Moving to Our Future:
Pricing Options for Equitable Mobility

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Community Task Force Meeting #14 – Meeting Summary
April 12, 2021 | 6:00 – 8:00 p.m.
Virtual Meeting

Relevant Materials

Please find links to relevant meeting materials below:
- Meeting 14 Agenda
- Meeting 14 Recording
- Meeting 14 Presentation Slides
- Meeting Materials
  - Draft Principles Emerging from Task Force Discussions
- Task Force Letter on Oregon Department of Transportation's Tolling Program
- Equitable Mobility Framework (working draft)
- Pricing Options for Equitable Mobility Website

Agenda

TIME	AGENDA ITEM
6:00 p.m.	**Welcome & Housekeeping** • Agenda review • Finalize Meeting #13 Summary • Public comment
6:10 p.m.	**Presentation: Pricing "Sandbox" Model Results** • Review current draft principles • Model results & key takeaways • Q&A
6:45 p.m.	**Small Group Discussions**
7:35 p.m.	**Report-Out & Next Steps**

Attendance

Present:

Task Force Members		City Staff	Bureau
Violeta Alvarez	Tony Jordan	Shoshana Cohen	Transportation
Andy Cotugno	Ady Leverette	Michael Espinoza	Transportation
Baofeng "Bao" Dong	Tammy Lundervold	Ingrid Fish	BPS
Stephenie Frederick	Esme Miller	Eric Hesse	Transportation
Monique Gaskins	Sherifa Roach	Peter Hurley	Transportation
Aaron Grimmer	Ashton Simpson	Mel Krnjaić	Transportation
Hau Hagedorn	Elizabeth Liedel Turnbull	Marianna Lomanto	Transportation
Shani Harris-Bagwell	Sara Wright	Emma Sagor	Transportation
Jonathan Hutchison		Marty Stockton	BPS

Project Advisors

Vivian Satterfield

Guest Presenters

Daniel Firth (C40 Cities)
Kevin O'Neill (WSP)
Geoff Gibson (WSP)

Absent:

Task Force Members

Taren Evans   Justin Jackson

Welcome & Housekeeping

Shoshana Cohen, Facilitator, welcomed Task Force members and informed attendees that the meeting will be recorded to ensure Task Force members and those unable to attend will have access.

Public Comment

The City will be collecting public comment throughout the entire 18-month Task Force process via email, regular mail, phone, and written and verbal comments at public events. At each meeting, Task Force members will be provided a written report of public comments received since the last meeting.

To share comments with the Pricing for Equitable Mobility Task Force, please email comments and questions to POEMComments@portlandoregon.gov. All comments received via email by the Friday before a Task Force meeting (which occur the second Monday of each month) will be recorded and shared with the Task Force at the meeting.

No public comments were received prior to Meeting #14. One public comment was heard from a community member during the meeting:

- **Doug Allen** expressed thanks to the Task Force for taking action and submitting their letter regarding the Oregon Department of Transportation (ODOT) Tolling Program to Portland City Commissioners and Bureau Directors. He noted the news release following the submission of the letter and Commissioner Jo Ann Hardesty's testimony on House Bill 3065, which signaled supported many of the principles and concerns enumerated in the Task Force letter. Doug Allen encouraged the Task Force to follow other bills that address tolling, including HB 3055, with the same eye towards advocating for equitable mobility values and outcomes.

Project Updates

Shoshana Cohen provided an update on related work.

Task Force Letter on ODOT's Tolling Program
- The tolling recommendation [letter](#) finalized by the Task Force at Meeting #13 was shared with City Commissioners Jo Ann Hardesty and Carmen Rubio, Bureau Directors Chris Warner of the Portland Bureau of Transportation (PBOT) and Andrea Durbin of the Bureau of Planning and Sustainability (BPS). The letter was also shared with ODOT's Equity & Mobility Advisory Committee.
  - Michael Espinoza is a point of coordination between the two projects given his role on the Project Management Team for PBOT's Pricing Options for Equitable Mobility project and as a member of ODOT's Equity & Mobility Advisory Committee.
- The letter helped shape City's [testimony](#) in opposition to [HB 3065-5](#), given by Commissioner Jo Ann Hardesty, to the Oregon Legislature in Salem on March 16, 2021.

