

WSG Comments on Existing Conditions & Design Criteria Memo from Toole Design – 2014-04-03

Page 1 – Paragraph 2 states “TDG has prepared 2 additional Memos” for the Traffic Circulation Study and Parking Utilization Study “with more in-depth documentation of existing conditions and analysis about vehicle, bicycle & pedestrian circulation and parking patterns that will influence the design of the cycle track.” Please provide the DAC with this source information.

Are the order of bulleted points in any specific order?

- If so, how was the order chosen?
- Is it correct to say that “safety” is the top concern?
 - Or are they all linear and that “parking and safe access to businesses” is as imp as the top bullet?

RESPONSE:

Safety is always SDOT’s top priority. You can read SDOT’s mission, vision and five core principles at www.seattle.gov/transportation/sdotmission.htm. The city has a goal of zero traffic fatalities and serious injuries by 2030. Constructing a cycle track (protected bike lane) creates predictability and is one of the recommendations included in the Road Safety Action Plan under Safe Roadway Design for All. To learn more about this initiative visit www.besupersafe.gov.

The bullets you mention above are included in the Existing Conditions and Design Criteria Memo and describe the intent of the project. They do not represent a hierarchy. The more in-depth documentation mentioned and requested, is available online at www.seattle.gov/transportation/wct.htm under ‘Project Library.’

We are looking to the DAC to help us identify a design that meets the city’s safety goal, the intent of the project and creates a cycle track (protected bike lane) that minimizes impacts to parking.

- Can you provide the DAC with data about the number of bicycle related injuries occurring in Westlake during each of the past 10 years?
 - We understand that that some go un-reported but we would like to know where are all starting from.

RESPONSE:

Collision data is available Attachment B of the [Traffic Circulation Memo](#).

Page 2 – What is the source of the Average Annual Daily Traffic (AADT) of 23,900 (per 2011 counts)? Is there more recent data? What is the projected traffic growth along Westlake Ave. N for the future?

RESPONSE:

SDOT conducts annual studies using tube counts. Here is the breakdown for recent years. We used 2011 volumes because this was the data quoted in the project grant application. We now have more current information. Traffic flow data and maps dating back to 1996 are available online at <http://www.seattle.gov/transportation/tfdmaps96.htm>.

2010	2011	2012	2013
26,200	23,900	23,000	21,600

Future traffic volumes on Westlake Avenue N depend on a number of factors such as availability of transportation options, land uses, the economy, and other factors. We know that currently the City is growing and car usage is declining. To accept growth and continue to keep people and goods moving, the city’s investments in transportation infrastructure are guided by multiple plans and our Complete Street Ordinance. The DAC received an overview of the planning documents in their April 7 meeting presentation available here www.seattle.gov/transportation/docs/2014_0407_DAC_Meeting2_PPT.pdf.

This “Existing Conditions Section” should also include SDOT survey data showing the average daily usage of 124 bicycles per day and 150 pedestrians per day for this area.

RESPONSE :

The purpose of the existing conditions study was to take a broad look at the many aspects that define the corridor. Traffic circulation is a critical issue for the corridor and is explored in more depth in the separate study. Bicycle and multi-modal counts are included in the Traffic Circulation Memo.

The 2nd sentence on page two states: “Improve a high use connector, meeting the City’s goal to build a network tht puts all residents within a quarter mile of a bike facility...” Does Dexter Ave N. meet that quarter-mile goal of the City?

RESPONSE:

No, the 2014 Bicycle Master Plan refers to an all ages and abilities bike facility within a quarter mile of all households. Dexter Ave N is an in-street, minor separation facility and is not considered an all ages and abilities facility.

