

Service Reduction Scenario Application of Criteria

Regional Transit Task Force

July 15, 2010



King County

METRO

We'll Get You There.

Regional Transit Task Force's Evolving Policy Statements

- Emphasize **productivity** due to its linkage to **economic development, land use** and **financial sustainability**
- Acknowledge the need to address **social and geographic balance**

Scenario Development Process

- Interpreted “Evolving Direction” of the Task Force into service design criteria
 - **Prioritize service to students, low income riders, and people dependent on transit for basic mobility**
 - **Prioritize service to employment centers**
 - **Consider demand for transit when establishing frequency and span of service**
 - **Maximize productivity and cost efficiency**
 - **Provide transit service throughout King County**
 - **Control costs**
- **Modified the existing network accordingly**
- Quantified the changes
- Identified impacts to riders

Baseline System

SERVICE ADDITIONS

Fall 2009 Baseline	3,495,000
RapidRide	118,000
<u>SR 520 Urban Partnership</u>	<u>28,000</u>
Subtotal	3,631,000

SERVICE REDUCTIONS

New Baseline	3,631,000
2010 – 2011 Efficiencies	-200,000
<u>R1 Scenario</u>	<u>-400,000</u>
Total	3,031,000

Structured Application of Criteria

STEP ONE: Productivity Screen

Eliminate all services
Below 15 Rides per
Platform Hour

Productivity/Efficiency

STEP TWO: Network Considerations

Restore lost core connections
between centers and
higher density
residential areas

Provide at least hourly
service within most
cities currently served

Land Use, Economic
Development

Social Equity

Geographic Balance

STEP THREE: Identify Efficiencies

Use capacity of ST Bus
and Rail

Consolidate
routes/eliminate tails

Match capacity to demand

Productivity/Efficiency

Step One: Productivity Screen

- If all routes < 15 rides per platform hour (by time of day) are cut, the distribution of reductions is:

East 55%

South 27%

West 18%

- System logic breaks down – some activity centers have no service at all, or at certain times of day (e.g. after 7 p.m.)

Step Two: Network Considerations

- Connect Centers – e.g. Redmond to Kirkland all day; Crossroads, Covington at night
- Restore geographic coverage – e.g. Carnation, Enumclaw, North Bend, Duvall

Step Three: Identify Efficiencies

- Remove or direct feeder routes to ST Bus & Rail
 - Where ST seats/frequency (capacity) are available
- Consolidate routes that serve common origins & destinations and eliminate residential tails
 - Maintain seats/frequency (capacity) at lower cost
 - First/last 10% of riders should use \leq 10% of running time
- Eliminate extra capacity, match seats to demand

Baseline Information – Scenario Comparison

Service Family	Number of Routes	Annual* Platform Hours	Percent of total Platform Hours	Riders per Platform Hour	Rider Miles per Platform Hour	Cost per Rider
Frequent Arterial	56	1,975,000	57%	37.4	144	\$3.23
	46	2,020,000	64%	39.6	n/a	\$3.09
Peak Commuter	99	505,000	14%	20.8	198	\$6.69
	69	440,000	14%	24.2	n/a	\$5.67
Local	60	915,000	26%	25.1	97	\$4.69
	38	570,000	18%	23.5	n/a	\$4.88
Hourly	25	100,000	3%	12.0	60	\$9.64
	22	135,000	4%	14.1	n/a	\$8.18
Totals	240	3,495,000	100%	31.1	137	\$3.95
	175	3,035,000	100%	34.6	n/a	\$3.52

*Approximate

Baseline and R-1 Scenario Comparison

	2009 Base	R-1 Scenario	Percent Change
Hours	3.5 million	3.1 million	- 11%
Riders	108.5 million	105.8 million	- 2%
Access	1.47 million	1.45 million	- 1%
Productivity	31.1	34.6	11%

Question

- Do the criteria we used balance the key factors appropriately?
 - productivity
 - economic development
 - land use
 - financial sustainability
 - social equity
 - geographic balance

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