



MEETING SUMMARY

Washington State AV Work Group - Infrastructure and Systems Subcommittee

July 13th, 2020 | 1:00 pm – 3:00 pm

Remote Participation | Meeting Materials available [here](#)¹

Attendees:

First Name	Last Name	Organization
Robert	Acevedo	HDR
Bruce	Agnew	ACES Northwest
Amanda	Anderson	Peloton Technology
Ted	Bailey	WSDOT
Debi	Besser	Washington Traffic Safety Commission
Erica	Bramlet	Washington State Senate Transportation Commission
Daniela	Bremmer	WSDOT
Sheri	Call	Washington Trucking Association
Holly	Cocci	GTH GOB
Marc	Daily	Thurston Regional Planning Council (TRPC)
Marshall	Elizer	WSDOT
Russ	Elliott	Washington Statewide Broadband Office
Mike	Ennis	Association of Washington Business
Mariya	Frost	Washington Policy Center
Chris	Grgich	Fehr & Peers
Azmeena	Hasham	Verizon Smart Communities
Samantha	Kersul	TechNet
Rep. Shelley	Kloba	Washington State House Representative
Daniel	Lai	City of Bellevue
Francesca	Maier	Fair Cape Consulting
Cecile	Malik	City of Auburn
Loreana	Marciante	HNTB
Steve	Marshall	City of Bellevue
John	Milbrath	AAA Washington
Roger	Millar	WSDOT
Kyle	Miller	WSDOT
Markell	Moffett	WSP USA
Paul	Parker	Washington State Transportation Commission
Jeff	Peterson	First Transit
Tony	Sermonti	Sermonti Public Affairs

¹ Meeting materials: <https://avworkgroupwa.org/committee-meeting/infrastructure-and-systems-subcommittee-meeting-9>

First Name	Last Name	Organization
Michael	Shannon	HNTB
Ryan	Spiller	Capitol Connection
Rui	Tu	HDR
Karl	Typolt	DKS Associates
Michael	Villnave	Federal Highway Administration
Shannon	Walker	Seattle DOT
Yinhai	Wang	University of Washington
Bryce	Yadon	Futurewise

WELCOME, INTRODUCTIONS, OPENING REMARKS

Roger Millar & Mike Ennis

- Overview of agenda
- Go-To-Webinar remote participation process
 - Breaking after each agenda items for questions and comments
 - Use chat/questions box if you have questions
 - Use the “raise your hand” feature to be unmuted for verbal questions/comments
 - Encouraged to show video when you are speaking, after raising your hand

Topic closed.

PUBLIC COMMENT

- No public comment.

Topic closed.

HOW IS WA STATE PREPARING FOR MOBILITY BROADBAND ACCESS FOR ALL CITIZENS AND BUSINESSES BY 2028?

Russ Elliot, Mobility Broadband Office

- The importance of broadband has been acknowledged, now coming up with priorities and plans to fix the gaps
- Washington State goals for the Statewide Broadband Office
 - By 2024 – 25Mbps download / 3Mbps upload
 - By 2026 – 1Gbps for anchor institutions such as schools, libraries, health care, etc.
 - By 2028 – 150Mbps symmetrical
 - Symmetry is very important, especially when talking about AVs and transferring all that data up and down
- There is a demand for growth and for user choice
- Need to make room for disruptive technologies
- Looking to solve specific problems, defining at the micro level
 - Example: City of Colville, WA has broadband but the 3-mile radius around the city does not – this is a specific use case we can work to solve the problem
- Broadband delivery lifecycle is not provider-down anymore