Metro Regional Congestion Pricing Study: Expert Panel Review Webinar
This online discussion on April 22, 2021 was hosted by Metro to learn more about Metro's Regional Congestion Pricing Study and hear what experts have to say. The webinar recording as well as the panel bios can be found [here](#).

Presentation: Pricing "Sandbox" Model

Shoshana Cohen gave some background on additional modeling work undertaken to inform Task Force work and introduced the meeting's guest speakers and project consultants: Daniel Firth, Kevin O'Neil, and Geoff Gibson, who presented on the results of a modeling exercise, referred to as the "Sandbox," undertaken to gain further insight into pricing strategies.

Context
- Sandbox modeling work undertaken to provide additional data and insights intended to supplement thinking and discussions around various pricing and reinvestment strategies, especially longer-term pricing opportunities.
  - New information may help validate, question, or refine individual thinking and group recommendations.
- Meeting #14 discussion groups intended to advance thinking and deliberation around the following:

- o **Principles** for pricing equitable mobility
- o **Longer-term pricing opportunities-** *The direction the Task Force wants to head.*
- o **Implementation Considerations-** *potential next steps*
- With additional conversations in upcoming meetings focused on:
  - o **Nearer-term pricing moves-** *What the Task Force should do next*
  - o **Complimentary strategies** to be explored alongside pricing- *What else matters.*

Principles for Pricing for Equitable Mobility

- Principles refer to overarching recommendations and values for how the city of Portland should consider and design equitable pricing strategies moving forward.
- <u>Principles from Task Force discussions to date:</u>
  - o **Pricing holds promise** for advancing mobility, climate, and equity outcomes.
  - o **Prioritize demand managemen**t
  - o **Center climate & equity** goals throughout design
  - o **Revenue use matters**. Reinvest in multimodal alternatives
  - o **Provide discounts/rebates/exemptions** for low-income drivers
  - o **Design to reduce unequal burdens** of technology and enforcement
  - o Pricing is just one policy tool, **not a stand-alone solution**

Refresher on key takeaways from Metro's Regional Congestion Pricing Study

Shoshana Cohen provided a brief refresher on the key takeaways from Metro's Regional Congestion Pricing Study, as an introduction to the technical presentation by tonight's guest presenters.

Scope
Metro's technical study, which the Task Force received a deeper presentation on during Meeting #13, looked at the following:
- Four types of pricing considered (VMT/RUC, Cordon, Parking, Roadway Tolling)
- Eight scenarios evaluated (VMT B, VMT C, COR A, COR B, PARK A, PARK B, RD A, RD B)

Key Takeaways
- All scenarios result in reductions in VMT, drive-alone trips, and greenhouse (GHG) emissions.

- VMT & Parking scenarios show the most positive changes, no negative changes.
- Cordon & 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.
- Metro (& Sandbox) models are very high level—a first step to begin to evaluate the efficacy of strategies. For any of these ideas to advance, much deeper analysis and additional design parameters would need to be tested.

Sandbox Modeling Tool

POEM project consultants Kevin O'Neil (WSP, Seattle Office) and Daniel Firth (C40 cities) presented results from high-level modeling using a pricing "sandbox" tool.

Sandbox Purpose & Parameters

- The "sandbox" was developed to provide additional, high-level modeled analysis of what different pricing scenarios could mean for a hypothetical Portland-like city.
- The "sandbox" is a simple four-step travel demand model with trip-generating land uses and a transportation network. It models a hypothetical Portland-like city, with similar characteristics to Portland, but is not intended to model Portland itself as the Metro Regional Congestion Pricing Study (RCPS) model does.
    - The Metro model is calibrated (i.e., ground-truthed) to the Portland region's transportation network and is informed by real travel behavior surveys and land use information. The sandbox model is much simpler and based on a hypothetical city with Portland-*like* characteristics in terms of demographics, mode share, and land use, but it's not meant to be a true proxy for Portland.
- Like Metro's RCPS modeling, the "sandbox" allows for comparison across different pricing scenarios and helps identify questions and opportunities for further analysis in future phases of pricing work. The "sandbox" also allowed the POEM team to evaluate a few additional design parameters that Metro's study did not explore, including exemptions for low-income and lower-emission vehicles and peak v. off-peak charging.

