1

Neighborhood Traffic and Parking Mitigation Strategies during East Link Construction

The purpose of this document is to highlight temporary strategies that could mitigate traffic and parking impacts to residential neighborhoods that result from East Link construction.

These strategies are being developed to address traffic mitigation and parking mitigation because of the long-term duration of East Link construction across all contract segments. Neighborhood impacts that result from large-scale city projects are often considered. Long-term roadway closures (e.g. Coal Creek Parkway) and planned capacity projects on arterials (NE 4th St) have instigated the installation of radar signs, one-lane zones, and entry treatments in adjacent neighborhoods.

Traffic Mitigation: Refers to tools that will largely manage traffic volume and reduce excessive vehicles speeds as a result of neighboring residential streets being more attractive routes for motorists as a result of construction activity on primary routes

Parking Mitigation: Refers to tools that would minimize parking impacts in neighborhoods that could increase during construction.

Within the traffic and parking mitigation categories, there are several temporary tools that could be implemented to mitigate concerns. Tools are only being considered while construction activity takes place, not during the future permanent condition (i.e. capital improvements are not being considered and any features in the roadway will be easily removed upon completion of construction). The process by which tools are implemented would be managed by the City of Bellevue. Inclusion of the tools in the document does not guarantee their implementation. Additional analysis, field reviews, and extensive community involvement will be required prior to implementation. They are as follows and described in more detail below. These tools may be appropriate in South Bellevue, East Main, Downtown, or Bel-Red.

It needs to be reiterated that all tools are temporary in nature. Only materials that are easily to implement and remove are being considered (e.g. rubber speed humps).

Traffic Mitigation Tools		Parking Mitigation Tools	
Temporary features in the roadway	Full closure	Parking	General parking restrictions
	Partial closure		
	One lane zone/chicane		
	Speed humps (e.g. rubber material)		
Signs	Radar signs]	
	Local access only signs]	
	Turn restrictions		

Some tools are self-enforcing such as speed humps and chicanes while others, such as signage and parking restrictions, require a strong enforcement commitment to be successful. Simply implementing these tools without enforcement behind it will drastically reduce their effectiveness, particularly in the long-term.



City of Bellevue Last modified: February 5, 2015

Due to the nature of construction activity, there may be other tools not currently identified that are best suited to address neighborhood and parking concerns. Any mitigation strategy will need to allow for flexibility in application to adjust for changing conditions associated with construction activity, timing, and influences and will also require extensive neighborhood outreach. A public outreach plan is not included as part of this document but will be considered alongside the development of mitigation strategies.

Traffic mitigation tools

Temporary features in the roadway:

Full closure: A full closure physically closes a roadway in a neighborhood and is considered the most restrictive and severe form of traffic calming. These installations eliminate or reroute cutthrough traffic but come with significant trade-offs for residents including increased travel time to and from their homes. Full closures can be implemented with impermanent materials such as flexible vertical pylons.

Benefits: manage traffic volume, reduce excessive vehicle speeds, improve pedestrian and bicycle safety, enhance neighborhood identity

Partial closure: Partial closures restrict the roadway to one direction of travel. They limit vehicular access into neighborhoods while still providing residents with either an exit or entrance depending on the restriction. Partial closures change traffic patterns for residents within a neighborhood sometimes resulting in longer travel times and traffic shifts within the residential area.

Benefits: manage traffic volume, reduce excessive vehicle speeds, improve pedestrian and bicycle safety, enhance neighborhood identity

One lane zone/chicane: Chicanes are a series of two to three curb extensions that alternate from one side of the street to the other forming S-shaped curves on what would be an otherwise straight roadway. Slow points are curb extensions that narrow a roadway, sometimes allowing only one car at a time to pass. This treatment is used to reduce vehicle speeds. In some cases, this tool can be designed as a one-lane zone which allows only one vehicle at a time to pass, requiring vehicles at both ends to stop or yield before proceeding through. This creates delay for motorists and can reduce cut-through traffic as a result. One lane zones can be implemented with impermanent materials such as flexible vertical pylons. The city has used removable materials on past one lane zone/chicane projects.

Benefits: manage traffic volume, reduce excessive vehicle speeds

Speed humps: Speed humps (also known as speed bumps) have been used in the City of Bellevue since 1985 as a technique to reduce vehicle speeds. They are different from the more severe speed humps you may find in a parking lot. A speed hump causes a vehicle to produce a rocking motion, creating an uncomfortable sensation for the occupants of speeding vehicles



thus encouraging the driver to reduce their speed. Speed humps, traditionally made of asphalt, can be implemented on a temporary basis using removable materials such as hard rubber. The city has used removable materials on past speed humps projects.

Benefits: manage traffic volume, reduce excessive vehicle speeds, and heighten school zone awareness

Signs:

Temporary Radar signs: Stationary radar signs direct a driver's attention to the posted speed limit and digitally display the speed of the driver's vehicle on a large message board. This instant feedback results in a greater awareness of the speed limit and encourages motorists to adjust their speed accordingly, if needed. Typically, these signs are installed where other physical traffic calming measures are not appropriate. These installations have been shown to reduce vehicle speeds by 6-8 mph.

Benefits: reduce excessive vehicle speeds

Reduced speed limit signs: Reduced speed limit signs are an opportunity to reduce the speed limit on a street (e.g. from 25 mph to 20 mph). This may be appropriate in residential neighborhoods where curvilinear street patterns or other characteristics invite lower speeds. *Benefits: reduce excessive vehicle speeds*

Local access only signs: "Local access only" signs are generally positioned at the entrance to a neighborhood to discourage non-resident motorists from using the roadway. Unless ordinanced with a commitment of enforcement, over time, their effectiveness can decrease.

Benefits: manage traffic volume

Turn restrictions: Turn restrictions are placed at the entrance to neighborhood that restrict through movements or turns into the neighborhood. They can be all-day restrictions or during specific times, such as the peak-periods. Turn restrictions require a commitment of enforcement to be effective.

Benefits: manage traffic volume

Parking tools

Parking:

General Parking Restrictions: Parking restrictions are installed in neighborhoods for a variety of reasons, such as for sight-distance issues near an intersection, limited roadway widths, and spillover parking from businesses, schools, or parks. These restrictions do not allow any vehicles to park in these areas during the time indicated on the signs. Parking in these areas is also restricted to residents.

Benefits: manage traffic volume, manage neighborhood parking



City of Bellevue

Last modified: February 5, 2015