From the Bicycle Master Plan Update:

Goal	Performance Measure	Baseline Measurement	Performance Target
Livability	Percentage of households within ¼ mile of an all ages and abilities bicycle facility	2013 percentage (calculate based on latest built network)	100% of households in Seattle within ¼ mile of an all ages and abilities bicycle facility by 2035

Page 4 – The statement regarding 62% of the 1,271 parking spaces being unrestricted in terms of time limits and the hours of the spaces being metered from 9:00 am – 4:00 pm does not appear to have any relevance to the design of a cycle track. It should be noted that the current Westlake Parking Management Plan is the direct result of an 18 month engagement process in which SDOT partnered and jointly developed with the Westlake community.

RESPONSE:

Knowing how parking is managed is relevant to understanding the corridor and how it is used.

Page 4 – The 2nd sentence description of the current land use is woefully inadequate and disregards the water based uses. We recommend the following information be incorporated into this section and the title broadened to say “Current Land and Water Uses”…….

Westlake Ave. N is a 1.2 mile long working waterfront and diverse water dependent community which is bordered by Lake Union to the east and a very steep hillside on west. The land use along this corridor supports the following:

RESIDENTIAL USAGE

- Approx. 65 Floating Homes
- Approx. 200 Live-a-board Vessels
- Condominiums & Apartments
- Visitors & Guests

WATER DEPENDENT BUSINESSES USAGE

- Approx. 20 Boat Dealerships & Brokerages 19 Marinas
- Approx. 1200 Moorage slips Marine Electronics
- Largest Float Plane Port in USA Marine Painting & Varnish Shops
- Large Charters & Tour Boats Fiberglass Repair
- Large Kayak/ Paddle Board Center Marine Custom Canvas
- Approx. 45 Boat Repair Businesses Marine Surveyors
- Boat Lift-out Yards Marine Financial/Insurance/Title
- Marine Engine Repair Boat Signage
- Propeller Shop Marine Fuel Dock
- Shipwrights Underwater Boat Repair & Maintenance Services
- 300 Member Rowing club 100 Member Dragon Boat Club

NON-MARINE RELATED BUSINESS USAGE

- 8 Restaurants & 2 Delicatessens Sign Company
- Hotel 2 Banks
- Radio Station Recycling Company
- Fitness Centers Large Swimming Pool with Classes

- Numerous Business Offices (wide variety)

RESPONSE:

Thank you for this information. We will keep this list as a reference.

Page 5 – The 2nd sentence under “Parking Lot Access” paragraph incorrectly states Galer Street as the only intersection providing western connectivity. This should state 8th Street, not Galer.

RESPONSE:

Noted. Since 8th Avenue N meets Westlake Avenue N is two separate places, the study used Galer Street and 8th Avenue N to distinguish the two.

Page 6 - Figure 7 (labeled “Driveways, Street Ends and Crossings”) incorrectly shows 6 streets having a connection to Westlake. Since only one street 8th St. has a western connection to Westlake, this should be corrected.

RESPONSE:

Shoreline street ends and waterways are specifically identified and recognized by the City as a public resource. Each of these street ends and waterways have an associated right of way, despite the fact that they do not have a western connection to Westlake.

Page 7 – The statement that “Peak Time is 4:30 – 5:30 pm weekday” does not appear to have any context or is supported. Copies of the “Traffic Circulation Study” should be provided to the DAC members.

RESPONSE:

The following times were used to collect traffic data informing the Traffic Circulation Study:

- Weekday morning (7:00 to 8:30 AM)
- Weekday evening (4:30 to 6:30 PM)
- Weekend afternoon (1:00 to 2:30 PM)

The PM peak hour used in the Existing Conditions and Design Criteria reflects the highest volumes within the weekday evening two-hour window from 4:30 to 5:30 PM. The Traffic Circulation Study has been made available to the DAC. Both are also available online at <http://www.seattle.gov/transportation/wctdac.htm>.

Page 8 – The “one day” study of Local Ridership by TDG provides higher ridership data than the SDOT study. Please provide both the TDC & SDOT studies to the DAC membership so we can better understand these differences at a different meeting.

