

Washington Autonomous Vehicle Work Group  
Infrastructure & Systems Subcommittee

# **Cooperative Automated Transportation (CAT) Policy Framework Development Workshop**

**April 1<sup>st</sup>, 2020**

# Policy Framework Development



# Potential State and Federal Grant Funding Sources for CAT Strategies and Actions



19 GRANT PROGRAMS



11 GRANT PROGRAMS



1 GRANT PROGRAM



1 GRANT PROGRAM

Infrastructure and Systems Subcommittee, 2020 Final Action Plan: Activity #2  
As priority CAT Strategies and Actions begin to take shape

- Conduct an eligibility GAP Analysis with these existing **32** funding sources
- Identify potential impacts from introducing CAT Strategies and Actions to existing funding sources
- **Communicate, promote and share with subcommittee and other interested parties**

# Infographic Example: Communicating potential funding source



## Federal Grant Example ATCMTD

### Advanced Transportation and Congestion Management Technologies Deployment Grant - Fact Sheets



The program authorizes \$60 M for 2020  
The funding size stays the same as 2016



Eligible Applicants

- State or local government or political subdivision thereof,
- Transit agency,
- Metropolitan planning organization (MPO) representing a population of more than 200,000,
- Multijurisdictional group made up of the above eligible applicants, with a signed agreement to implement the initiative across jurisdictional boundaries, and
- Consortium of research or academic institutions. [23 U.S.C. 503(c)(4)(N)]



Focus Areas for ATCMTD

- Multimodal Integrated Corridor Management (ICM)
- Installation of connected vehicle technologies at intersections, pedestrian crossing locations, and other conflict areas
- Unified fare collection and payment systems across transportation modes and jurisdictions,
- Freight Community System
- Technologies to support connected communities
- Infrastructure Maintenance, Monitoring, and Condition Assessment
- Rural technology deployments

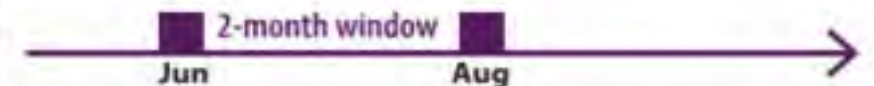
$$20\% \times 60 = \$12M$$

Federal share **UP** to **50%** of the cost of the project. The secretary may **NOT** award **more than 20%** of program funding for a fiscal year to a single grant recipient



NOFO Posted Date: Jun 6, 2019

Last Closing Date for Applications: Aug 18, 2019



# Workshop Agenda

## Morning Session – 3 hours | 9:00am – 12:00pm

- Welcome, overview of process and workshop goals
- Ground rules and workshop collaboration tools
- Focus on four policy goals
  - Economic Vitality & Livability (#3), Infrastructure & Context Sensitive Street Design (#4), Safety (#7), Environment (#8)

## *LUNCH BREAK*

## Afternoon Session – 2 ½ hours | 1:00pm – 3:30pm

- Focus on remaining four policy goals
  - Equity (#6), Shared Mobility (#2), Organize for Innovation (#1), Land Use (#5)
- Wrap-up and next steps

# Goals for Today...

## For each of the 8 Policy Goal areas:

- Action ranking results (Pre-workshop rankings are informational and not final)
  - High = 3; Medium = 2; Low = 1; Action Not a Priority for my Organization = 0
  - “Ranking Score” = Sum of all scores (22 votes; 66 highest score possible)
  - Only one score per organization (if multiples, scores were averaged)
- Changes to existing strategies and actions (shown in strikethrough and red text)
- Newly added strategies and actions (shown in red text)
- Identify gaps, opportunity for changes, new actions, final thoughts
- Next steps for ranking of existing, modified and new actions



# Ground Rules...

1. Focus on refinement of actions
2. Don't be afraid to ask for clarifications or explanations
3. Proposed modifications and new material will be retained
4. Use clear action language
5. Wordsmithing kept to a minimum




## GoToWebinar Comment Features for in-workshop feedback

- **Option 1)** Type your question or comment into the Questions box in the GoToWebinar control panel.
- **Option 2)** Click the hand icon on the GoToWebinar control panel to show organizers that you are ‘raising your hand’ and would like to speak, and the organizers will unmute you.

## IdeaBoardz for new ideas, actions, and general input

<https://ideaboardz.com/for/WA%20AV%20CAT%20Policy%20Development%20Workshop/3079181>

- Click on the plus  symbol next to a Policy Goal to add a new sticky note under that goal (or under General Comments and Ideas)
- “Like” a sticky note, using the thumbs up  button on a card



# Goal # 3: Economic Vitality & Livability

Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.

