

Moving to Our Future: Pricing Options for Equitable Mobility

Task Force Meeting #14

April 12, 2021



Zoom orientation

P P P P P P P
P P P P P P P
P P P P P P P
P P P P P P P
P P P P P P P
P P P P P P P

B B B B B B B
B B B B B B B
B B B B B B B
B B B B B B B
B B B B B B B
B B B B B B B

U U U U U U U
U U U U U U U
U U U U U U U
U U U U U U U
U U U U U U U
U U U U U U U

T T T T T T T
T T T T T T T
T T T T T T T
T T T T T T T
T T T T T T T
T T T T T T T

General guidelines for Task Force members:

- Mute when you're not speaking
- Hold questions and comments for designated discussion times
- "Raise your hand" when you'd like to speak (found in participants tab)

For audience members:

- We ask that you mute yourself and turn your video off, except during public comment opportunities

Please keep the chat open for technical troubleshooting



Agenda

Time	Agenda item
6:00 p.m.	Welcome and housekeeping <ul style="list-style-type: none">• Agenda review• Finalize meeting #13 summary• Public comment
6:10 p.m.	Presentation: Pricing "sandbox" model results <ul style="list-style-type: none">• Review current draft principles• Model results and key take-aways• Q&A
6:45 p.m.	Small group discussions
7:35 p.m.	Report out and next steps

Meeting #13 Summary

Any questions or edits before finalizing?

P P P P P P P P
P P P P P P P P
P P P P P P P P
P P P P P P P P
P P P P P P P P

B B B B B B B B
B B B B B B B B
B B B B B B B B
B B B B B B B B
B B B B B B B B

U U U U U U U U
U U U U U U U U
U U U U U U U U
U U U U U U U U
U U U U U U U U

T T T T T T T T
T T T T T T T T
T T T T T T T T
T T T T T T T T
T T T T T T T T



Public Comment

(POEMcomments@portlandoregon.gov)



An aerial, high-angle photograph of a city street intersection, overlaid with a semi-transparent blue filter. The scene captures a mix of urban mobility: several pedestrians are walking across a crosswalk, while a group of cyclists is riding through the intersection. The street is marked with white dashed lines for the crosswalk and large white letters on the pavement that read 'BUS LANE' and 'BIKE LANE'. A traffic light pole stands on the right side of the frame. The overall composition is clean and modern, emphasizing active transportation.

Project Updates



**Presentation:
Pricing "sandbox"
model**



Reminder: What we're driving toward



Principles

for pricing for equitable mobility

What we should do next:
Nearer-term pricing moves



What direction we want to head:
Longer-term pricing opportunities

What else matters:
Complementary strategies to further explore
alongside pricing



Potential next steps
and implementation considerations



*Today's presentation will help
inform Task Force discussions
in these areas*

Principles for pricing for equitable mobility

Overarching recommendations for how the City should consider and design new pricing strategies moving forward.

Where are we now?

- **Pricing holds promise for advancing mobility, climate and equity outcomes**
- **Prioritize demand management**
- **Center climate & equity goals throughout design**
- **Revenue use matters. Reinvest in multimodal alternatives**
- **Provide discounts/rebates/exemptions for low-income drivers**
- **Design to reduce unequal burdens of technology and enforcement**
- **Pricing is one policy tool, not a stand alone solution.**

Reminder: Key take-aways from Metro's study

RTP Goal	Metrics	VMT B	VMT C	COR A	COR B	PARK A	PARK B	RD A	RD B
Congestion & Climate	Daily VMT	Light Green	Dark Green	Light Green	Light Green	Light Green	Light Green	Light Green	Dark Green
	Drive Alone Rate	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
	Daily Transit Trips	Light Green	Light Green	Light Green	Light Green	Light Green	Dark Green	Grey	Light Green
	2HR Freeway Delay	Dark Green	Dark Green	Light Orange	Light Orange	Light Green	Dark Green	Dark Green	Dark Green
	2HR Arterial Delay	Dark Green	Dark Green	Light Orange	Light Orange	Light Green	Dark Green	Light Orange	Dark Orange
Climate	Emissions	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green	Light Green
Equity	Job Access (Auto)	Light Green	Light Green	Light Orange	Light Orange	Light Green	Light Green	Light Green	Light Green
	Job Access (Transit)	Light Green	Light Green	Light Green	Light Green	Grey	Light Green	Grey	Light Orange
	Total Regional Travel Cost	Medium-High	High	Medium-Low	Medium-Low	Low	Low	Medium	Medium

