Electric Vehicle Advisory Committee

Guiding the Washington State Transportation Electrification Strategy

July 19, 2023

Agenda

- Welcome and Updates
- TES Project Update
- Equity Workshop Update
- Policy Recommendations Framework
- Utilities + Transportation Electrification Deep Dive

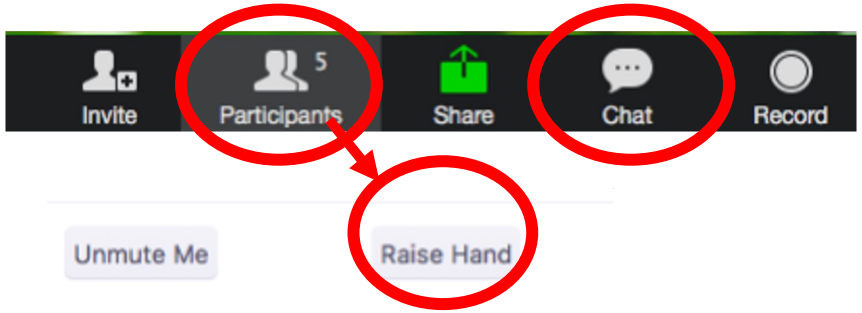
Zoom Etiquette

Change your title to include your name and affiliation

- Click on Participants, hover over your name, click "Rename"
- *or* Hover over your video, click "…" and then "Rename"

For questions or comments:

- Use the 'Chat' feature on control panel, or
- Click the 'Raise Hand' button



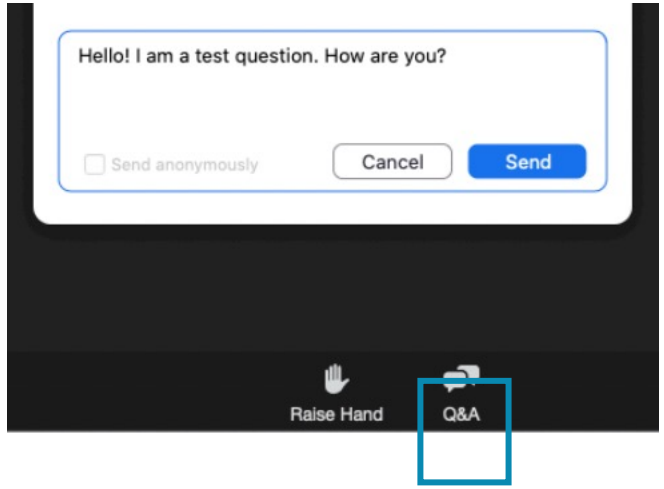
Keep your phone or headset muted unless you are speaking to the group

Mid-Workshop Technical Issues: Contact Molly Freed at mfreed@rmi.org

Overview – Plan for Q&A

Designated Q&A after each presentation

Use the Q&A button to submit your questions throughout the presentation



Team members will respond or direct you to email our Public Engagement inbox: EVCouncilFeedback@cascadiaconsulting.com

