Clackamas County Coordinating Committee

C4 I205 Tolling Diversion Subcommittee

Wednesday, January 18, 202
12:00 PM – 1:00 AM

Meeting Link:
https://clackamascounty.zoom.us/j/84523116174?pwd=bE5TaURMbVgyb3dtcEt5dTVtRTU1dz09

Agenda

- Housekeeping:
  - Co-Chair Vacancy
  - Meeting times and length

- Update on Environmental Analysis

- Case Study: WSDOT Tolling Monitoring Approach
  Presented by: Tyler Patterson, WSDOT Systems and Engineering Manager

- Oregon Monitoring Plan Likely Elements

Attachment:
- Presentation Materials

C4 Diversion Subcommittee

January 18, 2023

Mandy Putney (she/her)

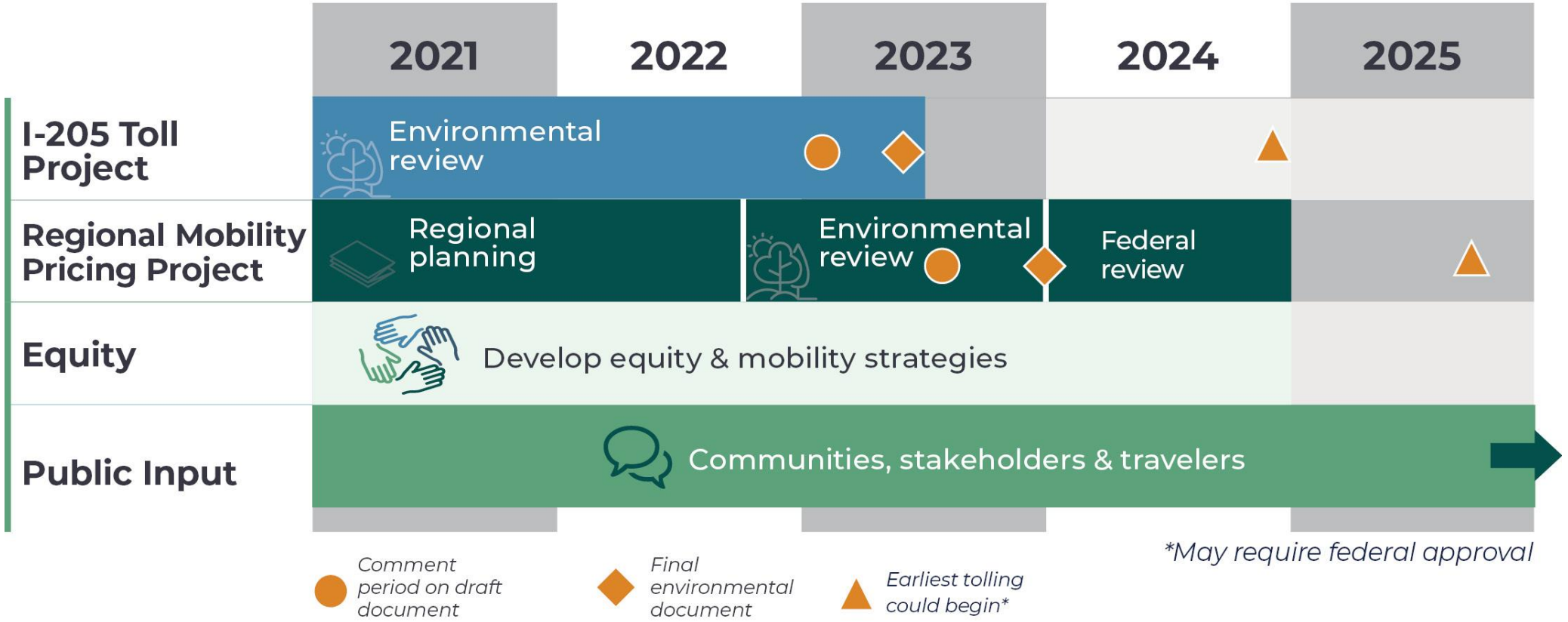
Tyler Patterson (he/him)

Urban Mobility STRATEGY

Oregon Department of Transportation

EA Schedule Update

I-205 Toll Project
Updated Environmental Assessment Schedule



Case Study of Toll Monitoring in Washington State

Case Study Presentation Outline

- Why is the monitoring process important?
- Background
  - Washington State's Toll Program
  - Roles and responsibilities
- Performance monitoring
  - High level methodology
  - Detail steps and examples
- Keys to success

What changes when tolling starts?