Dark Green	Large Positive Change
Light Green	Moderate Positive Change
Very Light Green	Small Positive Change
Grey	Minimal Change
Light Orange	Small Negative Change
Dark Orange	Moderate Negative Change
Dark Orange	Large Negative Change

- All scenarios result in reductions in VMT, drive-alone trips, and emissions
- VMT and Parking scenarios show the most positive changes, no negative changes
- Cordon and roadway scenarios see some increases in delay and reductions in job access due to potential diversion
- These results are before any discounts/exemptions, reinvestment of revenues, or iterations of program design

“Sandbox” tool purpose

- Model (high-level) outcomes from pricing scenarios connected to our Equitable Mobility Framework
- Explore impacts of different design parameters
 - Exemptions (income, lower-emission vehicles)
 - Peak v. Off-peak rates
- Point to questions and opportunities for further analysis in future phases



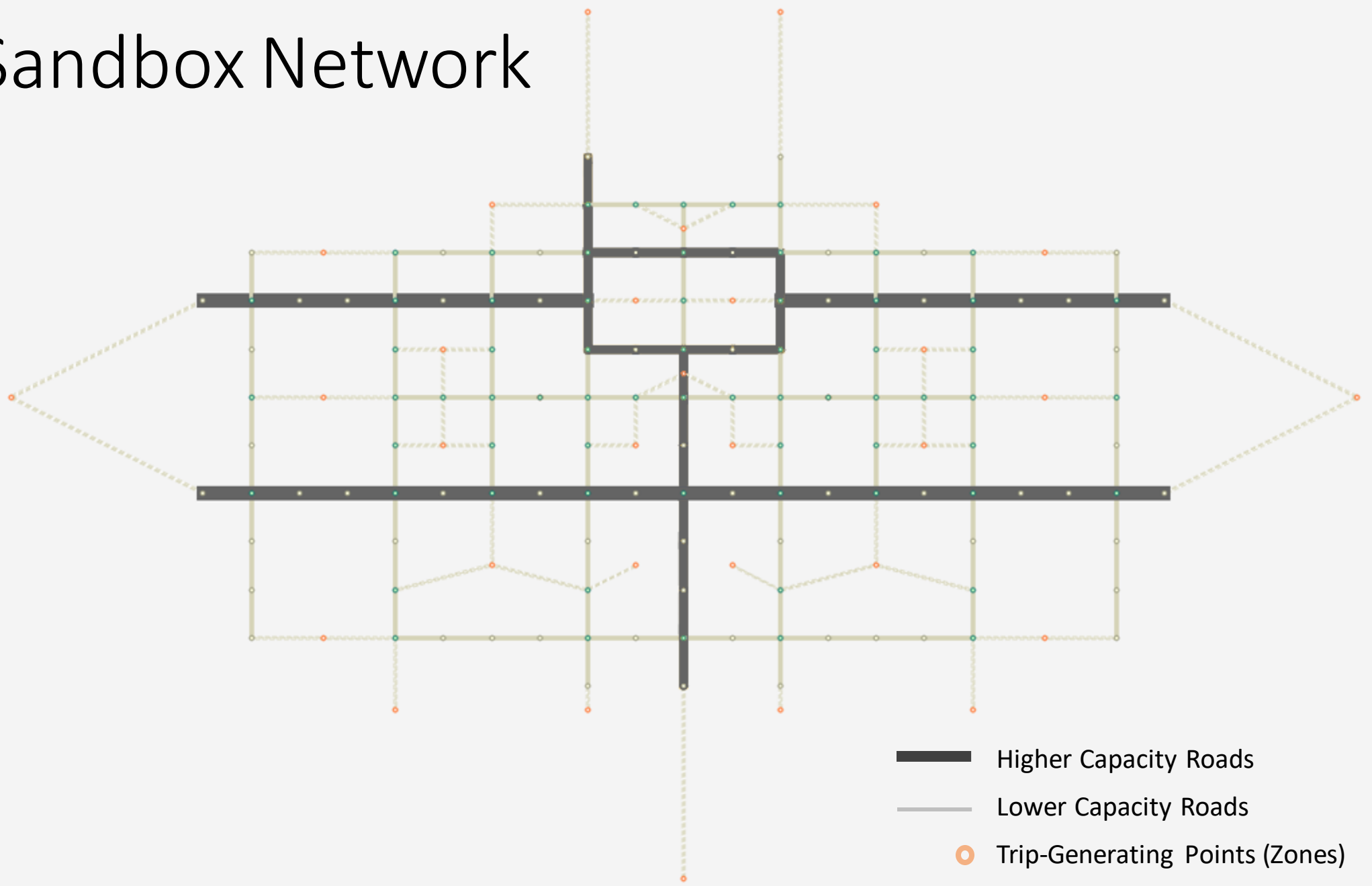
What is the Sandbox tool?