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Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Incorporate emerging modes in transportation planning.	1-A) Provide support and technical assistance to cities and counties to adopt the Mobility Data Specification into their ordinances and/or contracts that manage private mobility providers using the public right-of-way.	9	7	2	4	<b>43</b>
	1-B) Provide support and technical assistance to RPOs and MPOs to include emerging MaaS and MOD modes into regional travel demand models.	5	8	5	4	<b>36</b>

# Goal # 3: Economic Vitality & Livability

Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.

## Ranking Existing Actions

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		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>Strategy 01</b></p> <p>Incorporate emerging modes in transportation planning.</p>	<p><i>(new)</i> 1-C) Develop a public-private partnership to support and secure funding for a research project that examines how the Public Records Act (PRA) may be updated to:</p> <ul style="list-style-type: none"> <li>• Protect trade secrets for private mobility providers</li> <li>• Protect personally identifiable information for users</li> <li>• Allow for data sharing between public and private entities that advances mobility, safety, equity and other public interest outcomes; while Involving a diverse set of stakeholder and partners.</li> </ul>	N/A	N/A	N/A	N/A	N/A

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		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>Strategy 01</b></p> <p>Incorporate emerging modes in transportation planning.</p>	<p><i>(new)</i> 1-D) Produce a strategy document with recommendations for the state on shared Mobility Data Standards (MDS), storage, and management. This document would involve a diverse group of stakeholders from the public and private sectors in evaluating existing data standards (included the Mobility Data Specifications), researching data management best practices, and working towards forming strong data sharing partnerships.</p>	N/A	N/A	N/A	N/A	N/A

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		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Incorporate emerging modes in transportation planning.	<i>(new)</i> 1-E) Evaluate and assess the experience of cities and counties that have adopted the Mobility Data Specification into their ordinances and/or contracts that manage private mobility providers using the public right-of-way.	N/A	N/A	N/A	N/A	N/A

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<b>Strategy 02</b>  Use public/private partnerships.	2-A) Partner with telecom companies to expand the availability of high-speed internet in rural corridors.	4	12	3	3	<b>39</b>
	2-B) <b>Research ways to</b> partner with telecom companies to install fiber and wireless communications infrastructure within public rights of way.	7	9	3	3	<b>42</b>
	2-C) Support local jurisdictions to pilot MaaS and MOD strategies.	4	12	2	4	<b>38</b>

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		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Use public/private partnerships.	2-D) Partner with MaaS providers to conduct demonstration projects that illustrate how to address specific mobility needs with MaaS.	5	10	3	4	<b>38</b>
	(new) 2-E) Partner with other agencies and private companies to ensure dark fiber is included in as much of the infrastructure as possible.	N/A	N/A	N/A	N/A	N/A



# Goal # 3: Economic Vitality & Livability

Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 03</b>  Increase the person-throughput on commuter routes.	3-A) Provide funding and technical assistance to local jurisdictions to implement transit signal prioritization in designated corridors.	9	6	5	2	<b>44</b>
	3-B) Provide funding and technical assistance to local jurisdictions to implement <del>HOV lanes</del> <b>managed lanes (e.g. BOT or HOT lanes)</b> in designated corridors.	9	4	4	5	<b>39</b>
<b>Strategy 04</b>  Provide sustainable transportation funding.	4-A) Assess alternatives to the state gas tax.	13	4	2	3	<b>49</b>

# Goal # 3: Economic Vitality & Livability

Create resilient and efficient regional networks and empower local agencies to create resilient, multimodal local networks.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<i>(new) Strategy 05</i> Encourage coordination and communication between cities and agencies for efficient regional mobility.	<i>(new) 5-A</i> Explore the inter-agency relationships which may impact and influence potential mobility policies programs and efforts.	N/A	N/A	N/A	N/A	N/A
<i>(new) Strategy 06</i> Coordinate with freight and local services.	<i>(new) 6-A</i> Identify how local entities will need to adapt for the movement of goods and services.	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
- New actions?
- Remaining gaps?
- Final thoughts?