WSDOT's approach to understanding the impacts on the transportation system

Clackamas County Coordinating Committee, C4 Diversion Subcommittee
Tyler Patterson, WSDOT Toll Division Systems and Engineering Manager
Jan. 18, 2023

Why is this process important?

- Establishes facts that everyone agrees are both relevant and accurate
- Builds trust and connections between the partnered agencies and public
- The transportation network is operated and maintained by multiple agencies and jurisdictions – this process reflects that.

Agenda

1. **Why is this important?**

2. **Background**
   - Washington state's toll program

3. **Performance monitoring**
   - High level methodology
   - Detail steps and examples

4. **Keys to success**

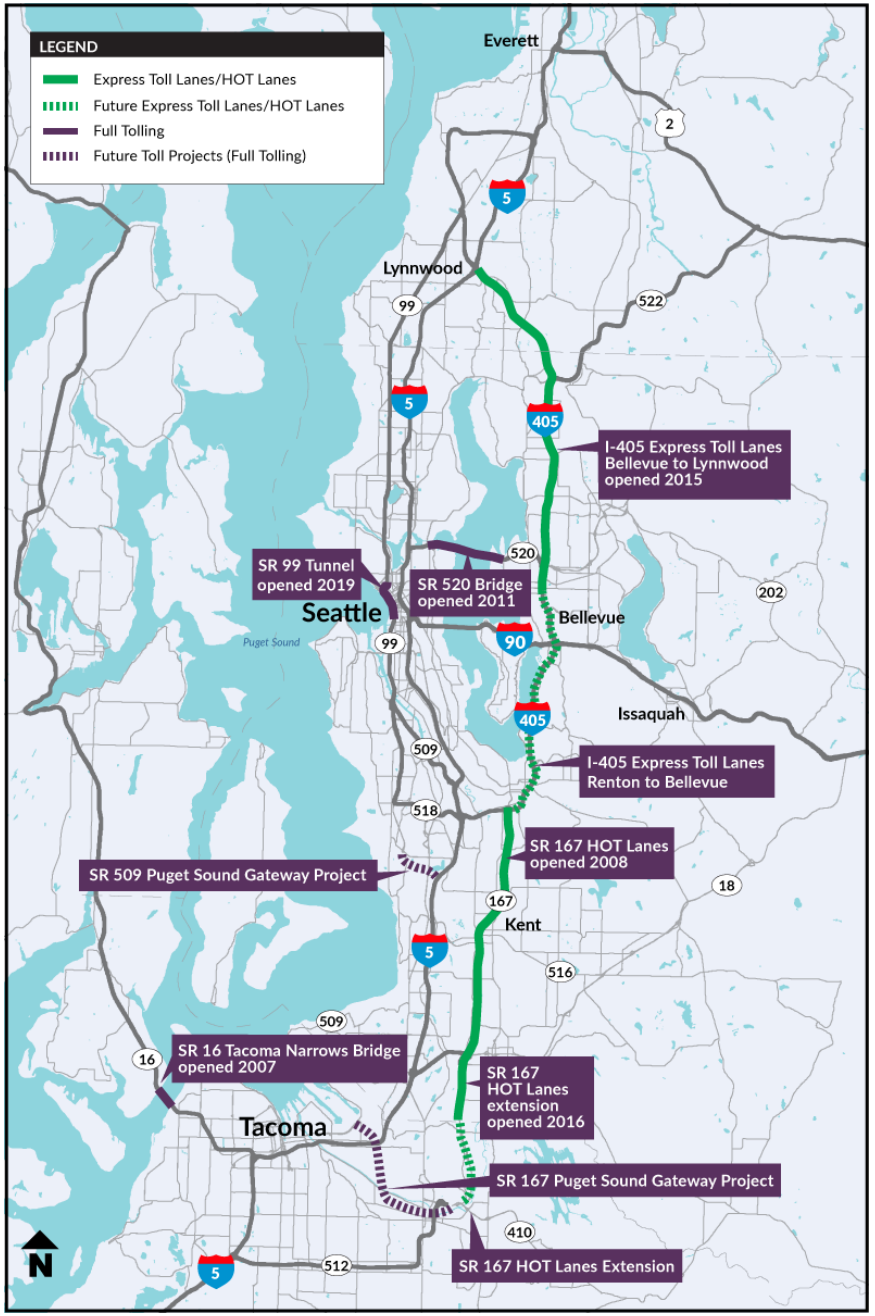
Washington state's tolling program

Current toll facilities:

- SR 16 Tacoma Narrows Bridge
- SR 167 HOT Lanes
- SR 520 Floating Bridge
- I-405 Express Toll Lanes (Bellevue to Lynnwood)
- SR 99 Tunnel

Authorized toll facilities:

- Puget Sound Gateway Project (SR 167, SR 509)
- I-405 Express Toll Lanes (Renton to Bellevue)



How does the process work?

1. Form the team
2. Establish the area to monitor and time period
3. Listen and understand the concerns from partners
4. Select metrics to measure these concerns
5. Determine data needed and identify gaps
6. Fill the gaps
7. Establish a baseline time period
8. Begin collecting and sharing the data
9. Start tolling
10. Keep collecting and sharing data
11. Ongoing operations

1. Form the team

- Identify who needs to be on the team:
  - Engineers, planners, public works directors, data analysts
  - State DOT, cities, county, transit, ports, state patrol, etc.

- Meet with the jurisdictions one at a time and listen.
  - Ask who else should we meet with?

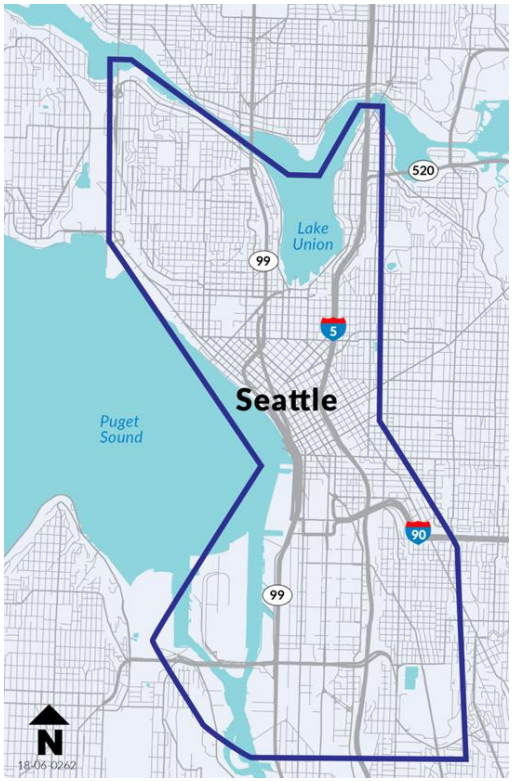
- Bring everyone together for a kick-off meeting

SR 99
- King County
- Port of Seattle
- Seattle DOT
- Sound Transit
- WSDOT

SR 520
- 14 local jurisdictions
- King County
- WSDOT
- Federal Highway Administration
- Washington State Patrol

2. Establish the area and time period

Establish the area and time period. This can be refined later, if need be.



SR 99

SR 520

3. Listen and understand the concerns and needs

A series of meetings to gather information from:

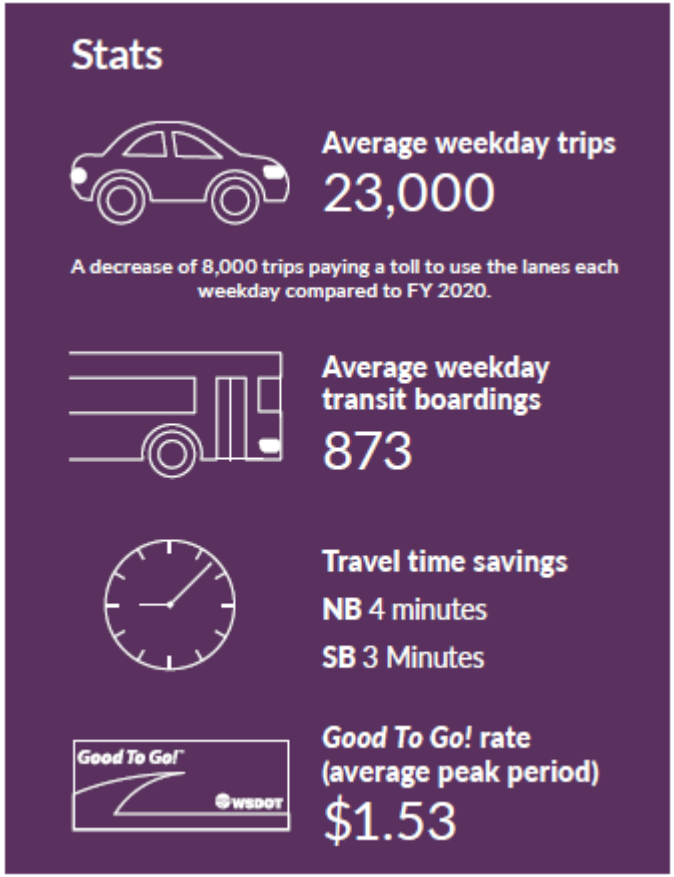
- Local jurisdictions
- State officials
- Federal officials