Sandbox Caveats & Limits

- **Informs rather than Answers:** Like all models, Sandbox is an analytical tool that doesn't provide a definitive "answer," but can help validate and/or challenge anticipated trends and point to questions for further study and help inform decision-making.
- **High-Level Analysis:** The simulated city in Sandbox has many similarities to Portland, but is not calibrated to real-world conditions and doesn't look at a regional perspective.
- **Limited Transportation Network:** The transportation network coded into the model is relatively small, so travel time changes were hard to assess
- **Limited Set of Scenarios & Design Parameters Modeled**: The POEM team was only able to run a narrow set of scenarios at a high level for now.

Project consultant Daniel Firth (C40, Stockholm Office) presented key findings from the Sandbox tool. Daniel noted prior experience using a similar tool with the City of Vancouver, Canada.

Pricing Scenarios Tested using Sandbox
- **Cordon Pricing**: Fee upon entry to the downtown
- **Corridor Pricing:** Two highways & all highways
- **Road Usage Charge (RUC):** Citywide
- **Parking Fees & RUC:** Within key destination zones
- **Transportation Network Company (TNC) Pricing**: Within downtown

Sandbox Outputs

Key Findings
- **VMT, CO2 and Air Quality**: Similar to the Metro RCPS results, most pricing scenarios modeled in the sandbox had a positive impact on VMT, CO2 emissions and particulate matter emissions, with the exception of the cordon and TNC fee scenarios
- **Mode Share:** Most pricing scenarios reduced the private car mode share and increased transit mode share, with the exception of the TNC fee
- **Cordon** impacts are more mixed because of diversion and rerouting in the model
- **RUC** tends to have the greatest system-wide VMT, climate, air quality, and mode share benefits
- **TNC Fee** has minimal impact on mobility and climate outcomes, but could support other policy objectives and generate revenue for reinvestment

Table 2 | **Sandbox Outputs**

Criteria	Cordon (Downtown)	Highways (Two)	Highways (All)	RUC (Citywide)	RUC & Parking Fees (in Key Zones)	TNC Fee (in Central City)
VMT	Minimal Change	Moderate Positive Change	Large Positive Change	Large Positive Change	Large Positive Change	Minimal Change
Change in Private Car Mode Share	Large Positive Change	Small Positive Change	Moderate Positive Change	Moderate Positive Change	Moderate Positive Change	Minimal Change
Change in TNC Mode Share with VMT*	Minimal Change	Minimal Change	Moderate Positive Change	Large Positive Change	Moderate Positive Change	Minimal Change
Change in Transit Mode Share	Large Positive Change	Small Positive Change	Small Positive Change	Moderate Positive Change	Moderate Positive Change	Minimal Change
CO_2 Emissions	Minimal Change	Moderate Positive Change	Large Positive Change	Large Positive Change	Moderate Positive Change	Minimal Change
Particulate Matter Emissions	Minimal Change	Moderate Positive Change	Large Positive Change	Large Positive Change	Moderate Positive Change	Minimal Change
Revenue Generating Potential	$	$	$$	$$$	$$$	$

* 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

Legend

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

- **Note for all Legends**: "Positive" change indicates a change in the direction the Task Force seeks to head (e.g., a positive change in VMT is a reduction in VMT)
    - **VMT**- decrease in VMT is considered a positive change
    - **CO₂ Emissions**- decrease in CO_2 is considered a positive change
    - **Private Car Mode Share**- decrease in private car mode share is considered a positive change
    - **TNC Mode Share**- decrease in TNC mode share is considered a positive change IF it was also correlated with reduced VMT
    - **Transit Mode Share**- increase in transit mode share is considered a positive result

Impact of Different Design Parameters: Low-Income Exemptions

Takeaways:
- All scenarios except the Cordon see a VMT reduction from baseline conditions, even with a low-income exemption[1]

Table 3 | **Impact of Low-Income Exemptions on VMT**

Scenario	Impact on VMT from baseline <u>without</u> exemptions	Impact on VMT from baseline <u>with</u> exemption for low-income drivers
Cordon (Downtown)		
Highways (Two)		
Highways (All)		
RUC (Citywide)		
RUC & Parking Fees (in Key Zones)		

Legend

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

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[1] Low-income is defined as individuals earning less than $25,000 per year. This represents approximately 20-25% of the population.