- Working to have community-up discussions – communities to take ownership and be part of the conversation to resolve their specific broadband issues
- The State does not have the funding to solve all the broadband problems, the Washington State Broadband Office is going after federal funds to fund specific opportunities
- Developing a State Broadband Planning Group – collaborative group with many voices at the table, such as health care, tribes, commerce, transportation, etc.
 - This group can be a community to discuss and bring opportunities forward, find funding, get deliverables and ensure the projects are serviceable and long-term funded
- COVID-19 did not change current collaborations but did highlight the issue of affordability – people were not expecting to have to add connectivity to their monthly home bills, but need it now for the new virtual world
 - Equity and inclusion impacts – Those that cannot afford, those that don't understand how to use the technology, etc.
- Statewide mapping project
 - What gets measured gets done
 - Statewide mapping platform will identify state assets (e.g. towers), infrastructure and fiber already installed/in the ground, areas of need (via crowdsource speed tests)
 - Project is meant to identify and help the unserved areas, under 25/3 Mbps
 - Current problem is that public funds are competing with private dollars
 - Plan to make sure incumbent providers are selected to provide services first - they currently have the capital investment – find out if they want to provide services and help fix the problem
 - How can we help to protect their investments?
 - How can we make sure they are accountable?
 - If current providers aren't going to provide services, alternatives will be selected
- Funding for feasibility, construction, and services
 - Just missed opportunity for up to \$600M in USDA ReConnect Grant Program
 - Struggling to identify and chase after federal funding opportunities
 - Expect another Recovery Act with an infrastructure plan that includes broadband
 - We need to be prepared to speak to that funding opportunity – What we plan to do with it, where the funding would go
 - Recently won \$2.4M through a ReConnect grant and \$2.3M through Community Connect grant
- Next steps
 - Need to be ready with shovel-ready projects
 - Need to identify what we can do
 - Holding State Representatives and Senators accountable to go to their districts to identify specific projects in each district – such as feasibility studies or grant applications
 - Going to seat State Broadband Planning Group
- Discussion:
 - WSDOT will have a seat on the State Broadband Planning Group
 - WSDOT can support identifying areas where we need conduit – where there

are gaps, rural areas or places where the market just isn't there where the Washington State Broadband Office and WSDOT could partner

- Policy suggestion to “Dig Once” – collaborate with other agencies/entities as much as possible to meet multiple needs
- May require federal reform – current federal law and administrative rules restricts what we can do in our right-of-way
- Moving into the post-pandemic world, it is increasingly important to the economy to provide internet access to everyone in the State
- Wyoming Department of Transportation talked at state level on collaborating on barriers and opportunities – how to address, what obstacles can we remove
 - If federal laws and administrative rules are an obstacle, we can get our congressional folks working to remove that obstacle
- Washington Public Works Board just published [\\$18M Broadband Construction Grant](#), is strictly a grant loan for unserved communities – those below 25/3Mbps
 - Community focused, network provider focused – If they can demonstrate an area is unserved, they can go after those funds
 - Potential to build conduit in an area if you are in need
 - WSDOT should come forward with areas they want to reach, projects going on with providers, identify areas for potential partnerships
 - Projects in the public right-of-way is a great way to close gaps
- Suggestion for Broadband Office to work on, help with partnerships – the permit process – A long, extensive process, huge problem for deployment
 - If there is desire to fast track projects, need to expedite the permit process
 - City of Seattle is expediting permits for outside dining post-pandemic – If cities want to expedite permits, they can, could put some focus on broadband project permits
 - Specifics around permitting can be run up the flagpole to address challenges

Topic closed.

2020 ACTION PLAN UPDATE

Activity 1: Developing policy goals, strategies, and illustrative actions based on local, regional, and national “best practice” policy examples

Daniela Bremmer

- Started in 2019, reviewing policy frameworks and best practices from across country
- Incorporated findings into an initial draft, adding to and enhancing WSDOT’s CAT policy framework
- Workshop held in April 2020 to develop a set of strategies and actions
- Many opportunities for input – throughout process, stopped many times to ask where we need input, reach out to additional partners, solicit ideas
- Workshop process
 - Gather right people, everyone has an opportunity to be at the table
 - Pre-workshop inputs – ranking of existing draft actions and provide new ideas or modifications

- Hold workshop
 - Plan was to hold an in-person workshop, COVID-19 required we shift to a virtual workshop quickly
 - Virtual workshop was challenging for gathering input
 - Worked to accommodate different methods to gather input – IdeaBoardz, chat/questions during the meeting, etc.
- Post-workshop integration of results
- Workshop Participation
 - 1-day workshop over 6 hours, split into 8 sections
 - Even attendance across private and public sectors
 - Active discussion with new ideas under every policy goal
 - Over 150 articles of feedback
 - 30+ attendees
- Integration of input
 - Inclusive – nothing removed, everything considered
 - Transparent – everything documented, tracked/logged
 - Informed – industry knowledge/best practice where applicable
- 3 key integration products
 - Marked up version of Strategies and Actions document
 - Clean version of Strategies and Actions document
 - Strategies and Actions feedback log – all feedback received during the workshop was logged with responses/actions based on feedback – In-meeting verbal and written questions and responses, IdeaBoardz, etc.
 - All 3 integration products available on WA AV website on [Resources page](#), under Infrastructure & Systems Subcommittee General Subcommittee Resources sub-header
- Anticipated next steps
 - Executive Committee confirmed the 8 adopted policy goals are to serve as framework for action at the June 24th Executive Committee meeting
 - Executive Committee will provide direction to subcommittees to help guide activities based on polling results from June 24th Executive Committee meeting
 - Other subcommittees will continue to review policy goals and develop their respective goals as needed
 - Continue discussion under the “Where do we go from here?” agenda topic at today’s meeting