# Goal # 4: Infrastructure & Context

## Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Promote resilient and maintainable infrastructure enhancements.	1-A) <del>Pilot the use of</del> Evaluate the performance of existing recessed striping in areas with frequent snow plow activity in relation to current ADAS machine vision technologies.	4	4	10	4	30
	1-B) Develop standards for machine readable signing and striping.	5	9	6	2	39
	1-C) Prioritize roadway investments that support the evolving needs of the vehicle fleet over the service life of the facility.  <i>Revised Action language:</i> Prioritize Roadway Investments that leverage the ADAS Technologies that are available on existing and near future vehicle fleets	4	10	4	4	36

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Promote resilient and maintainable infrastructure enhancements.	1-D) Partner with telecom companies to advance standards for communications infrastructure that support CAT, e.g. 5G.	7	8	5	2	<b>42</b>
	<i>(new)</i> 1-E) Prioritize Corridors and/or Roadway types for implementation of associated strategies and actions.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 1-F) Join the 5G Automotive Association to monitor industry activity.	N/A	N/A	N/A	N/A	N/A

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Preserve the 5.9 GHz wireless communication spectrum for public safety applications.	2-A) Identify vehicle to everything (V2X) data sharing uses case implementations.	8	7	4	3	<b>42</b>
	2-B) Evaluate both cloud and roadside infrastructure-based V2X implementations in a technology neutral manner.	8	6	4	4	<b>40</b>



# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>Strategy 02</b></p> <p>Preserve the 5.9 GHz wireless communication spectrum for public safety applications.</p>	<p>2-C) Create synergy across jurisdictional boundaries for V2X applications (e.g. Real-time data sharing: traffic signal operations, winter operations, roadway weather, work zone operations, traveler information services, truck parking, commercial vehicle services and enforcement).</p> <p><b>Revised Action language:</b> Plan for a multi-agency connected vehicle data platform to collect and share CV information from infrastructure, moving vehicles, multimodal and 3rd parties so multiple users (OEMs, private sector, and public sector) can access and turn the data into useful information.</p>	8	7	4	3	42

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Preserve the 5.9 GHz wireless communication spectrum for public safety applications.	<i>(new)</i> 2-D) Assess how V2X technologies equitably account for the needs of all modes (e.g. Start with Signalized Intersections and then identify other use cases such as mid block crossings, bike lanes, etc.)	N/A	N/A	N/A	N/A	N/A
<b>Strategy 03</b>  <del>Prevent cybersecurity threats.</del>	<del>A) Implement robust digital security protocols for all public infrastructure.</del>	<del>17</del>	<del>4</del>	<del>0</del>	<del>1</del>	<del>59</del>
<i>(new)</i> <b>Strategy 03</b> Ensure existing statutes do not restrict infrastructure readiness.	<i>(new)</i> 3-A) Audit current RCW/WAC to identify outdated, contradictory, or restrictive policy prescriptions.	N/A	N/A	N/A	N/A	N/A

Moved to new Strategy 05 under Goal 1

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>(new) Strategy 04</b> Advance agency curb space management practice to support emerging modes.	<b>(new) 4-A)</b> Participate as a panel member of the ISO standards development effort (ISO/PWI TR 4448) for use of curb space.	N/A	N/A	N/A	N/A	N/A
	<b>(new) 4-B)</b> Work with partners to develop clear curb management regulations that compliment connected vehicles and infrastructure.	N/A	N/A	N/A	N/A	N/A

# Goal # 4: Infrastructure & Context Sensitive Street Design

Promote durable, physical and digital networks that accommodate the movement of people and goods in ways that are appropriate for the context.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>(new) Strategy 05</b> Use resiliency as a performance measure to prioritize projects.	<i>(new)</i> 5-A) Define safety and operational resiliency quantitatively. Use fault tree analysis to identify resilience gaps and use it as a project prioritization tool.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 5-B) Apply Fault Tree Analysis to new construction projects to determine how they mitigate safety and operational resiliency issues.	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
- New actions?
- Remaining gaps?
- Final thoughts?

# Goal # 7: Safety

Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

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Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>Strategy 01</b></p> <p>Expand the use of automated enforcement.</p>	<p>1-A) <del>Install speed and red-light cameras in urban areas,</del> <b>Identify a list of potential use cases with supporting implementation criteria for all areas that are candidates for automated enforcement. At a minimum, evaluate speed, red-light cameras, congestion management, tolling, and HOV occupancy enforcement. Considerations should be given to</b> where traditional enforcement methods are unfeasible (e.g. no shoulders) or where crash rates remain high.</p>	6	11	2	3	<b>42</b>



