



MEMORANDUM

DATE: April 3, 2008

TO: Transportation Commission

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SUBJECT: Bel-Red Subarea Plan - Arterial Projects

At the April 10 meeting, staff is seeking the Commission's action on its recommendation for arterial projects to be included in the Bel-Red Subarea Plan. In addition, staff will seek a recommendation on two topics that were introduced to the Commission on March 13: 1) Changing the Mobility Management Area (MMA) boundaries to coincide with the proposed Bel-Red Subarea, and 2) Changing the level of service (LOS) standard for this reconfigured MMA from .9 to .95.

Bel-Red Corridor Project Implementation Schedule

DATE	TOPIC	ACTION
October 10	Joint Boards and Commission meeting to review final recommendation and receive direction from Council.	None requested
October 11	Overview charge to Transportation Commission. Review Comprehensive Plan components to be amended (work plan)	Approve work plan <i>Commission approved work plan</i>
October 25	Review proposed changes: <ul style="list-style-type: none"> • Eastside Transportation Program • Bridle Trails, Bel-Red and Crossroads Transportation Facility Plan 	Review projects and provide preliminary recommendation
November 15	Review proposed changes: <ul style="list-style-type: none"> • Eastside Transportation Program • Bridle Trails, Bel-Red and Crossroads Transportation Facility Plan • Bel-Red Corridor Project List 	Review projects and provide preliminary recommendation
December 13	Review proposed Subarea Plan: <ul style="list-style-type: none"> • Bel-Red Subarea Plan outline format and policy topics 	Review plan outline and proposed policy topics and provide recommendation on modified and/or additional policy topics.
January 10	Review proposed policy changes: <ul style="list-style-type: none"> • Bel-Red Subarea Plan 	Review draft policies
January 24	Review proposed policy changes: <ul style="list-style-type: none"> • Bel-Red Subarea Plan 	Review draft policies and provide preliminary policy recommendation to the Planning Commission
February 28	Review proposed transportation projects	Review and discuss Bel-Red Subarea plan project list
March 13	Review proposed transportation projects Review proposed change to MMA 4 and LOS for the Bel-Red Subarea	Review and discuss the projects and priorities, plus a recommendation to modify MMA 4 and LOS
April 10	Recommend Bel-Red arterial projects, plus MMA 4 and LOS changes	Provide recommendation to the Planning Commission

Recap of March 13 Transportation Commission Meeting

At the March 13 meeting, the Commission discussed the proposed arterial projects for the draft Bel-Red Subarea Plan, and developed a preliminary recommendation as follows:

- Preliminary Commission recommendation for projects to include in the Subarea Plan:
 - Northrup Way: 3 lanes west of 120th Avenue NE (in current CIP for preliminary design)
 - Northrup Way: 5 lanes between 120th Avenue NE and 124th Avenue NE (in current CIP for construction)
 - 116th Avenue NE: 5 lanes north from NE 12th Street across Children's Hospital frontage
 - 120th Avenue NE: 5 lanes NE 8th to Northrup Way, bike lanes both sides
 - 124th Avenue NE: 5 lanes Bel-Red Road to SR 520, intersection improvements at Bel-Red Road, new ramps at SR 520
 - 130th Avenue NE: Pedestrian-oriented retail street north of NE 16th Street, 2 lanes with on-street parking both sides. 3-lanes, no on-street parking south of NE 16th Street.
 - 136th Place NE: 3 lanes (2 southbound and 1 northbound)
 - NE 15th/16th Street: 4/5 lanes between 116th Avenue NE and 136th Place NE (Additional information was requested regarding how NE 15th/16th Street would implement the Steering Committee's recommendation that this project include a significant park component. Staff and consultants have prepared some materials that will help describe the proposed roadway design— these will be presented on April 10.)