Activity 2: Develop project selection criteria and discuss potential funding approaches to enable the selection of near-term pilot deployment proposals and projects

Kyle Miller & Robert Acevedo

- Goal of activity to is to develop project selection criteria and discuss potential funding approaches to enable the selection of near-term pilot deployment proposal and projects
- Continuing to evaluate and build upon evaluation scorecard developed by SDOT, King County Metro, and Sound Transit.
- Continuing to evaluate grant criteria from existing state, federal, and WSDOT grant programs

- Work done to date is posted on [WA AV website Resources page](#)
- Looking to incorporate information from Activity 1 when it is available
- Planning to assess feasibility of grant criteria from deployment scenarios identified by the subcommittee
- Have done a deep dive into funding sources – there are a lot of grant opportunities available
- Want to make sure initiatives and criteria formed from Activity 1 have clear paths to funding and available resources
- Activity 2 group looked at the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant
 - 2020 notice of funding opportunity (NOFO) came out July 1st
 - Highlights of NOFO sent to members of subcommittee
 - \$60M funding available this round with a 50% match requirement, application due August 31st
 - NOFO webinar being hosted on July 30th
 - **ACTION ITEM: Kyle Miller will send webinar information to subcommittee members as it becomes available – July 30, 2020 at 1:00 EST – [register here](#)**
 - ATCMTD usually only awards 5-10 projects – looking for sizeable efforts, healthy awards
- WSDOT recent recipient of a \$3.4M ATCMTD grant for virtual community center project with City of Seattle, Washington State Patrol, University of Washington, and Challenge Seattle
 - Happy to work with partner agencies if any are interested in going after 2020 round
- Discussion:
 - Activity 2 group or WSDOT has not received any inquiries from local jurisdictions on this grant
 - Information sent out was helpful, provided additional information over the federal guidance
 - Whatever extra help WSDOT and this subcommittee can provide on communicating with people, cities, transit agencies, etc. is helpful
 - This grant needs extraordinary outreach, only a few weeks to put an application together
 - 50% funding match requirement makes it difficult as well
 - This won't be the last time this grant becomes available. If folks are interested but unable to make this round's deadline, suggest continuing to develop ideas and start organizing for a future grant campaign – this ground comes around in cycles
 - Another grant available now, with an even shorter fuse, is the [ITS4US Complete Trip program](#) which has an automated vehicle focus as well
 - City of Bellevue is trying to strategize a game plan on both this and ATCMTD
 - Applications due August 3rd

[Activity #3 - Partnership and Collaboration Discussions with Private Sector Companies](#)

Ted Bailey

- 2019 Activity 3 efforts – reached out to self-certified companies to have open discussions – How can we help you move forward, what can we be doing?
- Since then, with the new insurance law, companies could decide whether to continue in the self-certification process or remove themselves from the self-certified list
 - Some chose to remove themselves for various reasons, such as no longer being interested in testing in WA or only conducting levels 1-3 testing
- Companies currently [self-certified with WA DOL](#):