RESPONSE:

SDOT does quarterly bicycle counts around the City in many locations, but not along this segment of Westlake Avenue N. The project did multi-modal counts to determine typical

bicycle, pedestrian and traffic volumes within the parking area. For more information on city bicycle count methodology and locations visit www.seattle.gov/transportation/bikedata.htm.

Page 9 – Please correct the following statement: “There are also raised crosswalks across the parking lot at these stops, to provide access to and from the east sidewalk”. There is actually only “one” raised crosswalk located at 8th street.

RESPONSE:

We count 16 raised crosswalks along the corridor. Below is a list of raised pedestrian pathways (mostly paved with brick or concrete, so visually distinct from the asphalt surface of the parking lot). Some are striped, but not all.

The east-west crossings that connect Westlake Avenue N (at transit stops, for example) and the east sidewalk are located at:

- Kenmore Air
- Highland Drive
- 8th Ave North
- 1700/Lake Union Building
- Newton Street end
- Crockett Street end
- Halladay
- Driveway #14

There are also several north-south oriented crossings where the pedestrian pathway (Cheshiahud Lake Union Loop) crosses heavier-use driveways, such as at:

- Highland Drive
- Julie’s Landing
- Boat World Marina

Page 9 – What is the relevance of the bus ridership for busses that transit through Westlake Ave. N to the design of the cycle track?

RESPONSE:

Bus information, including ridership, frequency and stop locations, provides context about the corridor.

Page 11 – Please provide the DAC members copies of the following 2 documents which are referenced throughout this memo:

- American Association of Highway & Transportation Officials Guide for the Development of Bicycle Facilities, 2012
- Manual of Uniform Traffic Devices

RESPONSE:

The Federal Highway Association does not print copies of the Manual of Uniform Traffic Devices. However, national organizations have partnered and printed hard copies that are available for sale. You can read the manual online, download a PDF, or order a copy here

<http://mutcd.fhwa.dot.gov/>. The guide is also available in the Seattle Central Library for in-use only.

Similarly, the AASHTO Guide for the Development of Bicycle Facilities can be purchased online at the AASHTO Bookstore at https://bookstore.transportation.org/item_details.aspx?ID=1943. The guide is also available in the Seattle Central Library for in-use only.

Page 11 – The last paragraph states: “The City of Seattle has constructed a number of two way cycle tracks at 10 feet wide, the width of 2 bicycle lanes.” Please identify where these are located and provide images of the current structures.

What is the size of the Broadway Cycle Track? How long has the Broadway Cycle Track been in use? How successful was the design in achieving increased ridership? How has the local community responded to the Broadway Cycle Track now that it has been implemented?

RESPONSE:

2-way Protected Bicycle Lane Location	Characteristics
Alki Ave SW from 59th Ave SW to SW Stevens St	Street grade, 13.5’ wide with 8’ wide parking buffer, raised sidewalk on the other side
NE 65th St from Sand Point Way NE to the Burke-Gilman Trail	Street grade, 10’ wide with 3’ buffer with physical continuous barrier, raised planting strip/sidewalk on the other side
Linden Ave N from N 128th St to N 145th St	Street grade, 10’ wide with 2’ buffer which varies with either raised curb, parked vehicles or travel lane
Sand Point Way NE from 40th Ave NE to Penny Dr	Sidewalk grade, 10’ wide next to 5’ wide sidewalk with planting strip
Broadway from E Denny Way to Yesler Way	Street grade, 8’ to 10’ wide with 2’ buffer which is either raised curb or painted; next to parking buffer (8’ wide) or travel lane (varies along the corridor)
Mercer St from Dexter Ave N to 5th Ave N	Sidewalk grade, 10’ wide with 6’ wide planting strip buffer, 7.5’ wide sidewalk with 2” grade difference on other side
5th Ave N from Mercer St to Harrison St	Street grade 10 wide’ with 2’ wide raised curb buffer, planting strip sidewalk on the other side
NE 40th St from 15th Ave NE to Brooklyn Ave NE	Street grade, 10 to 12’ wide, with 3’ buffer with delineator posts, raised sidewalk on the other side

The Broadway Protected Bike Lane is generally 10-feet wide with a two-foot buffer. A small section opened in fall 2013 and the full length (with the exception of one block at Denny) opened in early May. Here is a [video](#) of the current section in use, showing how bikes, vehicles and

pedestrians are interacting. Once the protected bike lane has been fully operational for a few months, the City will have a better understanding of usage and community feedback.

