



Stakeholder Planning Charrette

For The Greater SE Redmond Area Transportation Study

February 2, 2009

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EXECUTIVE SUMMARY

The study team including City staff and the consultant, Perteet, for the Greater Southeast Redmond Area Transportation Study organized a stakeholder planning charrette at the Redmond City Hall on February 2, 2009. The purposes of the charrette were engaging stakeholders at the initial stage of the study; identifying issues key to stakeholders; and soliciting potential solutions to address key issues. Stakeholders included staff from agencies, representatives from major business, transportation, business and environmental organizations, residential groups, and various city staff.

Major activities of the charrette included:

- Introducing the study;
- Brainstorming issues;
- Proposing ideas to address identified issues; and
- Voting the most common ideas.

Identified Issues involved the following:

- Signal operations including arterial coordination, application of intelligent transportation system (ITS), treatment of individual movements and travel modes;
- Transportation network connectivity including a general roadway grid system and connected non-motorized links;
- A multimodal transportation network including both balancing opportunities for all modes of travel and integrating different modes smoothly to serve a holistic function;
- Congestion and traffic dispersion adjacent to or at where City streets intersect with SR 520;
- Accommodation of freight traffic where they are allowed regarding regulations, roadway, and signal design;
- Transit service regarding pedestrian access to transit stations, frequency of service, direct service to major employers, effective use of park-and-ride lots, and connections to the future light rail station;
- Access management on Avondale Road such as providing U-turn opportunities;
- Environment and culture including stormwater runoff, aesthetics, open space, and a historic feature; and
- Partnership.

Once issues were identified, stakeholders were divided into four groups based on their affiliations and potential interests. These four groups were general traffic, freight, NE 76th Street and 188th Avenue NE area, and transit/non-motorized. These four groups generated about 75 pieces of ideas. Commonality appeared among ideas from different groups even though ideas from these four groups had very different perspectives and emphasis. Four common themes emerged across all groups:

1. **Focus on The East End of SR 520** - City streets intersect with the east end of SR 520 at two areas, Redmond Way/NE 76th Street and NE Union Hill Road/Avondale Road. Groups of general traffic and NE 76th Street and 188th Avenue NE area proposed to have direct connection/fly over ramps from City streets to SR 520. In addition, the general

traffic group proposed to have high vehicle occupancy (HOV) lanes on Avondale Road and NE Union Hill Road to SR 520. At the end of SR 520, i.e., the intersection of NE Union Hill Road and Avondale Road, the freight group proposed to examine turning movements of trucks while considering pedestrian crossing safety. Regarding SR 520, the transit/non-motorized group had three ideas: 1) provide more parking for transit users for the SR 520 corridor; 2) address potential additional traffic demand by the future light rail station adjacent to the Redmond Way/SR 520 area; and 3) improve the non-motorized barriers on Avondale and Redmond Way around SR 520.

2. **Provide More Connections** - The idea of adding east/ west streets either to add more capacity or complete the street grid system was proposed by all groups except the transit/non-motorized group. The transit/non-motorized group proposed to link missing pieces on non-motorized corridors that connect people with major destinations and activity centers such as town center and the future light rail station or as simple as have safe pedestrian crossings to and from transit stations.
3. **Emphasize Multimodal Transportation** - All groups proposed ideas that involved more than one mode of travel. Some ideas are specifically for integrating different modes of travel. The general traffic group proposed to have both general traffic lanes and HOV lanes on Avondale Road and NE Union Hill Road. The freight group proposed examining 1) the conflict between peak traffic periods and truck operating time; and 2) certain truck maneuvers and pedestrian crossing safety. While focusing on roadway network for motorized travel modes, the NE 76th Street and 188th Ave. NE area group proposed adding pedestrian connections on certain City streets and missing links in the regional trail system. The transit/non-motorized group emphasized the need for having non-motorized facilities to and at transit facilities. Examples include pedestrian and bike connections to transit stops and pedestrian crossings to transit stops.
4. **Improve Traffic Flow Through Advanced Technology** - All groups proposed to improve traffic flow through better signal operations with the aid of advanced technology such as interconnecting signals on arterials, using ITS to move traffic efficiently, and transit signal priority.