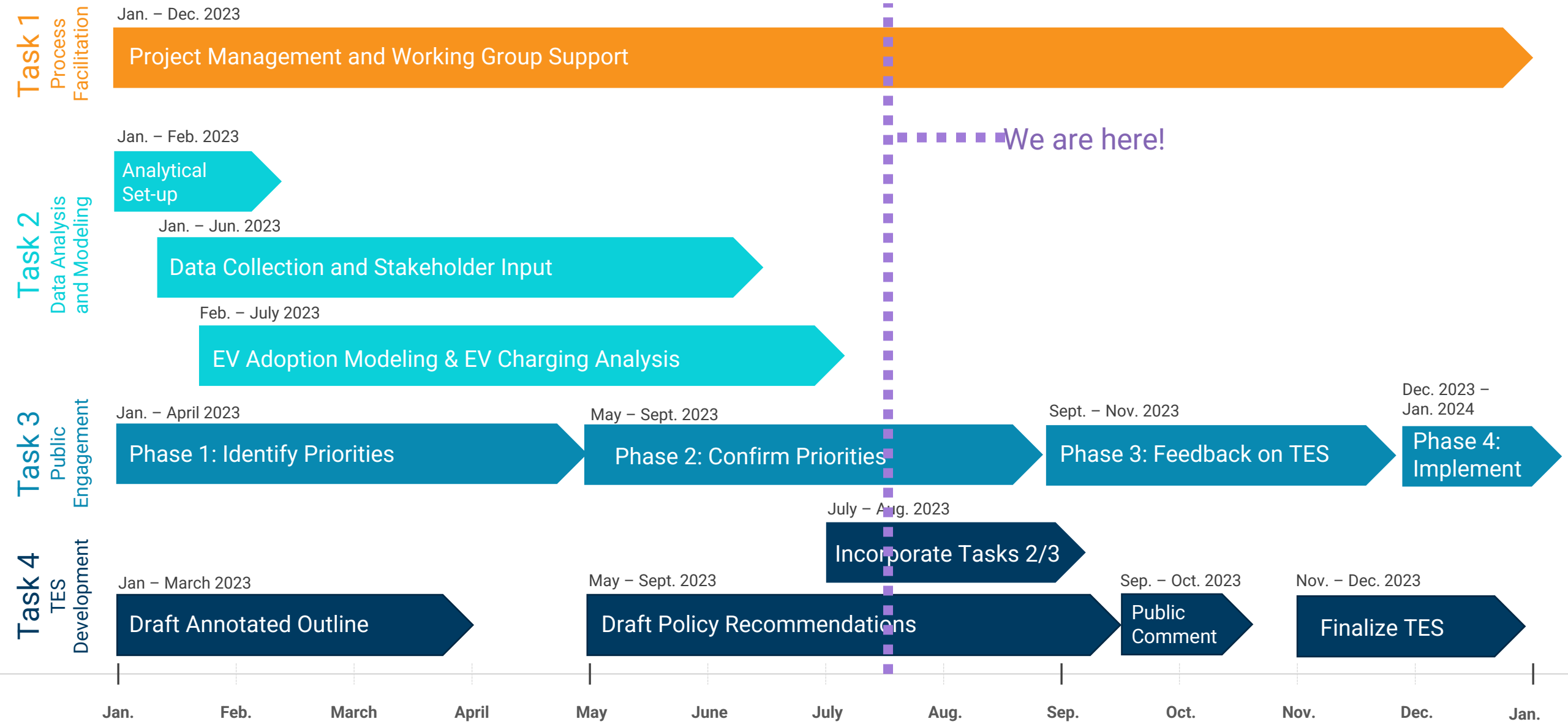
Rules of Engagement

Be present

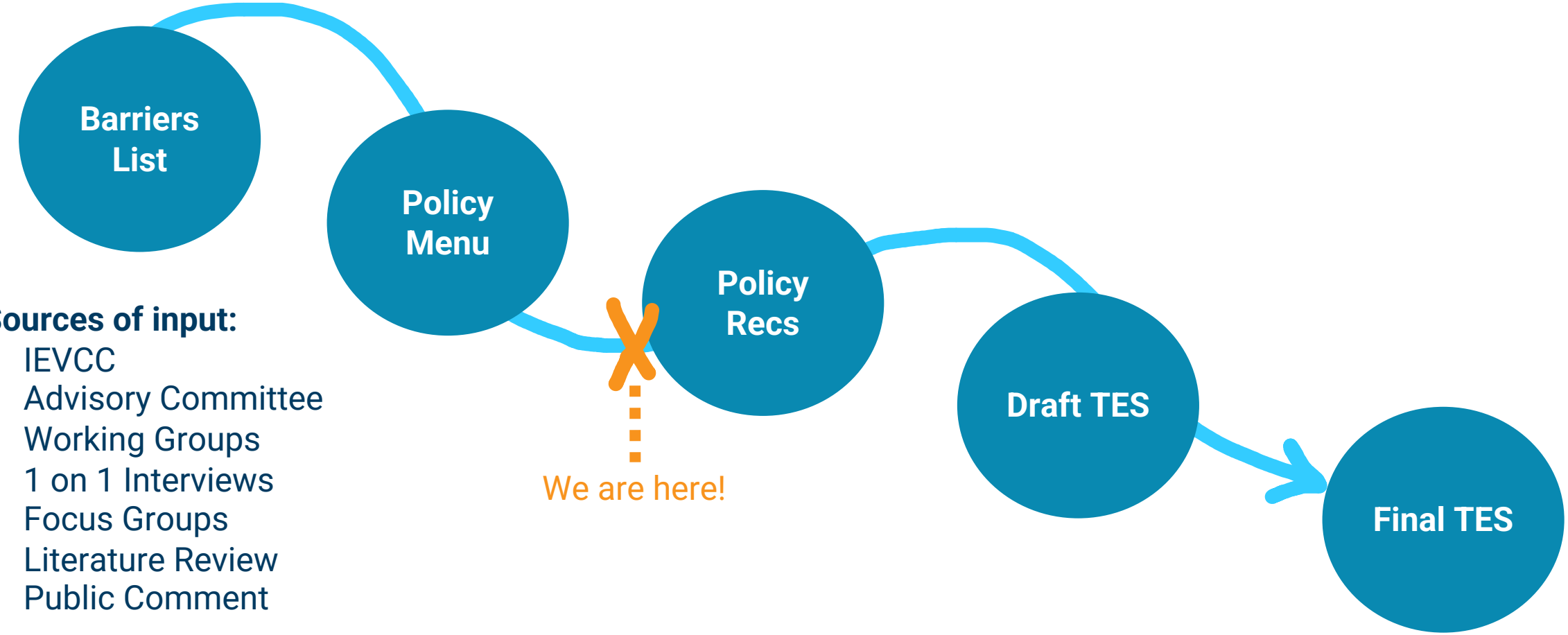
Practice democracy of time

Share and listen first, debate later

TES Project Update


Task 1
Process Facilitation
Jan. – Dec. 2023
Project Management and Working Group Support
We are here!
Task 2
Data Analysis and Modeling
Jan. – Feb. 2023
Analytical Set-up
Jan. – Jun. 2023
Data Collection and Stakeholder Input
Feb. – July 2023
EV Adoption Modeling & EV Charging Analysis
Task 3
Public Engagement
Jan. – April 2023
Phase 1: Identify Priorities
May – Sept. 2023
Phase 2: Confirm Priorities
Sept. – Nov. 2023
Phase 3: Feedback on TES
Dec. 2023 – Jan. 2024
Phase 4: Implement
Task 4
TES Development
July – Aug. 2023
Incorporate Tasks 2/3
Jan – March 2023
Draft Annotated Outline
May – Sept. 2023
Draft Policy Recommendations
Sep. – Oct. 2023
Public Comment
Nov. – Dec. 2023
Finalize TES
Jan.
Feb.
March
April
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
Jan.

Strategy Development Process



Sources of input:

- IEVCC
- Advisory Committee
- Working Groups
- 1 on 1 Interviews
- Focus Groups
- Literature Review
- Public Comment

Advisory Committee Deliverables & Presentations

Feb 15
- Project Kick Off, Equity Approach Discussion, Engagement Approach Discussion

Mar 15
- EV 101, EV Adoption Scenario, Final Engagement Plan and Tools, Subcommittee Discussion

April 19
- EV Adoption Scenario Returned, Analytical Dashboard Demonstration, Annotated Outline Overview

May 17
- Phase 1 Preliminary Engagement Findings

June 21
- In person w/ EVCC and others to workshop first draft of the TES long list policy menu

July 19
- In person Workshop Debrief, Equity Workshop Debrief, Utilities + Transportation Electrification Deep Dive

Aug 16
- Updated Scenario Outputs Presentation, Analytical Dashboard Demonstration, Education Plan Approach, Long-term Engagement Plan Approach, Early Draft Policy Recommendations and Roadmap

Sept 20
- Full Strategy Preview and Discussion, Phase 3 Preliminary Engagement Findings