Impact of Different Design Parameters: Zero/Low-Emission Vehicle (LEV/ZEV) Exemptions

Takeaways:
- **VMT**: Exempting zero/low-emission vehicles (LEV/ZEVs) diminishes the VMT benefit observed, though some small benefits still exist compared to baseline.
- **GHG Emissions**- Exempting zero/low-emission vehicles also diminishes GHG emissions reduction benefits because LEV/ZEVs drive similar at similar rates compared to the baseline and the scenario included many more low-emission cars than zero-emission vehicles. However, this doesn't consider any potential impact of incentivizing more zero/low-emission vehicles.
- **Equity**: It's important to consider who has access to and is driving LEV/ZEVs, which could change overtime as these markets grow and more financial assistance is available to people looking to purchase LEV/ZEVs.
- **Considerations for Future Analyses**-
  - *What happens if only zero-emissions vehicles (ZEVs) (not LEVs) are exempt?*
  - *What if ZEVs and/or LEVs are exempt with a policy goal of removing the exemptions once they reach achieve a certain market share threshold?*
  - *What would happen if instead of an exemption, LEV/ZEV drivers received a discount, so LEV/ZEV drivers still received some price signal?*
  - *Who is driving LEVs and ZEVs? From an equity perspective, if a greater share of wealthier people drives LEVs and ZEVs, this could be seen as providing a subsidy to those drivers. However, as the LEV/ZEV market grows and these vehicles become more accessible, driver demographics may change.*

Table 4 | **Impact of Low- and Zero-Emission Vehicle Exemptions on VMT**

Scenario	Impact on VMT without exemptions	Impact on VMT with exemption
Cordon (Downtown)		
Highways (Two)		
Highways (All)		
RUC (Citywide)		
RUC & Parking Fees		

(in Key Zones)		

Legend

	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: All-Day versus Peak-Only Charging

- **Peak-only scenario run for Downtown Cordon & Citywide RUC**
    - In a peak-only scenario for Citywide RUC, there are fewer benefits to VMT, private car mode share, and CO_2 emissions reductions than for an all-day scenario
    - In a peak-only scenario for a downtown cordon, there are fewer benefits to VMT, private car mode share, and CO_2 emissions reductions as compared to all-day, but the differences are less than in a Citywide RUC scenario, likely because some peak hour trips will not divert and continue to enter the cordon
- **Roughly one-third of all trips are made during peak times, but trips made in peak hours are less price sensitive**
    - Peak trips have less effect on VMT because trips during peak times often have less flexibility (e.g., people driving to work at a certain time may be unable to change their schedule)
    - Off-peak trips are more responsive to price changes because a greater share of them are more discretionary, in terms of time of day or whether they need to happen at all
- **Model Limitation**
    - No time shifting of travel/trips was captured

VMT Impacts: BIPOC & Non-BIPOC Households

Takeaways:
- The sandbox model showed no meaningful difference in how pricing scenarios impact VMT for Black, Indigenous, and People of Color (BIPOC) communities as compared to non-BIPOC communities on average.
  - This simply looks at VMT reductions not any number of other impacts. From a VMT perspective we are seeing a similar reduction level for BIPOC communities and non BIPOC communities for pricing scenarios as compared to the baseline.
  - This could potentially be seen as a good thing: at least we aren't seeing BIPOC communities needing to increase or decrease at a substantially different rates. However, it could also potentially be seen as a bad thing if the policy goal were to target non-BIPOC communities for higher VMT reductions, knowing that BIPOC communities start with lower baseline VMT.

Table 5 | **Impact of VMT on BIPOC and non-BIPOC Households**

Scenario	Impact on VMT of BIPOC households (average)	Impact on VMT of non-BIPOC households (average)
Cordon (Downtown)		
Highways (Two)		
Highways (All)		
RUC (Citywide)		
RUC & Parking Fees (in Key Zones)		

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

　　	Moderate Negative Change
　　	Large Negative Change

Task Force Comments and Q&A

- **Lack of negative changes to VMT, mode share and GHG from pricing strategies**: upon reviewing the results of the Sandbox modeling tool, a Task Force member noted that none of the pricing scenarios modeled indicated negative impacts with regard to VMT, mode share, and GHG emissions.

