MEETING SUMMARY

Meeting: System Technology & Data Security Subcommittee
Location: Teleconference
Date: August 19, 2019

Attendees:

Name	Organization	Executive Committee Member? (Y/N)
Amanda Anderson	Peloton Technology	N
Yelena Baker	Office of Program Research	N
Leonard Byrne	Washington Society of Professional Engineers (WSPE)	N
Rose Feliciano	Internet Association	N
Kate Garman	City of Seattle Mayor's Office	N
Ian Griswold	WTIA	N
Mike G.	*Unknown*	N
Jennifer Harris	Washington State House Transportation Committee	N
Devin Liddell	Teague	N
Daniel Malarkey	Sightline Institute	N
Markell Moffett	WSP USA	N
Jessica Nadelman	City of Seattle	N
Paul Parker	Washington State Transportation Commission (WSTC)	N
Kelly Rula	City of Seattle	N
Will Saunders	WA Office of the Chief Information Officer (OCIO)	Y
Thomas Smailus	Washington Society of Professional Engineers (WSPE)	N
Michael Transue	Association of Global Automakers	N

Welcome and Introductions
Will Saunders
- Meeting attendees captured.
- Reviewed agenda.

Topic Closed.

AV Regulations – Federal and State
Rose Feliciano
- Safety regulations from USDOT and California; Other states' testing requirements related to data collection, privacy and security

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- o During June 28 Executive Committee meeting evaluation of this subcommittee's recommendation to adopt data standards – Private sector states that there are already data being reported to federal government
- o During July 1 subcommittee meeting, federal data reporting and potential state data reporting was discussed and follow up requested
- Email sent to meeting attendees August 19 with links to several resources on AV data reporting
  - o USDOT has certain requirements
  - o California requires certain data to register with the California Department of Motor Vehicles to test and/or deploy AVs in the state
  - o National Conference of State Legislatures (NCSL) hosts a repository of information and links related to other states' data reporting requirements
  - o National Highway Traffic Safety Administration (NHTSA) has published federal guidance for AVs – v3.0 is currently published version
  - o NHTSA publishes the data AV testing/deployment companies have submitted
    - No defined reporting schedule at this time
    - As AVs evolve, expect standards around reporting will be established
      - When to report, such as when a recall is required
      - What to report – data parameters/standards
      - Anticipate it will be similar to how internal combustion engine standards are setup now
- Data reporting as it relates to AV testing
  - o Most states have not gotten to the point that AV testing data is standardized and required to be reported
  - o Many states have requested/required reporting *that* an AV company is conducting testing, such as a registration process
  - o State of New York requires that any AV testing must be done with a state patrol officer following the vehicle; This has drastically limited the testing being conducted in New York
- Group discussion:
  - o This subcommittee's recommendation to the Executive Committee in June was related to standardizing AV testing/deployment data reporting to the State
    - Pushback was received on recommendation, stating that data is already reported to the Federal government, and that data can be used to meet the needs of the State
    - Information being presented today indicates that AV testing/deployment data reporting to the Federal government is voluntary – allows companies to decide what to report, if they report at all

- It is assumed that it is within a company's best interest to complete the Federal reporting template, although each company may provide data differently
  - This does not address the pushback on the subcommittee's recommendation
  - Subcommittee's recommendation was not a voluntary data reporting structure – it was to be mandatory and standardized
- o Data reporting requirements/requests of other states:
  - California requires reporting on collisions and disengagements
  - California is "in the middle" of data reporting requirements
    - Some states, such as New York require full knowledge and engagement in AV testing (requires state patrol officer present at test)
    - Some states, such as Washington, currently only require a company to self-certify and 'register' with the Department of Licensing to notify the State *that* they may be testing/operating in the State
  - Need to understand the wide spectrum of data reporting across states
  - **ACTION ITEM**: Rose Feliciano to confirm whether other states require any data on their testing (as California requires reporting of collision and disengagement).
- o The topic of whether the State of Washington should establish state-specific data reporting requirements is still an open item.
  - Pushback from companies that they are already reporting; however information received today does not provide enough assurance that data will be reported consistently or accurately
  - Subcommittee does not have enough information at this time to move forward with a recommendation or to consider this topic closed
  - **ACTION ITEM**: Will Saunders to identify this topic as an open item and put on list for a future subcommittee meeting discussion.