Charrette facilitator categorized all the ideas and sorted the top ten ideas from each group. The total number of ideas came down to 32. Then, each charrette participant voted the top five ideas. The ideas that received the highest votes included:

1. Propose a direct connection from NE 76th Street to SR 520 and flyover for the SR 520/Union Hill Road intersection;
2. Provide an addition east-west corridor;
3. Make roundabout truck friendly;
4. 188th Ave. NE is critical for freight movement. Do not restrict the use of this street;
5. Complete the street grid in southeast Redmond area; and
6. Add U-turn opportunities on Avondale Road.

The next step for the study team is to take the charrette outcomes forward including:

- Verify project principles and objectives with Council;
- Take charrette outcomes to further technical analysis; and

Take any other ideas and directions from Council to further technical analysis.

INTRODUCTION

The City of Redmond's Greater Southeast Redmond Area Transportation Study (study area is shown in **Figure 1**) includes three elements:

- Citywide Freight Mobility Study with the emphasis in the southeast Redmond area
- SE Redmond Area Transportation Study
- NE 76th Street Preliminary Corridor Design

The Greater SE Redmond Area Transportation Study will examine issues and needs, and identify multi-modal transportation improvements to help improve mobility and safety, serve future land uses, and provide connectivity for vehicles, freight, pedestrians, bicyclists and transit.

Specifically, the project's principles include:

- Provide multi-modal transportation solutions for the SE Redmond area.
- Support the City's adopted land use vision for SE Redmond.
- Promote environmental sustainability.
- Support non-Single Occupant Vehicle (non-SOV) solutions for regional through traffic.
- Connect places and people through the development of an integrated transportation grid system.
- Support movement of freight, goods and services.
- Provide connectivity with the rest of the City and with regional facilities and services.

The study team organized a planning charrette to engage stakeholders at the initiate stage of the study; identify issues key to stakeholders; and solicit potential solutions to address key issues. The charrette agenda was as follows.

Charrette Agenda

A planning meeting was held on February 2, 2009 between 10:00am and 2:00pm at Redmond City Hall. The meeting included the following components:

1. Welcome and Introductions
 - Introduction to the Study
 - Policy direction
 - Study area
 - Expected outcomes
 - Scope and Schedule
2. Group self-introduction
3. Introduce Objectives & Principles and solicit comments
4. Existing Conditions and Future Plans
 - Brainstorming Session
 - Identify issues
5. Lunch and Break Out Sessions (Ideas / Visioning)

- Pedestrian-Bike & Transit Group
 - Freight Study Group
 - NE 76th Street/188th Extension Group
 - General Traffic Group
6. Reconvene Large Group
 - Break Out Groups Report their top 10 ideas
 - Categorize and consolidate ideas
 7. Select the best ideas (dot exercise)
 8. Next Steps - Schedule of future events

Charrette Participants

The following persons participated in the meeting:

Agencies

- Leonard McGhee - Sound Transit
- David Hull - King County Metro Transit
- Carter Reeve – King County Roads
- John Shively – King County Roads
- Shuming Yan - WSDOT Planning
- Rick Roberts - WSDOT Traffic Operations

Major Employers

- Tim Barton – Cadman
- Dan Van Der Vliet – Genie Industries
- Tim Tucker – Target
- Judy Jewell – Olympian Precast
- Howard Hawk – Cadman
- Mike Schroeder – Watson Asphalt

Organizations and Neighborhoods

- Arnold Tomac – Pedestrian Bicycle Advisory Committee
- Judy Jewell – RICE
- Christine Hoffmann – Redmond Chamber of Commerce
- Dick Schaetzel – Water Tenders
- Gary Smith – Water Tenders
- Barb Warberg – Friendly Village
- Mike Arntzen – Woodbridge Home Owner Association
- Sylvia Murillo – Avondale Green Home Owners Association