- **Desire for near-term action**: Some Task Force members expressed a desire to see some of these ideas, currently labeled as "longer-term strategies" advance more quickly, especially those perceived as easier to implement, such as parking-based strategies.

- **Ongoing Road Usage Charge (RUC) conversations in state legislature**: Task Force members noted the ongoing consideration of legislation related to RUCs by the state legislature, and advised of a hearing scheduled on April 20.

- **Sandbox model transportation assumptions**: Task Force members inquired about the transportation data used to inform the Sandbox tool and whether it is reflective of pre-COVID-19 transportation patterns.
    - **Staff response**: Consultant staff confirmed that the model used transportation patterns and VMT data that would be similar to Portland (or a Portland-like city) in 2019.
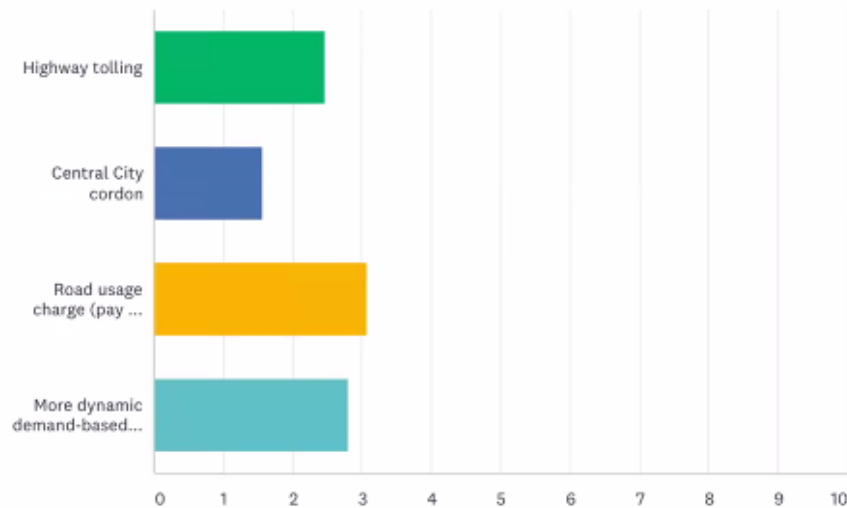
Poll Question #1

Task Force members completed a short temperature-taking poll to assess which pricing strategies they feel has the most potential to advance equitable mobility in Portland given all the information shared with the group to date.

Poll Question #1: *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.* (Rank 1 to 4; 1 = Most potential, 4 = Least potential)

<u>**Results***</u>:

Based on all the information we've discussed to date, rank these strategies based on what you think shows the most promise for advancing equitable mobility in Portland.

Answered: 15   Skipped: 0

The final option in the poll was "More dynamic demand-based parking pricing"

Small Group Discussions

Task Force members broke out into small groups with staff facilitators to discuss the following questions.

Discussion Questions
- *What were your highest & lowest ranked strategies, 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 <u>draft overarching principles</u> we've discussed as a group to date?*

Key Takeaways from Small Group Discussions

- Overall, most groups said parking strategies and RUCs felt like they had the most potential to advance equitable mobility.

- Several groups discussed the important of tying the pricing strategy to the goal/objectives you want to achieve.
  - Some groups discussed the importance of weaving climate more strongly through the draft principles.
  - Some groups also discussed how the use of revenue is also tied to the overarching policy goals you want to achieve.
- Ability to implement in a near-term time frame was a key theme. There was strong interest on strategies that the City of Portland has control to implement from multiple groups.
- Some groups said it is important to consider how we are defining "low income" and ensure people have access to the information needed to access any potential exemptions.
- Some groups discussed privacy and enforcement concerns and the need for further exploration into technology in these policy conversations.
- Several groups discussed the need for better data to evaluate equity impacts of potential strategies and recommended the city prioritize this data collection.
- Some groups discussed the need to consider the safety of alternatives to driving if we are encouraging people to take those modes.
- Some groups discussed the importance of future and further community engagement.

Poll Question #2

Following the debrief, the Task Force took another poll to see if any opinions had changed as a result of the discussion.