# Goal # 7: Safety

Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Promote solutions that have been demonstrated to reduce fatal and serious injury crashes.	2-A) Educate the public on benefits and proper use of Advanced Driver-Assistance Systems (ADAS).	12	9	1	0	<b>55</b>
	2-B) Establish a uniform minimal level of safety assessment for the testing of automated vehicles SAE Levels 3, 4 and 5 that is consistent with other states and federal regulation in a manner that avoids a patchwork of regulation.	14	6	2	0	<b>56</b>

# Goal # 7: Safety

Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Promote solutions that have been demonstrated to reduce fatal and serious injury crashes.	2-C) Create a plan to improve roadway pavement markings in a manner consistent with current and developing ADAS technology performance, <b>and in compliance with Manual on Uniform Traffic Control Devices (MUTCD).</b>	10	4	7	1	<b>45</b>
	(new) 2-D) Enact safety standards for connected autonomous vehicles that ensure people who walk, bike, and roll can safely travel in the right of way.	N/A	N/A	N/A	N/A	N/A

# Goal # 7: Safety

Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 03</b>  Implement Vision Zero.	3-A) Implement the Cooperative Automated Transportation strategies identified in the 2019 Target Zero Plan / WA State Strategic Highway Safety Plan.	8	12	0	2	<b>48</b>
<b>Strategy 04</b>  Use Data-Driven Safety Analysis for decision-making.	4-A) Identify systematic changes to the roadway infrastructure systems and services that <del>increase crash performance</del> <b>reduce crashes</b> with Advanced Driver-Assistance Systems (ADAS).	9	10	2	1	<b>49</b>

# Goal # 7: Safety

Increase the safety of transportation systems and infrastructure to support the safe movement of people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 04</b>  Use Data-Driven Safety Analysis for decision-making.	<i>(new)</i> 4-B) Test new methods for safety analysis (i.e. video near-miss safety-analytics, using 3rd party moving vehicle data with hard braking/hard acceleration, etc.) to understand hot spots and corridor safety needs.	N/A	N/A	N/A	N/A	N/A
<i>(new)</i> <b>Strategy 05</b>  Develop systems which can provide the most positive impact to safety within transit/mobility.	<i>(new)</i> 5-A) Identify and detail specific safety systems for focus.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 5-B) Create machine readable signs to initiate AV notifications/safe shutdowns for roadways with AV restrictions (i.e. no markings, weight restrictions, surface changes, etc.).	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
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# Goal # 8: Environment

Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

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## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>Strategy 01</b></p> <p>Make it easier for individuals to plan and execute multimodal trips.</p>	<p>1-A) Provide support and technical assistance to cities, counties, RPOs, MPOs, and transit agencies to integrate their services (e.g. transit, parking, MOD and MaaS providers) into a smartphone app that integrates planning, scheduling, and paying for trips of different modes.</p>	6	9	5	2	<b>41</b>



# Goal # 8: Environment

Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Decarbonize the transportation system.	2-A) Develop a multi-year transition plan for the <del>complete electrification</del> <b>conversion</b> of agency fleets <b>to non-carbon polluting fueled vehicles</b> .	9	8	3	2	<b>46</b>
	2-B) Expand the existing WSDOT electric vehicle (EV) charging infrastructure grant program that closes that gap of installing sufficient EV charging stations, e.g. every 70 miles along strategic interstate and state routes.	6	9	6	1	<b>42</b>
	2-C) Include electrification as a measure of effectiveness for transportation projects.	5	9	4	4	<b>37</b>

# Goal # 8: Environment

Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Decarbonize the transportation system.	2-D) Include <del>intersection</del> <b>person</b> throughput as a measure of effectiveness for <del>transportation</del> <b>mobility</b> projects.	5	10	4	3	<b>39</b>
	2-E) Measure VMT of internal combustion engine vehicles and electric vehicles separately.	2	8	6	6	<b>28</b>
	(new) 2-F) Include increased <b>mobility as a measure of effectiveness for transportation projects.</b>	N/A	N/A	N/A	N/A	N/A

# Goal # 8: Environment

Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>	<i>(new)</i> 2-G) Reduce greenhouse gas emissions by using AVs as a complement to transit and active transportation.	N/A	N/A	N/A	N/A	N/A
	Decarbonize the transportation system. <i>(new)</i> 2-H) Pilot more accurate ways of measuring greenhouse gas emissions using moving vehicle data (i.e. connected vehicle) for transportation planning & analysis projects.	N/A	N/A	N/A	N/A	N/A

# Goal # 8: Environment

Reduce the local and cumulative environmental impacts of mobility to improve air and water quality, energy conservation and mitigate climate change.

