

Agenda



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Meeting: Transportation Policy Alternatives Committee (TPAC) Workshop
Date: Wednesday, November 9, 2022
Time: 9:00 a.m. to 12:00 p.m.
Place: Virtual meeting held via Zoom
[Connect with Zoom](#)
Passcode: 515676
Phone: 888-475-4499 (Toll Free)

- | | | |
|-------------------|---|--|
| 9:00 a.m. | Call meeting to order and Introductions <ul style="list-style-type: none">• Committee input on creating a Safe Space at TPAC | Chair Kloster |
| 9:10 a.m. | Committee & Public communications on agenda items | |
| 9:15 a.m. | Consideration of TPAC workshop summary, Sept. 14, 2022
Edits/corrections sent to Marie Miller | Chair Kloster |
| 9:20 a.m. | Regional Freight Delay & Commodities Movement Study
Purpose: Provide findings and get feedback on research into regional e-commerce and delivery impacts during COVID; and present findings and get feedback for 2020 freight modeling results in key mobility corridors. | Tim Collins, Metro
Chris Lamm,
Cambridge Systematics |
| 10:50 a.m. | Committee comments on creating a safe space at TPAC | Chair Kloster |
| 10:55 a.m. | Adjournment | Chair Kloster |

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Ogeysiiska takooris la'aanta ee Metro

Metro waxay ixtiraamtaa xuquuqda madaniga. Si aad u heshid macluumaad ku saabsan barnaamijka xuquuqda madaniga ee Metro, ama aad u heshid warqadda ka cabashada takoorista, booqo www.oregonmetro.gov/civilrights. Haddii aad u baahan tahay turjubaan si aad uga qaybqaadatid kullanka dadweyne, wac 503-797-1700 (8 gallinka hore illaa 5 gallinka dambe maalmaha shaqada) shan maalmo shaqo ka hor kullanka si loo tixgaliyo codsashadaada.

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សេចក្តីជូនដំណឹងអំពីការមិនរើសអើងរបស់ Metro

ការគោរពសិទ្ធិពលរដ្ឋរបស់ ១ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលបានពាក្យបណ្តឹងរើសអើងសូមចូលទស្សនាការបោះពុម្ព www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃ ថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

إشعار بعدم التمييز من Metro

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Metro txoj kev ntxaub daim ntauw ceeb toom

Metro tributes cai. Rau cov lus qhia txog Metro txoj cai kev pab, los yog kom sau ib daim ntauw tsis txaus siab, mus saib www.oregonmetro.gov/civilrights. Yog hais tias koj xav tau lus kev pab, hu rau 503-797-1700 (8 teev sawv ntxov txog 5 teev tsaus ntuj weekdays) 5 hnub ua hauj lwm ua ntej ntawm lub rooj sib tham.

2022 TPAC Work Program

As of 10/25/2022

*NOTE: Items in **italics** are tentative; **bold** denotes required items*

November 4, 2022 9:00 am – noon

Comments from the Chair:

- Creating Safe Space at TPAC (Chair Kloster)
- Responses from Wufoo feedback from committee members (Chair Kloster)
- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-5291**
Recommendation to JPACT (Lobeck, 15 min)
- **Metro/ODOT Regional Mobility Policy Update: Draft Policy, Measures and Action Plan for the 2023 RTP** Recommendation to JPACT (Kim Ellis, Metro/ Glen Bolen, ODOT; 45 min)
- RTP Call for Projects Policy Framework and Draft Revenue Forecast (Kim Ellis/Ted Leybold, 75 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

November 9, 2022 – TPAC Workshop

9:00 am – noon

Agenda Items:

- Regional Freight Delay & Commodities Movement Study (Tim Collins, Metro/Chris Lamm, Cambridge Systematics; 90 min)

December 2, 2022 9:00 am – noon

Comments from the Chair:

- Creating Safe Space at TPAC (Chair Kloster)
- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)
- 2022-23 UPWP administrative amendments (Chair Kloster)

Agenda Items:

- **MTIP Formal Amendment 22-******
Recommendation to JPACT (Lobeck, 15 min)
- **RTP Call for Projects Policy Framework and Draft Revenue Forecast**
Recommendation to JPACT (Kim Ellis, Metro; 45 min.)
- MTIP Formal Amendment I-5 Rose Quarter Discussion (Ken Lobeck, TBD; 30 min)
- I-5 Rose Quarter Project Briefing (Megan Channell, ODOT, 30 min)
- Cascadia Corridor Ultra High Speed Ground Transportation: Overview and Update (Ally Holmqvist, Metro; Jennifer Sellers, ODOT; Jason Beloso, WSDOT; 45 min)
- Climate Smart Strategy JPACT/Council Workshop Recap (Kim Ellis, Metro; 30 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

December 21, 2022 – MTAC/TPAC Workshop

9:00 am – noon

WORKSHOP MEETING CANCELLED

2023 TPAC Work Program

As of 10/25/2022

NOTE: Items in italics are tentative; bold denotes required items

All meetings are scheduled from 9am - noon

TPAC meeting January 6, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Creating Safe Space Protocols & Democratic Rules (Chair Kloster)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- **I-5 Rose Quarter Project Briefing**
Recommendation to JPACT (Megan Channell, ODOT; 30 min)
- **MTIP Formal Amendment 22-XXXX I-5 Rose Quarter Project** Recommendation to JPACT (Ken Lobeck, TBD; 30 min)
- **Earthquake Ready Burnside Bridge Resolution 22-****** Recommended to JPACT (Alex Oreschak; 40 min)
- *82nd Avenue Project update (Elizabeth Mros-O'Hara, Metro/ City of Portland TBD; 30 min)*
- Carbon Reduction Program Update (Leybold/Cho/ Ellis, Metro; 60 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

TPAC workshop, January 11, 2023

Agenda Items:

- High Capacity Transit Strategy Update: Corridor Investment Readiness Tiers (Ally Holmqvist, Metro; 45 min)

TPAC meeting, February 3, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- **Carbon Reduction Program** Recommendation to JPACT (Leybold/Cho/Ellis, Metro; 60 min)
- *Recommended Projects for Implementing the 2021 TSMO Strategy (Caleb Winter, Metro/Kate Freitag, ODOT/A.J. O'Connor, TriMet; 45 min)*
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

MTAC/TPAC joint workshop, February 15, 2023

Agenda Items:

TPAC meeting, March 3, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- UPWP Draft Review (John Mermin, 30 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

TPAC workshop, March 8, 2023

Agenda Items:

TPAC meeting, April 7, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- **UPWP Resolution 22-****** Recommendation to JPACT (John Mermin, 20 min)
- 2024-2027 MTIP – Performance Evaluation Results and Public Comment (Cho, 30 min)
- 2023 RTP Draft System Evaluation (Eliot Rose, 30 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

MTAC/TPAC joint workshop, April 19, 2023

Agenda Items:

TPAC meeting, May 5, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)
- 2024-2027 MTIP – Public Comment Report (Grace Cho)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

TPAC workshop, May 10, 2023

Agenda Items:

- High Capacity Transit Strategy Update: Draft Report (Ally Holmqvist, Metro; 30 min)

<p><u>TPAC meeting, June 2, 2023</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX <u>Recommendation to JPACT</u> (Lobeck, 10 min) • 2024-2027 MTIP – Adoption Draft and Public Comment Report (Cho, 30 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>MTAC/TPAC joint workshop, June 21, 2023</u></p> <p>Agenda Items:</p>
<p><u>TPAC meeting, July 7, 2023</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX <u>Recommendation to JPACT</u> (Lobeck, 10 min) • 2024-2027 MTIP – Adoption Draft <u>Recommendation to JPACT</u> (Cho, 30 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>TPAC workshop, July 12, 2023</u></p> <p>Agenda Items:</p>
<p><u>TPAC meeting, August 4, 2023</u> Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX <u>Recommendation to JPACT</u> (Lobeck, 10 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>MTAC/TPAC joint workshop, August 16, 2023</u></p> <p>Agenda Items:</p>

<p><u>TPAC meeting, September 1, 2023</u></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX Recommendation to JPACT (Lobeck, 10 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>TPAC workshop, September 13, 2023</u></p> <p>Agenda Items:</p>
<p><u>TPAC meeting, October 6, 2023</u></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX Recommendation to JPACT (Lobeck, 10 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	
<p><u>TPAC meeting, November 3, 2023</u></p> <p>Comments from the Chair:</p> <ul style="list-style-type: none"> • Committee member updates around the Region (Chair Kloster & all) • Monthly MTIP Amendments Update (Ken Lobeck) • Fatal crashes update (Lake McTighe) <p>Agenda Items:</p> <ul style="list-style-type: none"> • MTIP Formal Amendment 22-XXXX Recommendation to JPACT (Lobeck, 10 min) • Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min) 	<p><u>TPAC workshop, November 8, 2023</u></p> <p>Agenda Items:</p>

TPAC meeting, December 1, 2023

Comments from the Chair:

- Committee member updates around the Region (Chair Kloster & all)
- Monthly MTIP Amendments Update (Ken Lobeck)
- Fatal crashes update (Lake McTighe)

Agenda Items:

- **MTIP Formal Amendment 22-XXXX**
Recommendation to JPACT (Lobeck, 10 min)
- Committee Wufoo reports on Creating a Safe Space at TPAC (Chair Kloster; 5 min)

Parking Lot: Future Topics/Periodic Updates

- Columbia Connects Project
- Best Practices and Data to Support Natural Resources Protection
- Regional Emergency Transportation Routes Update Phase 2 (John Mermin, Metro & Carol Chang, RDPO)
- Cost Increase & Inflation Impacts on Projects
- TV Highway updates
- 82nd Avenue updates
- TSMO updates
- DLCDC Climate Friendly & Equitable Communities Rulemaking (Kim Ellis, Metro)
- Ride Connection Program Report (Julie Wilcke)
- Get There Oregon Program Update (Marne Duke)
- RTO Updates (Dan Kaempff)
- Update on SW Corridor Transit
- UGB updates
- TOD updates
- 2040 Planning Grants updates
- Transit Oriented Development (Andrea Pastor)
- High Speed Rails updates (Ally Holmqvist)

Agenda and schedule information E-mail: marie.miller@oregonmetro.gov or call 503-797-1766.

To check on closure or cancellations during inclement weather please call 503-797-1700.

Meeting minutes



Meeting: **Transportation Policy Alternatives Committee (TPAC) Workshop**
Date/time: Wednesday September 14, 2022 | 9:00 a.m. to 12:00 p.m.
Place: Virtual online meeting via Web/Conference call (Zoom)

Members Attending

Tom Kloster, Chair
Karen Buehrig
Allison Boyd
Lynda David
Eric Hesse
Jaimie Lorenzini
Jay Higgins
Don Odermott
Tara O'Brien
Chris Ford
Karen Williams

Affiliate

Metro
Clackamas County
Multnomah County
SW Washington Regional Transportation Council
City of Portland
City of Happy Valley & Cities of Clackamas County
City of Gresham and Cities of Multnomah County
City of Hillsboro and Cities of Washington County
TriMet
Oregon Department of Transportation
Oregon Department of Environmental Quality

Alternates Attending

Jamie Stasny
Steve Williams
Sarah Paulus
Erin Wardell
Peter Hurley
Mike McCarthy
Neelam Dorman
Mike Coleman

Affiliate

Clackamas County
Clackamas County
Multnomah County
Washington County
City of Portland
City of Tualatin & Cities of Washington County
Oregon Department of Transportation
Port of Portland

Members Excused

Chris Deffebach
Laurie Lebowsky-Young
Lewis Lem
Idris Ibrahim
Jasmine Harris
Katherine Kelly
Rob Klug
Shawn M. Donaghy
Jeremy Borrego
Rich Doenges

Affiliate

Washington County
Washington State Department of Transportation
Port of Portland
Community Member
Federal Highway Administration
City of Vancouver
Clark County
C-Tran System
Federal Transit Administration
Washington Department of Ecology

Guests Attending

Aria Wong
Barbara Fryer

Affiliate

Nelson Nygaard
City of Cornelius

Carl Springer	DKS
Chris Smith	Citizen Activist
Cody Field	City of Tualatin
Cody Meyer	DLCD
Cora Potter	TriMet
Courtney Duke	Portland Bureau of Transportation
Jason Waters	
Jean Senechal-Biggs	City of Beaverton
Jessica Engelmann	City of Beaverton
Jessica Pelz	Washington County
Kevin Chewuk	DKS
Mel Krnjaic Hogg	Portland Bureau of Transportation
Melissa Johnston	City of Troutdale
Michael Dohn	TriMet
Michael Weston	City of King City
Steve Kelley	Washington County
Theresa Carr	Nelson Nygaard
Tom Armstrong	City of Portland
Ty Berry	Portland Bureau of Transportation
Vanessa Vissar	Oregon Department of Transportation

Metro Staff Attending

Kim Ellis, Principal Transportation Planner	Ted Leybold, Resource & Dev. Manager
Lake McTighe, Senior Transportation Planner	Grace Cho, Senior Transportation Planner
John Mermin, Senior Transportation Planner	Eliot Rose, Tech Strategic Planner
Ally Holmqvist, Senior Transportation Planner	Thaya Patton, Principal Researcher & Modeler
Dan Kaempff, Principal Transportation Planner	Ken Lobeck, Funding Programs Lead
Margi Bradway, Dep. Director PD&R	Rachael Lembo, Finance Manager
Matthew Hampton, Senior Transp. Planner	Matt Bihn, Planning Manager
Josh Harwood, Finance Policy Advisor	Marie Miller, TPAC Recorder

Call to Order and Introductions

Chair Kloster called the meeting to order at 9:00 a.m. Introductions were made. Reminders where Zoom features were found online was reviewed. Chair Kloster noted the all attendees would be listed as panelists for full viewing and participation for this workshop meeting. The link for providing ‘safe space’ at the meeting was shared in the chat area.

