2017 System Evaluation

Regional Transit Committee November 15, 2017



Context

- 7th annual report based on Service Guidelines
- Evaluation of fixed-route service, Community Connections, and Water Taxi services
- Based on a snapshot in time
- Shows how routes are performing
- Informs investment and reduction decisions



Fixed-route Evaluation



Service changes and report timeline

- Data for this report came from October '16 March '17:
 - after the U-Link and southeast Seattle restructures
 - before March and September 2017 investments
- Investment needs shown in the report were adjusted to account for investments made in 2017

System growth of 13% is needed

| Priority | Investment Purpose | 2016 Estimated Need | 2017 Estimated Need |
|----------|-------------------------------------|---------------------------|---------------------------|
| 1 | Reduce passenger crowding (pg 5) | 12,800 | 4 6,800 |
| 2 | Improve schedule reliability (pg 7) | 18,350 | 4 17,000 |
| 3 | System growth (pg 9) | 488,300 | 485,700 |
| | Total: | 519,450 | 509,500 |

- Estimated needs account for 2017 investments
- Increased population, jobs, and ridership driving higher targets for system growth



Budget for Service Guidelines Investments

| Priority | Investment Purpose | 2017-2018 Budgeted | 2017 Investments | 2018 Planned Investments | Total Investments |
|-----------------|------------------------------|-----------------------|---------------------|--------------------------------|----------------------|
| 1 | Reduce passenger crowding | 27,300 | 22,600 | 10,000 | 32,600 |
| 2 | Improve schedule reliability | 32,500 | 16,200* | 10,000 | 26,200 |
| 3 | System growth | 100,000 | 31,400 | 76,900 | 108,300 |
| Figures are app | proximate Total: | 159,800 | 70,200 | 96,900 | 167,100 |

Delays of major construction impacts and additional grant funding have enabled Metro to front-load and increase investments

* An additional 29,000 hours were invested in schedules to give operators more time to access comfort stations



Crowding Example (Priority 1)

- E Line (pg 6, Figure 1)
 - Trip heading to Seattle at 7:29am M-F
 - On average, trip has 1+ passengers over the crowding threshold
 - Needs 330 hours of investment (pg 67)
 - Latest data indicated crowding persists
 - Adding a trip is feasible
- Route is receiving investment in March '18

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Reliability Example (Priority 2)

• Route 131 (pg 8, Figure 2) is late too often

| Time Period | Route 131: % Late | Threshold |
|----------------------|-------------------|-----------|
| All-day weekday | 27% | > 20% |
| Weekday PM peak only | 40% | > 35% |
| Saturday | 27% | > 20% |

- Needs 600 hours of investment (pg 67)
- Latest data indicated lateness persists
- Work is underway to determine how to make best use of investment
- Route is receiving investment in March '18



Service Growth Example

(Priority 3)

- Corridor between Federal Way and Kent via Military Road S (Route 183) (pg 69)
 - Below target service level
- Plan for investment in March '18
 - Increasing off-peak frequency to 30 min
 - Adding 60 min service at night to build ridership
 - Metro remains constrained to add service in peak period



| | Peak | Off-peak | Night |
|------------|--------|----------|--------|
| Current | 30 min | 60 min | |
| Target | 15 min | 30 min | 30 min |
| Investment | | Yes | Yes |

Water Taxi Evaluation



Water Taxi Performance

- Evaluated for crowding, reliability, productivity and peak analysis
 - Crowding (pg 5)
 - Only two West Seattle Water Taxi were trips at 100% capacity (water taxis cannot exceed 100% capacity)
 - Reliability: On-time performance (pg 7)
 - West Seattle: 99.4%
 - Vashon: 98.4%
 - Productivity (pg 38)
 - Water taxis are significantly more productive than bus service
 - Peak Analysis (pg 41)
 - Both water taxis pass both tests of the peak analysis



Community Connections



Community Connections Performance Highlights (September 2016 – March 2017)

- High customer satisfaction
 - 90% to 100% satisfaction for services in performance measurement phase
- Improved cost efficiency
 - Reduced cost per boarding for all Community Shuttle services
- Program growth
 - Ten new pilot communities were engaged in 2017



Closing

- The region continues to grow quickly; transit demand is growing, too
- Where we have invested, we have seen improvements
- Crowding and reliability needs have appeared in new places