Oct 18
- Review and Discuss Public Feedback

Nov 15
- Distribution Strategy, Reflections on the Year, Looking Forward

NOTE:
Next EVCC Meeting Extended

August 2 IEVCC meeting

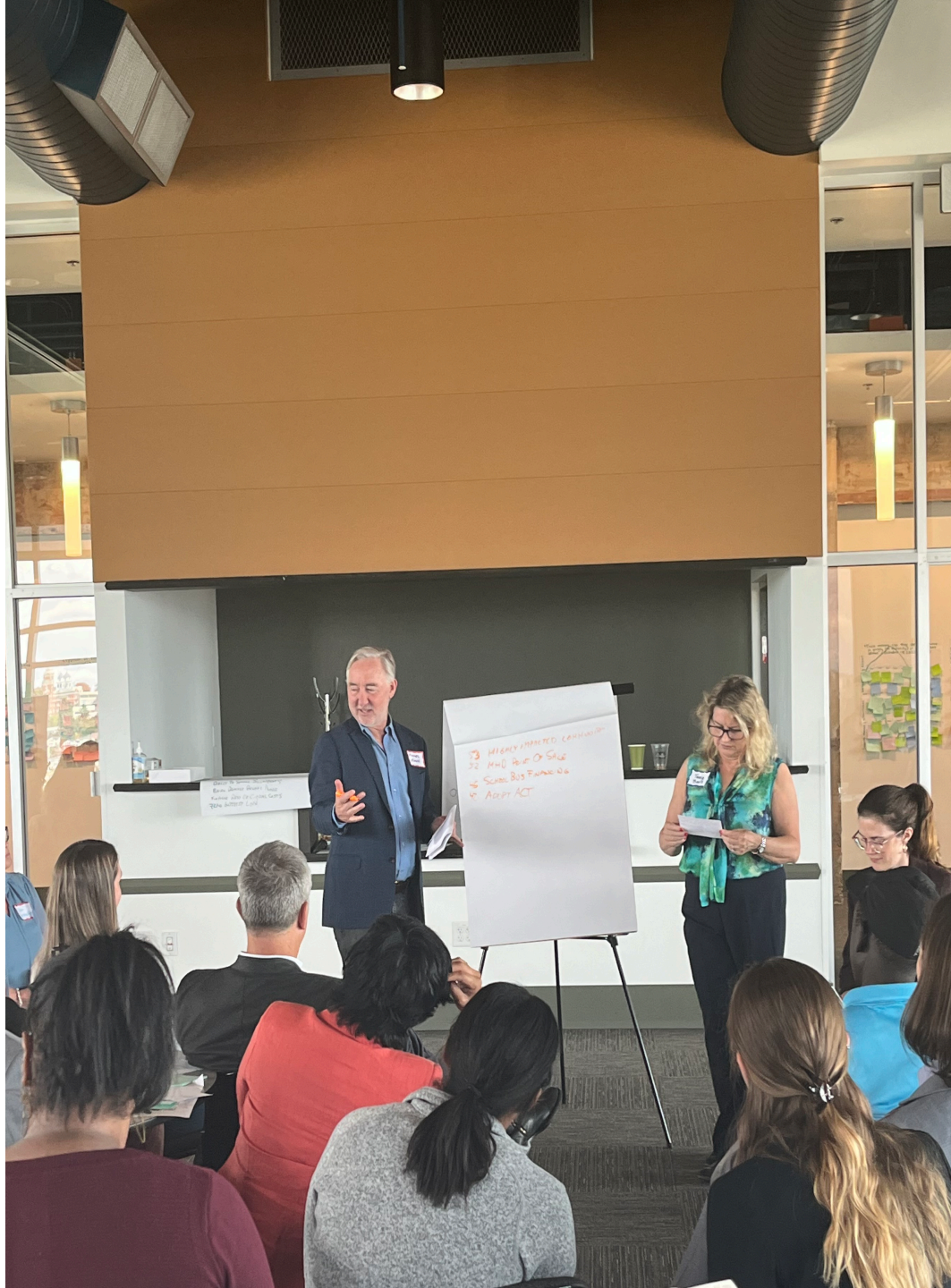
1:30 – 4:30 p.m.

Registration information remains the same
– please mark your calendars!

June Workshop Overview

Advisory Committee, state staff, and additional stakeholders discussed TES challenges and opportunities, including:

- TES Overview
- Equity in the TES
- Breakout 1: Identifying Barriers
- Breakout 2: Identifying Impacts
- Breakout 3: Prioritizing Opportunities



Equity Speaker Panel

What is Transportation Justice: Marwan Cameron - Gather Together Grow Together, Kitsap

How EVs Impact Affordable Housing: Bilan Aden - African Community Housing and Development, SeaTac

How EVs Impact People who Drive for a Living: Peter Kuel, Driver's Union

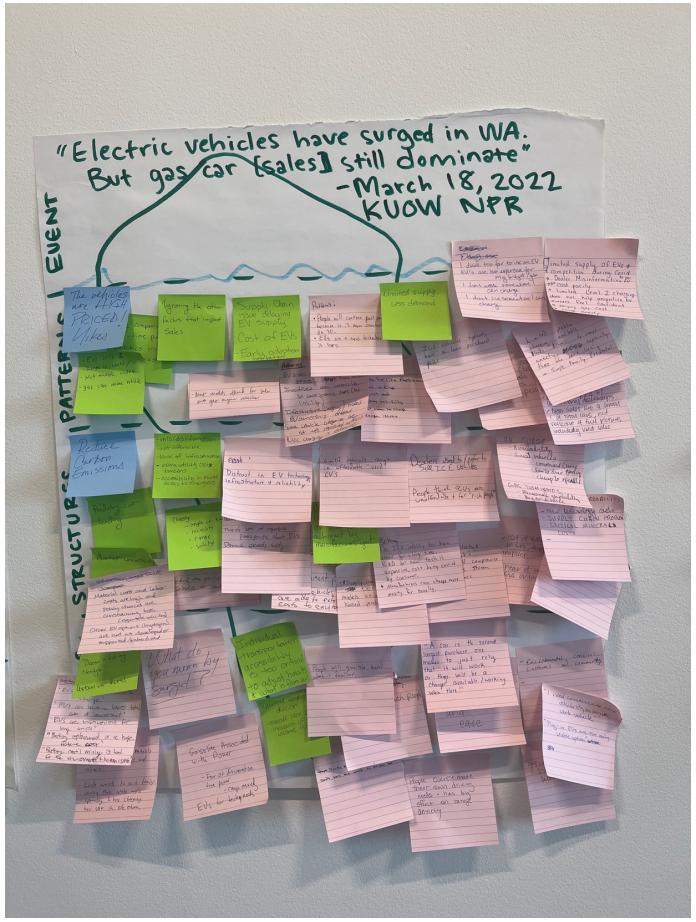
Policy Targets: Paulo Nunes-Ueno - Front and Centered