City of Redmond

- Don Cairns – Transportation Services

- Jeanne Justice – Natural Resources
- Jeff Palmer –Transportation Services
- Paul Cho –Traffic Operations
- Susan Byszieski –Transportation Services
- B Sanders - Parks
- Scott Thomasson – Utilities
- Erika Vandenbrande – Commute Trip Reduction
- Joel Pfundt –Transportation Services
- Jeff Churchill – Long Range Planning
- Asma Jeelani – Land Use Regulation
- Jeff Palmer – Neighborhood Traffic Calming
- Mike Paul – Construction
- Lei Wu – Transportation Services

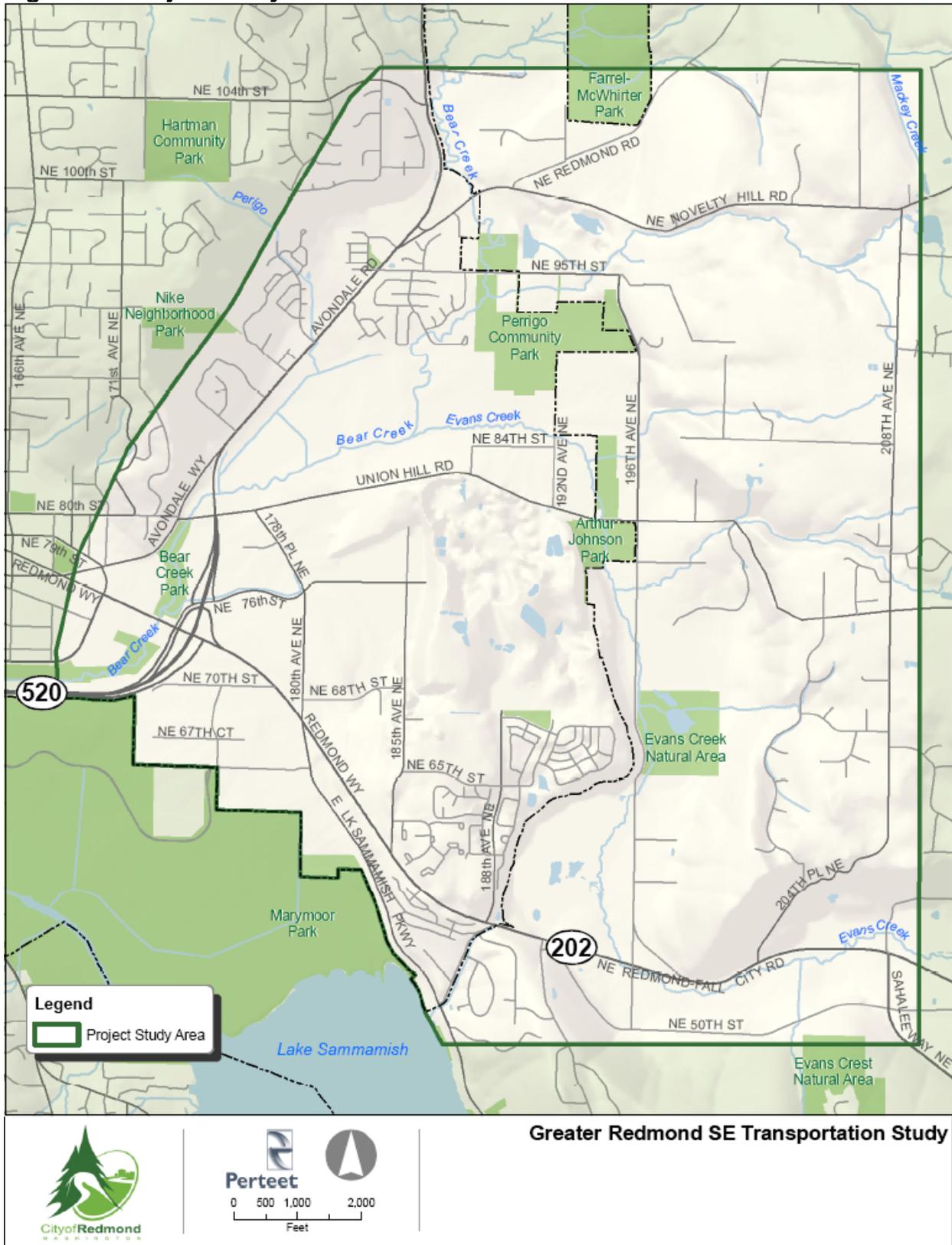
Consultant Team

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Stakeholders gather for the SE Redmond Charrette

Figure 1 – Project Study Area



GENERAL BRAINSTORMING ISSUES

After the study team presented the overall project principles and sought feedback and introduced background information and schedule, participants raised key issues. These issues are identified below, by category.

General Traffic

- At SR 202 / 188th (eastbound), the traffic signal has an arrow for left turn movements, but not enough WB traffic to warrant it. The arrow backs up EB traffic.
- Signal synchronization in general needs to be improved – Avondale Rd/95th is a problem area, difficulty getting on arterials due to lack of gaps.
- Need to develop snow emergency routes
- At Avondale Green, there is only one road in/out; heavy traffic requires people to turn right out only, and then do a U-turn to go south-west bound toward Redmond.
- Look at creating designated U-turn opportunities along Avondale Road to improve safety, system improvements/access management
- People cut through the Woodbridge neighborhood to get to SR 520 rather than staying on SR 202. This includes many people coming from the Sammamish Plateau.
- There is a need for an integrated, multi-modal transportation network.
- Improve the grid network to improve connectivity.