- Commission recommendation on these projects pending further analysis:
 - NE 10th Street Extension east of 116th Avenue NE
 - Hospital Connection (NE 11th/NE 12th Street)

Additional items discussed included changing the boundaries of Mobility Management Area (MMA) 4 to be consistent with the proposed boundaries on the Bel-Red Subarea Plan, and changing the Level of Service (LOS) standard for MMA 4 from .9 to .95. The Commission did not provide a preliminary recommendation on these items as further discussion was expected on April 10.

Bel-Red Subarea Plan Arterial Projects

Table 1 represents the Transportation Commission's preliminary recommendation for arterial projects to be included in the Bel-Red Subarea Plan. As discussed at the Commission's meeting on March 13, insufficient information was available on 2 projects to make a recommendation: the NE 10th Street extension and NE11th/NE12th Street.

After further analysis, staff now is able to recommend including in the Subarea Plan, the proposed NE11th/NE12th Street and to not include the NE 10th Street extension.

These two proposed arterials were tested under several modeling scenarios:

- Both NE 10th Street and the new NE11th/NE12th Street
- NE 10th Street and no NE11th/NE12th Street
- NE11th/NE12th Street and no NE 10th Street
- Neither NE 10th Street nor the NE11th/NE12th Street.

Modeling demonstrates that a combination of projects that includes the NE11th/NE12th Street and not the NE 10th Street extension would accommodate the anticipated travel demand in 2030. A benefit of the NE 10th Street extension project would be to provide some traffic relief to NE 8th Street. While a roadway system that includes BOTH the NE 10th Street extension and the new NE11th/12th Street would result in a higher overall level of service, the option that includes only NE11th/12th Street, shows the average LOS as being only slightly worse. Given the cost of building the NE 10th Street extension between 116th Avenue NE and 124th Avenue NE, it appears that for the significant investment, a commensurate benefit to mobility is not achieved.

Therefore staff recommends including the new NE11th/12th Street in the Bel-Red Subarea Plan and not including the NE10th Street extension.