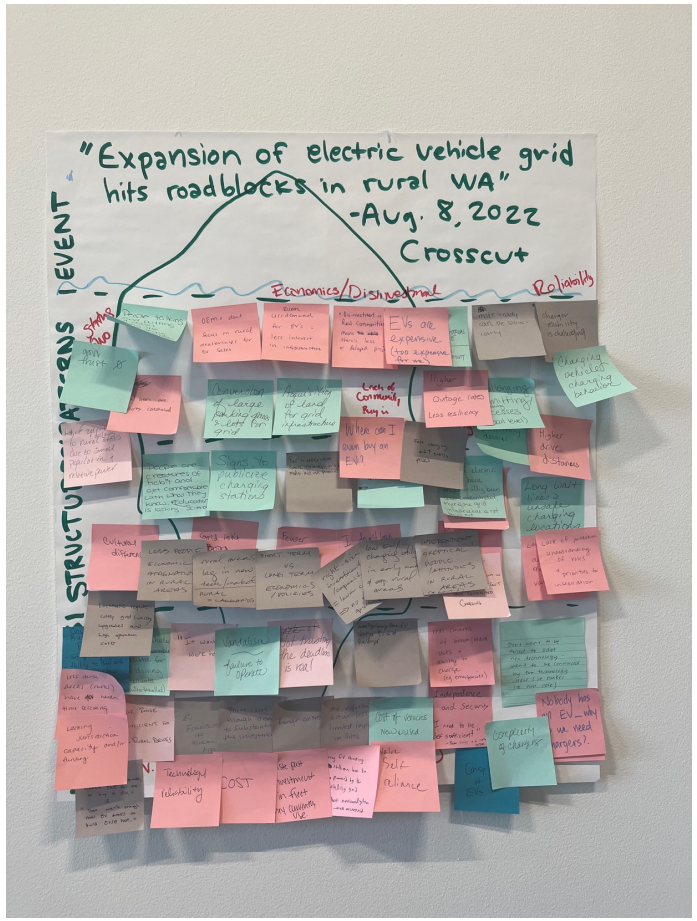
What is Transportation Justice: Marwan Cameron - Gather Together Grow Together, Kitsap

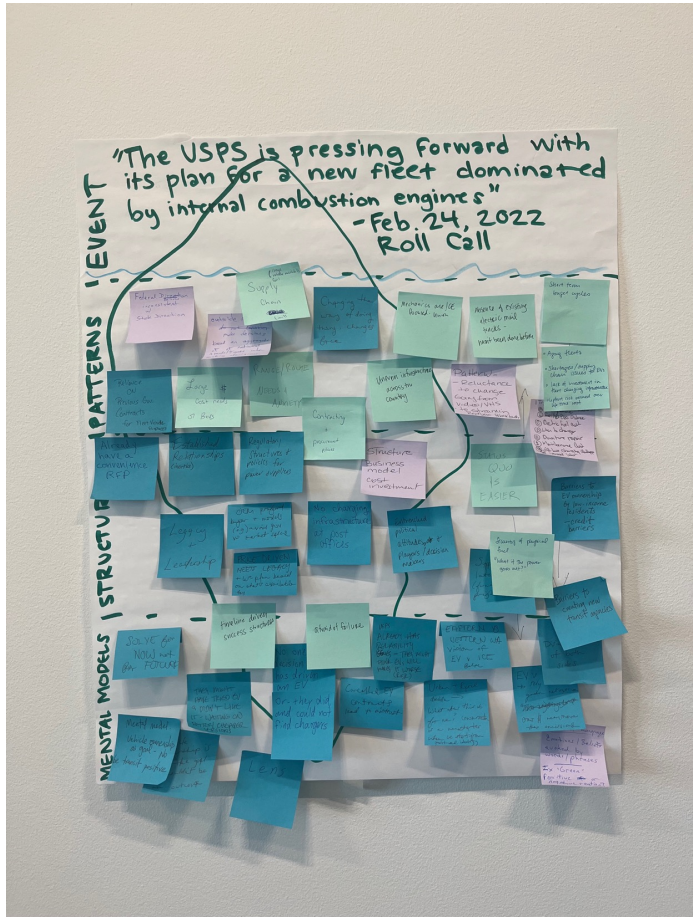
Electric Vehicles and a Just Transition

- Moving away from fossil fuels is a huge transition, but it's a change we MUST make.
- Electrification is not the only change we need to make to ensure that everyone benefits from our transportation system.
- TES Equity Policy Targets
  - Electrify vehicle miles traveled, not just single-occupancy vehicles, to maximize benefits and minimize risks
  - Focus subsidies on the "Just" in Just Transition of transportation electrification
    - Sidewalks and transit fight climate change too - and create safety and equity
    - Safeguard public dollars from capture by/for elites and big industry
  - Fair and equitable rates for everyone, no matter where you charge
  - Build community wealth in the transition