- Form should follow function – roads should move people as a first priority; other needs such as aesthetics should be secondary.
- There is increased pressure on Avondale Road at Union Hill Road; the City considered a flyover (grade separation) previously.
- Consider solutions that bring all users together – roads, non-motorized, freight; and environmental issues.

Freight

- UPS would like signal cycle lengths extended to allow trucks to get through intersections.
- The planned roundabouts on 196th and 208th need to be wide enough for trucks to maneuver through them.
- Ready mix – Better coordination is needed between noise ordinances and business operating hours. The current situation creates concentrated problems due to the constrained times. Extending the times might help spread out the flow. Would there be any applications for Intelligent Transportation Systems?
- UPS starts operations at 9am. Trucks should be allowed to exit the site earlier to reduce congestion at certain hours. Heavy flow of trucks impacts the Woodbridge area. Truck traffic uses multiple roads to get to SR 520, including 180th, 185th, 188th.

Non-Motorized

- There is a missing link at SR 520/Redmond Way for bike facilities – there is a lack of good connections, and bicyclists must use the sidewalk for portions. There is a need for better non-motorized connectivity / integration.
- Improved pedestrian access is needed along Union Hill Road, and along E Lake Sammamish Parkway.

- The planned roundabouts at 196th/Union Hill, 196th/Novelty Hill, and 208th/Novelty Hill will need to adequately accommodate pedestrians and bikes
- There is a need to provide better balance between pedestrians and traffic. Improved pedestrian crossings should be considered, especially along the wide arterials at high accident locations (especially where turning movement-related accidents occur).