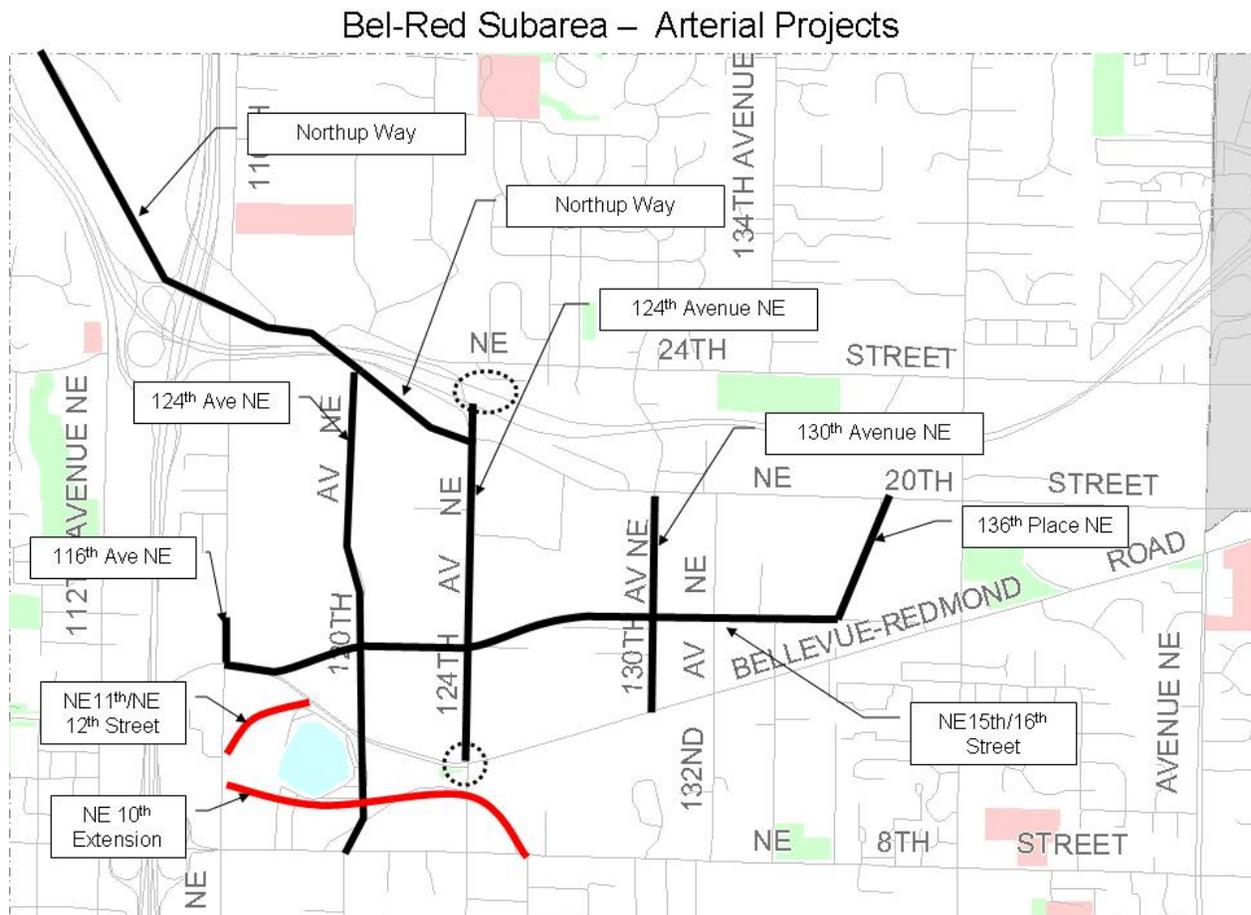


Figure 1. Potential Bel-Red Subarea Arterial Projects

Table 1

Arterial Project	Preliminary Recommended Arterial Configuration
Northrup Way	5-lanes Add eastbound lane between 120 th Ave NE and 124 th Ave NE Sidewalks both sides Bicycle lanes
Northrup Way	3-lanes west of 120 th Avenue NE Sidewalks both sides Bicycle lanes
116 th Avenue NE	5-lanes between NE 12 th Street and approximately NE 16 th Street – across the frontage of the Children’s Hospital site.
120 th Avenue NE	5-lanes Connect directly to NE 8 th Street on the south Sidewalks both sides Bike lanes both sides – connection to the SR 520 Trail on the north
124 th Avenue NE	5-lanes Connect with SR 520 and proposed ramps to and from the east Connect with Bel-Red Road with an improved intersection Sidewalks both sides
130 th Avenue NE	2-lanes, pedestrian-oriented street north of NE 16 th Street On-street parking north of NE 16 th Street 3-lanes south of NE 16 th Street
NE 15 th /16 th Street (116 th Avenue NE to 136 th Place NE)	4/5-lanes with LRT in the median Frontage road with on–street parking on north side at nodes Wide sidewalks both sides Multi-purpose “cycle-track”, off-street – continuous on the north side
136 th Place NE	3-lanes (2 southbound, 1 northbound) LRT running above grade in the median Sidewalks both sides Bike lanes both sides
Arterial Project	Commission’s Recommendation Needed
NE 10 th Street Extension east of 116 th Avenue NE	4-lanes 116 th Avenue NE to 124 th Avenue NE
NE 11th/NE 12th Street	4/5 lanes 116 th Avenue NE to NE 12th Street

In the Transportation Element of the Comprehensive Plan, Policy TR-21 directs the City to: *“Manage the transportation system through the Mobility Management Areas shown in Figure TR.1, the boundaries of which reflect street patterns, transit serviceability, topography, development patterns, and land use objectives”.*

With the dramatic changes proposed for the Bel-Red Subarea in terms of street patterns, transit serviceability, development patterns, and land use objectives, as well as for impact fee calculations, staff determined that adjustments should be made to the MMA boundaries, shown in Figure 2, to reflect the proposed boundaries of the Bel-Red Subarea.