Topic Closed.

Mobility as a Service Presentation
Kelly Rula

- Adapted presentation on concepts of mobility and active management of data in an open world
- Active management
  - o It is the role of cities and departments of transportation (DOTs) to actively manage the public right of way
  - o Active management of data involves both receiving and giving data
  - o The exchange of data has been going on in government and specifically DOTs for a long time

- o Why cities need to receive data
  - ▪ Traffic flows
  - ▪ Parking transactions
  - ▪ Asset management (stop signs, curbs, etc.)
  - ▪ Permit compliance (what construction can occur in a public right of way)
- o What happens when we miss our chance to require data sharing from a new type of operator?
  - ▪ We end up trying to regulate something we don't fully understand
  - ▪ Example: TNCs
    - Couldn't get in front of TNCs from a regulatory perspective until they were already in the market
    - Jurisdictions had no data - movement, patterns/behaviors unknown
    - There was a need for less parking, more loading
    - More access to curbs was needed, jurisdictions needed to identify wat parts of the block space should loading/unloading occur
    - Got far down the road with this new service/mode with no jurisdictional insight on how to regulate it
    - If we were ahead of it, we may have been ahead of some regulation, operations, policies, etc.
  - ▪ Need to be ahead of emerging trends instead of being reactive
- Cities / jurisdictions also give data:
  - o Signals, No Parking signs, Dynamic message signs, etc.
  - o Seattle DOT hosts an Open Data Portal, that gives data out for free
    - ▪ Open Data Portal is static – Parking transactions, construction permits, etc.
    - ▪ There is a need for more real-time data exchange
      - Twitter feed
      - Open traffic feeds
      - Information about traffic incidents, closures, etc.
      - Data the real-time transportation industry (e.g. Google or TomTom) and eventually AVs could leverage for real-time updates and algorithms
- Digital infrastructure
  - o Active management has traditionally offered static information about the status of elements (signs, signals, etc.)
  - o How do we accomplish this same goal in the digital space?
    - ▪ Digital twinning, replicas, etc.
    - ▪ As mobility services are evolving and reliant on technology, growing need for more digital replication of what is happening in physical world

- - Companies can have base maps and then verify through government owned/ran base maps
- Standards and common language
  - o Jurisdictions across the world are currently operating off different standards for mobility
  - o Road and engineering standards set precedence for standardizing to common languages
    - Original Equipment Manufacturers
    - Transit – General Transit Feed Specification (GFTS)
      - Uses a common repository to send data about transit systems to feed companies such as Google
      - Used internationally
      - Good example of an open standard that was developed and adopted internationally quickly
  - o Mobility data specifications (MDS)
    - Developed by City of Los Angeles for dockless e-scooters and bikeshares
    - Provides information about where docks are located/maintained, historical trip data, locations, device status changes, parking, etc.
    - Allows cities to manage what is happening on their sidewalks and streets
    - Adopted by at least 15 other cities (international), spun off into the Open Mobility Foundation
    - Seattle uses MDS to receive data (trip records, device status) and give data (appropriate parking locations, speed limits)
    - Can use data for program compliance, regulatory compliance, planning
      - Verify company(ies) within approved fleet count
      - Verify whether a mobility program is meeting equity goals e.g. Number of devices in certain parts of the city)
      - Planning to understand broader impacts of devices, mobility, use of curb and parking space
  - o Example of TNCs - Chicago
    - Chicago now publishing certain data reported by TNCs in the city
    - See trends like time of day, trip counts, volume, trip length
    - Opens discussion around privacy and security on aggregated data being published by the city
  - o Known Risks
    - Non-adoption of industry standards
      - May results in lower quality or less granular data than what we need, what can we do something with
      - Standards avoid one-off solutions that don't align with national/international approach