- BMW of North America, LLC
- LM Industries Group, Inc.
- NVIDIA Corporation
- Optimus Ride Inc.
- Waymo LLC
- Zoox, Inc.
- Now DOL subcommittee is engaged in developing legislation going into effect Oct 2021 for AV testing and reporting requirements
- Infrastructure & Systems Subcommittee is partnering with DOL, encouraging companies to have collaborative discussions through the Licensing subcommittee-hosted webinars
- Licensing subcommittee focusing on the testing process and having discussions with those wanting to move forward, a better use of everyone's time
- June 24th Executive Committee meeting included an AV Industry panel – Beep, Cruise, and LM Industries all discussed what their plans are, where we can help to promote safe testing and deployments in WA
 - One thing that resonated from those presentations was that companies are looking for a pathway to commercial deployments
 - One thing to be able to get testing underway
 - Unclear how that scales to commercial deployments
 - From Infrastructure & Systems subcommittee perspective – what tangible things can we be working on to help resolve? Physical infrastructure? Policies? Procedures?
- Broadband is engaging a lot, there is a desire to close the digital divide, figure out what we do with giber, how we enable those types of investments, how we get technical issues/barriers removed
 - Reason for the Washington State Broadband Office presentation today
- Discussion:
 - During the evolution of Activity 3, there was a focus on companies self-certified with DOL, leaving out companies already deploying some form of AV technology that does not require self-certification, such as Tesla; Concern that we are only engaging companies on the current DOL self-certification list.
 - Could Activity 3 add existing companies already deploying to the list to reach out to, to see if there is an opportunity to learn more about their obstacles and challenges?
 - WSDOT is reaching out to those types of companies via coordination at a national level with AASHTO, ITSA, etc.
 - Activity 3 is an un-resourced subcommittee activity, so we want to put a fence around it by only reaching out to companies on the current DOL self-certification list.
 - Fundamental goals to remove barriers to investment of AV testing and deployment
 - Desire to remove a barrier for commercialization that isn't coming soon is a lower priority – We want to balance our efforts with those ready now
 - One example is vehicles operating in automated mode deployed on the street today follow lines on freeways – when they come in to a construction zone where the lines haven't been altered, the vehicle continues to follow the line and goes straight through the construction zone without consideration to work being done, just plowing through and hitting barriers
 - Example of an infrastructure obstacle for technology on the road now

- Is this a challenge for companies like Tesla? for DOTs? Is this a widespread issue that we should look to resolve?
- These types of issues may not come up in discussions only with companies self-certified to test AVs
- This relates to an action in the WA CAT Policy Framework – looking into things like lane striping, could be a focus area when we have conversations with self-certified companies
- Don't want to limit efforts to the 6 companies self-certified when there are so many others already deploying
 - This Infrastructure & Systems Subcommittee is reaching out to self-certified companies, with broader public/private partnerships and collaboration with the Licensing subcommittee so as not to create silos
 - Need to have conversations across subcommittee to identify broader issues so companies don't have to talk to each subcommittee separately
 - Activity 3 leads should talk, discuss how to have conversations with other subcommittees
- As it relates to the lane striping issue, industry is having conversations at a national level with FHWA and USDOT, the CAT Coalition
 - We as a state should not put a lot of energy into a Washington-specific solution – Companies like Tesla do not want to have 50+ solutions, based on where they are operating
 - Topics like this can be identified and we can determine whether it is something already being addressed at the national level
 - Subcommittee members involved in those discussions can make sure the rest of the subcommittee and Executive Committee members know what is happening at the national level
- Work zone / lane striping issue is not something that needs to be researched, or discussed with OEMs, it is a known issue
 - Level 2 ADAS technology autosteers (lane keeping technologies), uses cameras to follow paint stripes
 - WSDOT operates high-speed zones with work zones where workers lives are in jeopardy, don't want to punt on that.
 - We can update work zone temporary traffic control and save lives
 - People are misusing their Level 2 ADAS, this doesn't need to be in a policy statement, it can be acted on today
 - We can tell the Legislature it is important even though we have lost funding because of COVID-19; It is important to have a statewide database on paint stripes and conditions of such assets to keep people safe
 - Getting information about work zones into systems so that highly automated vehicles are given a notice they are entering a work zone won't resolve the issue
 - People are misusing the technology, having the car on autopilot through work zones even though they are not supposed to
 - It is incumbent on us (WSDOT) as an agency to make work zones as safe as possible, we also need to communicate where those work zones are to the technology