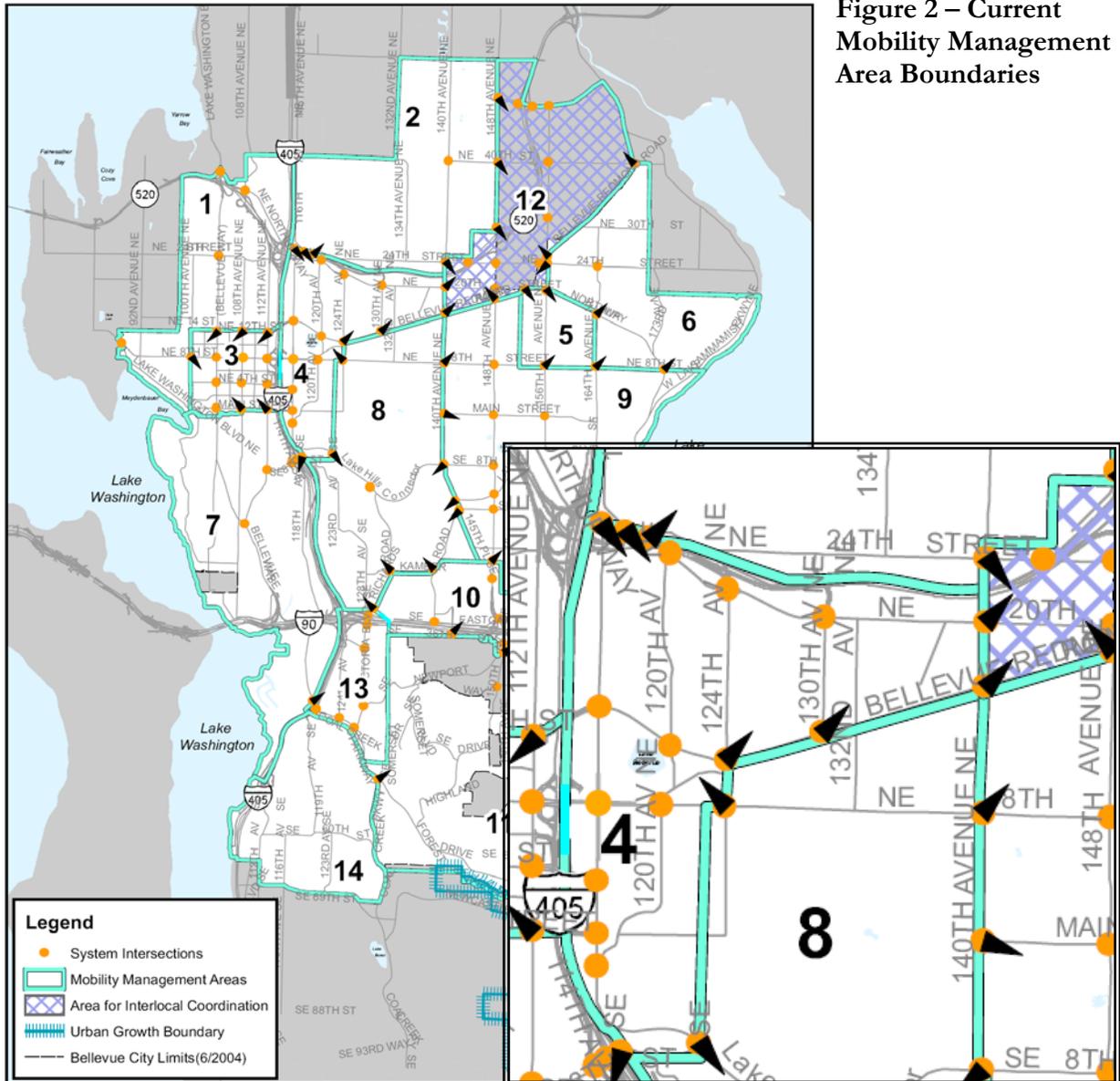


Figure 2 – Current Mobility Management Area Boundaries

**FIGURE TR.1
Mobility Management Areas**

Changes to MMA 4, as shown in Figure 3, would encompass the entire Bel-Red Subarea. This modified MMA 4 would become MMA 12 since the current MMA 12 would become entirely within the city of Redmond and removed from the Bellevue Comprehensive Plan. The remainder of MMA 4 would become a new stand-alone MMA for the Wilburton area.