Breakout 1: Identifying Barriers

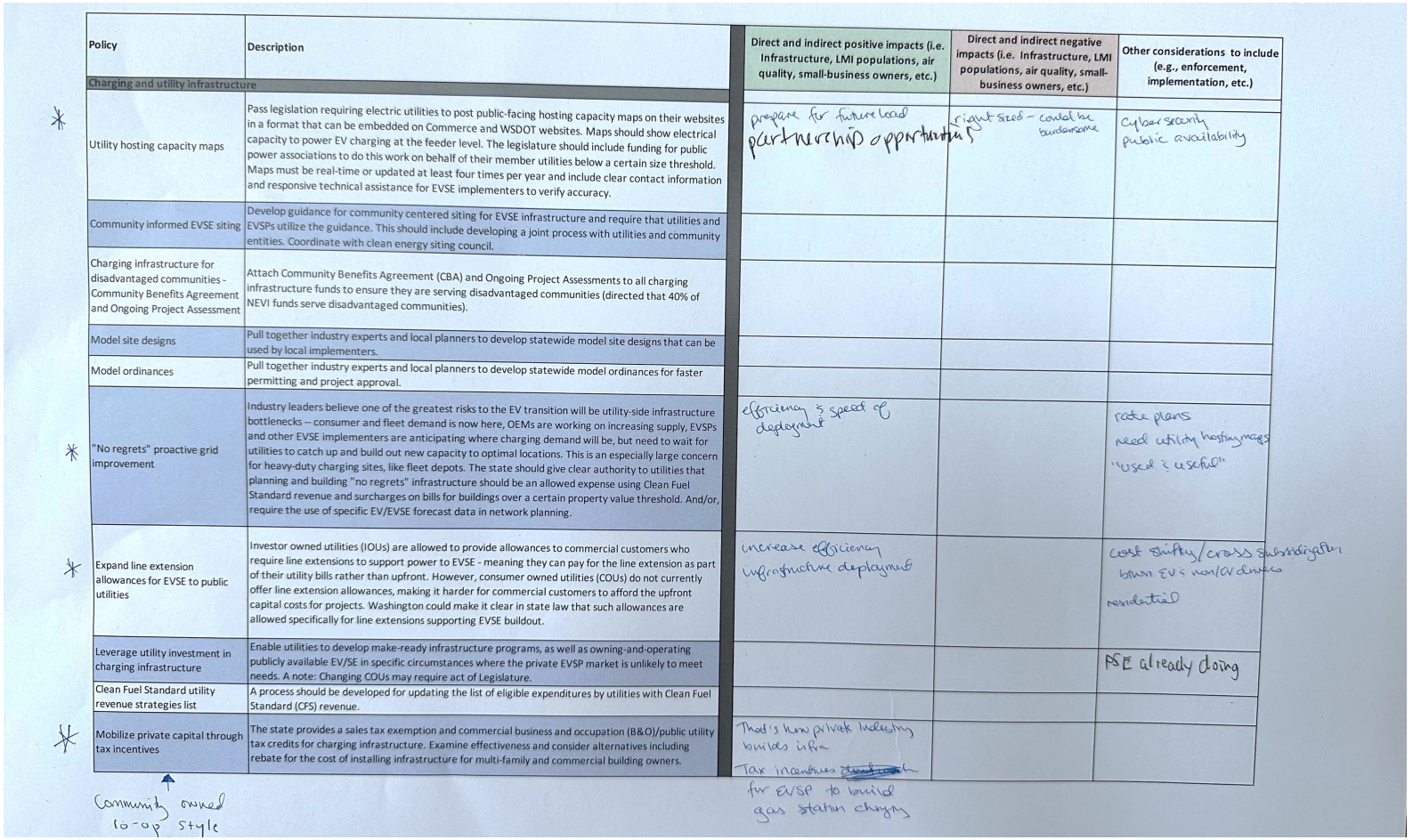






Breakout 2: Impacts Exercise

- Reviewed a menu of policy options
- Noted positive and negative impacts (direct or indirect) and added missing policies
- Discussed with topic group



Policy	Description	Direct and indirect positive impacts (i.e. Infrastructure, LMI populations, air quality, small-business owners, etc.)	Direct and indirect negative impacts (i.e. Infrastructure, LMI populations, air quality, small-business owners, etc.)	Other considerations to include (e.g., enforcement, implementation, etc.)
Charging and utility infrastructure				
Utility hosting capacity maps	Pass legislation requiring electric utilities to post public-facing hosting capacity maps on their websites in a format that can be embedded on Commerce and WSDOT websites. Maps should show electrical capacity to power EV charging at the feeder level. The legislature should include funding for public power associations to do this work on behalf of their member utilities below a certain size threshold. Maps must be real-time or updated at least four times per year and include clear contact information and responsive technical assistance for EVSE implementers to verify accuracy.	prepare for future load partnership opportunities	right sized – could be burdensome	Cybersecurity public availability
Community informed EVSE siting	Develop guidance for community centered siting for EVSE infrastructure and require that utilities and EVSPs utilize the guidance. This should include developing a joint process with utilities and community entities. Coordinate with clean energy siting council.			
Charging infrastructure for disadvantaged communities - Community Benefits Agreement and Ongoing Project Assessment	Attach Community Benefits Agreement (CBA) and Ongoing Project Assessments to all charging infrastructure funds to ensure they are serving disadvantaged communities (directed that 40% of NEVI funds serve disadvantaged communities).			
Model site designs	Pull together industry experts and local planners to develop statewide model site designs that can be used by local implementers.			
Model ordinances	Pull together industry experts and local planners to develop statewide model ordinances for faster permitting and project approval.			
"No regrets" proactive grid improvement	Industry leaders believe one of the greatest risks to the EV transition will be utility-side infrastructure bottlenecks – consumer and fleet demand is now here, OEMs are working on increasing supply, EVSPs and other EVSE implementers are anticipating where charging demand will be, but need to wait for utilities to catch up and build out new capacity to optimal locations. This is an especially large concern for heavy-duty charging sites, like fleet depots. The state should give clear authority to utilities that planning and building "no regrets" infrastructure should be an allowed expense using Clean Fuel Standard revenue and surcharges on bills for buildings over a certain property value threshold. And/or, require the use of specific EV/EVSE forecast data in network planning.	efficiency + speed of deployment		rate plans need utility hosting maps "used + useful"
Expand line extension allowances for EVSE to public utilities	Investor owned utilities (IOUs) are allowed to provide allowances to commercial customers who require line extensions to support power to EVSE - meaning they can pay for the line extension as part of their utility bills rather than upfront. However, consumer owned utilities (COUs) do not currently offer line extension allowances, making it harder for commercial customers to afford the upfront capital costs for projects. Washington could make it clear in state law that such allowances are allowed specifically for line extensions supporting EVSE buildout.	increase efficiency infrastructure deployment		cost shifting / cross subsidization between EV + non-EV drivers residential
Leverage utility investment in charging infrastructure	Enable utilities to develop make-ready infrastructure programs, as well as owning-and-operating publicly available EV/SE in specific circumstances where the private EVSP market is unlikely to meet needs. A note: Changing COUs may require act of Legislature.			PSE already doing
Clean Fuel Standard utility revenue strategies list	A process should be developed for updating the list of eligible expenditures by utilities with Clean Fuel Standard (CFS) revenue.			
Mobilize private capital through tax incentives	The state provides a sales tax exemption and commercial business and occupation (B&O)/public utility tax credits for charging infrastructure. Examine effectiveness and consider alternatives including rebate for the cost of installing infrastructure for multi-family and commercial building owners.	That's how private industry builds infra Tax incentives for EVSP to build gas station charging		

