Today’s Meeting

- **Presentation:** Use of Crowdsourcing to Advance Transportation Operations – *James Colyar, FHWA*

- **Discussion:** Estimating ITS/Traffic Control M&P Costs for the 2022 RTP
Discussion: Estimating ITS/Traffic Control M&P Costs for the 2022 RTP
The financial strategy is a federally required component of the Regional Transportation Plan.

The revenues identified in the financial strategy must cover the anticipated costs of the transportation projects along with operation and maintenance of the existing system.

2018 Total Projected Costs: $196.8 Billion

- System Expansion Costs: $91.7 Billion
- Maintenance, Preservation & Existing Ops: $105.2 Billion
2018 RTP Maintenance and Preservation Expenditure Breakdowns

TOTAL: $105.2 BILLION

- Cities and Counties: $34.0 B
- Local Transit: $25.8 B
- Sound Transit: $19.2 B
- State Ferries: $7.2 B
- State Highways: $18.9 B

Total Expenditures: $105.2 Billion
Maintenance and Preservation City and County Asset Categories

• Pavement
• Stormwater
• ITS/Traffic Control
• Structures
• Street Lighting
• Roadside Development
• Sidewalks and Bike Paths
• Other Maintenance
Methodology used for estimating ITS/Traffic Control costs for 2018 RTP

- Worked with RTOC to develop and distribute a survey to all jurisdictions to capture ITS needs for 2018-2040 based on an “optimal” scenario
  - Optimal defined as fully staffed and able to carry out all functions in a timely manner, including regular maintenance, and all capital components of ITS being replaced within their intended lifecycle
- 25% of jurisdictions provided a response, and average lane mile costs based on these responses were used to extrapolate estimates for the remaining 75% of jurisdictions
Key Issues with 2018 Approach

- Using the survey as the primary data source seemed to significantly underestimate costs compared to what was being reported to the State Auditor’s Office though the BARS system

- The response rate for the survey (25%) was very low

- Survey results included a snapshot of ITS expenditures and did not provide a growth rate over time
Overview of proposed revised methodology to estimate 2022-2050 need:

1. Use BARS data to identify most recent ITS/Traffic Control expenditures
2. Capture additional need using a survey to build on reported BARS data
3. Calculate annual growth rate based on historic BARS data
4. Apply growth rate to estimates calculated in step 2
Options for capturing additional need

1. Distribute survey to all jurisdictions to determine % increase above reported BARS data required to achieve optimal level of traffic control maintenance (optimal level to be determined based on discussions with stakeholders)

2. Instead of surveying all jurisdictions, target 2-3 large-, medium-, and small-sized jurisdictions (based on population of # of signals along the NHS) to determine additional funding needed to achieve optimal level. Then calculate average % increase by category and apply to remaining jurisdictions.
Discussion Questions

1. What are your general thoughts on the proposed methodology for estimating 2022-2050 ITS/Traffic Control M&P Expenditures?

2. Is a survey an appropriate tool for capturing additional need beyond reported BARS expenditures?

3. If the methodology involves sampling jurisdictions, what would be the appropriate metric (e.g. population, # of signals along the NHS, etc.) to categorize and apply survey responses to remaining jurisdictions?

4. Is there another potential approach for developing an annual growth rate aside from using historic BARS data?