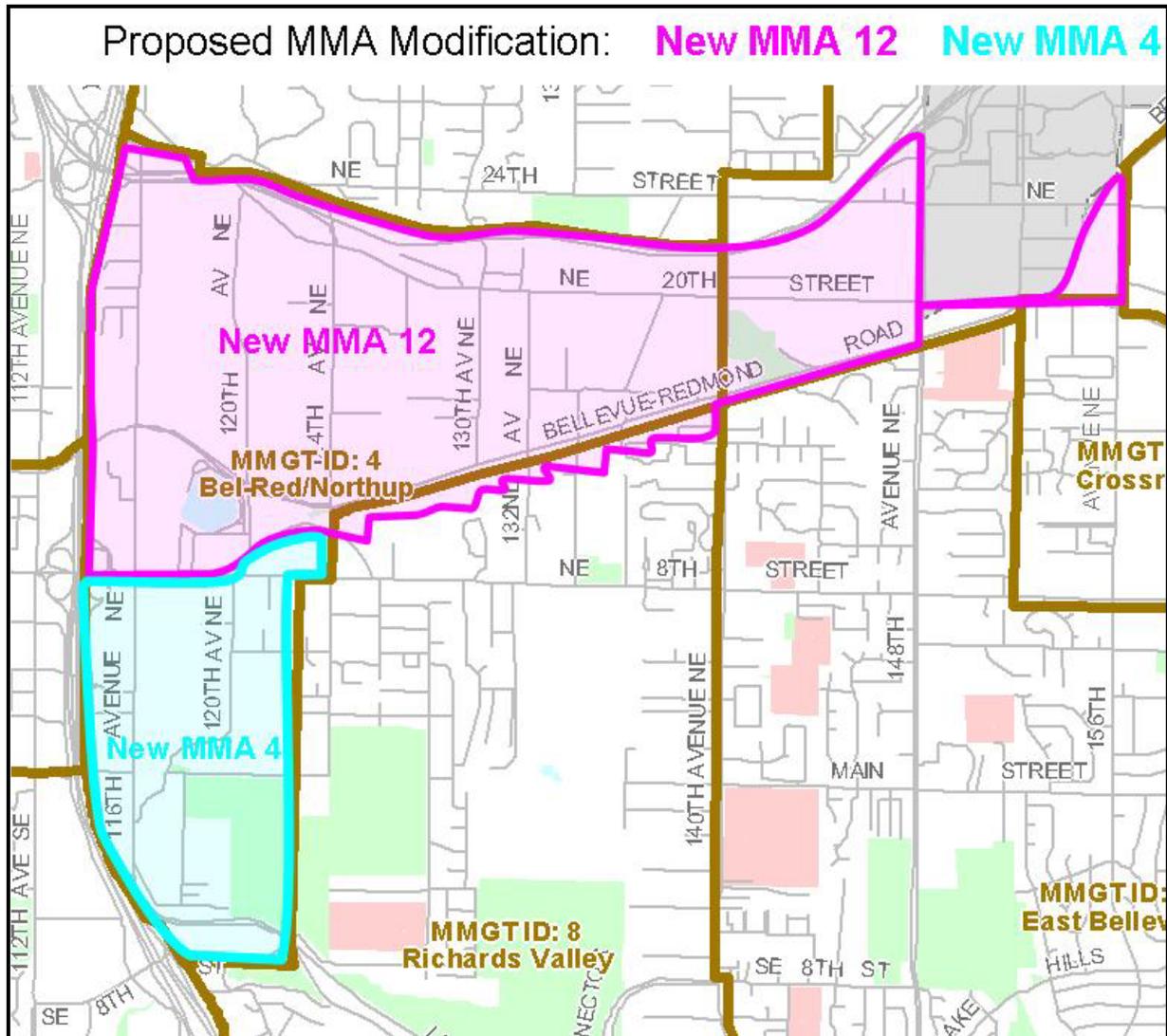


Figure 3 - Proposed Mobility Management Area Boundaries

Within each MMA are several “system” intersections that contribute to transportation system function and for which level of service is calculated based on the PM peak hour *volume to capacity* ratio. The aggregate of the system intersection levels of service is the area average level of service for the MMA. This standard is established in the Comprehensive Plan and codified in the Traffic Standards Code (*14.10.030 Level-of-service standard*).

The proposed change to the MMA boundaries must consider the resulting level of service to the reconfigured MMAs to ensure that the adopted standards are met. A preliminary assessment of the proposed modified MMA 12 and the new MMA 4, shows that the level of service for each MMA is

projected to fall within the adopted LOS standard in the concurrency threshold of 2013. Table 2 shows the existing LOS and the adopted LOS standard for the affected MMAs.

Table 2

MMA	Existing LOS	LOS Standard	Projected 2013 LOS
4 (new 12)	B	D (.9) *	B (.66)
New 4	N/A	D (.9)	C (.74)

* proposed to change to E+ (.95)

Staff recommends amending the Transportation Element to modify the boundaries of MMA 4 to correspond with the proposed boundaries of the Bel-Red Subarea, and redesignating it as MMA 12 – and to create a new MMA 4 from the remainder of the old MMA 4 to encompass the Wilburton area.

Level of Service Standard Proposed Change

(The following section is copied from the memo for the March 13 meeting – staff recommendation added)

In its Final Report, the Bel-Red Corridor Project Steering Committee recommended:

“Modif(y) level-of-service (LOS) standards for the Bel-Red area to acknowledge the creation of a higher intensity mixed-use area with multimodal transportation choices. The standards would change from an average volume/capacity ratio of D ~~(.85)~~(.90) to E+ (0.95). This would be accompanied by policy direction to consider amendments to parking standards, transportation demand management (TDM) measures, improved local transit service, and other mechanisms to reduce SOV use and encourage other travel modes”.

Guidelines for modifying the LOS standard are adopted in the Comprehensive Plan, Policy TR-36:

“Observe the following guidelines in adopting and revising arterial level of service standards by Mobility Management Area:

- 1. Reflect the availability of alternative travel options and community goals that may be as important as managing congestion, such as goals for lane use, neighborhood protection from wider streets, or economic vitality. For example, allow more congestion in some areas of the city under the following conditions:

 - a. In return for stronger emphasis on transit, walking, and other alternatives to the single-occupant vehicle, and*
 - b. Where the impacts of wider streets are judged to be worse than the congestion they are designed to solve.**
- 2. Establish roadway levels of service adequate to prevent system failure and to protect residential neighborhoods from cut-through traffic”.*

The adopted level of service for MMA 4, Bel-Red/Northup, as well as the other MMAs in the city, are shown in Table TR.1 from the Comprehensive Plan:

Table TR.1 Area Mobility Targets
(reference Policies TR-21, TR-36)