- It is technology developers' responsibility to build into the software that when entering a work zone (or close to one) that autopilot must turn off and the driver must take the wheel
 - Work is being done in this space at the national level, see no need for our subcommittee's Activity 3 group to also take it on
 - Our role is to make the Legislature and Work Group aware of the conversations being had at a national level, investments that need to be made
 - WSDOT proposed to double the paint budget 3 years ago – did not make it through the legislative process
 - To continue to inform and educate, suggest the subcommittee do it as efficiently as possible to best use everyone's time and talent
 - Suggest this as an appropriate action of this subcommittee to pass the message on to the Legislature to invest in managing paint strip assets
- Discussion goes back to the notions behind Target Zero
 - We should be making sure systems, structures, equipment are being engineered so that consumers cannot misuse, or make it very difficult to misuse
 - We have a responsibility as a state to consider what the companies' responsibilities are to create a safe product
 - If there are places where it is inappropriate to use the automated systems in a vehicle, we could geofence those areas
 - Right now, humans get to decide
 - Manufacturers could take on the responsibility to make sure their products are not being misused the way they are now
 - If Brand X is a highly automated vehicle, why is it still able to break the law? To speed?
 - School zones, camera enforcement... We wouldn't need those if we could geofence the zones and AVs simply followed the law
 - When you look at automation coming into automobiles, buses, trucks – Is there an ethics knob the owner can turn?
 - In WA, 70MPH is as fast as you can legally go – but vehicle speedometers go up to 120MPH-Could AVs accommodate for that?
 - What is the appropriate distribution of responsibility and accountability of behavior?
 - Cars driven by humans through something like a work zone can safely do so
 - Should we change out practice to enable AVs to move through in automated mode, or do we let drivers know they are in a work zone and put the onus on them?
 - What is the private vs. public role in this partnership?
 - It is bigger than the vehicle. We need to be talking about the broader transportation system – CAT

Activity 3 Topic Closed.

REVIEW INFRASTRUCTURE AND SYSTEMS SUBCOMMITTEE RESOURCE PAGE

Daniela Bremmer

- *Agenda topic not discussed due to time constraints/will be shared through email.*

Topic Closed.

WHERE DO WE GO FROM HERE ROUNDTABLE

Roger Millar & Mike Ennis

- This subcommittee has done a lot of good work to this point, some might even consider it overachieving compared to the other WA AV Work Group subcommittees
- Some concerns voiced by subcommittee members, the Transportation Commission, business partners –where we are headed, how COVID-19 is changing priorities and availability/focus of subcommittee members
- Washington State Transportation Commission (WSTC) recently facilitated a survey of AV WG Executive Committee members, looking for directions to the AV WG and to all subcommittees in moving forward
- In conjunction, this subcommittee, is trying to assess where we want to go in the remaining few years of this subcommittee – This is a good time to check in with subcommittee members
 - The AV WG confirmed that the CAT policy goals this subcommittee developed and got adopted by the Executive Committee are used as a basis and starting point for setting priorities
 - Strategies and Actions discussions and development work we've done recently is comprehensive,
 - There is some concern that some of the actions are out of our lane, out of this subcommittee's scope
 - The AV WG may be asking us to drill down a bit, identify near-term actionable items we can focus on, which was the next step in our strategy and action development process

Highlights / Guidance from the June 24th WA WG EC Meeting / Mentimeter Survey Results
Markell Moffett, WSP USA

- WSP USA on behalf of the WSTC facilitated a work session with the AV WG Executive Committee at the June 24th meeting to identify priorities and direction for the Work Group's path moving forward
- The executive committee acknowledged that this subcommittee has done a lot of important work, and it's a lot farther ahead than the rest of the Work Group's subcommittees
- There was recognition that the rest of the Work Group needs to catch up, start to identify more focused priorities for the Work Group and subcommittees to focus on through the Work Group's time (sunset December 2023)
- Part of the work session was a polling exercise that asked the Executive Committee members to rank broad focus areas, then actions within each of those broad focus areas to try and highlight some priorities

