Today’s Meeting

- **Presentation:** Ali Eghtedari, WSDOT – WSDOT Meets SPaT Challenge

- **Discussion:** Review Draft ITS Inventory Survey Instrument
Today’s Guest Speaker

Ali Eghtedari, WSDOT
WSDOT Meets SPaT Challenge
Discussion Item

Review Draft ITS Inventory Survey Instrument
Regional Inventory Data Collection

Desired Outcome:
Inventory of ITS assets and where they are deployed along all principal arterials and non-Interstate NHS routes across the region →

• What are the ITS assets?
• Where are they deployed?
• PSRC is developing an online survey instrument to facilitate data collection

• The instrument is currently in an Excel format, but will be transferred to an online tool once finalized
INTRODUCTION

The Puget Sound Regional Council is reaching out to jurisdictions in the central Puget Sound region to request data for a regional inventory of existing ITS deployments. While agencies throughout the region have long maintained their own inventories, consistent and uniform information about signals and ITS deployments across jurisdictions is lacking. This effort seeks to fill this gap and to serve as a tool for our regional partners to help facilitate coordination and cross-jurisdictional collaboration on ITS efforts. This inventory will also be used to develop an ITS needs and gaps assessment as part of an upcoming update to the Regional ITS Implementation Plan.

INSTRUCTIONS

1) Provide Traffic Signal GIS data as an attachment if available - **Make sure to include all fields exactly as described in the metadata table in the "Traffic Signal Instructions" tab**

2) If you do not have GIS data available, provide Traffic Signal tabular data in Excel as an attachment if available - **Make sure to include all fields exactly as described in the metadata table in the "Traffic Signal Instructions" tab**

3) If you do not have Traffic Signal GIS or tabular data, provide the data through the "Traffic Signal Inventory" tab (consult "Traffic Signal_instructions" tab for more detailed directions)

4) Fill in responses in "Additional ITS Assets" tab (leave any responses that don’t apply as blank) and provide attachments as requested

SUMMARY CHECKLIST

☐ Traffic signal Inventory data:
  • GIS Attachment; OR
  • Excel Attachment; OR
  • Filled-in "Traffic Signal Inventory" Tab

☐ Additional ITS Assets:
  • Fill in 'Additional ITS Assets' Tab; AND
  • Provide Active Traffic Management (ATM), Integrated Corridor Management (ICM), and Data Collection attachments (as available)

QUESTIONS

If you have any questions, please contact Gary Simonson at gsimonson@psrc.org or Pavithra Parthasarathi at pparthasarathi@psrc.org

• Is the description of the inventory sufficient?

• Are the instructions clear? If not, what could be done to clarify?
Draft Survey Instrument

TRAFFIC SIGNAL INSTRUCTIONS

- Does the format described and data fields specified make sense?

- What can we do to improve our chances of getting the data?

### INSTRUCTIONS FOR "TRAFFIC SIGNAL_INVENTORY" TAB

**IF YOU HAVE TRAFFIC SIGNAL GIS OR TABULAR DATA:** Please include it as an attachment. Please list the dataset to signals along all principal arterials and any other non-interstate NHS routes within your jurisdiction.

Make sure the dataset includes all fields exactly as described in the metadata table to the right.

**IF YOU DO NOT HAVE TRAFFIC SIGNAL GIS OR TABULAR DATA:** In the "Traffic Signal_inventory" tab of this spreadsheet provide entries for each traffic signal along all principal arterials and any other non-interstate NHS routes within your jurisdiction.

Please use the metadata table to the right to correctly fill in the spreadsheet.

*A drop-down menu limiting responses is included for fields with a closed response set.

