

TDR 4/12/11

100 Years



# Rose City Park Neighborhood Association - Land Use/Transportation Committee -

*Exhibit 1*

The Rose City Park Neighborhood Association submits the following comments:

- a. NE 57<sup>th</sup> to 60th: extend unimproved Holladay St to mitigate truck traffic presence on neighborhood streets. Include bike and pedestrian pathways
- b. Consider Sullivan Gulch trail as a linear park
- c. Install tree plantings and sound walls along I-84 to minimize interstate traffic noise and enhance air quality
- d. NE 63<sup>rd</sup> Ave between Halsey and I-84 create a ped/bike pathway to relieve foot traffic on adjacent streets
- e. Construct a ped/bike connection between NE 57<sup>th</sup>, near Normandale Park, through existing Graybar property to MAX station area *\*S\**
- f. Create a bicycle center/hub/park & ride for with future ties via Sullivan Gulch Trail to I-205, Marine Drive, Eastbank Esplanade, MAX, and downtown. Become a non motorized transit expressway with MAX transfer capability. Mixed use retail/residential with bike amenities, showers, lockers, relocated Bike Gallery or similar as retail anchor. The location becomes a weekend and summer destination for cyclists with sustainable commercial development.
- g. Apply transit equity to nearby bus facilities. (bus riders should have same size of shelter as train riders)
- h. Extend the MAX platform to allow a stairwell from 60th St overpass *\*S\** (eastward?) so there are stairs on both sides. As an interim measure, have a flashing light at and before the crosswalk for pedestrian safety.

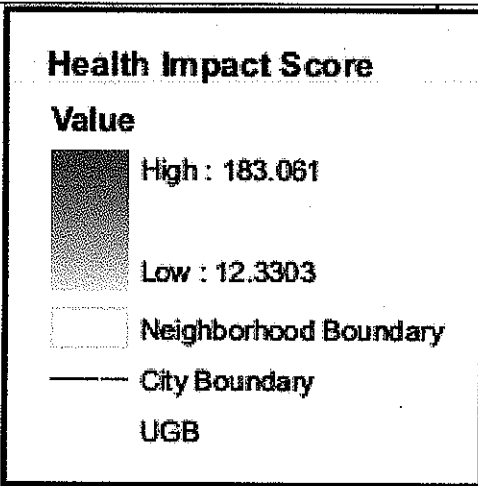
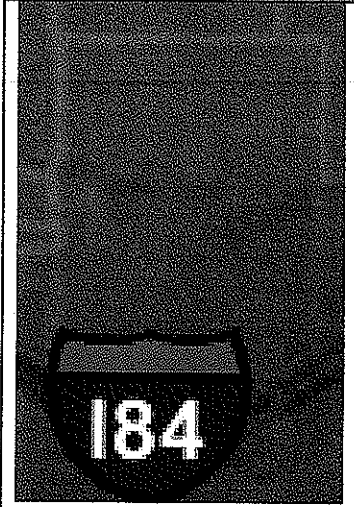
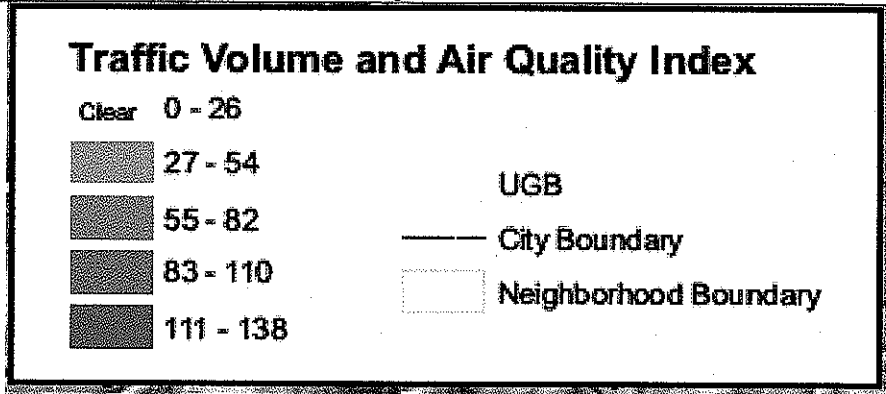
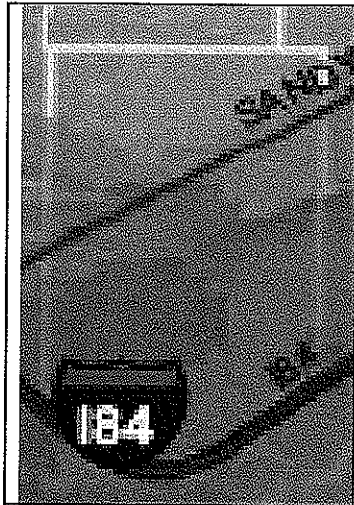
*i. Community Center - LOCATE Between 60th St. Sta & Normandale Park*