- Broad focus areas – Near-term testing of highly automated vehicles, near- and long-term deployment of highly automated vehicles, and achievement of CAT objectives and mitigating potential negative impacts of AV technologies
 - WSP is working to synthesize and interpret the results in a meaningful way to disseminate to the Executive Committee and subcommittees to move forward on
 - One initial takeaway is the rankings within ‘deployment-oriented activities’ focus area indicate the desire to lay near-term groundwork for future AV deployments
 - Rankings show prioritizing a list of near-term infrastructure investments ranked first, followed by prioritizing a list of topics needing legislative reform then by identifying AV data guiding principles – this order makes logical sense to lay the groundwork
 - The work session also gathered free-form input from Executive Committee members on actions or focus areas not in the polling exercise that members would like to see prioritized, as well as what outcomes do members see as most critical to the success of the group
 - WSTC is looking for a synthesis and recommendations report to be sent out to the Executive Committee and subcommittees with enough time before the September Executive Committee meeting for people to be prepared to discuss further as needed
- **Roundtable Discussion: Where do we go from here?**
 - Will there be a report or actual direction/request for us to work from? What is the timing?
 - WSP is meeting with WSTC this week to discuss whether the report out will be directive or simply informative – will provide more information as it is available
 - There seemed to be two different tracks of thought during the AV WG executive committee’s work session –
 - 1. Very high-level philosophy, including concerns on AV safety and benefits for WA
 - 2. Very tangible and specific how do we get business here? What actions are needed to attract deployment, i.e.do we need to improve striping and signs, address reasonable insurance, etc.?”
 - Two levels of conversation, both are valid. We can take action in both areas.
 - Answers to the high-level track informs the effort and direction of the more specific, tangible topics
 - Potential that the Executive Committee is not internally consistent
 - In the beginning, there was focus on expanding equity, being thoughtful
 - The prioritization poll, ranked developing equity guiding principles as the lowest priority
 - What ranked high was scenario planning for deployments
 - This could mean that the intent behind that is the Executive Committee needs something more tangible/specific to find it relatable
 - We don’t want to engage in science fiction – writing what we think the future would look like
 - I don’t think it is this subcommittee’s to role take on something like scenario planning
 - This was an either/or Mentimeter exercise – Equity happened to come out at the bottom of the list, does not mean it is not a priority
 - Scenario planning was at the top of the list, equity should be an element of that package/exercise

- Hoping WSTC provides leadership through results of this – What is Washington’s AV position?
 - Let private sector do whatever they want and just tell us what they need?
 - Or do we talk about how it all fits together – how AVs connect to land use, economic development, etc.?
- Signage, striping, etc. – WSDOT is developing those plans – we do not have funding for it though, that is where a group like this can help getting funding for those types of things
- The question is do we put time, energy, resources to up construction zone traffic controls so that AVs can go through a work zone in automated mode, or do we partner with the private sector to identify where are appropriate places for AVs to be in automated mode and where not?
 - How do we keep the owner from making a potentially fatal mistake?
 - One is money. The other is public policy, regulation, guidance.
- Potential need for AV WG and subcommittee members to get more educated.
 - Vehicles on roads now not highly automated, they are low level AVs; Not required to self-certify, owners are not required to have higher levels of insurance
 - Active infrastructure pushing information to vehicles (I2V) – there aren’t really vehicles on the road now that would use that
 - Even if the resources were there, it takes time to rollout
 - Companies are using passive sensing, WSDOT could invest in smarter work zones to push information to mapping companies
 - Separation of powers – Vehicle regulation is at the federal level. Federal could act and say these vehicles need software features to regulate and all DOT does is put up barcode-readable signs that say work zone
 - Not something we can do at the state level because it is vehicle regulation
 - Don’t want to ignore the significant input we’ve received through the policy framework efforts, we can still sort and do things with that information
 - There was resistance within the Activity 1 group, whether they didn’t want to make the call or thinking their input was rejected
 - As long as we are transparent and objective, we do not need complete buy-in on everything (actions) to get broad acceptance from the group
 - Need to better understand what infrastructure we have out there, what the status is, what is the level of investment needed?
 - Legislature can then make decisions on where to focus
 - Do we make it easier for drivers to move?
 - Or do we make it more efficient to move more goods and people through high-capacity modes?
- More information about what is going on in the AV world from OEMs and technology platforms could be helpful
 - Should take a new look at freight and logistics community, where AVs are likely to be accelerated
 - There are a lot of vehicles on the road today with ADAS, need to better understand how they interact with the roadside
 - The reality of the post-pandemic world is that private sector companies are focusing on surviving