Transit

- Employees are hesitant to take transit due to infrequent service and poor connectivity to transit stops.
- There is a need to improve pedestrian access from one side of a street to the other.
- Consider separating transit and truck routes for safety.
- Transit needs better routes and should follow a grid to serve places people need to go.
- Need to provide better access to Sound Transit routes.
- The Bear Creek Park and Ride is over capacity. Need to make sure parking is used for transit riders only.
- Improve access to transit through better pedestrian facilities.
- Provide transit near major employers.
- Provide better pedestrian facilities along Union Hill Road to allow pedestrians to cross safely to reach the park and ride lot.
- It is good that transit operates on 188th (Woodbridge) along with school buses. Need to acknowledge that transit schedule delays occur due to school bus operations – respecting the safety of school children as they are dropped off school buses. Are these opposing needs?
- Does the Microsoft Connector bus service serve a different market, or is it responding to KC Metro deficiencies?
- Bus travel times are too long; it can take 1hr-45mins by bus trip as opposed to 30 minutes by car.
- Connections to future transit (light rail) will be important.
- The Bear Creek Park and Ride lot is at capacity. Improved local transit connections to the park and ride lot are needed.

Environmental / Other

- Environmental concerns – Stormwater runoff causes impacts to streams, wetlands, and water table and ground water wells. Need to address salt/chemicals that result from snow removal. Consider ‘Viewshed’ signage to educate motorists of the environmental assets of the area.
- Aesthetics are an important asset supporting economic development, and important for motorists, pedestrians and bicyclists.
- The SR 520/ SR 202 interchange is a barrier to non-motorized travel, with a concentration of noise and concrete. We need to soften the landscape in this area and better tie it to the rest of City and the Bear Creek amenity.
- 196th Avenue NE – Consider how to deal with the historic significance of the red brick road. Parks is purchasing some farms to preserve open space.
- Cultural issues – preserve red brick road, historic resources and parks
- Partnerships are important – Need to have cooperative agreements between the city, businesses and other agencies.

ISSUES and IDEAS IDENTIFIED BY BREAK OUT SESSIONS

After the brainstorming session with the large group, smaller break out sessions were held for more specific subjects, including general traffic, NE 76th Street, freight, and transit/non-motorized. More feedback on issues were obtained during the first part of the break out sessions. After identifying issues, small groups generated ideas and prioritized them in order to report their top 10 ideas to the large group.

General Traffic Group

This section provides a summary of the issues and ideas identified by the General Traffic Group. Items shown in bold letters were identified by the group as its highest priorities.

- **Propose a flyover at the SR 520/SR 202 intersection.**
- **Propose a flyover at the SR 520/Union Hill Road intersection.**
- **Interconnect signals along Avondale Road and provide coordination – so through traffic gets fewer delays and cross traffic gets more gaps.**
- **Look at widening Union Hill Road and/or other parallel east-west streets to provide for future land use growth.**
- **Consider adding more east-west streets to create more of a grid.**
- **Add designated U-turn opportunities on Avondale Rd for traffic that cannot make a left turn out to heavy traffic or a median, similar to 148th Ave NE in Bellevue.**
- **Provide a transit corridor on Avondale Rd; Coordinate bus stop locations with safe crossing locations and provide amenities at stops.**
- **Avondale Rd NE should be widened to 2 lanes each direction to Union Hill Road, plus HOV lanes.**
- **Provide an HOV lane on Union Hill Road between SR 520 and the Bear Creek Park and Ride.**
- There is a concern about traffic volumes along 196th Avenue NE. 196th should be extended to Novelty Hill Road, with a roundabout at the intersection of Novelty Hill / 196th. This will help to relieve Avondale.
- The on-street parking on 196th at Perrigo Park reduces capacity; Propose that future park expansion provide more parking located within the park.
- There is concern about future roundabouts at 208th/Novelty Road; Is the traffic volume too heavy for a roundabout?

- Need to preserve red brick road (on 196th).
- NE 76th Street extension to 188th Ave NE, and the 85th Ave NE extension to Union Hill Road are being done as part of the Costco development. Expect heavier traffic on 76th as a result.
- Union Hill Road and 185th will carry the heaviest traffic for Costco (const. by end of 2009).
- At Redmond Way/180th Ave NE, intersection geometry is poor and should be straightened.
- Extend NE 70th Street between Redmond Way and 180th Ave NE.
- Emphasize the NE 76th Street route for Costco access to take advantage of grade separation at SR 520.
- For Avondale Green residents, need a safe left turn or U-turn at NE 95th, or a parallel access road.
- Provide a transit reversible lane on Avondale in place of the median.
- Consider widening NE 76th Street eastward to 188th Ave NE

Freight Group

This section provides a summary of all of the issues and ideas identified by the Freight Group. Items that are in bold (all in this case) are those that the group identified as its highest priorities.