AREA	ROADWAY (Area Average Level of Service) See TABLE TR.2 for Descriptions	MODE SPLIT INCLUDING RIDESHARING (% commute trips by modes other than SOV)	
		2002	2005 Target
REGIONAL CENTER			
3 - Downtown	E+	32	40
MIXED COMMERCIAL/RESIDENTIAL AREAS			
4 - Bel-Red/Northrup	D	20	25
5 - Crossroads	D-	19	25
10 - Eastgate	D	26	35
13 - Factoria	E+	15	20
RESIDENTIAL GROUP 1*			
1 - N. Bellevue	D+	N/A for residential areas	
7 - S. Bellevue	D+		
8 - Richards Valley	D+		
9 - E. Bellevue	D+		
RESIDENTIAL GROUP 2*			
2 - Bridle Trails	C	N/A for residential areas	
6 - NE Bellevue	C		
11 - Newcastle	C		
14 - Newport	C		
INTERLOCAL AREAS			
12 - Overlake	E+	N/A for interlocal area	

* Groupings based on street patterns, transit serviceability, topography, development patterns, & land use objectives (see Policy TR-21).

Together with modifying the boundaries of MMA 4 (*proposed to be MMA 12*) to coincide with the boundaries of the Bel-Red Subarea, staff recommends implementing the Steering Committee’s recommendation for level of service; changing the level of service standard from D (.9) to E+ (.95). This proposed LOS standard is consistent with the land use vision for the area, and is supported by a strong emphasis on developing alternatives to the single occupant vehicle – in particular, transit and non-motorized commute options. As shown in the above table, LOS E+ is consistent with other urban/mixed-use MMAs in the city, including downtown, Factoria and Overlake.

Several transportation policies in the draft Bel-Red Subarea Plan provide support for developing viable SOV alternatives, which in turn, allow for a LOS of E+(.95) to be implemented:

S-BR-H1 ___ Support the Bel-Red Subarea Land Use Plan with a multi-modal transportation system consistent with Figure BR-___ (map of system improvements), that provides enhanced, multi-modal travel connections within the Bel-Red Subarea, and to other parts of the City and region.

S-BR-H4 ___ Design and develop arterial improvements, including added vehicular capacity, transit facilities, and non-motorized components, to serve travel demand generated by the Bel-Red Land Use Plan.

S-BR-H16 ___ *Work with King County Metro and other transit providers to serve emerging new land uses in the Bel-Red Subarea, and to connect to and support future light rail, including:*

- a. Enhance conventional transit service throughout the Bel-Red Subarea;*
- b. Provide a level and type of service that, to the extent feasible, emulates high capacity transit in future light rail station areas, as an interim measure in advance of light rail operations; and*
- c. Provide transit feeder service from other Bellevue neighborhoods into transit-oriented development nodes at future LRT stations.*

S-BR-H20 ___ *Implement a transportation demand management program to reduce Bel-Red single-occupancy trip demand, and increase the share of trips utilizing transit, carpools and vanpools, and pedestrian and bicycle options.*

S-BR-H20.2 _ *Support the development of a Transportation Management Association in the Bel-Red Subarea to assist employers in providing commute options for employees.*

S-BR-H20.3 _ *Manage the parking supply to encourage the use of transit, car/van pool, and non-motorized commute options.*

Staff recommends implementing the Steering Committee recommendation by amending the Transportation Element to modify the Level-of-Service (LOS) standard for the Bel-Red Subarea (proposed MMA 12) from an average volume/capacity ratio of D(.90) to E+ (0.95).

Requested Transportation Commission Action on April 10

Action is requested on each of the items on the agenda:

1. Recommendation on the Bel-Red Subarea Plan arterial project list.
2. Recommendation on the proposed Comprehensive Plan amendment:
 - a. Change the MMA 4 boundary to reflect the Bel-Red Subarea boundary and rename MMA 4 as MMA 12,
 - b. Create a new MMA 4 from the remainder of the old MMA 4.
3. Recommendation on the proposed Comprehensive Plan amendment: Change the LOS standard for the new MMA 12 from D (.9) to E+ (.95).

Staff will forward the Transportation Commission's recommendation to the Planning Commission in the packet for their April 16 meeting. The Bel-Red Subarea Plan that goes forward to public hearing in May will include the recommended arterial projects. The changes to the MMA boundary and the LOS standard will amend the Transportation Element.

Please feel free to contact me if you have any comments or questions.