Committee and Public Communications on Agenda Items

- Chris Ford announced the position for Oregon Department of Transportation Region 1 Program and Funding Manager just posted.
https://oregon.wd5.myworkdayjobs.com/SOR_External_Career_Site/job/Portland--ODOT--Region-1-Headquarters/Business-Operations-Manager-1_REQ-108046
- Tara O’Brien announced the kick-off ceremony for the (Frequent Express) FX2-Division, TriMet’s new high-capacity bus service along Division Street in Southeast Portland.
trimet.org/fx

Consideration of TPAC workshop summary, July 13, 2022 and TPAC workshop summary July 14, 2022

(Chair Kloster) Edits or corrections were asked to be sent to Marie Miller. No edits/corrections were received.

Elements of the 2023 Regional Transportation Plan (RTP) Financial Plan

Revenue forecast (Ted Leybold/Ken Lobeck, Metro, Carl Springer/Kevin Chewuk, DKS)

Ted Leybold began the presentation with the purpose of the RTP financial plan to understand and document the funds available to fund the region's transportation needs. From the 2023 RTP Financial Plan Chapter 5, the first element of the financial plan is understanding how transportation is funded. The second element of the plan is revenue forecast and assumptions.

Revenue forecast elements were discussed which included Federal, State and Regional/local. Funding allocation programs are developed by allocating agencies, and can be single source revenues or mix of Revenues. Through September and October regional and local agencies will be drafting generated revenue forecasts that include funding allocation programs with revenue funding mixes to programs and defining their purpose and restrictions of their funding programs.

The next steps in the process were provided.

- Distribution of revenue forecast worksheets to funding allocation agency staff contacts
- Follow up by DKS Staff on agency revenue and allocation process information
- Draft revenue forecast and funding framework for RTP project solicitation process

Comments from the committee:

- Steve Williams asked if our long-term revenue forecast accounted for potential changes with gas taxes with demands for different fuel sources for transportation shifts. Mr. Leybold noted the source of the estimation for gas tax revenues came from the statewide task force. It was felt we had a good projection on expected revenue from the gas tax, and rather than be speculative on how we'd collect new revenue from electric vehicles, the general assumption when there is a shift a rise or decrease in revenues is not anticipated.
- Don Odermott asked who at Metro should be connected to update the 2018 spreadsheets. Mr. Leybold confirmed that Metro would be sending the worksheets out and staff at DKS will follow up. It was asked what assumptions on regional congestion pricing revenues would be and how these revenues would be placed in programs. Mr. Leybold noted discussions have begun with ODOT. Metro's approach is whatever the assumptions are they must be consistent with our regional pricing policies now being developed. ODOT has data on current projects which will be the basis for assumptions around the region. How the funding is restricted or applied is the subject to be developed.
- Eric Hesse noted the possible revenue sources as the financial plan develops. It was noted that in the work plan (2.3) regional agencies were not listed in conversations with Metro and ODOT. It was suggested that regional engagement and participation be encouraged with revenue generation and policy implication discussions. Mr. Leybold confirmed that during the process more regional engagement will take place. As the nomination of projects begin and known pricing revenues are available to which agency and for what purposes the work around the call for project solicitation will hold regional discussions.

Noting the different RTP policy different than regional pricing policy, it was asked if financial pricing plans with different performance tools was planned. Mr. Leybold noted how the revenues generated are going to be used in the project solicitation process must be consistent with assumptions behind pricing. Kim Ellis added we are still figuring out what we have capacity to do now. Between the November deadline for distribution of revenue forecast worksheets from funding allocation agency staff contacts to January with the call for projects, staff and time is limited for in-depth analysis.

- Peter Hurley noted that with a shift from the gas tax to OR user charge there are a number of jurisdictions around the region that have local gas options. It was asked if the assumption to a local option assumes it will go forward separate from the source. There are major revenue implications for jurisdictions.

Mr. Leybold noted the approach given for statewide collection of revenue with Federal and State gas tax would be the same approach for local jurisdictions. If agencies/jurisdictions wanted to have a conversation about this for their local gas taxes and what this approach toward changes in road user charges mean for revenues, we could have this discussion. It was planned to keep the gas tax assumption in place for the duration of the plan with the assumption that the substitution revenue source would raise the same or similar amounts. Regarding consistency with legislative policies, it was noted that later in Chapter 5 strategies that assigned revenues to funding programs address how we meet assumptions.

Equitable funding research (Lake McTighe, Metro, Theresa Carr/Aria Wong, Nelson Nygaard) Lake McTighe began the presentation with the purpose and overview of the report. The *Draft* Equitable Transportation Funding Research Report developed to support the 2023 RTP focus on equity, provides an inventory of existing, emerging and potential revenue sources for transportation, illuminates how revenue collection and disbursement may contribute to transportation inequities, and provides more transparency and clarity about how the regional transportation system is funded. The report will be used to inform elements of Chapter 5 of the 2023 RTP and future discussions as agencies consider potential new revenues.

Theresa Carr presented information on the *Draft* Equitable Transportation Funding Research Report. Defining Equity and Equitable Transportation Funding was described. The report addresses two key questions: Who does revenue collection burden and benefit the most and how the revenue collection and disbursement can be balanced to address inequities.

Slides were presented on how transportation planning and funding practices disproportionately burden and harm low income households, people of color, and people with disabilities. Slides were presented on types of revenue sources that fund the transportation system.

Aria Wong presented information on key findings and equity challenges with the report. How equity was assessed by revenue source by:

Share: Do lower-income households pay a higher share of their income?

Burden: Does the source provide subsidies or exemptions to alleviate unfair burdens?

Tiered: Is the fee or tax graduated based on the value of the item?

Benefits: Are low-income households and people of color directly benefiting?

Payments: Are unbanked or underbanked individuals unfairly penalized?

Penalties: Do unpaid fines, fees, or taxes trigger penalties and legal repercussions?

Revenue allocation constraints were noted. Funding constraints determine where and how revenue can be spent and are applied at the revenue source, fund, or program level. State and local motor fuel taxes all are subject to the constitutional requirement for exclusive spending on roadways, prohibiting the use of those funds for transit and other uses outside the road right of way. While motor fuel tax funds and other motor vehicle revenue sources are collected by users of roadways, restricting these funds to pay for further roadway improvements raises equity issues. These restrictions encourage further use and funding of roadway networks that require access and ability to use a personally owned vehicle.

Theresa Carr presented information on recommendations to improve Equity outcomes. Transportation needs in the greater Portland region exceed existing revenue capacity. Recommendations were given for the following:

Foundational principles
Fair and equitable public outreach
Equitable revenue collection
Equitable revenue disbursement

Ms. McTighe concluded the presentation with the timeline and next steps with the report. Comments and input on the report are due Sept. 27. These will be reported on at the Oct. 7 TPAC meeting. JPACT will be presented with this report in October and November with RTP Phase 4, Build RTP Investment Strategy coming in 2023.

Comments from the committee:

- Steve Williams noted that motor vehicle registration fees were not mentioned. Where are these accounted for in the revenue flow? Ms. McTighe noted the revenue sources in the report are from the 2018 RTP. Updates are planned for revenue sources with amount forecasts for the 2023 RTP. Providing better distinction between the revenue sources with definitions is a goal with this report and Chapter 5. It was noted main source of local transportation revenue is from transit fees, which are counted as one-time revenue streams. It was agreed to distinguish the local/regional funding.
- Tara O'Brien reported TriMet will send direct edits to make for the report. With work on equity it was suggested to have TriMet, Metro and the consulting team meet for further work on the equity assessment. It appeared the intent was to analyze transportation funding sources from the last RTP. A suggestion for further analysis could come from Chapter 8 as we identify the transportation revenue gap once the project development list and approach to analyze the equity assessment for new revenue sources. Ms. McTighe noted the equity assessment in Appendix A attempted to identify existing and potential revenue sources but several variables exist. Input and considerations for this are welcome. It was noted the recommendations from the presentation also welcome feedback prior to this report at JPACT.
- Mike McCarthy noted maps shown that cross reference poverty levels with access to transit with so many areas in the outskirts of our region, and the relative percent of where the money is coming from and going to in terms of the different modes of travel and how some unintended effects are happening. Lots of nice, new multi-family housing buildings are being developed near transit stations with very little parking by design to encourage transit. What is not talked about are equitable communities and their needs, with limited housing in older neighborhoods with limited transit access for work and necessities. This unintended effect is nicer, newer housing near transit stations are filled with more white, affluent populations and lower income populations are forced farther away from available transit and older housing.
- Barbara Fryer noted this concern as well. The naturally occurring affordable housing here in Cornelius may gentrify due to market forces that we cannot control.
- Eliot Rose noted, folks who are interested in understanding who is occupying new affordable housing units can check out the annual reports that Metro releases on the regional affordable housing bond. It contains information on how different AH developments funded through the bond are intended to different marginalized groups, and how policies and partnerships support making units available to those people as intended.

<https://www.oregonmetro.gov/sites/default/files/2022/07/12/2021%20housing%20bond%20annual%20report.pdf>

- Chris Ford would encourage further engagement with transportation agencies and communities involved. It was asked how we could fund improvements on arterials where people live and work. Noting past transportation bond measure failing with voters, what could be an equitable funding source to invest in the arterials that would pass with voters?

Ms. Carr shared thoughts on possible regional funding measures that would focus on benefits to everyone, invest on complete streets, look at transit and bike infrastructure, intersection improvements, bike trails, pedestrian improvements, and stress benefits of safety. Ms. McTighe added the policy around the funding source that is collected is important. Mr. Ford encouraged thought for the regional funding source that can apply to arterials and encourage voters to pass the measure.

- Karen Buehrig would find it helpful to have the report given to JPACT on what the next steps specifically are. Future Chapter 8 could include information on funding for urban arterials and consideration of equitable funding sources. It was confusing to find what recommendations are specific to related or would influence decisions being made in the RTP. It was not clear if any recommendations were from this report. Or was it to influence intended funding forecasts and potential decisions near-term?

The challenge with the report is that funding sources appear only applicable to jurisdictions or agencies. What is the role of JPACT in the funding collection? Certain funding sources are more influential to the RTP. Are these actions following under the JPACT umbrella, or actions that speak more to individual jurisdictions and the way they collect fees. It was suggested to think about how the report and recommendations could be simplified for JPACT so they understand what will influence their future decisions.

The motor vehicle tax and the gas tax at the state level are being discussed now with road user fees, and the conversation to the road user fee has not been addressed much up to now with direction taken and including equity as part of the discussion. In chapter 5 of the RTP "inadequate funding", 4.61 was suggested for some of this information might fit in and fold in equity funding. Chapter 5 seems to focus on the gas tax. Transit revenues from this report could be folded into Chapter 5.

Ms. McTighe noted the report is more informational, not specific to lead to future policy language. Discussions will lead to influencing policy discussions.

- Tara O'Brien supported and echo Karen's comment on clarifying the role of JPACT and what decisions will need to be made in this RTP vs other recommendations generally.
- Barbara Fryer noted I appreciate the effort. However, we don't want to LOSE already existing naturally occurring affordable housing when we do not have enough regulated affordable housing to house everyone in need.
- Mike McCarthy noted on the funding data, it is pertinent to note that many/most of the Highway/Roads projects have significant Active transportation elements. I recently finished on and just started another multi-million-dollar project that is primarily adding bike-ped facilities, but gets classified here as highway/road because it has a vehicular component.

Climate Smart Strategy Update: Kick-off Discussion (Kim Ellis, Metro) The presentation began with an overview of the Climate Smart Strategy: Background on greenhouse gas emissions targets, policies, and analytical tools. In 2009, the Oregon Legislature set goals to reduce greenhouse gas (GHG) emissions

10 percent below 1990 levels by 2020 and at least 75 percent below 1990 levels by 2050. More recently, Executive Order 20-04 set new emissions reduction goals that call for the State of Oregon to reduce its GHG emissions at least 45 percent below 1990 emissions levels by 2035 and at least 80 percent below 1990 levels by 2050.

Beginning in 2012, the State set GHG reduction targets for Oregon's metropolitan areas to meet and has continued to update these targets since. For the 2023 RTP update, the Portland region's targets are:

- A 20 percent reduction in per capita greenhouse gas emissions by the year 2035
- A 25 percent reduction by 2040
- A 35 percent reduction by 2050
- Targets for the years 2041-2049 steadily increase from 26 to 34 percent in order to maintain progress toward the 2050 target.