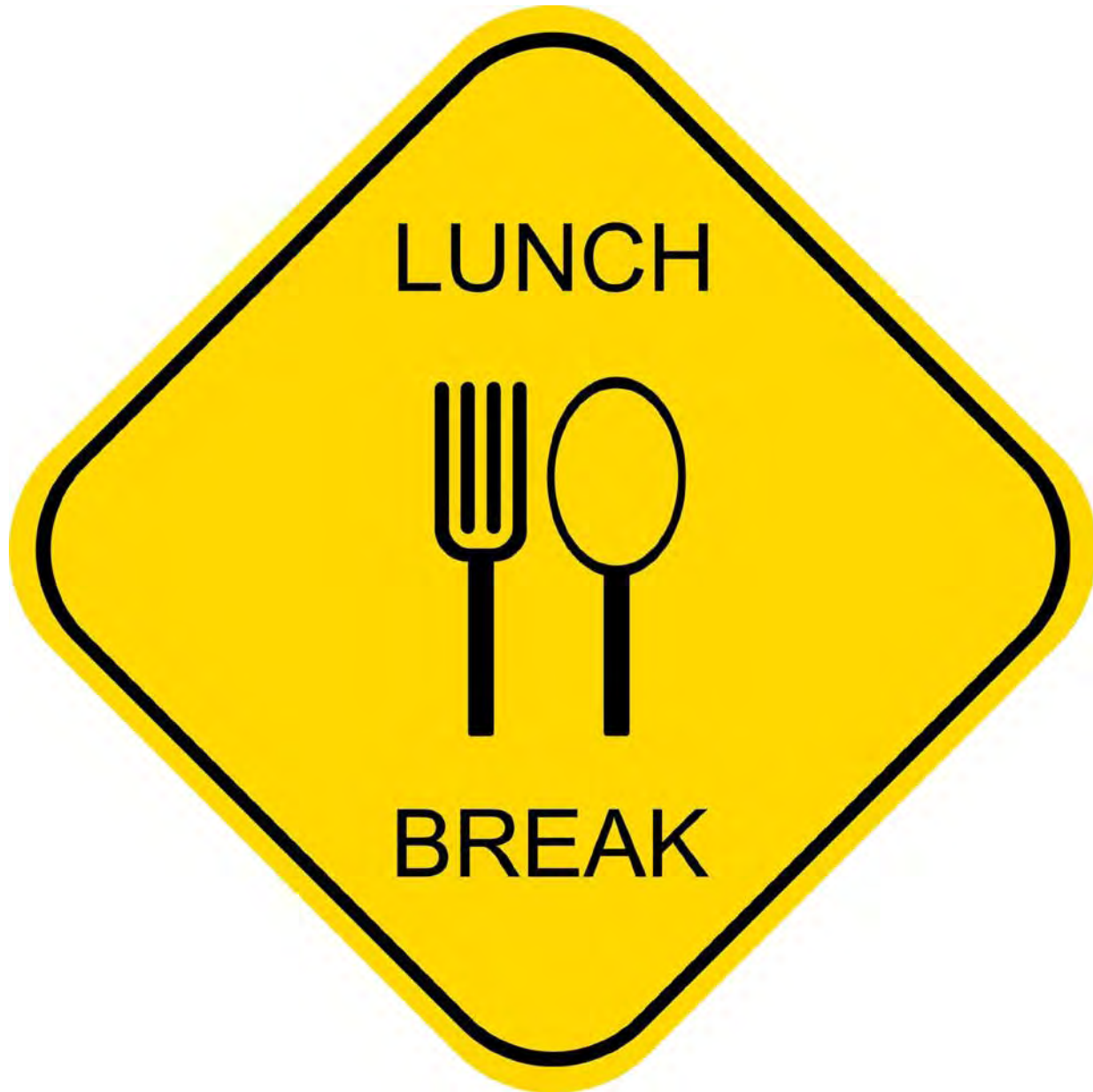
## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 03</b>  Expand the use of technologies proven to reduce emissions.	3-A) Provide funding and technical assistance to local jurisdictions to implement truck signal prioritization in designated corridors.	2	8	9	3	<b>31</b>
	3-B) Consider the impact to all system users through a comprehensive health impact assessment as part of the SEPA process.	3	10	4	5	<b>33</b>
<b>(new) Strategy 04</b>  Develop financial incentives for higher occupancy vehicles (pricing policy).	<b>(new) 4-A) Develop vehicle occupancy detection systems to measure efficiency of all vehicles.</b>	N/A	N/A	N/A	N/A	N/A

# Open Discussion

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Be back at...