- Simple, high-level 4-step travel demand model with trip-generating land uses and a transportation network
 - *The Sandbox models a city with Portland-like characteristics, but is not intended to model Portland itself as the Metro regional model does*
- The Sandbox has allowed us to model different design features, like discounts and exemptions to evaluate the tradeoffs and impacts of these design choices
- Modeled travelers:
 - CAN change destination, mode (private car, transit, etc.), route or choose to not travel
 - CANNOT change time of trip

Model caveats and limits

- Like all models, doesn't provide an "answer," but can help validate/challenge anticipated trends and point to questions for further study
- Model is high level— many similarities to Portland, but not calibrated to real-world conditions and doesn't look at a regional perspective
 - Demographic analysis also hypothetical, but informed by Portland patterns
- The transportation network coded into the model is relatively small, so travel time changes were hard to assess
- Have only run a narrow set of scenarios for now at a high level. Future phases of work would require much more analysis

Sandbox Network



Pricing Scenarios Tested Using Sandbox

- Cordon Pricing
 - Fee upon entry
- Corridor Pricing
 - Two highways
 - All highways
- Citywide Road Usage Charge (RUC)
- Parking fees and RUC within key destination zones
- TNC pricing within downtown

Sandbox outputs: Summary results

	Downtown cordon	Two highways	All highways	Citywide RUC	Parking and RUC in key zones	Central City TNC fee
VMT						
Change in private car mode share						
Change in TNC mode share with VMT*						
Change in transit mode share						
CO2 emissions						
Particulate matter emissions						
Revenue generating potential	\$	\$	\$\$	\$\$\$	\$\$\$	\$

	Large Positive Change
	Moderate Positive Change
	Small Positive Change
	Minimal Change
	Small Negative Change
	Moderate Negative Change
	Large Negative Change

*Change in TNC share was not considered a positive or negative change unless accompanied by a decrease or increase in VMT respectively

All increases/decreases are from baseline data points and represent network-wide effects

Impact of different design parameters: Low income exemptions

Scenario	Impact on VMT from baseline <u>without</u> exemptions	Impact on VMT from baseline <u>with</u> exemption for low income drivers
Downtown cordon		
Two highways		
All highways		
Citywide RUC		
Parking and RUC in key zones		

Take aways:

- With the exception of the cordon scenario, all scenarios still see a VMT reduction from baseline conditions, even with a low income exemption