The Climate Smart Strategy and related policies were adopted in the 2018 Regional Transportation Plan and will be reviewed and updated in 2023 to ensure ongoing compliance with Oregon's GHG emissions reduction targets. The monitoring report that was included as part of the 2018 RTP concluded that the Portland region was making satisfactory progress implementing the Climate Smart Strategy, but was not able to directly compare the GHG emissions from the RTP to the state-mandated targets because different tools were used to set the targets than were used to analyze performance of the RTP.

The 2023 RTP update will include an update to the Climate Smart Strategy and supporting RTP policies and investments, as needed, to meet the region's state-mandated greenhouse gas emissions reduction targets. The update will consider how best to account for more recent changes to federal and state climate-related policies and updated regional congestion pricing-related policies, and whether the strategies and key assumptions underlying the region's Climate Smart Strategy are being implemented and continue to be realistic.

In support of the 2023 RTP update, Metro staff proposes to use VisionEval to conduct a preliminary analysis of VMT per capita and related GHG reductions under the 2018 RTP (as a next step), and will update TPAC and MTAC on the results at a future meeting, including whether the updated RTP seems likely to meet its VMT per capita and related GHG reduction targets. Staff also proposes to evaluate the draft 2023 RTP project list using VisionEval as part of the system analysis conducted following the Call for Projects in Spring 2023.

Metro staff will continue to analyze progress toward regional VMT per capita and related GHG reduction targets based on feedback from the committee, as well as on the continued development of the 2023 RTP and of federal and State climate-related guidance, and will further engage TPAC, MTAC, MPAC, JPACT and the Metro Council in updating the Climate Smart Strategy. More detailed information can be found on the project page: <https://www.oregonmetro.gov/climate-smart-strategy>

Comments from the committee:

- Tara O'Brien agreed on the strategy exercise emphasis and need to do better with a new look and updating assumptions for climate smart scenarios. Next steps would be determining how and when scenarios will be developed and used in this RTP process. Ms. Ellis agreed, noting a consultant will be on board soon to help support the analysis. Currently gathering feedback on what could be the focus with bigger potential strategies is of interest. Asked what the process with updating the assumptions with the consultant, Ms. Ellis noted this work would begin over the winter and into early 2023. But not before Call for Projects. Ms. O'Brien noted mode shift

was not one of the goals in the RTP but would be interested in keeping updates and changes with assumptions regarding transit and mode shift in mind.

- Mike McCarthy noted it was important to look at what worked and what hasn't worked or had unintended consequences or even negated the benefits of strategies. To what extent have our efforts reduced VMT, or resulted with more people traveling elsewhere with changed travel patterns that increased VMT and emissions? It was noted the importance of how these results play into safety with increased fatal and serious injury crashes. Why are mode splits not seen as expected? Why has walking/biking leveled off?
- Karen Buehrig noted Table 1 in the memo packet with key transportation assumptions that outlines what these are well and included recent trends. As we move forward into these conversations it will be valuable for updating strategies with clear information and data. Under the umbrella of land use and changes made related to middle housing, any implications related to climate smart strategies will be important. More than one land use element that has changed will affect more than one assumption.
- Steve Williams noted that our strategy toward alternative modes has been "if you build it they will come". It was felt this strategy is failing. We are building transit improvements that are not drawing the level of use and benefit as planned. It was suggested we rethink our strategic approach and focus more on methods for results as opposed to just building facilities.
- Jay Higgins agreed. We need to really evaluate what will move people between modes this RTP.
- Eric Hesse noted the importance of continuing conversations on recognized gaps and plateau shifts to develop strategies that move us forward. It was noted there are risks inherent in the transportation system which require coordination between partners and following state orders to make equitable decisions for changes. It was suggested to bring in the pricing work done as part of discussions. Other factors to consider are areas that are not keeping up with the assumptions, TDM not clearly defined, better tool coordination with compliance, and updating assumptions with clear language for future analysis, planning and preparation for policy decisions and investments.
- Mike McCarthy noted that with the "if we build it they will come" applies to the bike/ped infrastructure. For vehicular capacity, our region has edged to "if we don't build it, they won't come", but there are a lot of things we haven't built, and they still come. We need to figure out what works and what doesn't.
- Chris Ford noted the transit travel impacts not just peak periods. Considerations for discussion include costs, time, lack of viable transit options, concern on land use and urban edges with the need to update the 2040 Growth Concept and plan communities for viable access and safe transit. It is hoped that strategies with housing, transit infrastructure, pricing, land use and other factors all contribute to making our climate goals achievable and directed to drive political agreement as essential.
- Don Odermott noted that the metrics over the years with climate smart is moving to the VMT. One of the indicators urged to consider is vehicle hours of operation which often takes us outside the regional travel model boundary. If serious about achieving our objectives, we need to get serious about developing a transit system that is as robust as what inner city Portland has.
- Barbara Fryer noted this is the key to getting residents in my jurisdiction out of their cars as well. Our Mayor has calculated that because we only have one bus route, we would need at least 125 busses running on TVHWY to get all our residents to use transit to go to work everyday. Alternatively - we need additional land added to the UGB for industrial development so that residents can walk or bike to work and stay within their chosen community.

- Tara O'Brien agreed that as part of the climate smart update the focus on how we most effectively support mode shift will be beneficial. Partners that help support ridership and transit not just pricing but other strategies and remove barriers to shifting modes is important. As updating assumptions and calling out the intent to reduce VMT is also. TriMet will keep Metro informed on most updated plans with changes to service routes and optimizing services.
- Peter Hurley found table 1 very helpful. The assumptions listed seemed very optimistic and needed to be revised. Conversations are needed around helping to identify the VMT gap which is a significant gap from 2018. Building the scenarios to help us get there can be identified from the various factors listed, starting with realistic assumptions around transit, TDM, and reconsidering assumptions around tools will be a significant step for being able to inform the call for projects and the needs we have.
- Barbara Fryer asked that the committee think of the region. All the region is not treated the same in terms of transit service and availability for jobs and opportunities. When Cornelius and Forest Grove are combined 80% of residents need to travel 29 miles each day for work, with most driving their car because there is only 1 bus route. To paint us all with the same brush is unjust. We can't achieve the same things as the City of Portland achieves which is not equitable. Ms. Ellis noted the climate smart strategies earlier developed found common themes, one of which was recognizing different places in the region need different strategies. We continue to allow for space for everyone to do what they can do and support all the region.

Committee comments on creating a safe space at TPAC

One comment received: *In terms of an equitable meeting, TPAC meetings and workshops tend to include very large material packets. It feels appropriate for Metro to offer to print and mail packets upon request to community members who may not have the technology to read online.*

This comment and others will be discussed at the next TPAC meeting.

Adjournment

There being no further business, workshop meeting was adjourned by Chair Kloster at 11:38 a.m.

Respectfully submitted,

Marie Miller, TPAC Recorder

Attachments to the Public Record, TPAC workshop meeting, September 14, 2022

Item	DOCUMENT TYPE	DOCUMENT DATE	DOCUMENT DESCRIPTION	DOCUMENT No.
1	Agenda	9/14/2022	9/14/2022 TPAC Workshop Agenda	091422T-01
2	TPAC Work Program	9/7/2022	TPAC Work Program as of 9/7/2022	091422T-02
3	Minutes	7/13/2022	Minutes for TPAC workshop, 7/13/2022	091422T-03
4	Minutes	7/14/2022	Minutes for TPAC workshop, 7/14/2022	091422T-04
5	Memo	9/7/2022	TO: TPAC and interested parties From: Ted Leybold & Lake McTighe RE: Elements of the 2023 Regional Transportation Plan (RTP) Financial Plan: Revenue Forecast and Equitable Funding Research	091422T-05
6	Attachment 1	N/A	Attachment 1: 2023 RTP Update Revenue Forecast and Costs Scope of Work	091422T-06
7	Attachment 2	N/A	Attachment 2: List of agency contacts for RTP Financial Plan	091422T-07
8	Attachment 3	September 7, 2022	Attachment 3: Equitable Transportation Funding Research Report	091422T-08
9	Handout	September 2022	Climate Smart Strategy: Background on greenhouse gas emissions targets, policies, and analytical tools	091422T-09
10	Presentation	9/14/2022	Development of the 2023 Regional Transportation Plan (RTP) Financial Plan	091422T-10
11	Presentation	9/14/2022	Equitable Transportation Funding	091422T-11
12	Presentation	9/14/2022	Climate Smart Strategy Update – Kick-Off	091422T-12

Memo



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Date: Wednesday, November 1, 2022
To: TPAC members and alternates
From: Tim Collins, Senior Transportation Planner (Regional Freight Planner)
Subject: Commodities Movement Study - 2020 freight model updated results for the November 9th TPAC workshop

This memo provides background material to review prior to the November 9th TPAC workshop for the Commodities Movement Study. The PowerPoint presentation to be shared during the workshop will provide an overview and key findings of research into regional e-commerce and delivery impacts during COVID. The second part of the presentation will provide an updated look at the 2020 regional freight model results on commodity types and where commodities are moving on the regional freight network.

The regional freight model is a relatively new tool that allows us to estimate where and how commodities (by category) are moving around the Portland region. *One purpose of the study is to evaluate the level and value of commodity movement on the regional freight network, and one of the primary objectives is to identify which mobility corridors are carrying the highest volumes and highest values of commodities.* Looking at which commodities are dominant in a particular corridor, by their dollar value, will help us understand both the dollar value of those commodities compared to other categories of commodities, and how those freight corridors play a key role in moving those commodities.

The commodities are grouped into these 10 categories: 1) Agriculture; 2) Chemicals and Fertilizers; 3) Coal, Oil, Waste, energy sector commodities; 4) Electronics (including computer microchips); 5) Food; 6) Gravel, Sand, Rock products; 7) Machinery; 8) Misc. manufactured goods; 9) Motor Vehicles and other commercial vehicles; and 10) Wood, Paper, etc. The model looks at commodities moved by trucks on the regional freight network. The dollar values and tonnage in this memo have increased from the memo sent to MTAC and TPAC in June of this year. The new values and tonnage now take into account the commodities on freight trucks that are traveling through the region (external to external truck trips). The table below shows 2020 model outputs for the locations on the freight system with the highest daily values (in dollars), and the highest daily tonnage for all 10 categories of goods ('All Goods').

2020 Regional Commodities for largest daily amounts (in \$s and tons) of All Goods category			
Location of Freight Flows	Direction	Daily \$ (in Millions)	Daily Tons
I-5 north of OR 217	Northbound	94.1	69,100
I-5 north of OR 217	Southbound	131.0	78,200
I-5 south of I-205	Northbound	93.5	66,500
I-5 south of I-205	Southbound	126.9	74,600
I-5 at NE Fremont	Northbound	82.2	58,700
I-5 at NE Fremont	Southbound	88.5	43,600
I-5 at SW Multnomah Blvd.	Northbound	94.8	69,200
I-5 at SW Multnomah Blvd.	Southbound	129.2	73,000
I-5 north of Hwy. 99W	Northbound	94.6	69,100
I-5 north of Hwy. 99W	Southbound	130.7	75,000

2020 Regional Commodities for largest daily amounts (in \$s and tons) of All Goods category			
Location of Freight Flows	Direction	Daily \$ (in Millions)	Daily Tons
I-84 west of NE 122nd	Eastbound	90.3	50,100
I-84 west of NE 122nd	Westbound	85.1	49,500
I-84 at Wood Village	Eastbound	73.3	35,000
I-84 at Wood Village	Westbound	66.3	36,100
I-205 south of Sandy Blvd.	Northbound	36.8	24,400
I-205 south of Sandy Blvd.	Southbound	49.5	21,800
I-205 north of SE Division	Northbound	33.3	24,800
I-205 north of SE Division	Southbound	34.0	24,400
I-205 north of SE Sunnyside	Northbound	33.1	23,900
I-205 north of SE Sunnyside	Southbound	31.8	22,100
US 26 (Sunset Hwy.) at Vista Ridge Tunnel	Eastbound	19.4	15,400
US 26 (Sunset Hwy.) at Vista Ridge Tunnel	Westbound	16.5	8,900
US 26 (Sunset Hwy.) east of OR 217	Eastbound	19.3	15,400
US 26 (Sunset Hwy.) east of OR 217	Westbound	16.3	8,700
OR30 west of I-405	Northbound	22.4	17,700
OR30 west of I-405	Southbound	39.6	33,100

The results in the table above for 'All Goods' shows that major interstate highways in the region are carrying both the largest amount of daily tons of commodities, and the largest daily dollar value of goods. However, OR30 southbound (west of I-405) has more tonnage of goods than I-205 or US 26, at any location in the table (in either direction). OR30 southbound has a larger dollar value of goods than I-205 at all locations in the table (in either direction), except Sandy Blvd southbound. OR30 (west of I-405) in either direction also has a larger dollar value of goods than US 26 (Sunset Hwy.) at all locations in the table (in either direction). The OR30 southbound west of I-405 stands out for both tonnage and dollar value compared to other state highways.

Two of the ten categories of commodity types are rather easy to identify, are found in most households, and will be part of the commodities covered in the SAC meeting presentation. The first is the 'Electronics' category which includes computer components like microchips, and all electronics equipment and parts. The table below shows 2020 model outputs for the locations on the freight system with the highest daily values (in dollars) for the Electronics category.