Tamara DeRidder Co Chair RCPNA LUTC  
Ed Gorman Co Chair RCPNA LUTC  
11/25/08

*\*S\* - Safety Enhacemnt.*

TDR 4/12/11  
Exhibit 3

### PSU Metroscape Air Quality for RCPNA



Source: 2009 Metroscape

TDR 4/12/11  
Exhibit 2

**Cancer Risk per Million Population  
by Census Tract for Select Air Toxics, 1996**  
**Rose City Park Neighborhood and Beyond**  
**Cancer Risk per Million Population**  
**1996 Air Toxics (Benzene & Diesel)**

| Risk per Million Population |            |
|-----------------------------|------------|
| ■                           | 92 to 182  |
| ■                           | 82 to 92   |
| ■                           | 72 to 82   |
| □                           | 45.5 to 72 |

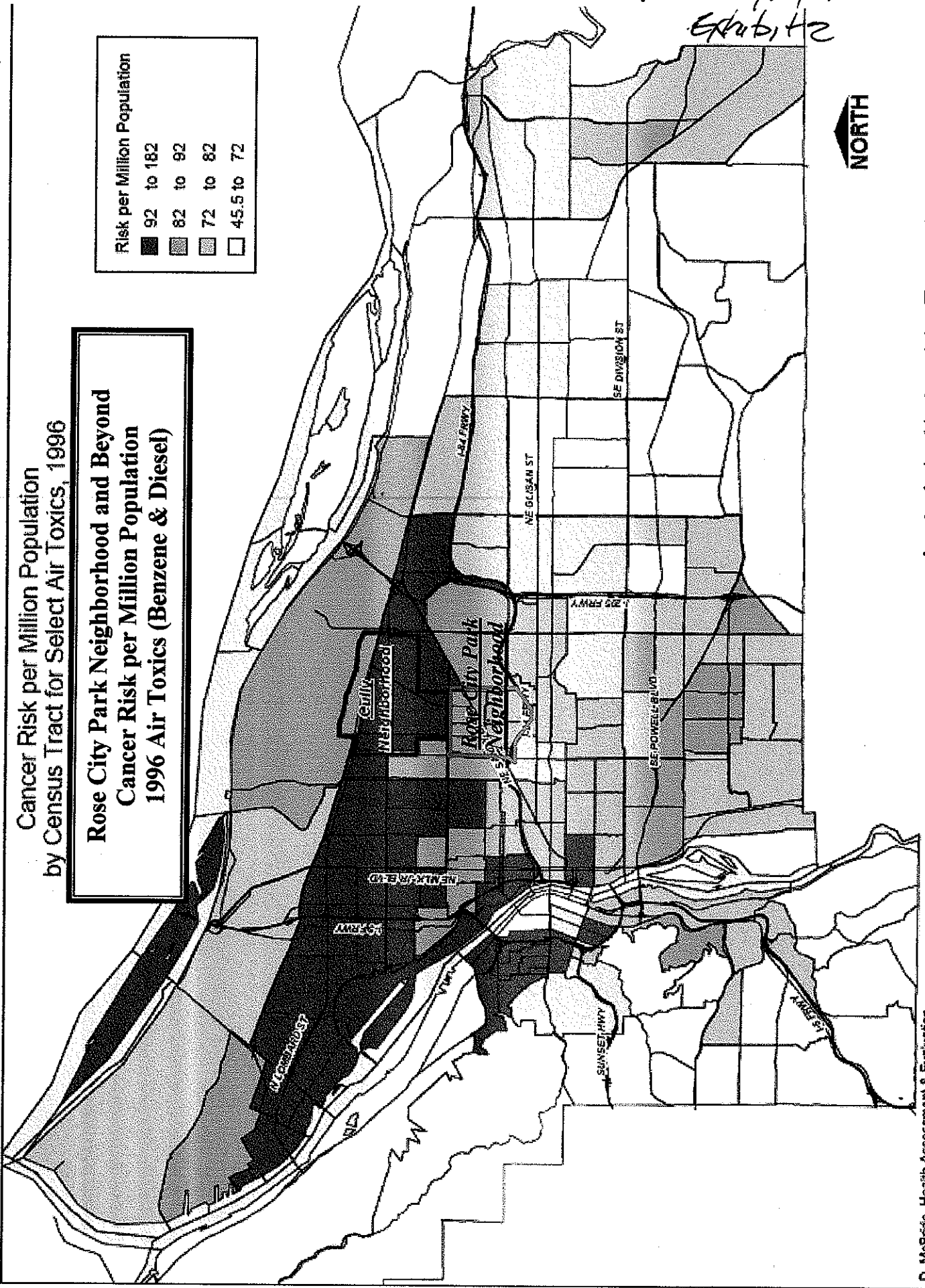
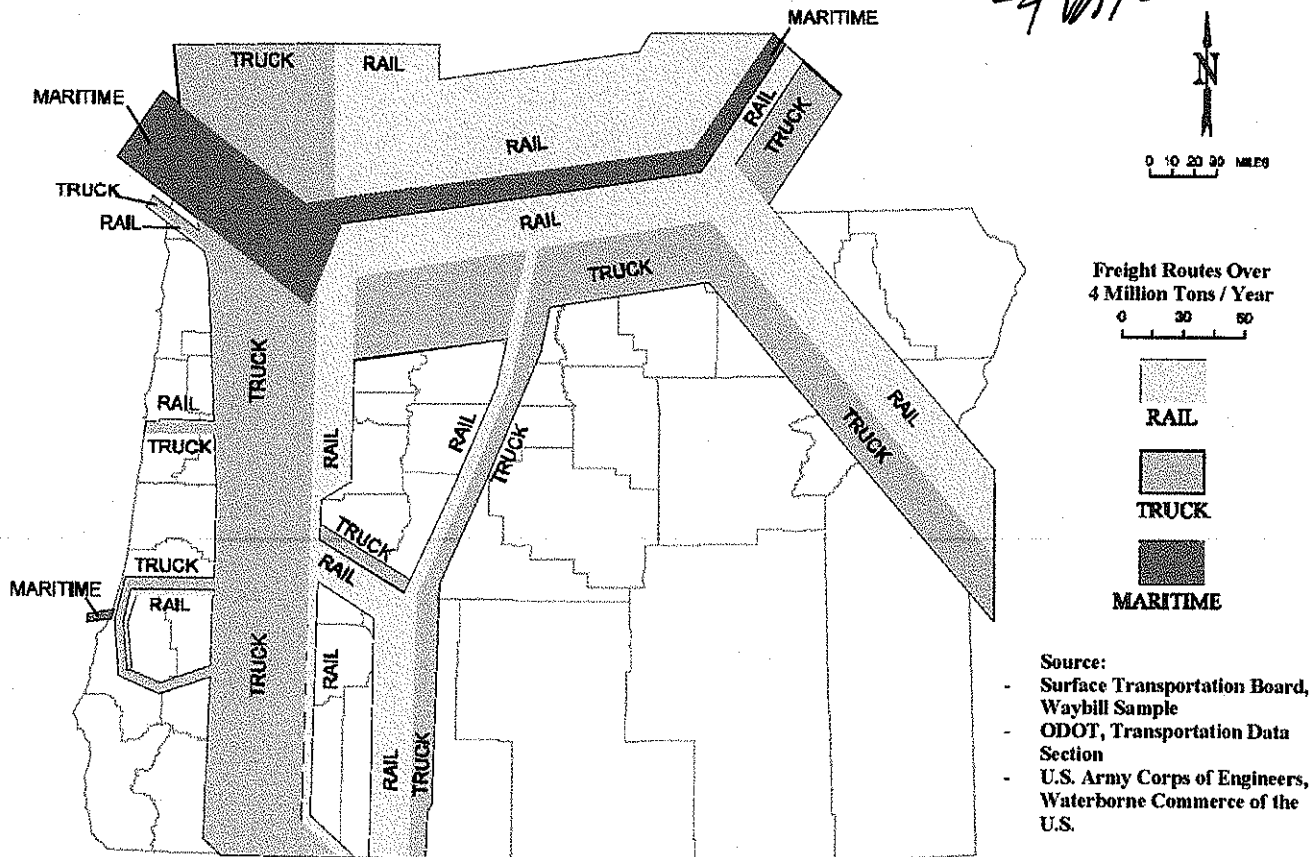


