

## SR-520 Project: Initial Findings from Data Analysis

### BACKGROUND (Data only for routes<sup>1</sup> in SR-520 project)

- About 600 weekday trips crossing SR-520, with about 2/3 in peak periods.
- Approximately 24,500 weekday rides on routes with approximately 80% of all rides crossing Lake Washington.
- Routes 255 and 545 account for approximately 2/3 of total project ridership for each agency.

	Trips Crossing SR-520		Annual Hours	Rides		Rides/Hour	
	Weekday	Peak	Total	Weekday	Annual	Weekday	Annual
<b>Metro</b>	<b>223</b>	<b>151</b>	<b>103,197</b>	<b>10,336</b>	<b>2,862,626</b>	<b>28.33</b>	<b>27.74</b>
<b>Sound Transit</b>	<b>377</b>	<b>256</b>	<b>133,811</b>	<b>14,120</b>	<b>3,807,206</b>	<b>28.66</b>	<b>28.45</b>
<b>Total</b>	<b>600</b>	<b>407</b>	<b>237,008</b>	<b>24,456</b>	<b>6,669,832</b>	<b>28.52</b>	<b>28.14</b>

### LOADS ACROSS SR-520

- Metro peak-only trips oriented to downtown Seattle (252, 257, 268 and 311) average maximum loads of 40-60 riders per trip.
- Route 277 trips, oriented to the U. District, have average loads of 10-25 riders per trip.
- All-day Route 255 is heavily peak-direction oriented (to Seattle in AM and to Kirkland in PM), with peak direction trips having average maximum loads in the 50-70 range opposed to average maximum loads in the 20-30 range at other times.
- Sound Transit Route 540 carries more riders in the traditional peak-direction (to U. District in AM and to Kirkland in PM), with peak direction trips having average max loads in the 20-30 range and dropping by about half in the other direction.
- Sound Transit Route 541 is struggling to generate riders in either direction with most trips averaging 10-20 average max rides. (This may change with the closing of the Overlake P&R)
- Sound Transit Route 542 carries a similar amount of riders in both directions in the peaks, with average max peak loads in the 25-40 range. Off-peak trips are currently generating average max loads of about 10-20.
- Sound Transit Route 545 also carries strong loads (40-70) in both directions in the peaks, however the peaks seem to be a bit wider in the traditional peak direction. Off-peak average max loads across Lake Washington fall into the 20-40 range.

<sup>1</sup> Project routes include, Metro: 252, 255, 257, 268, 277 and 311; Sound Transit: 540, 541, 542, 545, 555 and 556.

## MARKET SEGMENTATION

### *Downtown Seattle oriented routes:*

#### *Westbound:*

- During the AM Peak and Midday, about 40% of riders are heading to midtown, about 33% of riders are heading to the north part of downtown and about 20% of riders are heading to the south part of downtown. The remaining 6-7% of riders get off at Montlake Freeway Station.
- During the PM Peak and Evening, on Route 255, about 30-40% of riders are heading to midtown, about 10% of riders are heading to the north part of downtown and about 20-40% of riders are heading to the south part of downtown. About 15-20% of riders are alighting at Montlake Freeway Station.
- During the PM Peak and Evening, on Route 545, about 30% of riders are heading to midtown, about 40% of riders are heading to the north part of downtown and about 15% of riders are heading to the south part of downtown. About 15% of riders are alighting at Montlake Freeway Station.

#### *Eastbound:*

- During the AM Peak and Midday, on Route 255, about 35-45% of riders are boarding in the south part of downtown, about 25-35% are boarding in midtown and 15% in the north part of downtown. Approximately 15% of riders are boarding at the Montlake Freeway Station.
- During the AM Peak and Midday, on Route 545, about 25-35% of riders are boarding in the south part of downtown, about 25-30% are boarding in midtown and 10-20% in the north part of downtown. Approximately 20% of riders are boarding on Capitol Hill and 10% of riders are boarding at the Montlake Freeway Station.
- During the PM Peak, about 15% of riders are boarding in the south part of downtown (Route 255 is an exception with 25%), about 50% boarding in midtown and 30% boarding in the north part of downtown (Route 255 is an exception with 20%). The remaining 4-6% of riders board at the Montlake Freeway Station.

### *Eastside Residential Orientations (riders heading west in AM and east in PM):*

- On Routes 252 and 257, approximately 40% of riders access the routes in the Kingsgate neighborhood portion and 50% of riders access the routes at the Kingsgate P&R. The remaining 10% of riders access the routes along SR-520 or at the Totem Lake Freeway Station.
- On Route 255, about 40% of riders access the route at the South Kirkland P&R. The Kirkland core accounts for about 25% of riders. Kingsgate, Juanita, Totem Lake and South Kirkland stops (not at P&R) each account for about 5-10% of riders.
- On Route 268, about half of riders access the route at Bear Creek P&R, while about a quarter of riders access the route at Overlake and 20% of riders access the route in East Redmond.
- On Route 277, about a quarter of riders access the route at Houghton P&R. About 20% of riders access the route in East Kirkland. Juanita, Kingsgate, Kingsgate P&R, Rose Hill and Totem Lake each account for about 10% of riders.

- On Route 311, in the morning about 45% of riders board at Woodinville, 40% of riders board at Brickyard and 10% of riders board at Totem Lake. In the afternoon, 35% of riders alight at Woodinville, 35% of riders alight at Brickyard and 25% of riders alight at Totem Lake.
- On Route 540, about 65% of riders access the route at South Kirkland P&R and 30% of riders access the route at the Kirkland Transit Center.
- On Route 542, about 60% of riders access the route at Redmond TC and about 30% of riders access the route in Overlake.
- On Route 545, about 45% of riders access the route at Redmond TC, 35% of riders access the route in Overlake and 10% of riders access the route at Bear Creek P&R.

*Eastside Employment Orientations (riders heading east in AM and west in PM):*

- On Route 255, about 35% of riders are destined for locations near the South Kirkland P&R, 30% of riders are heading to the core of Kirkland and about 15% for Totem Lake.
- On Route 542, about 75% of riders are destined for locations in Overlake and 20% of riders are heading to Redmond.
- On Route 545, about 65% of riders are destined for locations in Overlake, 15% of riders are heading for locations near Bear Creek, and approximately 6% for downtown Redmond.

*Eastside Off-Peak Orientations*

- On Route 255, about 25% of riders access the route at the South Kirkland P&R. The Kirkland core accounts for about 25-30% of riders. Kingsgate, Juanita, Totem Lake and South Kirkland stops (not at P&R) each account for about 10% of riders.
- On Route 542 westbound (to U. District) about 50% of riders board in Redmond and about 40% of riders board at Overlake. Eastbound (from U. District) about 25% of riders are destined for Redmond and 70% are destined for Overlake.
- On Route 545, 20-35% of riders access the route at Redmond TC, 40-60% of riders access the route in Overlake and 10% of riders access the route at Bear Creek P&R.