2020 Regional Commodities for largest daily amounts (in \$s) for the Electronics category		
Location of Freight Flows	Direction	Daily \$ (in Millions)
I-5 south of I-205	Northbound	\$10.5
I-5 south of I-205	Southbound	\$18.5

2020 Regional Commodities for largest daily amounts (in \$s) for the Electronics category		
Location of Freight Flows	Direction	Daily \$ (in Millions)
I-5 north of OR 217	Northbound	\$12.7
I-5 north of OR 217	Southbound	\$20.2
I-5 at NE Fremont	Northbound	\$13.7
I-5 at NE Fremont	Southbound	\$11.6
I-5 at Jantzen Beach	Northbound	\$10.5
I-5 at Jantzen Beach	Southbound	\$10.3
I-5 north of Hwy. 99W	Northbound	\$15.0
I-5 north of Hwy. 99W	Southbound	\$20.0
I-84 at NE Grand	Eastbound	\$12.9
I-84 at NE Grand	Westbound	\$17.2
I-84 west of NE 122nd	Eastbound	\$19.4
I-84 west of NE 122nd	Westbound	\$21.1
I-84 at Wood Village	Eastbound	\$15.1
I-84 at Wood Village	Westbound	\$14.8
I-205 south of Sandy Blvd.	Northbound	\$7.4
I-205 south of Sandy Blvd.	Southbound	\$8.3
I-205 north of SE Division	Northbound	\$6.0
I-205 north of SE Division	Southbound	\$4.7
I-205 north of SE Sunnyside	Northbound	\$5.8
I-205 north of SE Sunnyside	Southbound	\$4.6
US 26 (Sunset Hwy.) at Vista Ridge Tunnel	Eastbound	\$8.2
US 26 (Sunset Hwy.) at Vista Ridge Tunnel	Westbound	\$7.3
US 26 (Sunset Hwy.) east of OR 217	Eastbound	\$8.2
US 26 (Sunset Hwy.) east of OR 217	Westbound	\$7.3
US 26 (Sunset Hwy.) at Cedar Hills Blvd.	Eastbound	\$8.5
US 26 (Sunset Hwy.) at Cedar Hills Blvd.	Westbound	\$7.8
OR30 west of I-405	Northbound	\$4.9
OR30 west of I-405	Southbound	\$5.5

The results in the table above for 'Electronics' shows that major interstate highways in the region are carrying the largest daily dollar value of electronics. However, the Sunset Highway (US 26) has a dominant role in moving electronics. This should be expected, since it is the major freeway serving the computer and electronics hub in the North Hillsboro Industrial Area. The Sunset Highway carries the same or more daily dollar value for electronics by direction (\$7.3 to \$8.5 million) than locations along I-205 by direction, and has nearly as much daily dollar values by direction for electronics compared to I-5 at Jantzen Beach.

The second category is 'Motor Vehicle' which includes passenger cars, trucks, and commercial vehicles. The majority of goods in this category are passenger cars and trucks traveling throughout our region and that are imported and exported in our region at the marine terminals in Portland

(Terminals 4 and 6). The following table shows 2020 model outputs for the locations on the freight system with the highest daily values (in dollars) for the Motor Vehicle category.

2020 Regional Commodities for largest daily amounts (in \$s) for the Motor Vehicle category		
Location of Freight Flows	Direction	Daily \$ (in Millions)
I-5 south of I-205	Northbound	\$11.5
I-5 south of I-205	Southbound	\$28.0
I-5 north of OR 217	Northbound	\$10.4
I-5 north of OR 217	Southbound	\$27.5
I-5 at NE Fremont	Northbound	\$9.4
I-5 at NE Fremont	Southbound	\$17.5
I-5 at Jantzen Beach	Northbound	\$7.1
I-5 at Jantzen Beach	Southbound	\$7.0
I-84 at NE Grand	Eastbound	\$5.6
I-84 at NE Grand	Westbound	\$5.2
I-84 west of NE 122nd	Eastbound	\$18.4
I-84 west of NE 122nd	Westbound	\$11.7
I-84 at Wood Village	Eastbound	\$19.4
I-84 at Wood Village	Westbound	\$10.2
I-205 north of SE Sunnyside	Northbound	\$4.6
I-205 north of SE Sunnyside	Southbound	\$4.3
I-205 north of SE Division	Northbound	\$4.0
I-205 north of SE Division	Southbound	\$4.5
Marine Dr. west of I-5 interchange	Eastbound	\$4.6
Marine Dr. west of I-5 interchange	Westbound	\$6.9
Columbia Blvd. at Chimney Park	Eastbound	\$9.5
Columbia Blvd. at Chimney Park	Westbound	\$2.5
N. Lombard St. at Terminal 4	Northbound	\$1.2
N. Lombard St. at Terminal 4	Southbound	\$9.9

The results in the table above for 'Motor Vehicle' generally shows that major interstate highways in the region are carrying the largest daily dollar value of the motor vehicle category. However, N. Lombard southbound at Terminal 4 has a daily value of \$9.9 million for the motor vehicle category. Columbia Blvd. eastbound at Chimney Park (east of Burgard) has a daily value of \$9.5 million for the motor vehicle category. Primarily this shows the daily dollar value of imported cars coming out of both the marine terminals (4 and 6) that receive imported cars that are destined for locations both inside and outside the region. These daily dollar values on Columbia Blvd. (eastbound) and N. Lombard (southbound) for motor vehicles are greater than daily values on I-5 at Jantzen Beach (about \$7 million each direction), and on I-205 north of Division Street and north of Sunnyside Road (\$4 to \$4.6 million each direction). For the motor vehicle category at the freeway exit points in the region, it is notable that the daily value of motor vehicles leaving the region (or headed to

Wilsonville) on I-5 southbound south of I-205 is \$28 million; and the daily value of motor vehicles leaving the region on I-84 eastbound at Wood Village is \$19.4 million. While the daily value of motor vehicles leaving the region on I-5 northbound at Jantzen Beach is only \$7.1 million.

The PowerPoint presentation at the TPAC workshop on November 9th will include some screenshots of the 2020 model results that will show key commodity groups on the freight network in five of the mobility corridors. The tables in this memo are intended as supplemental information that will provide additional context for a robust conversation about the modeled results and to highlight the importance of the commodities that move by truck throughout our region. We look forward to our discussion at the meeting.

cc: Chris Lamm, Principal Project Manager, Cambridge Systematics
Garth Appanaitis PE, Planning Group Manager, DKS Associates
Joe Broach, PhD, Senior Researcher & Modeler, Metro

Materials following this page were distributed at the meeting.

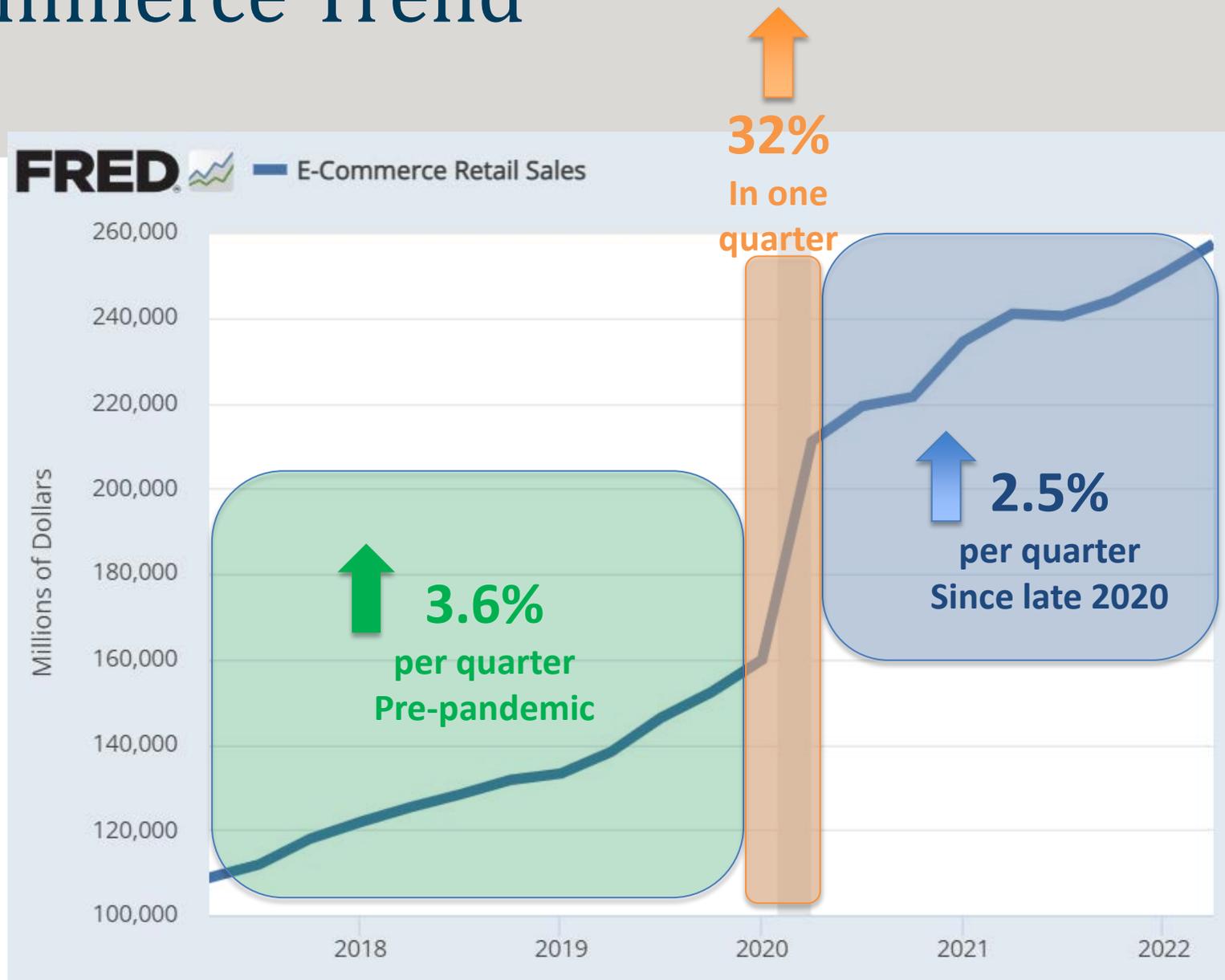
Localized E-Commerce Impacts Shaped by Regional and National Trends

- National Trends:
 - Increased e-commerce sales/share
 - Cooling in 2022
 - E-commerce requires 3x industrial square footage
- Regional Trends:
 - Consumer spending outpaced nation in 2021
 - 2022 “cooling” more than US total



National E-Commerce Trend

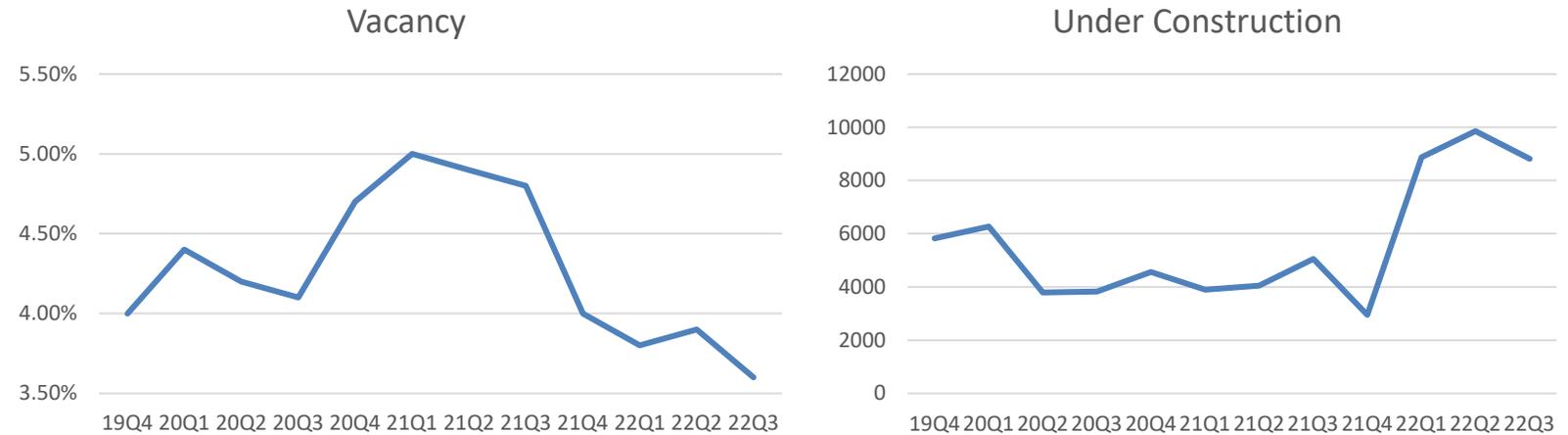
- Tremendous spike in e-commerce demand in 2020
- Growth rate has **slowed** since, but sales and deliveries continue to increase
- What effects has the pandemic had on e-commerce in this state and region?



