

# Executive Summary

## Identifying Transportation Needs on Rainier Avenue South

### RAINIER AVENUE SOUTH TODAY

Rainier Avenue is a critical transportation corridor serving the central Renton area. The section of Rainier Avenue between South 2nd Street and South 7th Street carries about 45,000 vehicles per day, and the section south of Grady Way carries over 65,000 vehicles per day. In comparison, Sunset Boulevard and Renton Avenue carry 23,000 and 21,000 vehicles per day respectively, and Northeast 8th Street through Downtown Bellevue carries 40,000 vehicles per day, while I-405 in the vicinity of SR 167 carries over 140,000 vehicles per day. Twenty-five years from now, how many vehicles will travel on Rainier Avenue? We know that the State's plans to revamp Renton's access to I-405, coupled with the redevelopment of the South Lake Washington Boeing site, will bring changes to Renton's traffic patterns.

The Rainier Avenue Transportation Corridor Study sets forth a master plan for proposed improvements to the Rainier Corridor. The volume of traffic on Rainier Avenue South moves reasonably well, albeit slowly, along the corridor, with all but one intersection operating at Level of Service D (between 35 and 55 seconds wait at a signal) during afternoon rush hours. The intersection of Rainier Avenue South and South Grady Way is the most congested, especially during the afternoon/evening peak period.

Slow travel speeds on Rainier Avenue have a significant impact on transit service. In the middle of the day, buses in both directions south of South 4th Place slow to less than 5 miles per hour. Buses in both directions on Rainier north of South 4th tend to travel at about the same speed as general traffic. During the evening peak period, southbound buses on Rainier travel substantially slower than general vehicles (4 to 8 miles per hour for buses vs. 10 to 30 miles per hour for general vehicles).

### RAINIER AVENUE SOUTH TOMORROW

Looking at what the future holds if the transportation system remains unchanged provides a basis by which to plan for medium and long-range needs. Using a computerized traffic model, the City projected future transportation volumes for 2015 and 2030. The 2015 snapshot forecast the impact of several land use and transportation assumptions. For example, future redevelopment of the Boeing property is expected to bring office and retail uses in place of Boeing's manufacturing activities. This transition away from shift work will affect traffic patterns, potentially moving Renton's current peak period into later hours.

Improvements to the I-405 corridor funded by the legislature in 2003 and 2005 will also affect traffic patterns through the Rainier Corridor. The most significant of these will be

the replacement of the current I-405/Rainier Avenue South interchange with new ramps at Lind Avenue Southwest and Talbot Road South. Additionally, by 2030, Rainier Avenue South was proposed to be connected directly to East Valley Road, but this proposal will be eliminated from the I-405 Implementation Plan. It is not certain whether the 2005 transportation funding with the gas tax increases would be rejected by an initiative. It is possible that the improvements assumed for this study, particularly those related to the I-405/SR 167 interchange program might change in the future.

## Performance Objectives

The study's recommendations address these anticipated future conditions and existing conditions through a combination of roadway, transit and pedestrian improvements designed to meet the following performance objectives:

- ◆ Enhance Transit Mobility
- ◆ Enhance Pedestrian Mobility
- ◆ Improve Safety
- ◆ Reduce Roadway Traffic Congestion
- ◆ Mitigate Environmental Impacts
- ◆ Support Land Use Objectives
- ◆ Feasible to Implement
- ◆ Supported by the Community

During the course of review and evaluation, the most promising ideas were categorized and considered by major themes, with a major decision emerging as to whether to use Hardie Avenue or Rainier Avenue for improved bus service.

## KEY CONSIDERATIONS

In comparing the two transit options, the project team found that the Hardie Avenue option would provide very similar travel time savings to the Rainier option, with considerably fewer impacts on businesses, lower cost and better pedestrian benefits.

Potential roadway improvements needed to demonstrate the ability to move increased traffic volumes, but also needed to respond to changing traffic patterns from the planned new freeway access points at Lind Avenue and Talbot Road. Those access points will attract significant traffic and will require careful integration with the City's signal and roadway system to keep traffic flowing at acceptable levels.

The combination of heavy vehicular traffic and intense business activity will require walkway improvements that provide safe pedestrian access while helping to direct drivers safely to their destinations. Some of these improvements, such as driveway access management, zero-set back in-fill and pedestrian scale streetlights, will require additional work with property owners and/or additional in-house coordination of land use, economic development and transportation concerns.

## Major Recommendations

The study's major recommendations can be summarized as follows:

- ◆ Select Hardie Avenue Southwest as the transit corridor between South 2<sup>nd</sup> Street and Rainier Avenue South to achieve higher transit speed and reliability.
- ◆ Improve vehicle and pedestrian safety as well as visual aesthetics on Rainier Avenue South
- ◆ Coordinate with WSDOT to improve city arterials within the Rainier Avenue Corridor Study area not currently included as part of the I-405 plan

Several roadway improvements recommended in this study will require additional coordination with WSDOT, as planning continues for I-405. This study also includes two recommendations for further analysis: one is to evaluate whether South 2<sup>nd</sup> and South 3<sup>rd</sup> Streets should be converted to two-way traffic operations; the other is to evaluate whether the South Renton Park and Ride lot should be moved closer to Hardie Avenue, particularly if future bus rapid transit will be using Hardie Avenue. Finally, the Sunset/Hardie interchange should be reconstructed from five legs to four as traffic volumes increase; this would also be a consideration in extending South 2<sup>nd</sup> Avenue from Rainier Avenue South to Hardie Avenue Southwest. Modifications to this intersection would require close coordination with the affected community.