- **Connect the street grid, including streets that currently dead-end, such as 185th Avenue NE, 188th Avenue NE, and NE 76th Street.**
- **Fix the geometry at the intersection of Redmond Way and 185th Avenue NE.**
- **Pull the stop bars back at left turn lanes to improve turning movements, especially for large vehicles.**
- **Make signals friendly for trucks, such as extending the short green times, or providing detection gap.**
- **Make roundabouts truck friendly and safe. Trucks take both lanes. Dual lanes entice passenger vehicles to cut inside the blind spot. Roundabouts/lanes need to be wide enough for trucks.**
- **The turn restrictions on Union Hill Road due to the lack of usable gaps may require trucks to make U-turns. This affects businesses, including KC Yard and Watson Asphalt.**

- **The spreading of peak traffic periods affects the traditional operating time for trucks.**
- **188th Avenue NE is critical for freight movements. Do not restrict the use of this street or construct traffic calming or place noise restrictions.**
- **At the Avondale Road / Union Hill Road intersection, having trucks use the outside dual left turn is good, but pedestrian crossings are an issue due to increased pedestrian crossing distance.**

NE 76th Street Group

This section provides a summary of all of the issues and ideas identified by the NE 76th Street Group. Items that are in bold are those that the group identified as its highest priorities.

- **Complete the street grid in Southeast Redmond.**
- **Provide through connectivity rather than jogs as currently in place at certain locations. Design intersection geometries with trucks in mind, such as at skewed intersections.**
- **Use Intelligent Transportation Systems to help handle freight traffic, such as at UPS. Provide perimeter truck routes, such as along 188th Ave NE.**
- **Provide a direct connection from NE 76th Street to SR 520.**
- **Provide a flyover ramp from Union Hill Road to SB SR 520.**
- **The pedestrian connection along 188th Ave NE through Woodbridge works well. Continue that treatment along 188th Ave NE to the north when extended.**
- **Connect the missing links in the regional trail system.**
- **Provide a permissive left turn from EB SR 202 to 188th Ave NE.**
- **Provide an additional east-west corridor, south of and parallel to NE 76th Street.**
- **180th / Redmond Way (at NW corner) - delivery loading occurs on 180th. It needs a separate loading zone on-site or on an adjacent street.**
- Encourage pedestrian treatments that work well along a truck route. A good example is Issaquah Highland Drive from Pine Lake to I-90.
- Need to determine whether the design of NE 76th should be used to encourage through traffic vs. local traffic (ie, traffic carrier vs a connection to retail).



The NE 76th Group presents their priority issues

- Assuming the NE 76th Street corridor is used as a major traffic connector, the largest improvement needs to happen at the intersection with Redmond Way. The rest of the corridor currently operates well.
- Provide a longer northbound right turn lane at the Avondale Way / Union Hill Road intersection.
- The connection of 192nd to SR202 is not direct, add connection to 188th or 185th
- Improve existing skewed intersections with Redmond Way, such as at 180th and 185th Avenues NE.
- Grid circulation truck routes – UPS right out to 188th; ITS to favor certain times.
- Connect the street grid for through users, and limit the number of turns.

Transit / Non-Motorized Group

This section provides a summary of all of the issues and ideas identified by the Transit / Non-Motorized Group. Items that are in bold are those that the group identified as its highest priorities.