Distribution Space Trends

- E-commerce requires 3x logistics space of brick-and-mortar retail*
- Every \$1 billion in e-commerce retail sales requires 1 million square feet of distribution space**

Portland-Vancouver, OR-WA Market Area, includes Salem



Source: Colliers Portland Market Reports, 2019-2022

*Pro Logis, 2020

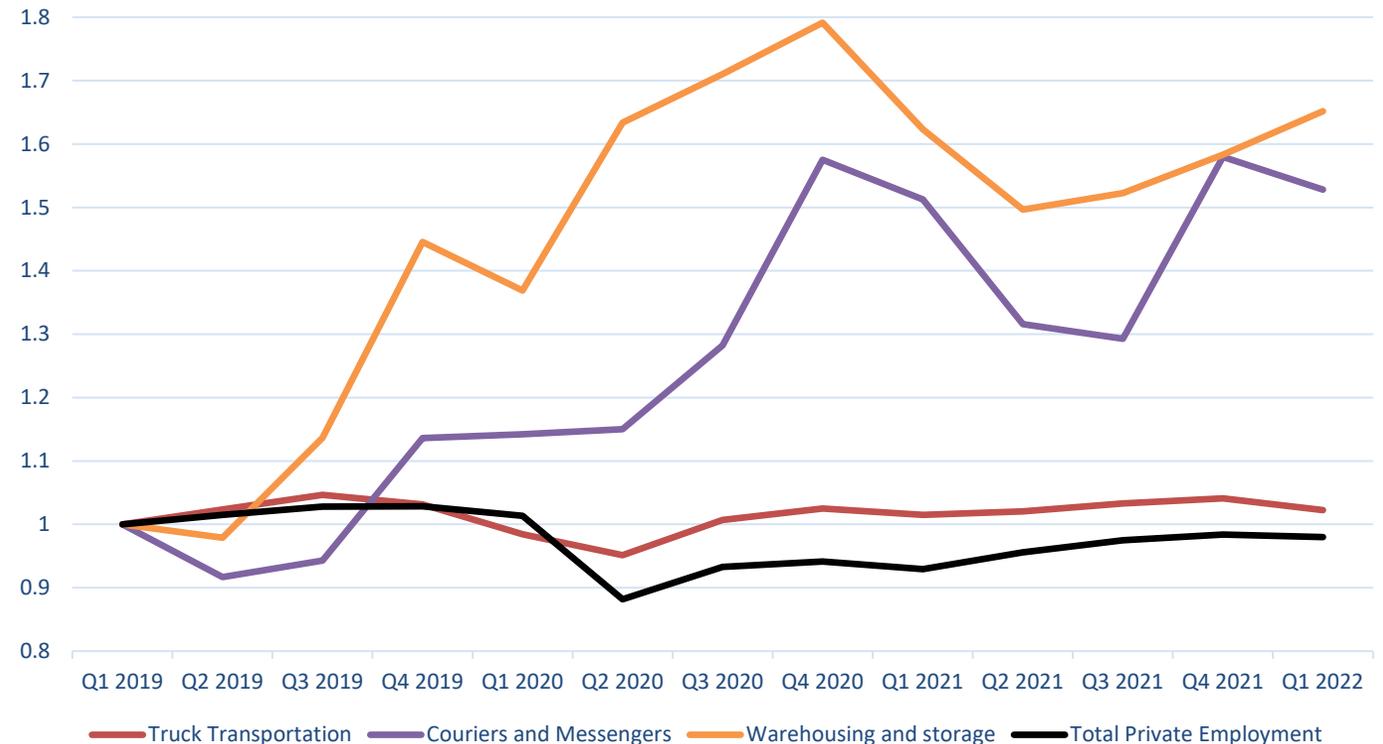
**CBRE, 2021

Employment Trends in Key “E-Commerce Sectors”

- Employment in key e-commerce sectors boomed during 2020-2021

	Q1 2019	Q1 2022	Change	% Change
Truck Transportation	8,992	9,192	200	2.2%
Couriers and Messengers	7,043	10,763	3,720	52.8%
Warehousing and Storage	7,749	12,799	5,050	65.2%
Total Private Employment	906,575	888,565	-18,010	-2.0%

Employment in Key Sectors, indexed to 2019 Q1
Quarterly, 2019 Q1 through 2022 Q1



Interviews to Supplement Analysis

- What we want to learn:
 - How has the volume of business changed since early 2020? How much of that change is attributable to e-commerce?
 - How has business responded to that change in demand (hiring, new equipment, new/expanded facilities, etc.)?
 - Are supply chain reliability, economic uncertainty, and/or other factors affecting operation? How?
 - What challenges are experienced while transporting and/or delivering e-commerce shipments in the Portland region? What effects do these challenges have on business?
 - Have these challenges been improved, worsened, or unchanged since the onset of the Pandemic?

Summary of Impacts in the Region

- Rise of E-Commerce means more:
 - Industrial real estate development
 - Deliveries
 - Jobs and wages in key sectors
- Unknown:
 - Net traffic and environmental impacts
- Key Interview Findings:
 - Spike in e-commerce business
 - Traffic was light, but by late 2021, it was “back to normal and then some”
 - Challenges delivering in urban neighborhoods (congestion, loading, complete streets, etc.)
 - Consumer purchase habits = strain on logistics + carbon footprint

Appendix

Brick-and-Mortar Retail Sales

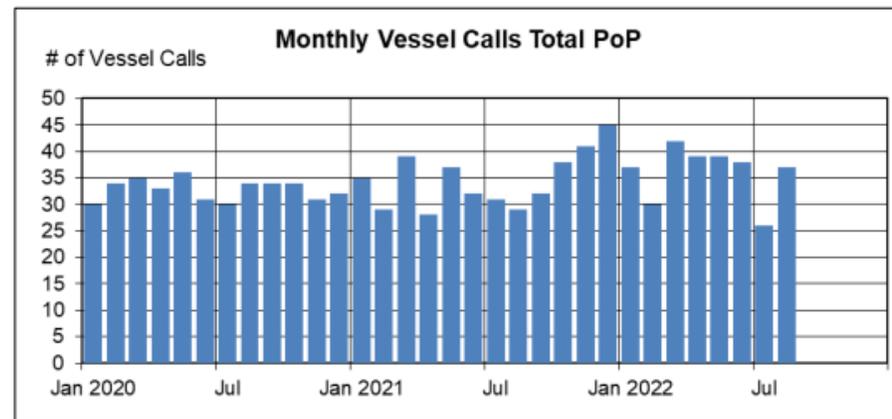
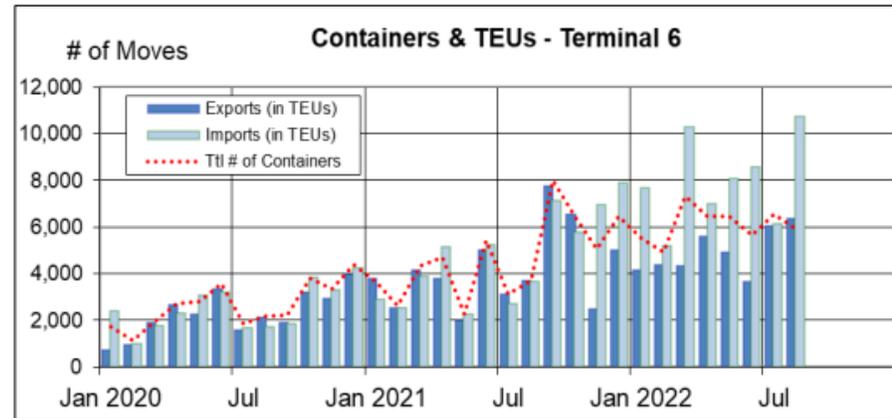
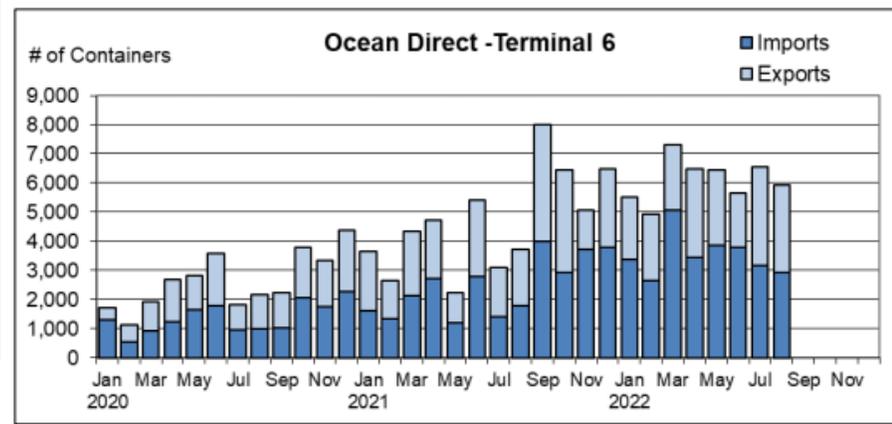
- Retail sales are still growing nationally and in **Oregon**, but rate of growth has slowed

Year-over-Year Change in Retail Sales, by Month, Jan 2019-Jun 2022, US and **Oregon**



Port Traffic Trend

- Port of Portland:
 - Container service resumed in 2020
 - Container volumes have increased 50% between early 2021-mid 2022



Source: Port of Portland Executive Director's Report, September 2022

E-Commerce Sectors are a growing part of the Economy of the Region

		Q1 2019	Q4 2020	Q1 2022
Employment	Number	23,784	34,194	32,754
	Percent of Region's Total	2.6%	4.0%	3.7%
Wages	Number	\$266.9M	\$444.0M	\$416.3M
	Percent of Region's Total	1.8%	2.8%	2.5%

Interview Targets

Company	Name	Title	Location
Amazon	Ellie Anne Booth	Sr. Manager, Public Policy	Lake Oswego, OR
Amazon	Kara Ruecker	Public Policy, Western Region	Portland, OR
FedEx	Jonathan Sabin	Engineer	Portland, OR
UPS	Justin Schantz	Operations and Logistics Manager	Portland, OR metro region
UPS	Kristal Fiser	Director State Govt Affairs (AK, ID, MT, OR, WA, WY)	Seattle, WA
Safeway - Albertson's	Daryl Woods	Director of Distribution	Vancouver, WA
Fred Meyer	Rob Freeman	Transportation Manager	Portland, OR
Fred Meyer	Scott Craft	Transportation Manager	Clackamas, OR
Estes	Steven Smitherman	Director of Operations Planning (national)	Richmond, VA
Saia	Joe Hills	Operations Manager	Portland, OR
Old Dominion	Jeff Lorenzini	Manager of Sales and Service	Portland, OR

Completed Interview

Successful Strategies

- Successful examples to improve efficiency:
 - How do we define “success” and “efficiency”?
 - What do we want these strategies to accomplish?
- Potential Strategy Types:
 - Curb management
 - Zoning (industrial and/or residential/mixed use buildings)
 - Focus on public sector roles/responsibilities



Metro

Regional Freight Delay and Commodities Movement Study

2020 modeling results on commodities

TPAC Workshop, November 9, 2022

Tim Collins, Metro

Main Study Objectives

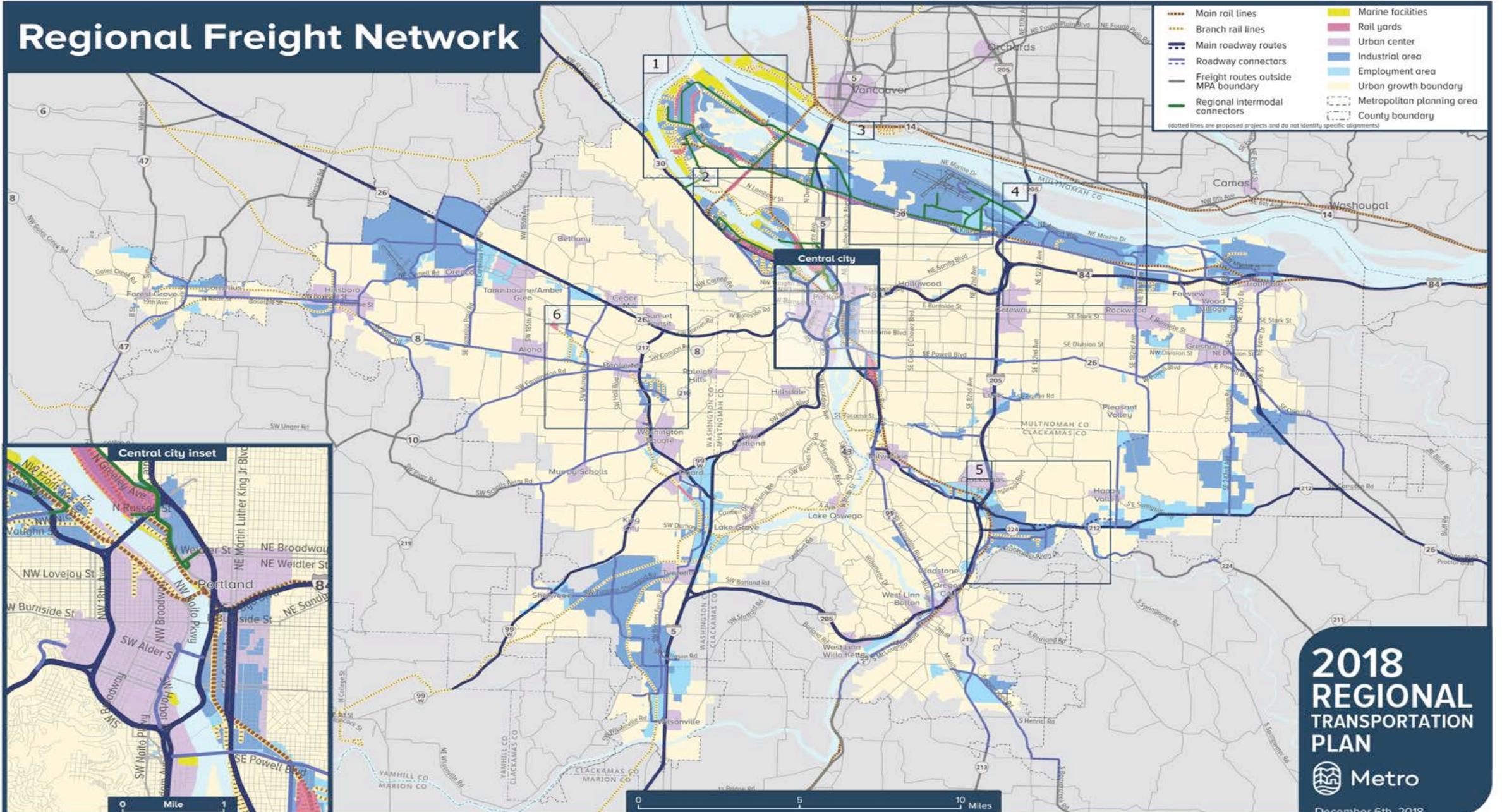
- Identify which mobility corridors are carrying the highest volumes and highest values of commodities
- Explore how increases in e-commerce are impacting the transportation system and regional economy
- Examine how congestion and unreliability on the regional transportation system impacts commodity movement
- Make recommendations for future regional policy and planning efforts to improve commodity movement; while addressing equity, safety and climate when applicable