## Phase One Improvements

Given the relative ease of implementation and a potential funding partnership with Sound Transit, the Hardie Avenue transit improvements are recommended for early implementation, or phase one improvements. Strong community support for pedestrian and aesthetic improvements to Rainier Avenue suggests that these should also be included as first phase improvements. The following projects are recommended for the first phase of the Rainier Avenue Transportation Corridor improvements.

### **RAINIER AVENUE SOUTH IMPROVEMENTS**

Improve vehicle and pedestrian safety and visual aesthetics with following improvements on Rainier Avenue South between the railroad bridge and South 2<sup>nd</sup> Street:

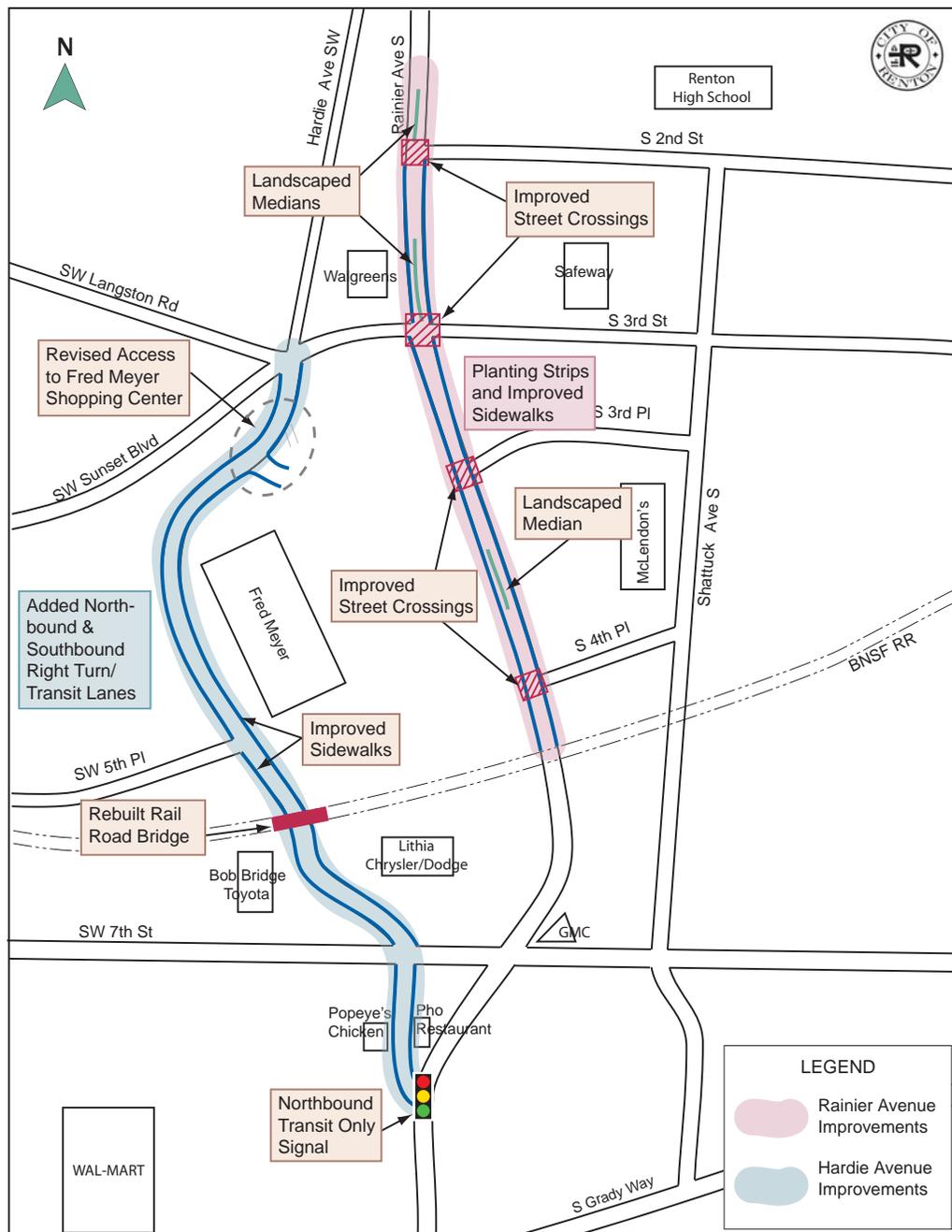
- ◆ Provide landscaped medians
- ◆ Restrict left-turn vehicle movements
- ◆ Widen sidewalks, including planter strips, and provide pedestrian-scale lights between railroad bridge and S 2nd Street
- ◆ Install textured and colored pavements at key intersections and pedestrian crosswalks

### **HARDIE AVENUE SOUTHWEST IMPROVEMENTS**

Select Hardie Avenue Southwest as the transit corridor between Southwest Sunset Boulevard and Rainier Avenue South to achieve higher speed and reliability for transit:

- ◆ Construct northbound and southbound business access transit (BAT) lanes
- ◆ Accomodate bicycle travel by the BAT lanes
- ◆ Complete sidewalks with planting strips on both sides of Hardie Avenue Southwest
- ◆ Install a transit signal at the Rainier Avenue South/Hardie Avenue Southwest intersection
- ◆ Reconstruct the railroad bridge over Hardie Avenue Southwest
- ◆ Remove the stop on Hardie Avenue Southwest at the Fred Meyer driveway and re-align the Hardie Avenue Southwest approach to Southwest Sunset Boulevard

**Figure 0. Recommended Phase 1 Improvements**



Note: Some buildings and streets are not shown to simplify details of drawing.