- Digital infrastructure acceleration is important to health care, education, and transportation
 - What are the public/private partnership opportunities to lay digital infrastructure? 5G? V2X?
- Seems the Executive Committee was pleased with the AV Industry panel at the June 24 meeting – hoping that continues, there are many other companies to hear from, such as Amazon (taking over Zoox), Uber, Aurora, GM Cruise, Waymo, Argo.AI
- Presentation from the California regulator was important, interested in taking a deeper dive into how California and Arizona regulatory approaches differ
- New West Coast Transit Coalition looking at electric vehicle freight and utilities – as there is an expectation most AVs will be electric
- June 24th AV WG executive meeting also had a spirited discussion between Michele Radosevich (ULC model AV bill drafting committee) and the Alliance for Automotive Innovation on safety and liability
- This subcommittee is far ahead of other subcommittees – Would like to see us learning, and by nature educating, at future Executive Committee meetings, expand to telecom industry and their perspective on 5G
- This subcommittee was able to cobble together staffing and gather volunteers to get a lot of work done to date
 - Concerned when Executive Committee meets, we restart a lot of conversations
 - Some attend every meeting, others are unable, especially with COVID-19
 - Have not done a “101” with many members at the table
 - We have brought industry to the table, not-for-profits, business, etc.
 - People at the table are at varying levels of understanding, it behooves us to have decision making bodies that have a base understanding of what is going on, what is at stake
- Support for going into education mode, several interesting topics to learn more about, for example:
 - Paint striping
 - National efforts
 - Understanding the consolidation of the AV marketplace
 - Differences in California and Arizona AV regulatory frameworks
- How Arizona, California, Michigan, etc. differ from a regulatory perspective is a conversation that effects everyone – and should be done at the Executive Committee level
- Request to elevate the conversation around how systems benefit those currently underserved by the transportation system now – disabilities, elderly, low-end socioeconomic, etc.
 - How out investments have a broad benefit, particularly for those currently left out of the transportation system or have a harder time accessing them
- If we consider an information and education effort, does it have to be through scheduled subcommittee meetings, or would this be an opportunity to invite folks to existing conversations happening all the time?
 - Subcommittee staff support could help screen opportunities provided by national organizations such as NHTSA, FHWA, ITSA, etc.
 - Would be a different level of support than an educational agenda for subcommittee meetings
 - Some ideas include, setting up sort of clearinghouse for information?

- Subcommittee staff pushing out information regularly, not always to the full subcommittee, but could increase sharing these opportunities for learning
 - i.e. Automated Vehicle Symposium (AVS) coming up in a few weeks for those interested – lots of good conversations, but does require a large time commitment
- Like the idea of narrowing the topics for conversation/education – i.e. focusing on work zones, lane striping, broadband
- What can we do to maximize benefit of existing communication channels?
- Understand the limitations of peoples’ ability to attend meetings – the ability of businesses to participate right now is low
- On striping – the big question with view of broader infrastructure is what is the role of infrastructure? How do we move away from enforcement and towards a built environment? How do we get the outcomes we want without a heavy hand?
- Need to learn about how the transition phase can occur
 - What highway speeds look like for AVs
 - How do we make sure when we are restriping for construction, we do it in a way to provide opportunities for continued safe operations of vehicles
 - Broaden beyond construction zone striping to how we create a safe environment
 - Would be interested to learn more about enforcement of long-term safety outcomes, what the timeframes are, etc.
- Recent presentation from the city of Copenhagen on a 5-lane arterial road over a bridge in an urban area
 - Presenter showed what it looked like now (2019) and what it would look like in 40 years with AVs on the roads...nothing changed
 - Waymo made it clear they do not need anything. They want to build in a way that the AV can operate in whatever environment it is in
 - Does industry provide everything needed for an AV to safely operate? Or do we change infrastructure as vehicle/infrastructure relationships change?
 - This is a policy and investment decision, a give and take conversation
 - WSDOT does not have the budget to paint the roads we want to
 - Having the budget to do that, including having asset management systems in place, is being stepped up
 - There is a blend of short-term actions we can do in 2020 in Washington, coupled with bringing subject matter experts in each policy area we’ve identified on a regular basis to inform our conversations, Executive Committee conversations, inform transportation leadership and Legislators
 - Have no problem advocating for additional budget authority/funding for paint if it saves lives
 - Don’t think additional paint will solve the work zone issue, but don’t know for sure – Need to learn more about the topic to see what the solutions are that can be handled at the state level
 - Want to learn what we need to, to advocate for topics and to fix specific problems

“Where do we go from here” Topic Closed.

- **Updates:** WSDOT Secretary Roger Millar giving presentation to Washington State Transportation Commission at their monthly meeting July 15th, 11am, on CAT vs. AV
 - **ACTION ITEM:** Subcommittee staff support to send information on the meeting/presentation

“Updates” ,Topic Closed.

MEETING ADJOURNED.

Upcoming Meetings:

- September 11th, 2020: Infrastructure and Systems Subcommittee, Virtual Webinar
- September 24th, 2020, Autonomous Vehicle Work Group Executive Committee, Virtual Webinar
- November 12th, 2020, Autonomous Vehicle Work Group Executive Committee, Virtual Webinar
- December 11th, 2020: Infrastructure and Systems Subcommittee, Virtual Webinar

Resources: New WA State AV Work Group website: <https://avworkgroupwa.org/>