Community owned co-op style

Breakout 3: Prioritizing Policies

Example Policy Card

IMPACT	3	4	2	3
EQUITY	3	4	3	3
URGENCY	1	2	2	1

Universal Takeaways

- **Equity is tantamount to success, but there remains ambiguity about how to frame it in practice**
- **There's no silver bullet for transportation electrification policies**
- **Invest in the right programs in the right places**
  - Differences in rural and urban needs
- **Coordinate with utility and labor partners – new relationships**
- **Focus on easy-to-understand incentives that offer community benefits**
- **Widen the scope of TE to go beyond the car and single-family home ideal**
- **We have a short window to plan for a long trajectory**

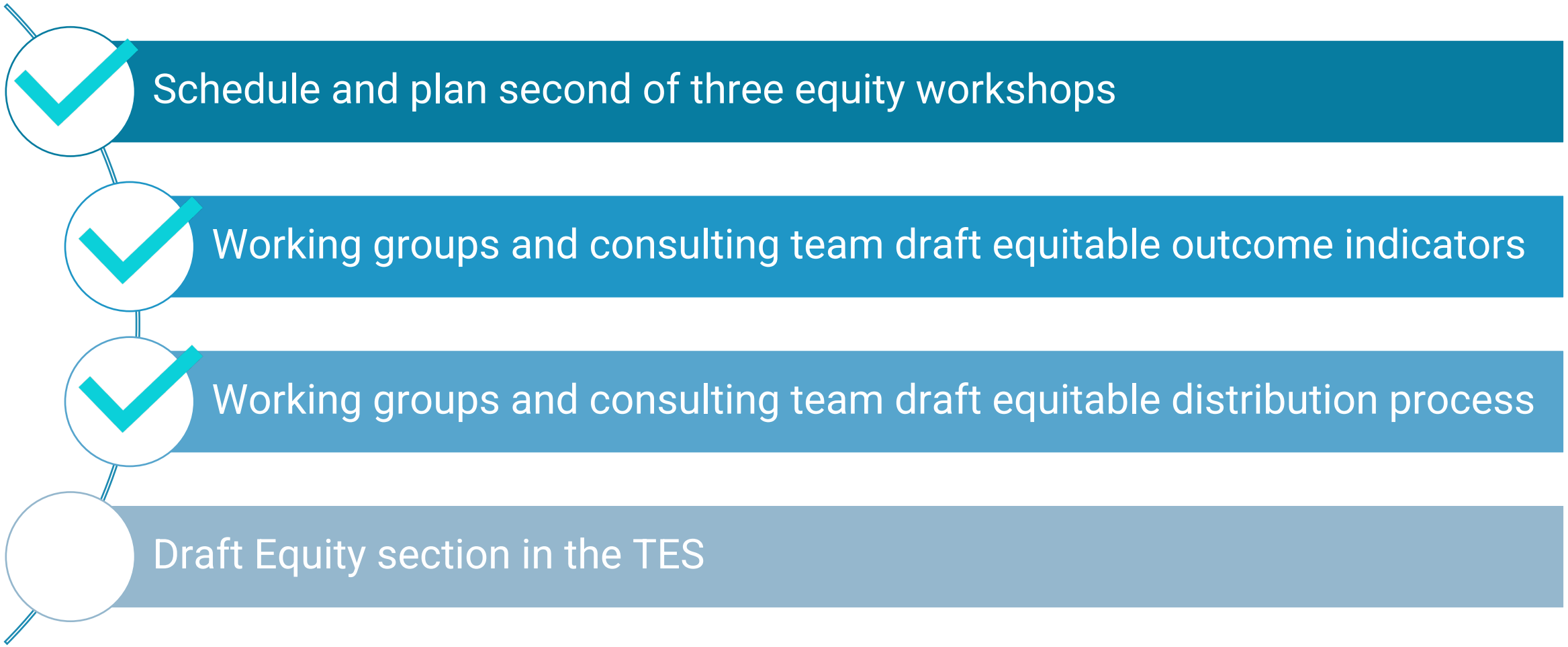
Next Steps

RMI compiled and sent a summary of the event and major takeaways

Consulting team is developing policy recommendations for further discussion

Task force leads will organize a time for your topic group to discuss in detail

Current Timeline



July Equity Workshop Overview

- Discussed Equity Frameworks
- Discussed Survey Results
- Drafted Definitions + Population Indicators
- Drafted Outcome Indicators