Figure 1 Major Oregon Freight Corridors

4/12/11

Major Freight Corridors  
Millions of Tons Shipped



Source: 2006 Freight Issues update of the Oregon Transportation Plan

The Portland area is a locus for mobile diesel engines that are based in the area but that also travel into and through from outside the PATS area. With the level of reductions projected to meet benchmark, a more comprehensive approach including these sources may be required, which may also be regarded as more equitable by locally based operators. Since diesel emissions contribute to elevated risk for 95% of Oregonians, out of area reductions will aid in reducing these exposures as well.

**B. Modeling Results: Degree of Contribution and Emission Reduction Needed**

Table 2 shows the various pollutants that are attributed to on road diesel emissions in the PATS domain and identifies the reduction targets for the specific PATS pollutants. The targets represent the reductions needed to meet ambient benchmark concentrations for on road diesel engines using reasonable worst case analysis and not considering background concentrations. The reduction targets were developed based on commensurate reductions for average values from receptors within 500 meters of high volume roadways in the PATS study area, considering emissions from all point, area, and mobile sources.

**Table 2: 2017 modeled emissions from on-road diesel**

| <b>Times Above Benchmark</b>           | <b>Pollutant</b>   | <b>Percent contribution of on-road diesel to emissions</b> | <b>Reduction Targets Percent</b> | <b>Projected 2017 total on-road diesel emissions (tons)</b> |
|--|--------------------|--|----------------------------------|---|
| More than 10 times above benchmark     | Diesel Particulate | 15%  | 91%                              | 81.72   |
|  | 15_PAH             | 1%   | 95%                              | 0.09  |
|  | 1, 3 Butadiene     | 3%   | 88%                              | 2.10  |
|  | Napthalene         | 1%   | 81%                              | 0.75  |
|  | Benzene            | 3%   | 86%                              | 16.91   |
|  | Formaldehyde       | 2%   | 88%                              | 6.64  |
|  | Acrolein           | <1%  | 85%                              | 0.34  |
| Between 1 and 10 times above benchmark | Arsenic            | 5%   | 64%                              | 0.01  |
|  | Chromium VI        | 6%   | 25%                              | 0.003   |
|  | Ethylbenzene       | 2%   | 37%                              | 7.03  |

On-road diesel is not expected to contribute cadmium, dichlorobenzene, lead, methylene chloride, nickel, manganese, perchloroethylene, or trichloroethylene. The acetaldehyde emissions from on-road diesel are relatively small and dwarfed by secondary formation (less than 3% vs. 91%). In general, DEQ plans to handle the three secondary formation pollutants (formaldehyde, acetaldehyde and acrolein) with precursor strategies in coordination with ozone control efforts rather than with toxics reduction strategies.