**1:00 p.m. PT**

# Goals for Today...



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- Action ranking results (Pre-workshop rankings are informational and not final)
  - High = 3; Medium = 2; Low = 1; Action Not a Priority for my Organization = 0
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- Newly added strategies and actions (shown in red text)
- Identify gaps, opportunity for changes, new actions, final thoughts
- Next steps for ranking of existing, modified and new actions

# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.



# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b> Expand the number of marginalized communities involved in drafting CAT policies.	1-A) Create an Equity subcommittee of the Autonomous Vehicles Work Group.	9	8	2	3	<b>45</b>
<b>Strategy 02</b> Serve diverse populations.	2-A) Establish performance measures for ADA accessibility for private mobility providers.	11	6	3	2	<b>48</b>
	<i>(new)</i> 2-B) Use transportation network companies (TNCs) as a method of supplementing Fixed Route Transit and either replacing or supplementing Dial-a-Ride services.	N/A	N/A	N/A	N/A	N/A

# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Serve diverse populations.	<i>(new)</i> 2-C) Ensure connected automated transportation works for vulnerable populations outside of urban areas.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 2-D) Ensure connected automated transportation includes solutions for human services transportation.	N/A	N/A	N/A	N/A	N/A

# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 03</b>  Meet the mobility needs of vulnerable populations.	3-A) <del>Consult with</del> <b>Prioritize and fund</b> communities' <del>on their</del> mobility needs.	16	3	2	1	<b>56</b>
	3-B) Implement an AV shuttle pilot in an urban corridor that is targeted to serve vulnerable populations.	7	6	6	3	<b>39</b>
	(new) 3-C) <b>Provide funding and technical assistance to transit agencies and local governments to make alternative mobility options available to historically underserved populations. Set up measurement benchmarks to quantify the progress in providing accessibility to alternative options.</b>	N/A	N/A	N/A	N/A	N/A

# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 04</b>  Incorporate community health into project prioritization criteria.	4-A) Identify best practices criteria, implementation approaches and potential barriers to incorporating a health impact assessment into the SEPA process.	4	8	6	4	<b>34</b>
	4-B) Identify urban and rural projects to pilot the health impact assessment. (e.g. If FTA IMI grant funding is secured, evaluated the SAE Level 4 AV Shuttle project in Lakewood WA with Pierce Transit).	6	8	5	3	<b>39</b>

# Goal # 6: Equity

Work with marginalized communities to increase access to desirable mobility options.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<i>(new)</i> <b>Strategy 05</b> Supplement existing fixed route and dial-a-ride transit with shared mobility providers accessed through MOD or MaaS.	<i>(new)</i> 1-A) Develop training and certifications for Transportation Network Companies (TNCs) to enable their services to comply with Americans with Disabilities Act (ADA).	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
- New actions?
- Remaining gaps?
- Final thoughts?

## Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Increase the proportion of homes that are within 10 minutes of a transit service with peak hour headway of 15 minutes or less.	1-A) Work with local transit agencies or providers and residents to identify areas where transit use is sub-optimal.	7	10	3	2	<b>44</b>
	1-B) Encourage transit agencies or providers to work with private partners to increase transit access.	8	6	7	1	<b>43</b>
	1-C) Explore opportunities for automated shuttles to feed transit stations.	6	4	10	2	<b>36</b>



# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Increase the proportion of homes that are within 10 minutes of a transit service with peak hour headway of 15 minutes or less.	1-D) <del>Only</del> Support partnerships with ride-hailing companies that demonstrate an increase in transit or other high occupancy mode ridership.	6	6	7	3	<b>37</b>
	(new) 1-E) Develop policies that encourage ride-hailing companies to promote increase in transit.	N/A	N/A	N/A	N/A	N/A
	(new) 1-F) A Washington city or unincorporated area that allows shared electric scooters or e-bikes, and their public transit provider will pilot the remote and autonomous repositioning of those devices to improve connections to transit.	N/A	N/A	N/A	N/A	N/A

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Adapt and reuse public infrastructure as mobility needs evolve.	2-A) Develop a plan for transitioning Park & Ride lots to other uses such as shared mobility hubs.	8	6	8	0	<b>44</b>
	2-B) Provide guidance on implementing Road Diets and Complete Streets that support the use of emerging modes.	7	9	3	3	<b>42</b>
	<i>(new)</i> 2-C) Provide guidance on the reutilization of road space that support the use of emerging modes.	N/A	N/A	N/A	N/A	N/A