4. Select metrics to measure these concerns

Evaluation may cover:

- Toll road usage
- Alternate routes
- Transit ridership
- Travel times
- Speeds
- Intersection level of service
- Revenue
- Customer survey
- Comparison to the forecast

Communicate these to anyone that will listen - often!

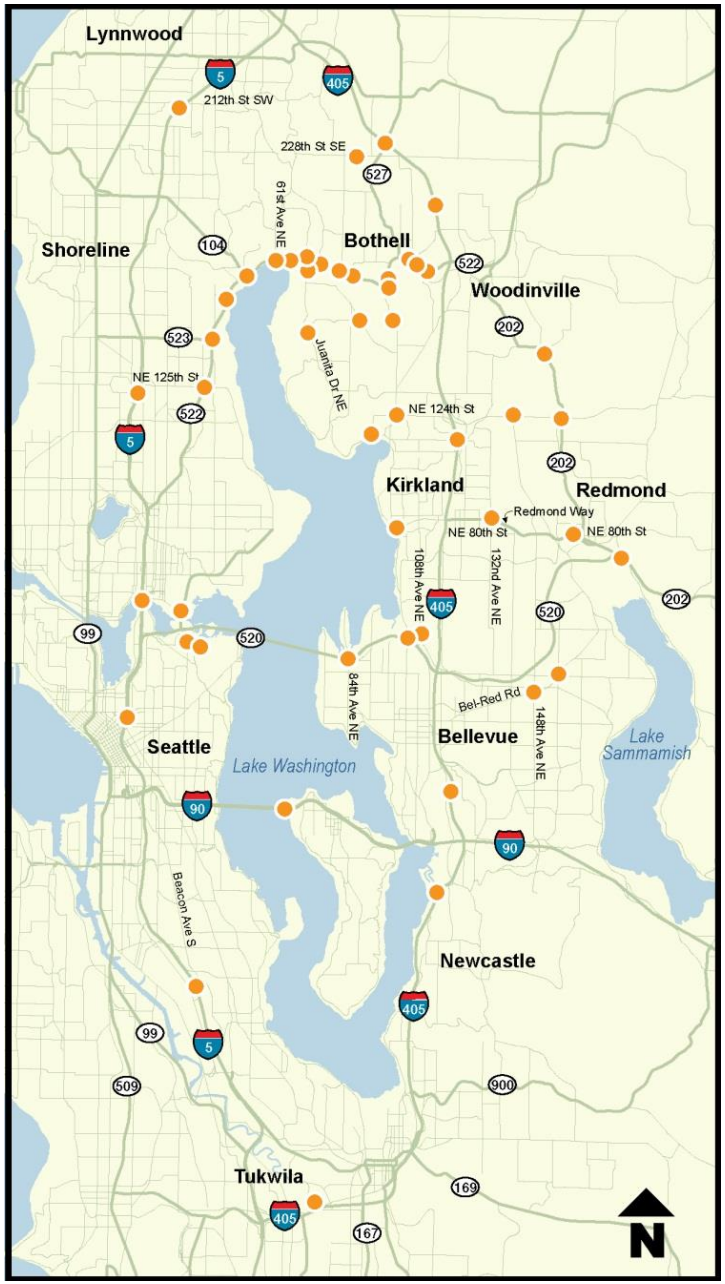


5. Identify data gaps

1. Review
   - What data is currently being collected?
   - What reports are currently being produced?

2. Determine if it is possible to measure everything that is being asked?

3. What are we missing?



SR 520

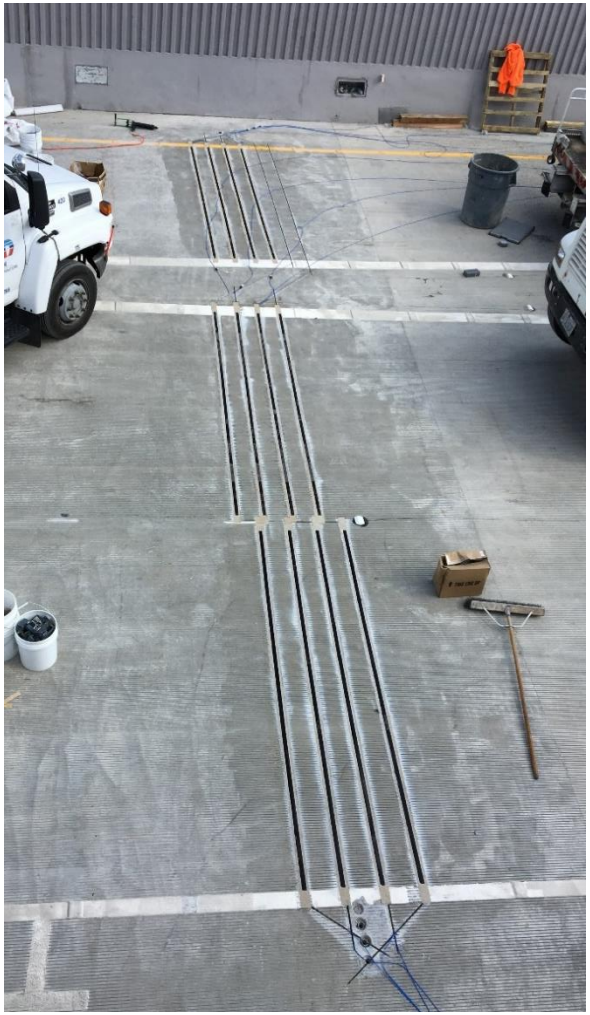
6. Fill the gaps

1. Install equipment
    1. Tubes
    2. Pucks
    3. Loops

2. Manual counts

3. Fund any new equipment

Every project has a budget – select the right collection method – balancing cost, sensitivity



7. Establish a baseline time period

1. Be flexible – this can be a moving target
    - Construction schedules move
    - Seasonal travel
    - External factors (i.e. global pandemic)
    - Weather impacts
    - Transit service adjustments

2. Forecasted data

3. Typically, a year of data is ideal

4. Consider shoulder months (i.e. October and May)
    - Commuting patterns are more typical with school in session
    - No spring or winter or summer breaks
    - Weather is typically not as big of a factor

8. Begin collecting data

1. Make data available to the entire team
   - Place data in central repository
   - Ensure the data is organized and well documented

2. Continue communicating, coordinating and meeting with the team
   - May need to add a location
   - New information may surface
   - Challenges may arise