Poll Question #2: *Based on what we've discussed and considered to date, how much promise do you think each of these strategies has to advance equitable mobility in Portland?*

<u>Results*:</u>

Based on what we've discussed and considered to date, how much promise do you think each of these strategies has to advance equitable mobility in Portland?

Answered: 17   Skipped: 0
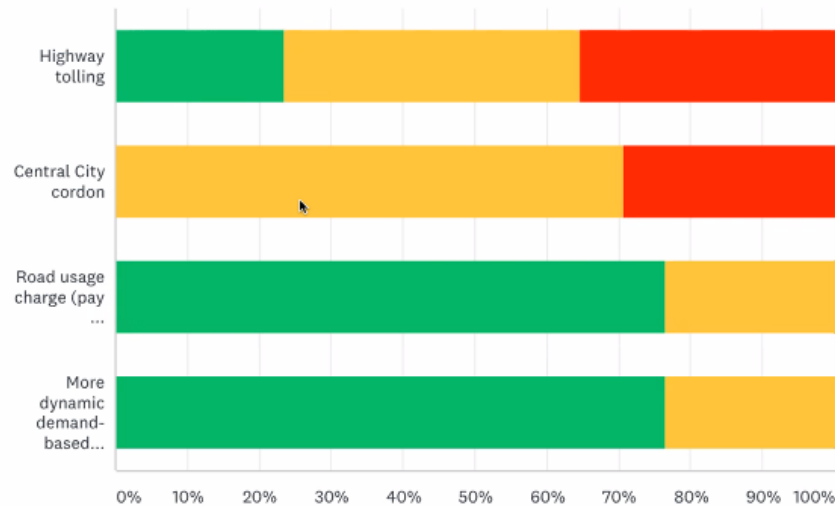
The final option in the poll was "More dynamic demand-based parking pricing"

Considerations for Policymakers & Implementers

To conclude the meeting, Daniel Firth shared some lessons learned and considerations for policymakers and implementers from his experience in several cities that have implemented pricing policies:

- **Evaluation Criteria & Conflicting Aims**
  - Identify which evaluation criteria are most important and which may be of secondary concern.
  - What reduction thresholds are considered "enough" (e.g., VMT, delay, GHG emissions etc.).
  - Conflicting aims- there are always conflicts between aims in public policy, both for measurable and non-measurable criteria—consider how tradeoffs can/should be handled.

- **Responding to & Learning from COVID-19**
  - Data will help calibrate models better.
  - Beware of possible rebound effects of teleworking.
  - Quick action is sometimes better than perfect action.

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- Geography
  - Geographic analysis may help inform where to implement specific actions e.g. solve a problem in a specific area or roadway, focus on an area that has access to transportation alternatives or that is severely congested or afflicted by air pollution.
  - Consider tradeoffs between having a big impact in a small area compared with a general (perhaps smaller) impact in a larger area.
  - Daniel cautioned from moving away from a cordon as a strategy too quickly given its effectiveness in several cities at accomplishing congestion, climate and air quality goals.

- Policy "Fairness" & Equity
  - Are the people that are paying in this system receiving benefits?
  - Are those who are receiving benefits paying for those benefits?

- Balancing Complexity & Acceptance
  - Simplicity is important. While there is a need to build a complex multi-faceted package with pricing, exemptions, etc. to address multiple policy goals, must also recognize that the more complex a system gets, the more challenging it is to build acceptance.

- Implementation & Technology
  - Create policies that are technology-agnostic (given technologies are constantly evolving) and try to avoid letting technology steer policy.

- Community Engagement, Coalition Building, Communications
  - Evidence suggests access to information can change minds; however, pricing is complex. People will need time & guidance to navigate the complexity of this topic.
  - Unlikely to have majority support at time for implementation. Will need coalitions of support, multiple stakeholders, etc. to gain acceptance & adoption.

- Be Ready When the Political Stars Align

- o Pricing is politically very difficult. Cities that have been successful in establishing pricing systems acted quickly when there was a window of opportunity. Don't let perfect be the enemy of the good.

Next Steps & Wrap-Up

Emma Sagor thanked participants for their participation and shared the topic for the next Task Force meeting.

> **Meeting #15**
> Date: May 10, 2021 6 – 8 p.m.
> Topic(s): Complementary Strategies