Page 12 – “(Design Speed)” The 3rd paragraph states “Research has documented that reductions in bicyclist design speeds and motorists’ turning speeds approaching intersections can improve safety” for pedestrians, bicyclists and motorists.” Please provide the DAC with the research which is referenced in this statement.

RESPONSE:

See the Federal Highway Administration’s Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE) and Bicycle Countermeasure Selection System (BIKESAFE).
<http://www.pedbikesafe.org/PEDSAFE/>
<http://www.pedbikesafe.org/BIKESAFE/>

Please provide the definitions of a “parallel buffered bike lanes” and a “trail-like facility” which are mentioned paragraph #4 on this page.

RESPONSE:

Buffered bike lanes are conventional bikes lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lanes. The reference is to the buffered bike lanes on Dexter Avenue North which is parallel to Westlake Avenue North.

A trail-like facility would be a bikeway that is separated from motor vehicle traffic.

The list of other factors in paragraph # 5 on this page omits the following significant additional factors which should be included:

- Access to boats for 1200 moorage tenants and their guests
- Access of trucks and vans used by marine repair shop technicians
- Access of busses supporting cruise boats
- Access of fuel trucks for boats

RESPONSE:

Thank you for the suggestion.

The DAC needs to determine who this cycle track is intended to accommodate in order to be able to better consider which design features are relevant or not.

RESPONSE:

The cycle track (protected bike lane) is being constructed to accommodate people of all ages and abilities riding bikes, as well as to add predictability that makes it easier for all users to travel the corridor—pedestrians, people driving, freight and transit.

Page 15 – In the 1st paragraph on this page, please provide a definition of a “major” vs. “minor street crossing” which are referenced here.

RESPONSE:

A major street crossing is a signalized intersection. A minor street crossing is a stop-controlled street end.

Page 19 – The “Parking Stall Size and Distribution Ratios” fail to discuss the specifications of space available to access the rear of a vehicle which abuts the side of the cycle track. This is especially important for the 45 marine repair shops along the corridor (truck, van, and car). Also, please provide the specifications for how the marine repair shops will be accommodated with space to transport marine repair materials through the parking area to/from their shops and vehicles.

RESPONSE:

This section is intended to document the variety of existing size standards and design criteria for parking spaces. Future parking stall sizes and arrangements will consider the types of vehicles using the corridor. We look to the DAC and corridor stakeholders to help us identify the needs and types of vehicles.

Page 20 – (Figure 13) Please discuss the space in the parking lot for transporting marine parts to/from a marine shop & vehicle (truck, van, car).

RESPONSE:

Loading zones will be determined on a case-by-case basis by looking at corridor segments during the design. As mentioned before, we look forward to working with the DAC and corridor stakeholders to identify business and service needs.

Page 22 – (Cycle Track Width Recommended Criteria). Why not consider an 8’ width and have a few pull-over & passing locations in the corridor? Again, this raises the question “who is this cycle track being designed to accommodate”?

RESPONSE:

The cycle track is intended to accommodate residents, visitors and commuters of all ages and abilities. The width factors in a number of key factors:

- The space users need to safety and comfortably maneuver
- The space to accommodate anticipated bicycle volumes
- The space to accommodate anticipated user types (e.g. Families with bicycle trailers, etc.)
- The accommodation of two-way traffic

The last page does not have a number – (Attachment A Comparison of ULI, ITE and CPS Parking Space Standards and Westlake Cycle Track). Can someone explain this attachment?

RESPONSE:

This attachment is intended to document the variety of existing size standards and design criteria for parking spaces, along with the project recommendations.