9. Start tolling

Create reports to share the information

1. Determine what you will be able to report on a daily, weekly, and monthly basis

2. Work with the project team for go-live event planning

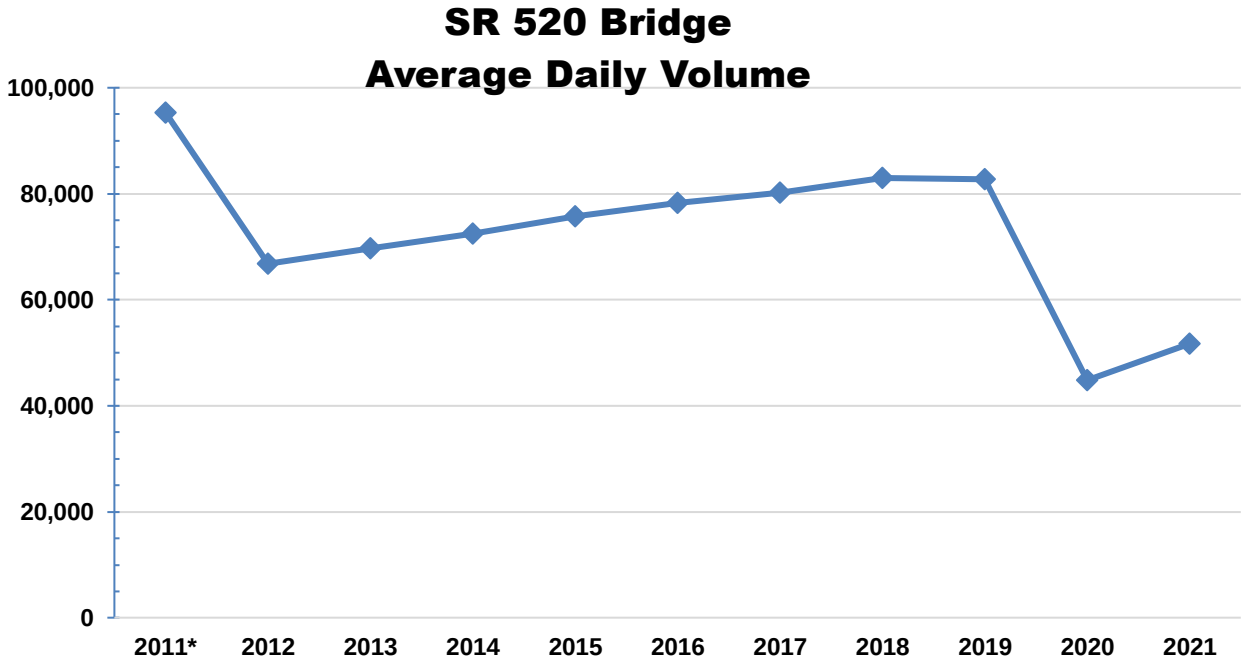
    - Develop schedule for sharing data
        - 7:00 am – Data pulled, gathered, prepared
        - 9:00 am – Data sent to QA
        - 10:00 am – Agency no surprises meeting
        - 10:30 am – Performance team meeting
        - 11:30 am – Media briefing
        - 1:00 pm – Posted to public website

10. Keep collecting and sharing data

1. Meet as frequently as needed

2. Aim to answer all questions and concerns

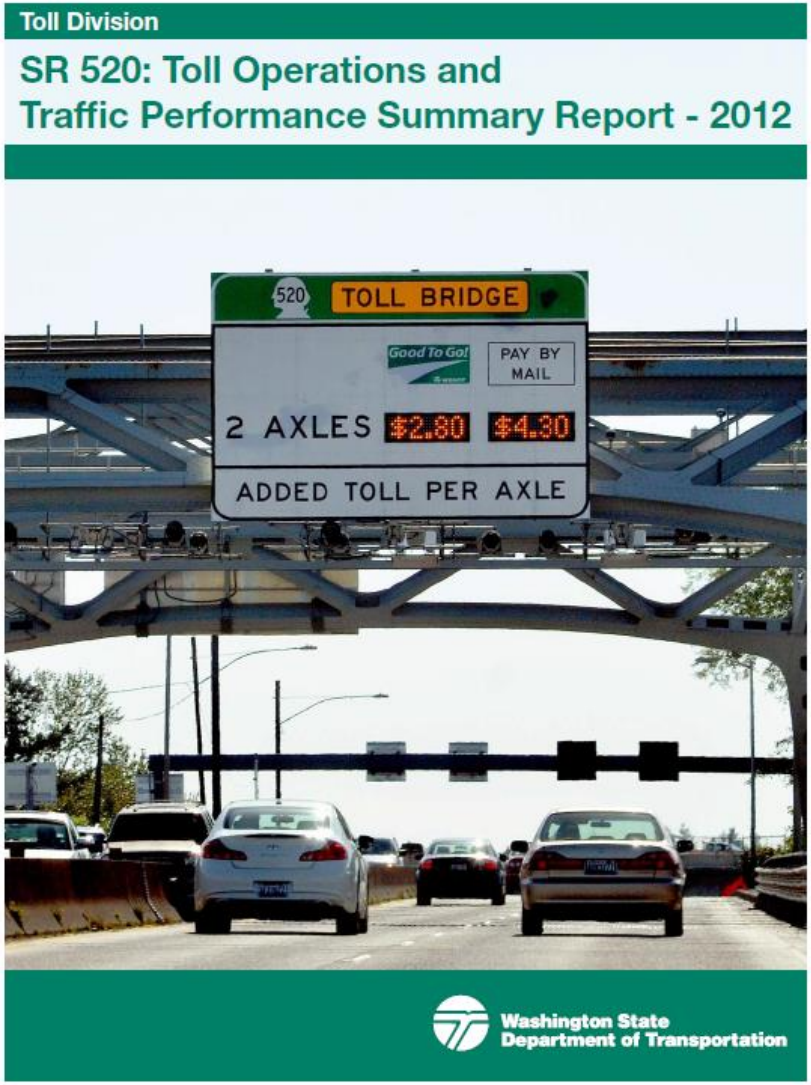
3. There will be new things that people didn't realize they wanted to monitor – try to add them if possible.