Let's talk freight movement



Freight Network from Regional Freight Strategy

Regional Freight Network

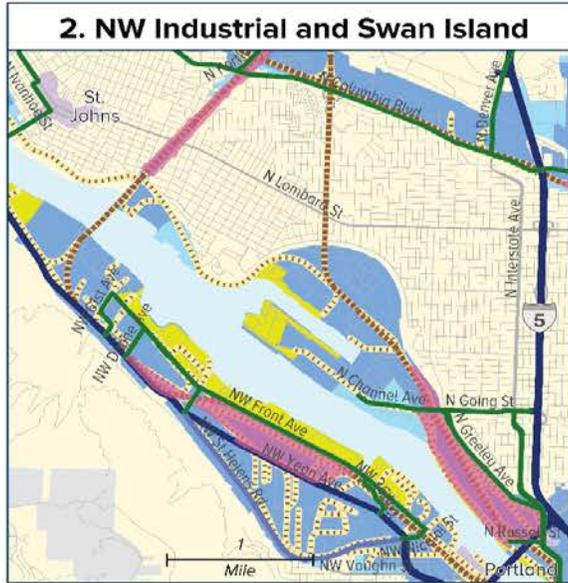
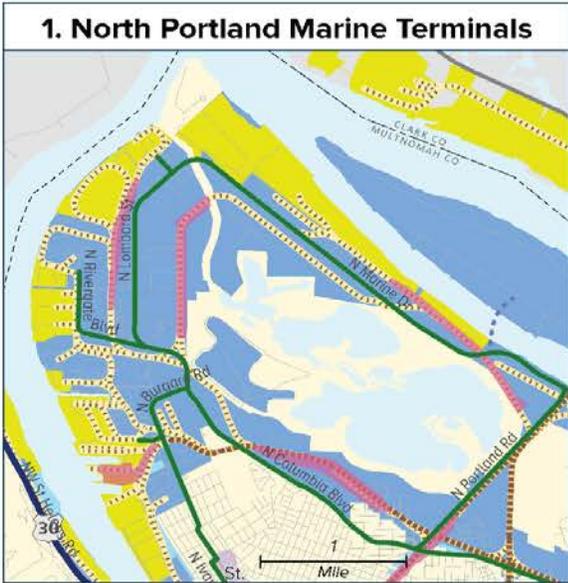


**2018
REGIONAL
TRANSPORTATION
PLAN**



December 6th, 2018

Freight Network from Regional Freight Strategy

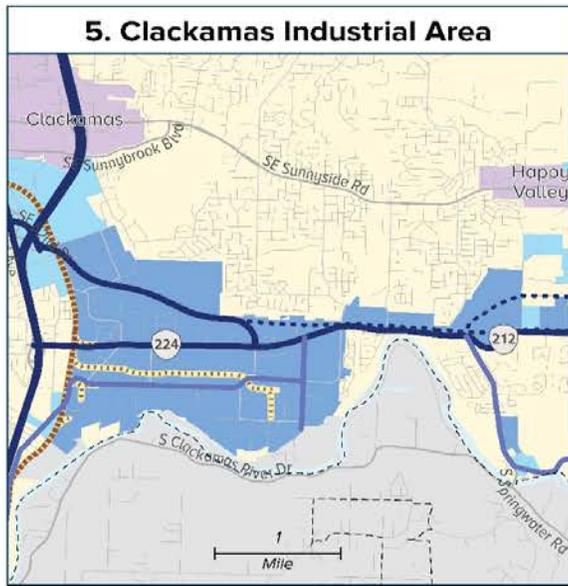


Legend

(dotted lines are proposed projects and do not identify specific alignments)

- Main rail lines
- Branch rail lines
- Main roadway routes
- Roadway connectors
- Freight routes outside MPA boundary
- Regional intermodal connectors
- Marine facilities
- Rail yards
- Urban center
- Industrial area
- Employment area
- Urban growth boundary
- Metropolitan planning area
- County boundary

December 6, 2018



Commodities traveling in the freight corridors (modeled)

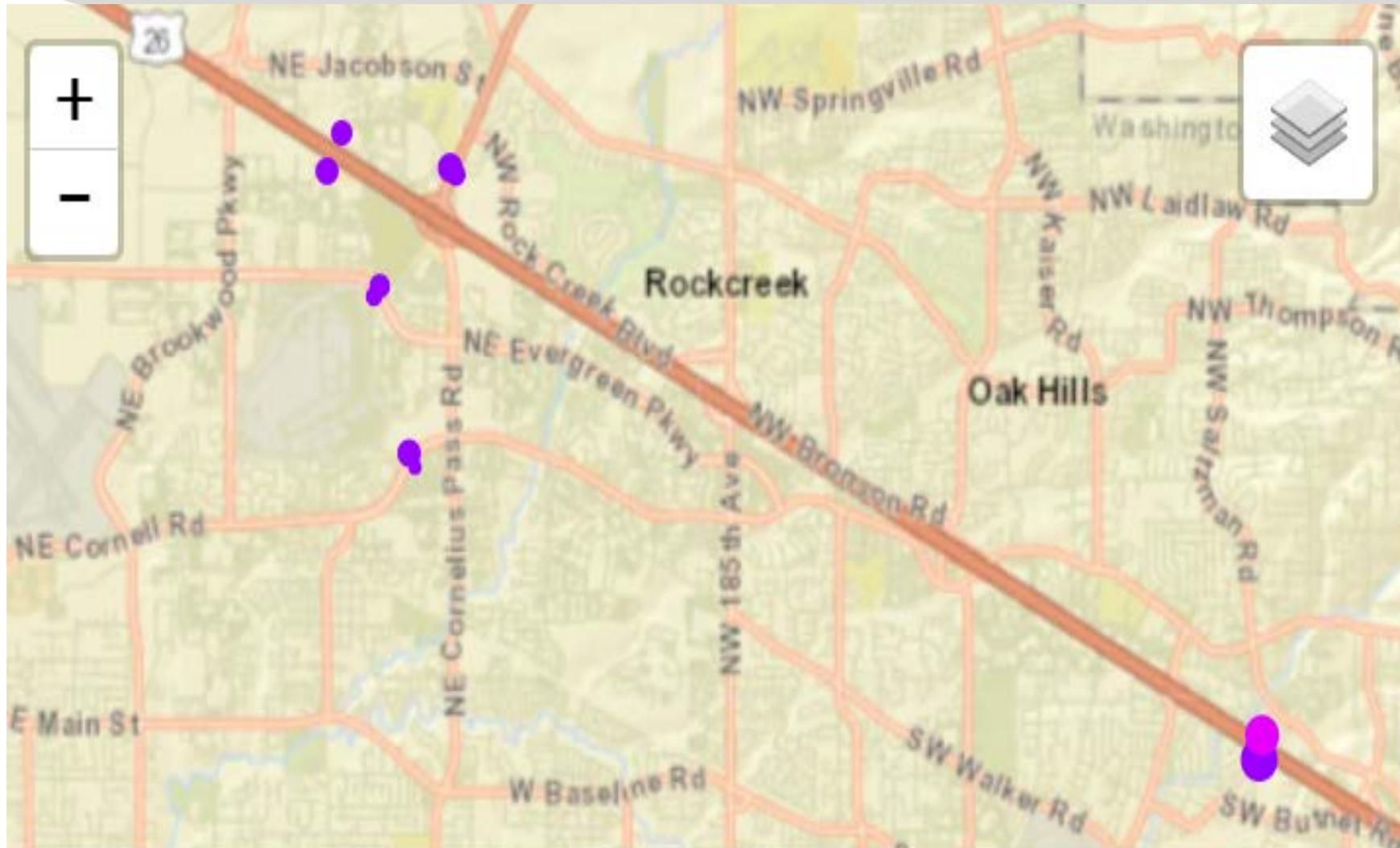
The commodities are grouped into 10 categories that include:

- 1) Agriculture; 2) Chemicals and Fertilizers;
- 3) Coal, Oil, Waste, (energy sector commodities);
- 4) Electronics (including computer microchips);
- 5) Food; 6) Gravel, Sand, (rock products); 7) Machinery;
- 8) Misc. manufactured goods;
- 9) Motor Vehicles, other commercial vehicles; and
- 10) Wood, Paper, etc.

Commodities traveling in the freight corridors (modeled)

- TPAC memo shows locations w/ largest values for goods
- The 2020 model results for commodities traveling in the freight corridors are best viewed by using the visualizer
- The values for goods have been updated to include commodities on freight trucks that travel through the region without stopping
- Today, we're using the visualizer to show results for five key corridors

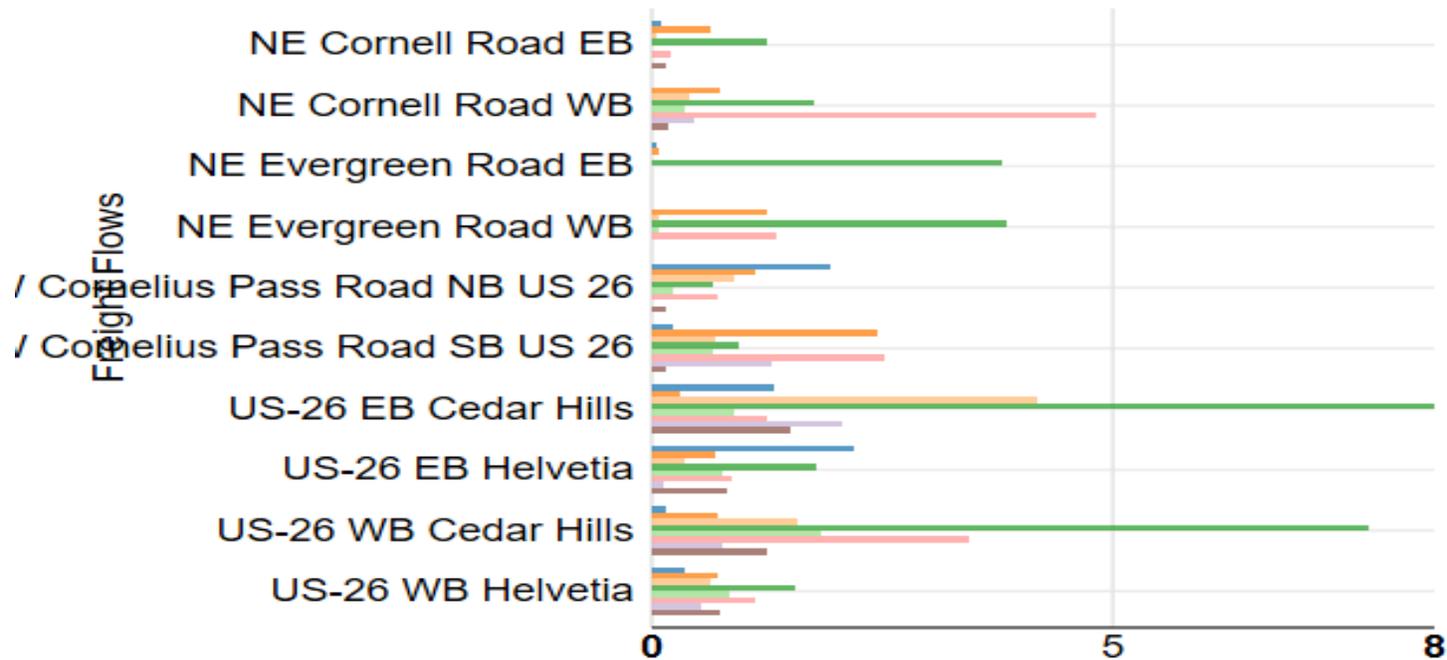
Commodities traveling in the Sunset Hwy. (US 26) freight corridor –west end (Year 2020 modeled)