Transit

- **Improve pedestrian and bicycle connections to transit stops/facilities. People will generally walk up to .5 miles depending on service (frequency, express).**
- **Improve pedestrian access and wayfinding – to/from Bear Creek Park and Ride.**

- **Provide more transit parking near the SR 520 corridor, especially the Bear Creek Park and Ride. Currently, a number of employees (non-transit riders) use the Park and Ride spaces.**
- **Improve or expand the VanShare and VanPool program usage. There are currently no vanshares in SE Redmond.**
- **Add another stop on Route 545 near NE 76th Street.**
- The planned Light Rail station may create a bottleneck near SR 520. Consider another location for the light rail station (closer to NE 76th Street), or improve access to the future planned light rail station.
- Consider paid parking at the P&R to discourage illegal users.
- City of Sammamish wants light rail service – requested on East Lake Sammamish Parkway
- Along Avondale, the transit service is limited during off peak periods. Expand service frequency.
- Improve pedestrian access and crossings along Avondale Road to transit.
- Consider transit improvements along Avondale, such as queue jumps, HOV lanes, transit signal priority.
- May need transit service along E. Lake Sammamish Parkway – City of Sammamish is interested in additional service.
- Provide a bike station at the future light rail station. This could be used by residents/employees, and could also rent out bikes for use on the nearby trails.

Non-Motorized

- **Add bike lanes to all future roads, and as part of roadway improvements. An example is along 196th Avenue NE. Bike lanes are not currently planned.**
- **Improve pedestrian crossings across arterials, such as Redmond Way (near Whole Foods, the future light rail stop, and the commercial area). Consider pedestrian refuges or bridges.**
- **There are non-motorized barriers at the chokepoint near SR 520. Barriers exist along Avondale, and Redmond Way. Remove barriers to provide seamless non-motorized connections.**

- **Future roundabouts may have negative impacts to pedestrians and bicyclists. Need to address safety issues for these modes at roundabouts.**
- Good pedestrian and bike facilities are needed to reach all major activity centers.
- Improve pedestrian crossings across Union Hill Road.
- Improve non-motorized connectivity to/from the Redmond Town Center from area east of SR 520.
- Provide sidewalks on NE 95th to connect with homes and park/school.
- It is important to provide a north-south bike corridor / bike lanes along 196th Avenue NE to connect with Novelty Hill Road.
- Need to provide bike facilities for both commuters and recreational users. These may entail different types of facilities. Novice or recreational riders are less likely to feel comfortable on bike lanes along arterials.
- Need to provide trails as well as bike lanes. Trails are more likely to be used when the roads are icy.
- There is a bike lane gap on Avondale Road; An improvement is needed in order to reach the future light rail facility, Town Center, and Bear Creek Trail.
- Redmond Way destinations are difficult to cross, future light rail station

VOTING EXERCISE

After the smaller break out sessions, the large group was reconvened. The facilitator of each break out group presented its prioritized issues to the entire group. Issues that were duplicative between groups were identified. At the end of the presentation, each participant was given five dots to place on the issues that they felt were the most important. A limit of one dot per item was set. The results of the dot exercise are shown in **Tables 1 through 4**. The tables show the number of dots received for each issue, the ranking within the particular category, and the overall ranking for all categories combined.



Stakeholders place their votes on issues most important to them.

Table 1: Dot Exercise Results (General Traffic)

Issue	No. of Dots	Category Rank	Overall Rank
General Traffic			
Propose a flyover for the SR 520/SR 202 intersection and flyover for the SR 520/Union Hill Road intersection	12	1	1
Add U-turn opportunities on Avondale Rd, similar to 148 th Ave NE in Bellevue	8	2	5
Provide a transit corridor on Avondale Rd; Coordinate stops with safe crossing locations	6	3	7
Avondale Rd NE should be widened to 2 lanes each direction to Union Hill Road; Provide HOV lanes on Avondale	5	4	8
Provide signal interconnectivity and coordination progression	Covered under "Freight" category		
Look at widening Union Hill Road corridor and/or other east-west streets	0	5	13
Consider more east-west grid streets	Covered under "NE 76th Street" category		
Provide an HOV lane on Union Hill Road between SR 520 and the Bear Creek Park and Ride	0	5	13