*Full day volumes.

11. Operational reports

- Daily reports
- Weekly wrap-ups
- Monthly reports
- Quarterly reports
- 1 year report
- Ongoing reporting



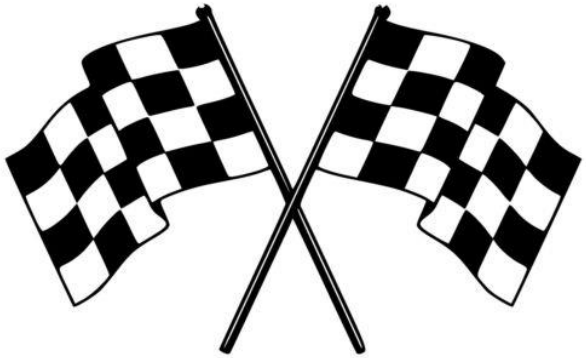
Keys to success

1. **Final report should be unbiased and accurate**
   - Reviewed and approved by the team

2. Collaboration with local jurisdictions who are the local experts and:
   - Have historical traffic counts and other data
   - Can keep their elected officials informed and answer questions

3. **A commitment to transparency throughout the process**

Questions?



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Likely Elements of a Monitoring Plan for Oregon

Purpose of a Monitoring Plan

- **Develop a schedule to routinely monitor and assess changes** in traffic and safety patterns at various time scales (e.g., hourly, weekly, monthly) and by mode
- **Collaborate with partner agencies** to achieve a comprehensive understanding of changes
  - Partnerships needed: cities, counties, regional government (Metro), transit agencies and transportation service providers (TriMet, Ride Connection), community organizations, interest groups (freight, business)

Data Collection

- Identify **data collection milestones** (e.g., X months prior to tolling, Day 1 of tolling, X weeks/months after tolling begins)
- Identify **data collection tools and agency responsible**
- Determine **frequency of data collection** (e.g., hourly, daily, weekly) for each type of data collected (e.g., automobile traffic, transit ridership, pedestrian/bicyclist injuries)
  - Frequency of data collection will vary based on type of data
- Identify geographic **locations for data collection** (key points/segments of interest)

Data Baselining

- Select a **baseline reference period** for pre-tolling reports and one for post-tolling reports
- Identify **seasonal factors** that could impact patterns (e.g., weather, holidays, sports games, school holidays)
- Data collection can be flexible to fit changing needs. However, it could take time to see the results of modifications to data collection.

Reporting

- Determine **frequency of reporting** (e.g., monthly, quarterly, annually, etc.)
  - Frequency of reporting of some metrics will be dependent on availability of comparable data

Metrics for monitoring

- Vehicle speed, volumes, and travel times
  - Separate by road classification
- Transit speed and ridership
- Bicycle ridership
- Accidents, injuries, and fatalities
  - Total
  - Pedestrian and bicyclist
- Intersection/segment performance
  - Volume to capacity ratio
  - Level of service
- Events and incidents

Limitations

- **Data validity** may be affected by construction projects, significant detours elsewhere, major events, maintenance projects, etc.
- ODOT has limited labor and technical ability to collect daily data on non-ODOT facilities – **partnerships will be key**.

Questions for Diversion Subcommittee

- Do you have any input on the monitoring framework presented?
- Are there aspects of a monitoring plan you want to see included that were not discussed today?

Next Steps for Diversion Subcommittee

- **February:**
  - Draft Environmental Assessment Overview
  - Further discussion on monitoring and partnerships
- **March:**
  - Diversion Subcommittee recommendation on monitoring and partnerships
  - Overview of public comments on Draft Environmental Assessment
- **April:** C4 recommendation/input on I-205 monitoring and partnership plan

Please contact us with your questions

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