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Adapt and reuse public infrastructure as mobility needs evolve.	(new) 2-D) Evaluate the transit grid to work toward better access and connections in the system, and to strengthen it where it is the weakest.	N/A	N/A	N/A	N/A	N/A
	(new) 2-E) Provide funding and technical assistance to local jurisdictions to implement Business Access and Transit (BAT) lanes in designated corridors.	N/A	N/A	N/A	N/A	N/A
	(new) 2-F) Assess the historical and projected usage of existing Park&Ride lots, identify underutilization issues, and potential barriers to others uses such as shared mobility hubs.	N/A	N/A	N/A	N/A	N/A

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>(new) Strategy 03</b></p> <p>Identify a list of existing planning tools for assessing the connection between modal options and housing.</p>	<p><b>(new) 3-A)</b> Identify, Evaluate and communicate the list of GIS based tools that can conduct a macro level planning analysis using publicly accessible data (e.g. Sugar Access, Census Tract and Streetlight Data).</p>	N/A	N/A	N/A	N/A	N/A
<p><b>(new) Strategy 04</b></p> <p>Explore methods to fund and support shared mobility pilot projects. Funding should cover a number of use cases and communities, not only urban.</p>	<p><b>(new) 4-A)</b> Further define and detail methods to incentivize shared mobility.</p>	N/A	N/A	N/A	N/A	N/A

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>(new) Strategy 05</b>  Embrace mode-neutral capacity measures.	<b>(new) 5-A) Define "shared mobility" quantitatively in terms of moving people and goods. Establish mode-neutral capacity measures that calculate capacity for all modes, including active modes and transit.</b>	N/A	N/A	N/A	N/A	N/A
	<b>(new) 5-B) Identify under-utilized facilities that can increase person-throughput, such as with managed lanes and road diets.</b>	N/A	N/A	N/A	N/A	N/A

# Goal # 2: Shared Mobility

Encourage and incentivize shared mobility, including an emphasis on high occupancy and shared modes for moving people and goods.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>(new) Strategy 06</b></p> <p>Encourage high adoption of Shared Mobility by enhancing the commuter experience and reducing costs from shared, automation, and electrification.</p>	<p><b>(new) 6-A) Measure commuter experience metrics to identify areas for enhancement. Metrics include, but are not limited to, time to destination and number of changeovers/hops to destination.</b></p>	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
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- Remaining gaps?
- Final thoughts?

# Goal # 1: Organize for Innovation

Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.



# Goal # 1: Organize for Innovation

Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Share knowledge with external partners.	1-A) Maintain active participation in the American Association of State Highway Officials (AASHTO) CAT Coalition, which is a national network to address critical program and technical issues associated with the nationwide deployment of connected and automated vehicles on streets and highways.	13	6	0	3	<b>51</b>
	1-B) Identify open data needs from the private and public sector and create a plan to address the gaps.	12	8	1	1	<b>53</b>

# Goal # 1: Organize for Innovation

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## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Share knowledge with external partners.	<i>(new)</i> 1-C) Maintain active participation in the Governors Highway Safety Association (GHSA) and the Association of American Motor Vehicle Administrators (AAMVA), who have autonomous vehicle working groups and are striving to develop standards for issues related to AVs.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 1-D) Identify a list of national organizations, workgroups, committees, etc. to intentionally partner with and engage in a continued meaningful way with a list of public and private organizations that should consider engaging in each opportunity.	N/A	N/A	N/A	N/A	N/A

# Goal # 1: Organize for Innovation

Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Adopt an organizational structure that can meet the needs of the <del>21st</del> century <b>next ten years</b> .	2-A) Establish employee positions dedicated to innovation with authority over dedicate operating and capital funds and flexibility to engage partnerships.	9	9	4	0	<b>49</b>
	2-B) Provide access to training that prepares agency staff to <b>plan, program,</b> manage, maintain, and operate new systems and infrastructure.	9	10	3	0	<b>50</b>

# Goal # 1: Organize for Innovation

Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 02</b>  Adopt an organizational structure that can meet the needs of the <del>21st</del> century next ten years.	<i>(new)</i> 2-C) Delineate the responsibilities between federal, state, MPO and local agencies. Identify the responsible party for implementing the policy.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 2-D) Identify a list of core technical competency skillsets that will be needed for planning, managing and operating the future transportation system, and identify existing training opportunities and gaps to address those needs.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 2-E) Identify organizational areas (such as asset management or information technology) that will be impacted and need to adapt within a CAT future.	N/A	N/A	N/A	N/A	N/A