	Large Positive Change
	Moderate Positive Change
	Small Positive Change
	Minimal Change
	Small Negative Change
	Moderate Negative Change
	Large Negative Change

Impact of different design parameters: Zero/low emission vehicle exemptions

Scenario	Impact on VMT <u>without</u> exemptions	Impact on VMT <u>with</u> exemption
Downtown cordon		
Two highways		
All highways		
Citywide RUC		
Parking and RUC in key zones		

Take aways:

- Exempting zero/low emission vehicles diminishes the VMT benefit observed, though some small benefits still exists compared to baseline.
- In this scenario the GHG benefits also diminish because the zero/low emissions vehicles drive amounts similar to the baseline. However, this doesn't consider any potential impact of incentivizing more zero/low emission vehicles.

	Large Positive Change
	Moderate Positive Change
	Small Positive Change
	Minimal Change
	Small Negative Change
	Moderate Negative Change
	Large Negative Change

All day versus peak only charging

- Peak only scenario run for Downtown Cordon and Citywide RUC
 - In a peak only scenario for citywide RUC, we see fewer VMT, private car mode share and carbon emissions benefits than for an all day scenario
 - In a peak only scenario for a cordon, we also see fewer benefits to VMT, private car mode share and carbon emissions as compared to all day, but the differences are less
- Roughly one third of all trips are made in the peak, but trips made in the peak are less price sensitive
 - Off-peak trips are more responsive to price changes because more of them are less time-specific trips
- Model limitation
 - No time shifting of travel trips was captured

VMT impacts for BIPOC and non-BIPOC households

Scenario	Impact on VMT of BIPOC households (average)	Impact on VMT of non-BIPOC households (average)
Downtown cordon		
Two highways		
All highways		
Citywide RUC		
Parking and RUC in key zones		

Take aways:

- No meaningful change in how the various scenarios impacted BIPOC communities as compared to non-BIPOC communities

	Large Positive Change
	Moderate Positive Change
	Small Positive Change
	Minimal Change
	Small Negative Change
	Moderate Negative Change
	Large Negative Change

**Any remaining
clarifying
questions?**



Let's take a quick gut-check poll!

Based on all the information we've discussed to date, rank these longer-term strategies based on what you think has the most potential to advance equitable mobility in Portland.

1 = Most potential

4 = Least potential



What "longer-term" strategies are we considering?



Highway tolling



OReGO

Road usage charges
(pay per mile on all roads)



More dynamic demand-
based parking



Central City Cordon

<https://www.surveymonkey.com/r/POEM14>





Small group discussions

Discussion questions

- What was your highest ranked strategy, and why? What was your lowest rank strategy, and why?
- What made this a hard deliberation for you, and what information would have made it easier? What do we need to explore further in a next phase of analysis?
- Does tonight's discussion change any of the overarching principles we've discussed as a group to date?





Report out and next steps



Report out

- ✦ What overall did your group feel is the most promising strategy/strategies? Did the discussion change anyone's opinion?
- ✦ What 1 or 2 questions did your group think would be most important to explore in the next phase of work?
- ✦ What (if any) are the top 1 or 2 changes your group thinks should be made to the draft principles



Poll Round 2!

Let's see if the results change...

https://www.surveymonkey.com/r/POEM14_2



Where next: Considerations for policymakers and implementers

- Evaluation criteria and conflicting aims
- Responding to and learning from Covid-19
- Geography
- Policy "fairness"
- Balancing complexity and acceptance
- Community engagement, coalition building, communications
- Be ready when the political stars align

And some pitfalls to avoid:

- *Letting the perfect be the enemy of the good*
- *Getting too distracted by technology*
- *Getting too distracted by revenues*
- *Expecting policy to move in a straight line*

What's coming up?

Next meeting: May 10, 2021 – 6-8 p.m.

Meeting focus: Complementary Strategies & Implementation Considerations

We want your feedback! Please complete our short, 60 second meeting evaluation:

<https://www.surveymonkey.com/r/PLK33PP>



Thank you!