<table>
<thead>
<tr>
<th>FIELD_NAME</th>
<th>STATUS</th>
<th>DATA_TYPE</th>
<th>DESCRIPTION</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIQUE_ID</td>
<td>Required</td>
<td>Text</td>
<td>A unique identifier for the traffic signal.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>JURISDICTION</td>
<td>Required</td>
<td>Text</td>
<td>The jurisdiction that the signal is located in.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>COUNTY</td>
<td>Required</td>
<td>Text</td>
<td>The county that the signal is located in.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>MAJORST_1</td>
<td>Required</td>
<td>Text</td>
<td>Major cross street 1 of the intersection where the signal is located.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>MAJORST_2</td>
<td>Required</td>
<td>Text</td>
<td>Major cross street 2 of the intersection where the signal is located.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>OWNER</td>
<td>Required</td>
<td>Text</td>
<td>Owner of the traffic signal.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>OPERATOR</td>
<td>Required</td>
<td>Text</td>
<td>Operator of the traffic signal.</td>
<td>Open-ended</td>
</tr>
<tr>
<td>TS_PRETIMED</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal utilize a PreTimed(Fixed, TOD) Timing Strategy?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>TS_ACTUATED</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal utilize an Actuated Timing Strategy?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>TS_COORDINATE</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal utilize a Coordinated (actuated synchronized) Timing Strategy?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>TS_ASC</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal utilize an Adaptive Signal Control (ASC) Timing Strategy?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>TS_ATSFM</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal utilize an Automated Traffic Signal Performance Measure (ATSFM) Timing Strategy?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>TSP</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal have Transit Signal Priority?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>EVP</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal have Emergency Vehicle Preemption?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>PED_SIGNAL</td>
<td>Required</td>
<td>Text</td>
<td>Does this signal have a pedestrian signal?</td>
<td>&quot;YES&quot; or &quot;NO&quot;</td>
</tr>
<tr>
<td>COMM</td>
<td>Optional</td>
<td>Text</td>
<td>Communication System (e.g. &quot;VixLink&quot;, &quot;Flex&quot;)</td>
<td>Open-ended</td>
</tr>
<tr>
<td>HARDWARE</td>
<td>Optional</td>
<td>Text</td>
<td>Hardware Type (e.g. &quot;Netsign&quot;, &quot;Cobalt&quot;, &quot;20/20W20&quot;)</td>
<td>Open-ended</td>
</tr>
<tr>
<td>SOFTWARE</td>
<td>Optional</td>
<td>Text</td>
<td>Software Type (e.g. &quot;FlexPhase&quot;, &quot;Apogee&quot;)</td>
<td>Open-ended</td>
</tr>
<tr>
<td>CABINET</td>
<td>Optional</td>
<td>Text</td>
<td>Cabinet Type (e.g. &quot;312&quot;, &quot;NEMA TSP&quot;, &quot;P&quot;)</td>
<td>Open-ended</td>
</tr>
<tr>
<td>XCOORD</td>
<td>Optional</td>
<td>Double</td>
<td>Longitude of the signal in decimal degrees (6 decimals)</td>
<td>&quot;nnn.nnnnn&quot;</td>
</tr>
<tr>
<td>YCOORD</td>
<td>Optional</td>
<td>Double</td>
<td>Latitude of the signal in decimal degrees (6 decimals)</td>
<td>&quot;nnn.nnnnn&quot;</td>
</tr>
</tbody>
</table>
TRAFFIC SIGNAL INVENTORY

• This will only be filled out by jurisdictions unable to provide GIS or tabular data

• Does the format of this table make sense?
## ADDITIONAL ITS ASSETS

- Does the format for this section make sense?
- Does the way the questions are worded work?

### TRAFFIC MANAGEMENT CENTER (TMC)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does your jurisdiction have a Traffic Management Center?</td>
<td></td>
</tr>
<tr>
<td>2. If you answered &quot;no&quot; to question 1, do you have any signals or devices connected to another jurisdiction's TMC?</td>
<td></td>
</tr>
<tr>
<td>3. If you answered &quot;yes&quot; to question 2, please enter the name of the jurisdiction.</td>
<td></td>
</tr>
<tr>
<td>4. What elements are managed through your TMC? (e.g. signals, CCTV cameras, dynamic messaging signs)</td>
<td></td>
</tr>
</tbody>
</table>

### ACTIVE TRAFFIC MANAGEMENT (ATM)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Do you implement Active Traffic Management along any corridors in your jurisdiction?</td>
<td></td>
</tr>
<tr>
<td>6. If you answered &quot;yes&quot; to question 5, please provide GIS or other locational information for your ATM corridors as an attachment</td>
<td></td>
</tr>
<tr>
<td>7. What elements are included in your ATM corridors? (Dynamic messaging signs, ramp meters, variable speed limits, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

### INTEGRATED CORRIDOR MANAGEMENT (ICM)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Do you implement Integrated Corridor Management along any corridors in your jurisdiction?</td>
<td></td>
</tr>
<tr>
<td>9. If you answered &quot;yes&quot; to question 8, please provide GIS or other locational information for your ICM corridors as an attachment</td>
<td></td>
</tr>
</tbody>
</table>

### DATA COLLECTION/INTEGRATION TOOLS (Not Limited to Principal Arterials and Above)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Do you utilize any permanent data collection tools? (e.g. loop detectors, bicycle counters)</td>
<td></td>
</tr>
<tr>
<td>11. If you answered &quot;yes&quot; to question 10, please provide GIS or other locational information for your data collection devices as an attachment</td>
<td></td>
</tr>
<tr>
<td>12. Are you connected to WSDOT’s Traffic Busters network?</td>
<td></td>
</tr>
</tbody>
</table>

### OTHER (OPTIONAL)

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. We will also accept GIS-based locational data or tabular data for: (A) other ITS assets not previously addressed in this survey and (B) ITS assets along key roadways outside the specified geographic scope (i.e. not only on Principal Arterials and above). Please include any attachments that include this data as you see fit.</td>
<td></td>
</tr>
</tbody>
</table>
Preliminary Feedback

- Received feedback on draft from Auburn, Kenmore, Snohomish County, and WSDOT
- Some of the requested data fields may take additional time to provide
- Some confusion around how to provide the data (i.e. GIS or table)
- Suggested changes:
  - Consider phased due dates for the two different sections
  - Provide better definitions for ATM and ICM
  - Clarify what is meant by pedestrian signal
Final Thoughts

Any other overarching input or feedback on the survey instrument?