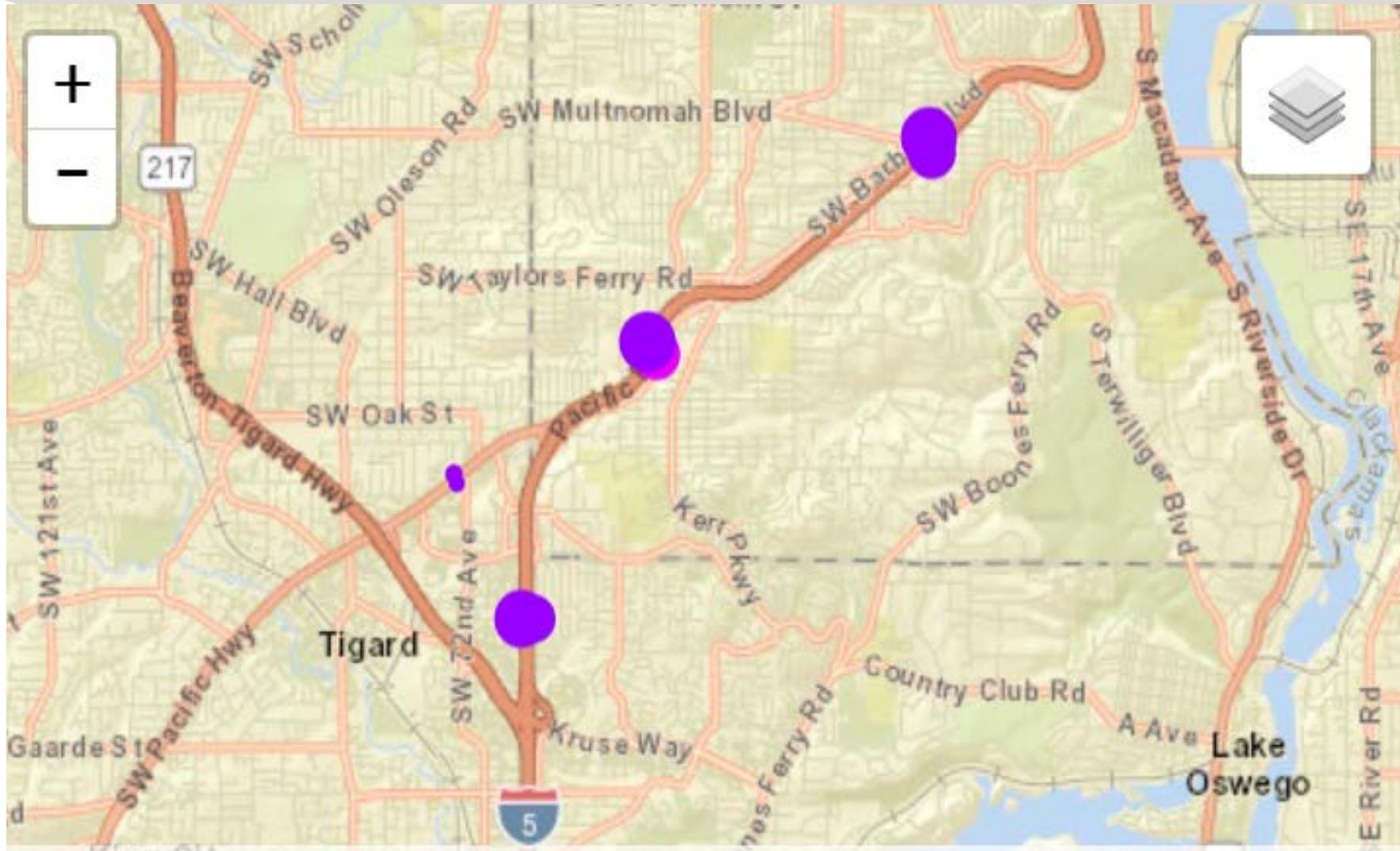
Commodities traveling in the Sunset Hwy (US 26) freight corridor – east end (2020 daily \$ in millions)

Beaverton to Hillsboro ▾

- Agriculture
- Chemical
- Electronics
- Gravel, Sand, etc.
- Misc manufactured
- Wood, Paper, etc.
- All Goods
- Coal, Oil, Waste, et...
- Food
- Machinery
- Motor Vehicles, etc.

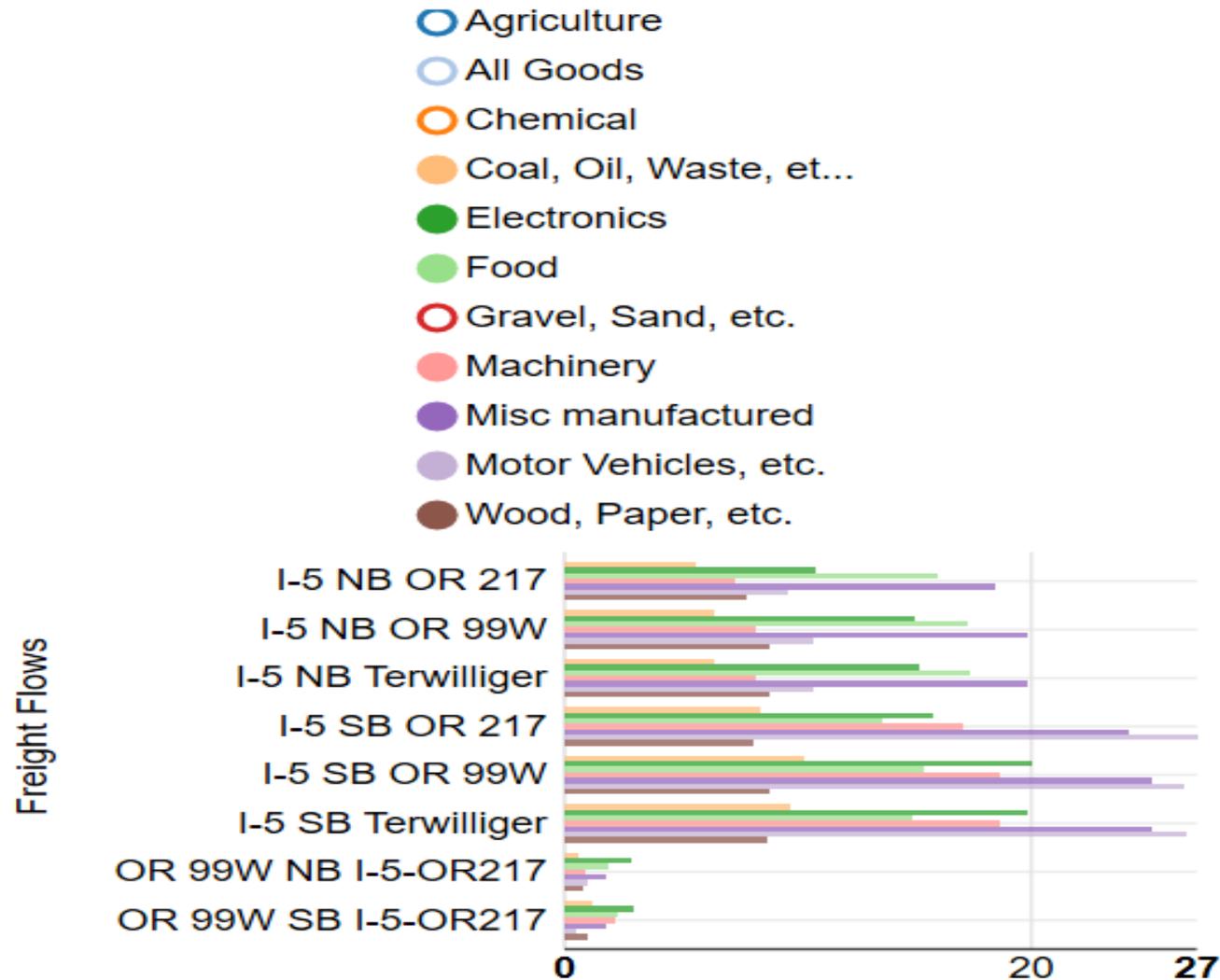


Commodities traveling in the I-5 freight corridor from Portland Central City to Tigard (Year 2020 modeled)

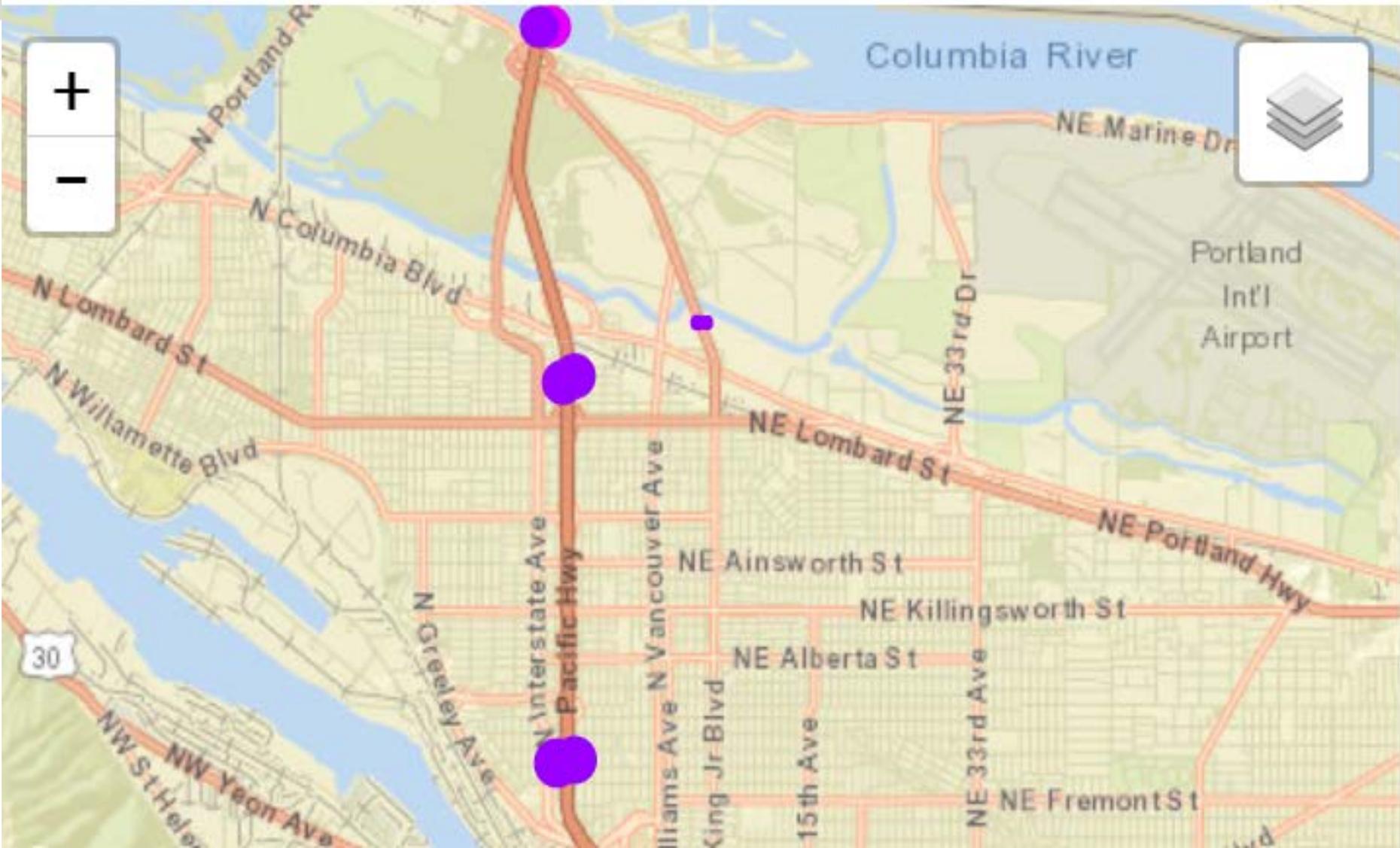


Commodities traveling in the I-5 freight corridor from Portland Central City to Tigard (2020 daily \$ in millions)