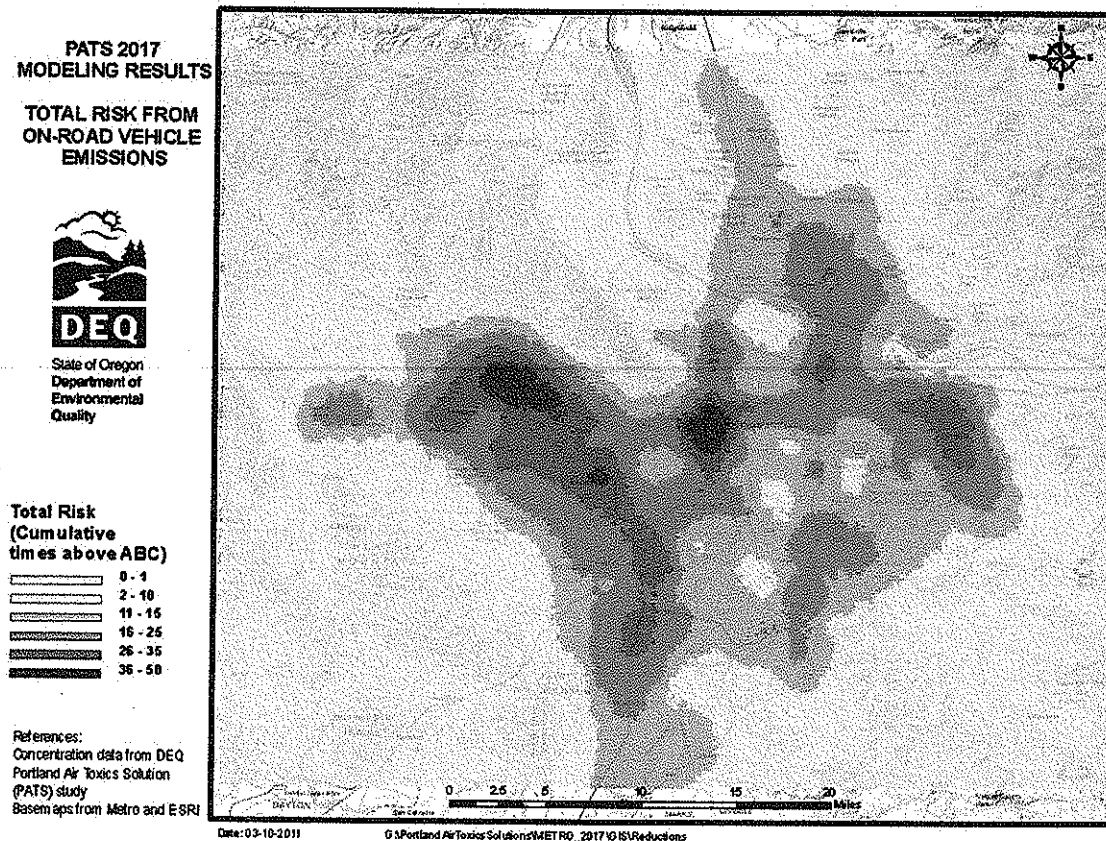
**B.2. Main risk drivers**

Most pollutants emitted by on-road diesel are risk drivers for the PATS study area as a whole, but the pollutants causing at least 5% of the risk within this category are diesel particulate matter, 15 PAH, benzene, 1, 3 butadiene, formaldehyde, arsenic and chromium. Because of the overwhelming contribution of secondary formation to formaldehyde concentrations (69%), it is not a risk driver targeted in this category.

## C. Source Category Effect on Distribution of Emissions

### Spatial extent of 2017 modeled emissions

On road diesel emissions are highest within 500 meters of high volume roadways. However, because much of the study area is developed, on road diesel emissions influence risk in much of the PATS study area. Below is a Map of all on road diesel PATS pollutants totaled to show levels above benchmarks. This shows the general geographic extent of risk from on road diesel.