Table ES-2 **Transportation Equity Evaluation Factors**

Types of Equity	Impacts	Metrics	Groups
A fair share of resources. "Get what you pay for and pay for what you get." **External costs** Minimize costs imposed on other people. **Inclusivity** Ensure that transport systems serve everybody. Multimodal planning and Universal design. **Affordability** Ensure that everybody can afford basic mobility. Quality of low-price modes. Targeted subsidies. **Social Justice** Considers structural injustices	**Facilities and Services** Funding and subsidies. Planning and design. Involvement in planning. **User benefits and costs** Costs and affordability. Service quality (convenience, comfort, speed, safety). Fares, fees and taxes. **External Impacts** Congestion delays. Crash risk. Noise and air pollution. **Economic Impacts** Economic opportunities. Job and business impacts. **Regulation and Enforcement** Regulations and enforcement.	**Level of Impacts** *Inputs* (funding, road space, etc.). *Outputs* (amount of mobility and accessibility). *Outcomes* (destinations accessed, cost burdens, crash casualties, etc.). **Units of People** Per person, household, commuter, or peak-period travel. **Units of travel** Per vehicle-mile/km. Per passenger-mile/km. Per trip (by type). **Financial** Per dollar. Subsidies. Cost recovery.	**Demographics** Age and household type. Physical and cognitive ability. Income and poverty. Race and ethnicity. **Location** Jurisdiction and neighborhood. Urban/suburban/rural. **Mode** Active (walking & bicycling). Vehicle ownership & licensure. Transit user/dependent. **Industries** Equipment/service providers. Shippers and Employees. **Trip type** Commutes and errands. Commercial/freight. Recreational/tourist.

Policy Recommendations Framework

Legislative Directive - 43.392.040

Interagency electric vehicle coordinating council responsibilities include, but are not limited to:

(a) Development of a statewide transportation electrification strategy to **ensure market and infrastructure readiness** for all new vehicle sales

....

(f) Ensuring the statewide transportation electrification strategy, grant distribution, programs, and activities associated with advancing transportation electrification **benefit vulnerable and overburdened communities**.

Holistic Approach

- Meeting Washington's transportation electrification and equity goals will require a **collaborative and iterative** approach across state agencies and the public and private sector.
- Recommendations should partner **electrification with efficiency**.

Scoping Framework

Raise

Acknowledge potential impact on transportation electrification targets (e.g., supply chain)

Explore

Recommend for future research, consideration, or action (e.g., land use)

Detail

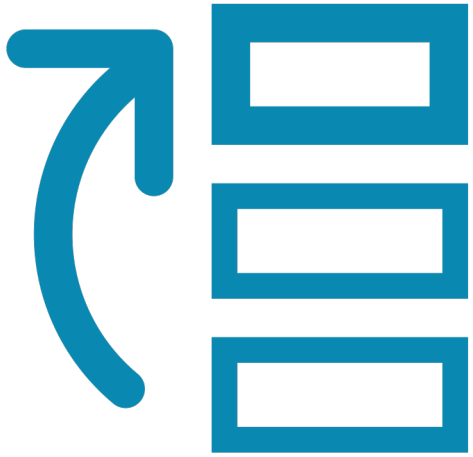
Polished policy recommendation included in roadmap (e.g., on-road vehicles)

Feedback Sources

- IEVCC
- State Working Groups
- June 21 Stakeholder Workshop
- Consultant Team Subject Matter Experts
- Statewide Public Engagement
- Early Analysis Scenario Results

Criteria for Policy Assessment

1. **High impact**
   a) Scoring from Subject Matter Experts
   b) Scoring from June 21 Workshop
2. **Stakeholder support**
   a) June 21 task force discussions
   b) Public engagement feedback
3. **Advances other state efforts**
   a) Multiplier effect
   b) Flag conflicting WA policies



Next Steps

July 14	Submit draft policy recommendations to IEVCC
End of July	Distribute draft policy recommendations to task forces
Aug. 2	Discuss draft policy recommendations at IEVCC meeting
Early August	Task forces meet to discuss draft policy recommendations
Aug. 16	Discuss draft policy recommendations at Advisory Committee meeting
Sept. 15	Submit full draft TES to IEVCC

How Electric Utilities Help Accelerate Transportation Electrification

Presentation on and Discussion

Objectives of Discussion

1. Gain perspective on how transportation electrification is being approached by utilities

2. Build understanding of the barriers both public and private utilities face

3. Embed this knowledge into the TES

Electric utilities can support transportation electrification as well as clean generation

Adoption Barriers:

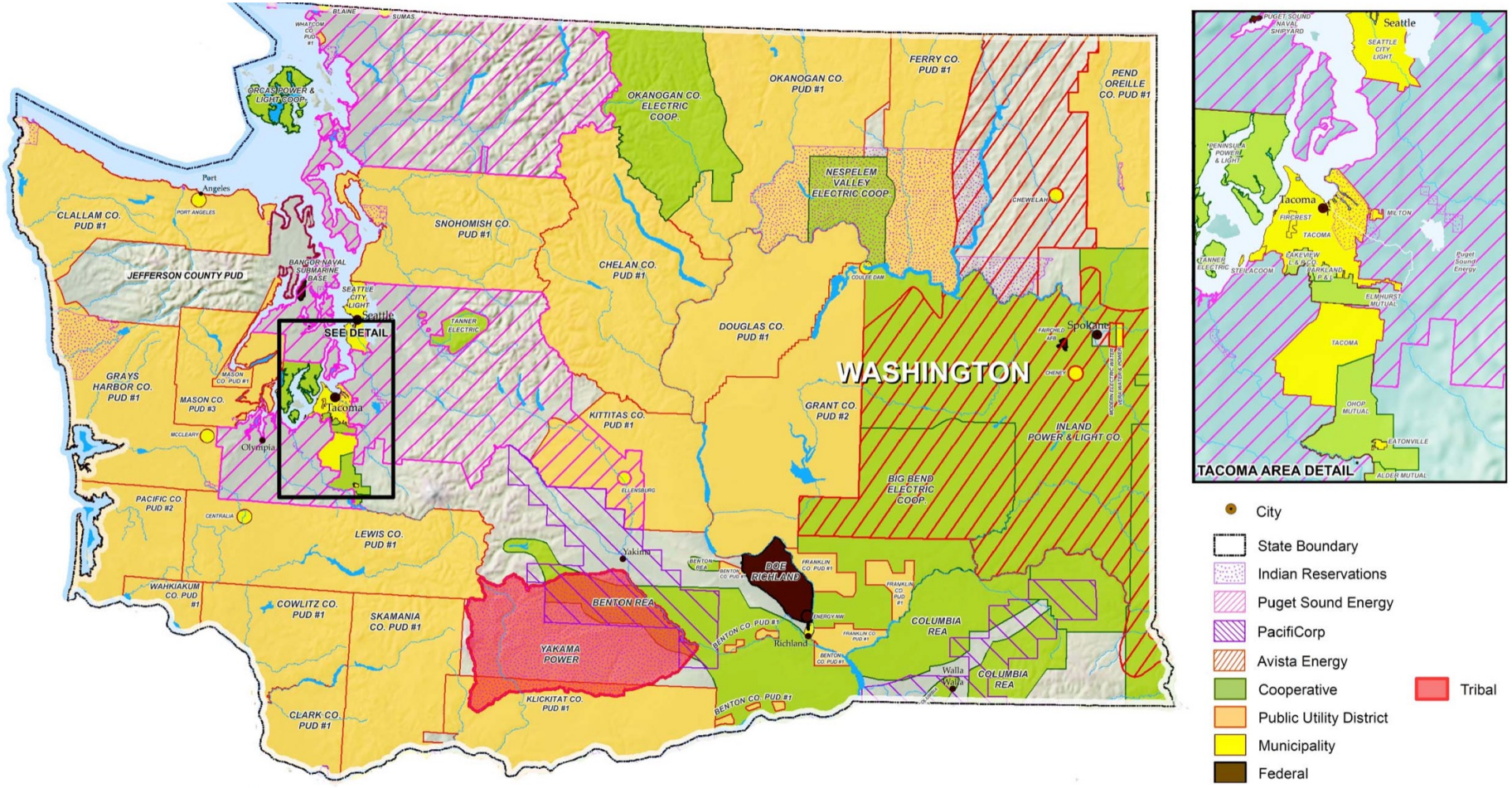
- Insufficient charging infrastructure & range anxiety
- Upfront cost premium vs. conventional vehicles
- Limited vehicle model availability outside CA
- Limited awareness, info, enthusiasm