- Hard or impossible to regulate what you don't understand
  - Privacy and data security
    - MDS does not collect individual user data (e.g. phone, email)
    - MDS does collect geolocation data, which is unique and re-identifiable
    - Washington State has unique public records access (PRA) regulations that presents a challenge in collecting and managing proprietary data – Would need to figure out how to address PRA with MDS
- How does all of this relate to the future of AVs in the state?
  - o If we assume most near-term AVs will be commercially operated and will use the existing ROW – Should assume that AVs will/must comply with modern standards and compliance reporting that helps jurisdictions manage the existing public ROW
  - o An open standard such as MDS could provide insight into how AVs are being used on the streets, how infrastructure interacts with AVs, etc.
  - o Will be a challenge to establish and enforce a standard in an industry that has not really been challenged by government yet
- Group Discussion:
  - o Is standardization of AV across the industry expected to come from the federal level, such as NHTSA or USDOT?
    - Anticipate something driven at federal level, similar to vehicle standards now
    - Public jurisdictions hold permitting authority over commercial operations, but not over devices themselves
    - Operating standards and device standards may not stay in alignment
    - Groups like this (AV Work Group) can help shape and drive this early on
  - o Do you anticipate that infrastructure owned/operated/maintained by local government would feed into or read the standardized AV data (e.g. traffic cameras)?
    - Vehicle-to-Infrastructure – yes, assume that at least major metros will have that connection / data feed
    - Anticipating historical and limited real-time data feed, rather than all-the-data-all-the-time exchanges
  - o What types of things can an MDS approach tell us about AV testing?
    - Telematics-related data – vehicle speed, hard braking, cornering, etc.
    - Could use to understand AV movement, interaction with infrastructure and environment, assist with things like signal phase and timing
    - Could mirror the TNC model – where vehicles are going, deadheading (completing a trip with no passengers or goods), fueling activity, etc.
    - Could provide data for analysis on first/last mile, propulsion type (electric, hybrid, etc.), peak hour activity, parking locations, etc.

- o On assumption that most AVs will be commercially operated – Many AVs will likely be privately owned, which opens different questions regarding privacy of data
    - ▪ Expect to hold precedent to not collect private data – only activity occurring on public ROW / interacting with public infrastructure (e.g. curb activity)
    - ▪ Open question still regarding device safety regulations – what information is needed to regulate patches/updates on AV software
  - o Uber opposed MDS in Los Angeles – Do you know the reason for opposition?
    - ▪ TNC industry is hesitant to provide detailed information – Want to protect proprietary information and trade secrets, concern of data privacy and security
    - ▪ Micro mobility operators are split – some are comfortable sharing data, others are hesitant
    - ▪ From a regulation standpoint, jurisdictions should require compliance and data sharing – if you want to operate on the public ROW, comply
  - o The data we are looking to get from AVs are not unique to AVs, it is telematics data present in all newer vehicles, whether internal combustion engines or electric vehicles
  - o **ACTION ITEM:** Any subcommittee members / meeting attendees that have materials / reading on this topic they would like to share, please send to Will Saunders to share with the group.

Other Topics / Open Discussion
Will Saunders

- Next subcommittee meeting is a joint meeting with the Licensing Subcommittee – September 17th 1:30pm – 3:00pm
  - o Meeting will have both virtual and in-person options
  - o **ACTION ITEM**: Will Saunders to send one final update on joint meeting invitation and information in approximately one week
- Executive Committee Meeting September 26th, with a PACCAR site visit on September 25th
- Subcommittee currently does not have another standard meeting schedule
  - o Current cadence would warrant a subcommittee meeting in early September
  - o **ACTION ITEM**: If subcommittee members / meeting attendees have a topic(s) to discuss, contact Will Saunders
  - o If no topics received, no subcommittee meeting will be scheduled in September.

NEXT MEETING: September 17, 2019

MEETING ADJOURNED.