## II. SUMMARY OF EXISTING EMISSION REDUCTION STRATEGIES

### A. Existing Regulations (federal, state, local)

#### Federal

- Heavy duty diesel emission standards for trucks and urban buses. Beginning with model year 1988, increasingly stringent engine certification standards focusing on nitrogen oxides and particulate matter emissions have taken effect for new model vehicles. Ultimately the 2007 model year standards for particulate matter and 2010 for nitrogen oxides require the use of exhaust aftertreatment to reduce these emissions by 98 percent as compared to a pre 1994 certified engine.

| Project location   | Rationale   | Short-term solutions (PBOT Operations) *  | L  |
|--|---|---|--|
| <p>60<sup>th</sup> Avenue<br/>NE Halsey<br/>at NE Glisan<br/>at</p>                | <p>60<sup>th</sup> Avenue has a narrow right-of-way with no landscape strip and narrow sidewalks resulting in an unpleasant pedestrian experience. Improvements are currently required as corner lots redevelop but only dedications (not improvements) are required as mid-block lots redevelop.<br/>Visibility issues along the 60<sup>th</sup> Avenue overpass raise concerns about pedestrian safety.</p> | <p>Adopt streetscape standards from NE Halsey Street to NE Glisan Street and ensure consistent application of right-of-way dedications.<br/><i>2 -&gt; Address set back of curbside from east west side greater than east</i></p>   | <p>Construct sidewalk<br/>enough right</p>   |
| <p>60<sup>th</sup> Avenue at<br/>entrance</p>                                      | <p>North-south bicycle connectivity through the station area is limited.</p>  | <p>Modify the direction and/or illumination of streetlights along the 60<sup>th</sup> Avenue, add additional pedestrian crossing signs, realign the marked crossing. <i>Possible sidewalk crossing closure at 1-84/60th st. ramp</i></p>  | <p>Add a signal<br/>entrance in<br/>marked cross</p>   |
| <p>60<sup>th</sup> Avenue<br/>pass</p>   | <p>60<sup>th</sup> Avenue has a narrow right-of-way which constrains bicycle access to the station and across I-84.</p>   | <p><i>needed? 505 Bike way at 1-84<br/>5'3rd overpass.</i></p>  | <p>Add a bicycle<br/>NE Halsey S</p>   |
| <p>Oregon Street<br/>E 63<sup>rd</sup> Avenue</p>                                  | <p>NE Oregon Street is only partially improved but provides a connection to the NE 63<sup>rd</sup> Avenue bikeway</p>   |   | <p>Add bicycle<br/>overpass by<br/>Stripe bicycle</p>  |
| <p>60<sup>th</sup> Avenue and<br/>Glisan Street</p>                                | <p>NE Glisan Street is four lanes through the station community with neighborhood traffic accessing and exiting I-84 at NE 58<sup>th</sup> and NE Glisan. The location of crosswalks and curb cuts at this location create the pedestrian safety issues due to vehicles turning on and off the freeway and entering and existing the gas station.</p>   | <p>Modify pedestrian signal timing at NE 58<sup>th</sup> and NE Glisan Street. Potentially coordinate pedestrian safety improvements with the renovation of the gas station at the southeast corner of this intersection which PBOT has flagged for NE Glisan access modifications.</p> | <p>Add bicycle<br/>NE 63<sup>rd</sup> Aver<br/>partially imp<br/>improver<br/>island at NE</p> |
| <p>60<sup>th</sup> Avenue and<br/>Glisan Street<br/>Van's Gulch<br/>Connection</p> | <p>Pedestrian crossings at the intersection of NE 60<sup>th</sup> Avenue and NE Glisan Street are complicated by heavy traffic.<br/>A concept plan is under development for the Sullivan's Gulch Trail, along I-84 from the Eastbank Esplanade at the Willamette River to I-205 at Rocky Butte and the Gateway District.</p>  | <p>Modify signal timing at the intersection. (I need further information on this one).<br/><i>LINEAR PARK?</i></p>  | <p>Potential for<br/>improver<br/>crossings at</p>   |
|  |   |   | <p>Include a con<br/>potential Sul</p>   |