees) do not utilize on-street parking that is most convenient for short-term customer use. Time limits can increase parking supply through turnover. Parking that is one to three blocks away from Tolt Avenue could remain unrestricted, so people who come downtown for longer periods would be encouraged to park a little farther away from the main corridor. As noted previously in this memorandum, Carnation municipal code already places a two-hour time restriction for vehicles parked on Tolt Avenue between Rutherford Street and Eugene Street during weekday business hours, but no signage is provided that indicates that restriction.
- **Provide bicycle parking** – Install bike racks in visible locations, to encourage people to stop in Carnation and to travel to and from downtown by bicycle rather than driving.

¹ City of Carnation, *Comprehensive Plan*, Transportation Element, September 2011.



Traffic data collected between June 18th and June 22nd counted more than 1,000 bicyclists riding along Tolt Avenue (between 100 and 300 per day). The nearby Tolt-McDonald Park and Snoqualmie Valley Trail also bring thousands of visitors to within blocks of downtown Carnation. Providing visible, safe bicycle parking will help to encourage more people to visit and explore downtown Carnation while minimizing additional automobile parking demand.

- **Provide motorcycle parking** – Information gathered during the Visioning Phase indicates motorcyclists often use the Tolt Avenue corridor. Provide dedicated motorcycle or scooter parking for these users. Opportunities exist to fit motorcycle parking in spaces that may not be appropriate for other uses. Such space often is found on the ends of parking rows where a full parallel stall cannot be striped. Locations should also be evaluated for safety and access.

Integrating Bicycle and Motorcycle Parking

The following guidelines should be used to help design and locate bicycle and motorcycle parking along Tolt Avenue:

- Bicycle parking should be at least as convenient as the majority of automobile parking. It should be easily accessible from the road or bicycle path. Enough room should be provided to park and remove a bike without bumping into other bikes, trees, walls, light poles or other street furnishings. The entrance and exit should be designed to minimize conflict with flows of pedestrians and motor vehicles.
- Parking should be highly visible for the safety and security of people as well as their bikes, and so users can find it easily.
- Spaces that are unusable for cars and would otherwise be dead space due to their location or size can be appropriate for bike parking, with little or no opportunity cost incurred (e.g. locate bicycle parking in curb extensions at intersections).
- Space between each rail needs to allow for the length of the bike, width of the handlebars while it is parked, and access for riders to lock and unlock their bike. Allow for 2 feet by 6 feet for each bicycle parking space.