# Goal # 1: Organize for Innovation

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## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>(new) Strategy 03</b> Restructure agency budgets to most effectively reduce safety related societal costs.	<b>(new) 3-A) Increase spending on safety related transportation expenditures to reduce societal costs of crashes.</b>	N/A	N/A	N/A	N/A	N/A
<b>(new) Strategy 04</b> Use agency performance measures to prioritize technology investments.	<b>(new) 4-A) Create a framework to screen technology investments based on how they contribute to agency performance measures.</b>	N/A	N/A	N/A	N/A	N/A
	<b>(new) 4-B) Create a discretionary fund to procure technologies that meet the performance measure criteria.</b>	N/A	N/A	N/A	N/A	N/A

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Enable organizational change that empowers officials to be flexible, accelerate decision-making, and adapt to changing technology.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>(new) Strategy 05</b></p> <p>Develop and maintain data security, privacy, and governance policies and standards.</p>	<p><i>(new)</i> 5-A) Identify and collect data from private and public sector on data.wa.gov.</p>	N/A	N/A	N/A	N/A	N/A
	<p><i>(new)</i> 5-B) Update/develop data standards, specifications, and policies that support connected infrastructure. This includes clarifications on who owns what data, who can access it, what it is used for, etc. Policies should enable public-private data sharing that protects trade secrets and individual privacy.</p>	N/A	N/A	N/A	N/A	N/A
	<p><i>(moved from Goal 4 Strategy 02)</i> 5-C) Implement robust <b>administrative, technical and physical</b> security protocols for all public infrastructure.</p>	17	4	0	1	<b>59</b>

# Goal # 1: Organize for Innovation

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## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<p><b>(new) Strategy 05</b></p> <p>Develop and maintain data security, privacy, and governance policies and standards.</p>	<i>(new)</i> 5-D) Evaluate, plan, and provide guidance for the IT security needs and threat response plans for transportation and local agencies.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 5-E) Dedicate IT or IT positions to cybersecurity.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 5-F) The System Technology and Data Security Subcommittee: Lead the development of a comprehensive cybersecurity workshop with a comprehensive list of public and private subject matter experts to identify near-term steps to address existing cybersecurity gaps for transportation systems and services.	N/A	N/A	N/A	N/A	N/A
	<i>(new)</i> 5-G) Identify data stewardship principles.	N/A	N/A	N/A	N/A	N/A

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
- New actions?
- Remaining gaps?
- Final thoughts?



## Goal # 5: Land Use

Encourage land use development patterns that support multimodal connectivity to efficient local and regional networks.

# Goal # 5: Land Use

Encourage land use development patterns that support multimodal connectivity to efficient local and regional networks.

## Ranking Existing Actions

STRATEGY	ACTION	COUNT OF SUBMITTED RANKINGS				RANKING SCORE (0 – 66)
		HIGH	MED	LOW	NOT A PRIORITY	
<b>Strategy 01</b>  Promote smart growth.	1-A) Provide support and technical assistance to cities and counties to incorporate shared mobility and transit-oriented development <b>communities</b> principles into their comprehensive plans and zoning ordinances.	8	7	2	5	<b>40</b>
	1-B) Provide support and technical assistance to cities and counties to adopt ordinances that reduce or eliminate parking requirements, <b>for main mobility routes, in a way to support desired, equitable mode shift, not a blanket reduction or elimination or parking.</b>	8	3	5	6	<b>35</b>

# Open Discussion

## For the Policy Goal just reviewed...

- Questions?
- Clarifications?
- New actions?
- Remaining gaps?
- Final thoughts?

# Next Steps

- IdeaBoardz open through end of day Thursday April 2<sup>nd</sup>
- Feedback received from workshop and IdeaBoardz will be synthesized and incorporated into post-workshop materials
- Post-Workshop Survey will be sent out by April 8<sup>th</sup> > Due April 15<sup>th</sup>
  - Updated Informational Ranking of existing, modified and new strategies and actions
  - Informational Ranking results will be shared at April 22<sup>nd</sup> Infrastructure & Systems Subcommittee meeting
- See “*WA-AV-IS-Activity1-Phase2-HighLevelWorkPlan*” for more information on next steps through 2020 (attached to workshop invitation)

# THANK YOU!

**Stay safe and healthy.**