Portland Central City to Tigard ▾ Sta



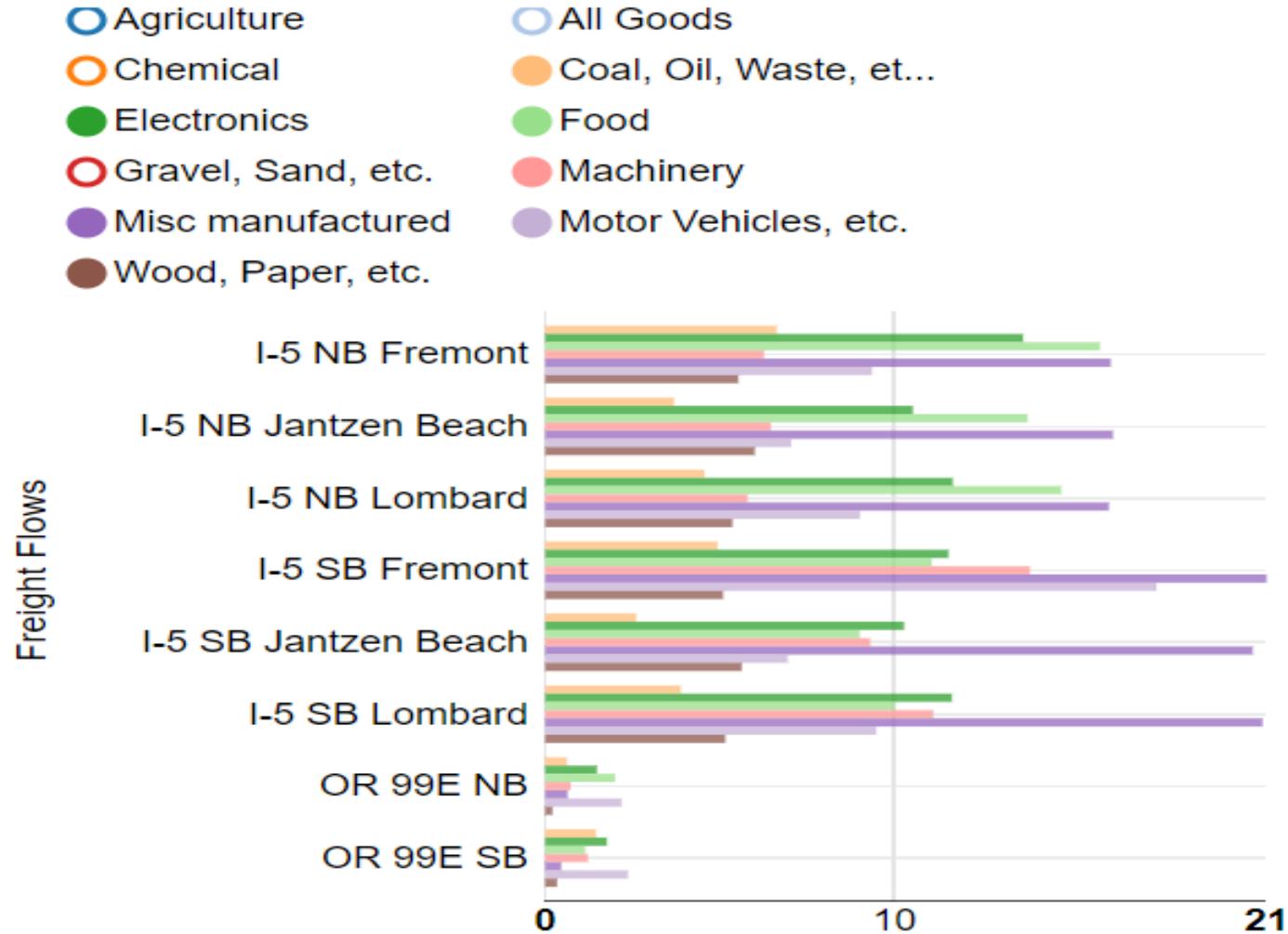
Commodities traveling in the I-5 freight corridor from Portland Central City to Vancouver (Year 2020 modeled)



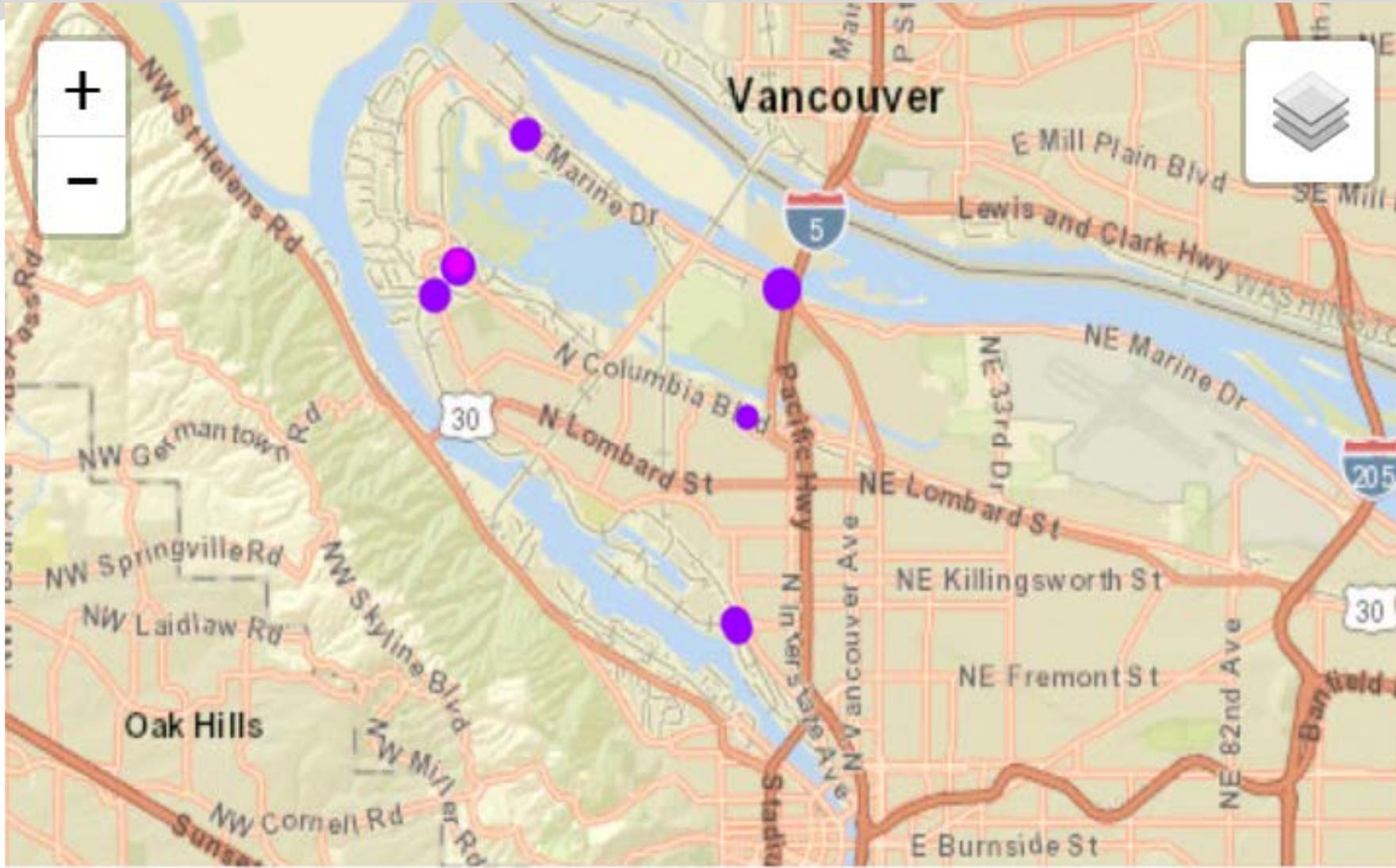
Commodities traveling in the I-5 freight corridor from Portland Central City to Vancouver (2020 daily \$ in millions)

Portland Central City to Vancouver ▾

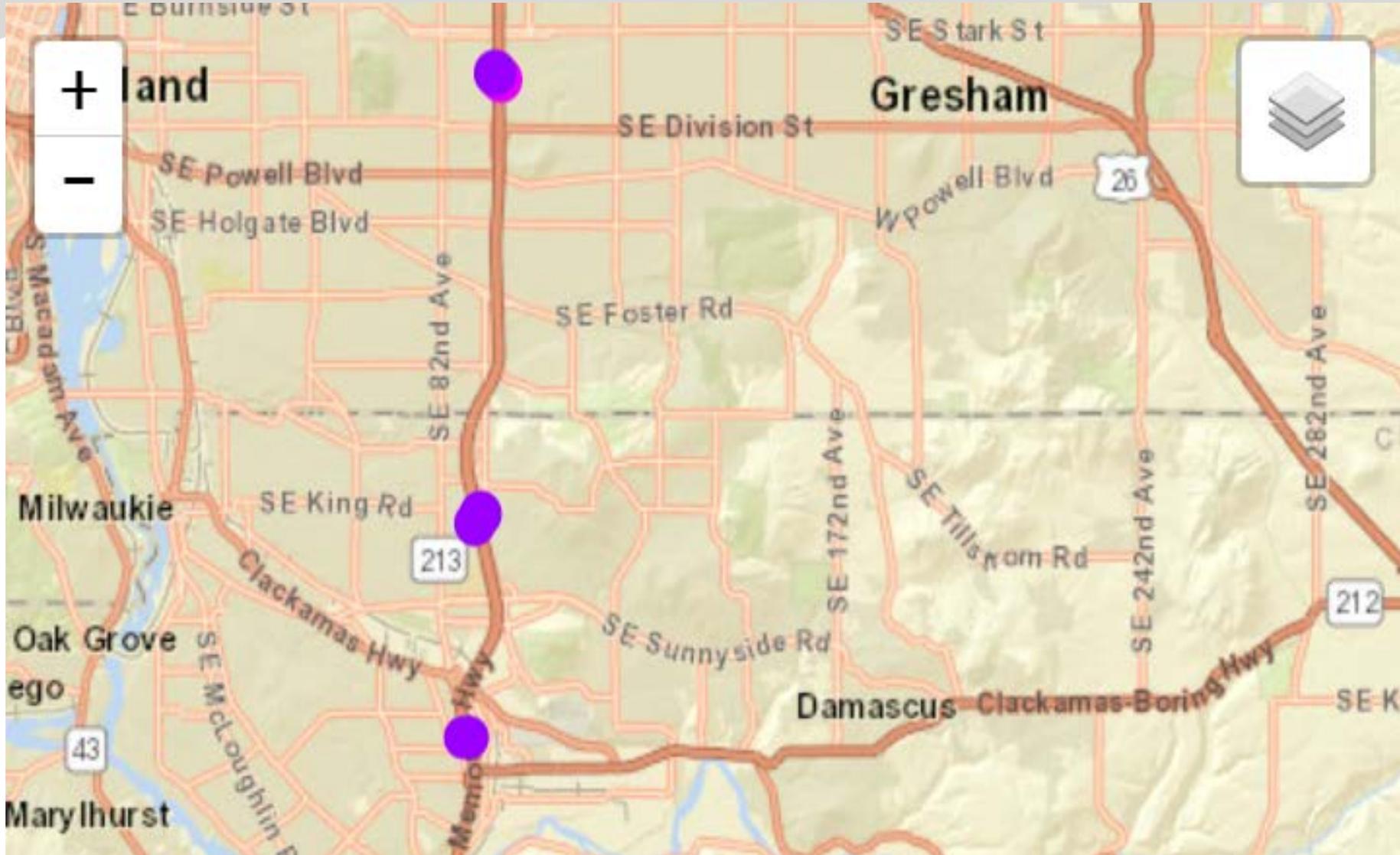
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Commodities traveling in the marine terminals freight corridor – Rivergate to I-5 (Year 2020 modeled)



Commodities traveling in the I-205 freight corridor from Gateway (south of I-205) to Oregon City (Year 2020 modeled)



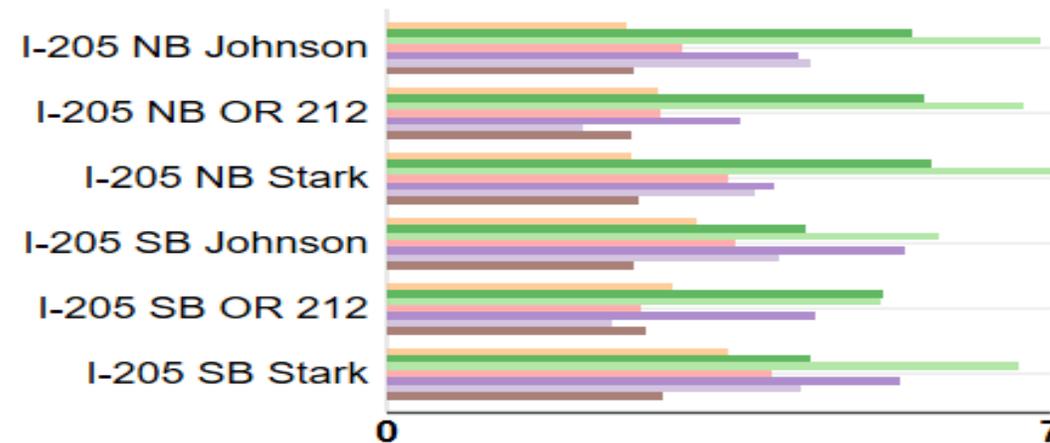
Commodities traveling in the I-205 freight corridor from Gateway to Oregon City (2020 daily \$ in millions)

Gateway to Oregon City ▾

S

- Agriculture
- All Goods
- Chemical
- Coal, Oil, Waste, et...
- Electronics
- Food
- Gravel, Sand, etc.
- Machinery
- Misc manufactured
- Motor Vehicles, etc.
- Wood, Paper, etc.

Freight Flows



Next Steps

- Updates to PMT, SAC, and MTAC/TPAC throughout the 22 – 23 month long study
- Analysis of 2045 future year regional freight modeling outputs and look at growth rates from 2020 to 2045
- Create a table of the data (truck volumes, percent that are trucks and travel speeds) in 19 of 23 regional mobility corridors

Comments and feedback

Questions?