Table 2: Dot Exercise Results (Freight)

Issue	No. of Dots	Category Rank	Overall Rank
Freight			
Make roundabouts truck friendly and safe. Trucks take both lanes. Dual lanes entice passenger vehicles to cut inside the blind spot. Roundabouts/lanes need to be wide enough for trucks	11	1	2
188 th Avenue NE is critical for freight movement. Do not restrict the use of this street or construct traffic calming or place noise restrictions	10	2	3
Pull the stop bars back at left turn lanes to improve turning movements	7	3	6
Fix the geometry at Redmond Way at 185 th Avenue NE	4	4	9
Make signals friendly for trucks, such as extending the short green times, or providing detection gap	4	4	9
The turn restrictions on Union Hill Road require trucks to make U-turns. This affects businesses, including KC Yard and Watson Asphalt	1	5	12
A peak spread affects traditional time for trucks	0	6	13
At Avondale Road / Union Hill Road intersection, having trucks use outside dual left turn is good, but pedestrian crossings are an issue	0	6	13
Connect the street grid, including streets that currently dead-end, such as 185 th Avenue NE, 188 th Avenue NE, and NE 76 th Street	Covered under "NE 76th Street" category		



Participants review the voting results.

Table 3: Dot Exercise Results (NE 76th Street)

Issue	No. of Dots	Category Rank	Overall Rank
Provide an additional east-west corridor, parallel to NE 76 th Street	12	1	1
Complete the street grid in Southeast Redmond	9	2	4
Provide a better connection from NE 76th Street to SR 520	5	3	8
Use ITS to help handle freight traffic, such as at UPS. Provide perimeter truck routes, such as along 188th Ave NE	5	3	8
Provide through connectivity rather than jogs as currently in place at certain locations. Design intersection geometries with trucks in mind, such as at skewed intersections	3	4	10
The Pedestrian connection along 188 th Ave NE through Woodridge works well. Continue the treatment along 188 th Ave NE to the north when extended	2	5	11
Provide a permissive left turn to 188 th Ave NE, from EB SR 202	1	6	12
180 th / Redmond Way (at NW corner), loading occurs on 180 th – Need a separate loading zone on site or adjacent street	1	6	12
Connect the missing links along the regional trail system	0	7	13
Provide a flyover ramp from Union Hill Road to SB SR 520	Covered under "General Traffic" Category		

Table 4: Dot Exercise Results (Transit and Non-Motorized)

Issue	No. of Dots	Category Rank	Overall Rank
Transit			
Improve pedestrian and bicycle connections to transit stops/facilities. People will generally walk up to .5 miles depending on service (frequency, express).	4	1	9
Provide more transit parking near the 520 corridor, especially the Bear Creek Park and Ride. Currently, a number of employees (non-transit riders) use the Park and Ride spaces	1	2	12
Improve or expand the VanShare and VanPool program usage. There are currently no vanshares in SE Redmond	1	2	12
Improve pedestrian access and wayfinding – to/from Bear Creek Park and Ride	0	3	13
Add another stop on Route 545 near NE 76 th Street	0	3	13
Non-Motorized			
Improve pedestrian crossings across arterials, such as Redmond Way (near Whole Foods, the future light rail stop, and the commercial area). Consider pedestrian refuges or bridges	5	1	8
There are non-motorized barriers at the chokepoint near SR 520. Barriers exist along Avondale, and Redmond Way. Remove barriers to provide seamless non-motorized connections	5	1	8
Add bike lanes to all future roads, and as part of roadway improvements. An example is along 196 th Avenue NE. Bike lanes are not currently planned	3	2	10
Future roundabouts may have negative impacts to pedestrians and bicyclists. Need to address safety issues for these modes at roundabouts	3	2	10