Integration Challenges:

- Control loads to minimize distribution costs
- Shape loads to support renewable integration
- Invest in grid upgrades to prepare for increases in peak demand from TE
- Ensure resource plans are inclusive of projected energy needs from TE

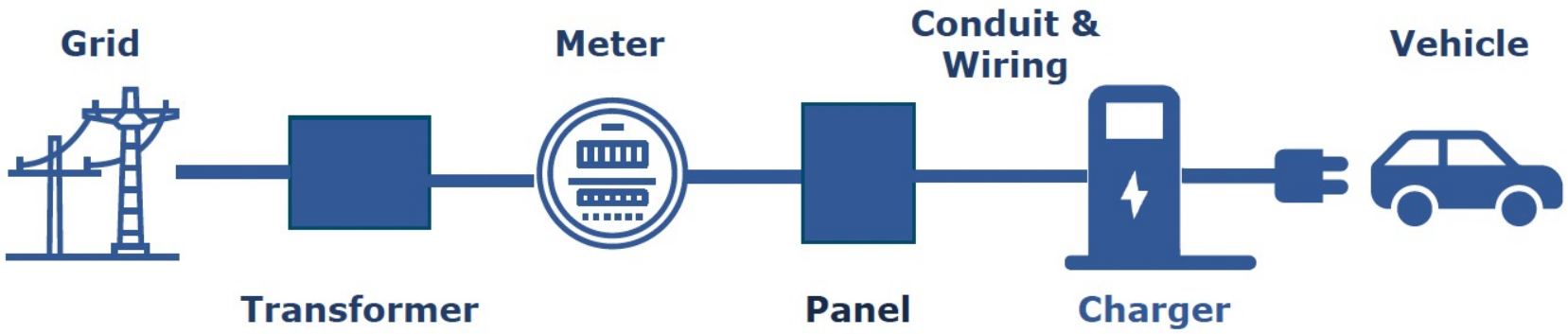
Content courtesy of Dr. Nancy Ryan, eMobility Advisors

US electric utilities are local monopolies - some are public, some are private



http://efaidnbmnnnibpcajpcglclefindmkaj/https://d3n8a8pro7vhmx.cloudfront.net/solarwa/pages/54/attachments/original/1513141161/Washington_Electric_Utilities-large_map.pdf?1513141161

Electric utilities have taken on different roles and tactics to deploy and operate EVSE



Content courtesy of Dr. Nancy Ryan, eMobility Advisors

TE increasingly touches on almost every aspect of utility operations and regulation

1. Rate design

- Rates have the ability to influence charging behavior and can be used to shift charging times to when renewable power is abundant.
- EVSE providers can work with utilities to solve commercial rates to make the business work especially for DCFC and fleets, while accounting for demand impacts.

2. Design and implementation of managed charging programs

- Managed charging programs have the potential to reduce the strain TE has on the grid, lowering costs and expediting service connection queues.
- Pilot programs are happening all over the country, these need to scale to the mass market.

3. Transmission & Distribution Planning

- Service connection costs and timelines are a particular barrier for fleets and DCFC operators.
- Traditional distribution planning has been reactive to the early wake of mass TE, but beginning to transition to proactive planning.

4. Standard development and adoption

- Regulators serve a critical role driving adoption of interoperability standards for all types of utilities to adopt.

Content courtesy of Dr. Nancy Ryan, eMobility Advisors

Energy regulators must balance multiple considerations including how to share costs across customer groups

- **Safety and reliability**
- **Impact on rates**
- **Cost containment**
- **Equity:**
  - EV owners vs. other customers
  - Environmental/social justice
- **Stranded costs**
- **Competition and innovation**
- **Cost recovery mechanism**

Discussion with Washington utilities representatives

Discussion Questions

- **How can the state meet the dual goals of:**
  1. Ensuring that EVSE is installed in overburdened communities and
  2. Not unintentionally creating more truck traffic in routing more MHDV-supported EVSE into overburdened communities?

- **How can utilities minimize passing on costs to customers to upgrade our grids to serve more EVs?**

- **How can the state help speed up for utilities the time it takes to upgrade grid infrastructure?**

Thank you!