Washington State Transportation Commission

Olympia Meeting Summary
February 19 & 20 2020

Chair Jerry Litt opened the meeting at 9:00 am with introductions by Commissioners.

Commission Business
Commissioner Restucci moved and Commissioner Jennings seconded the motion approving the January 14 & 15, 2019 meeting summary.

ACTION: The meeting summary was approved unanimously.

Reema Griffith reported that a seat on the Autonomous Vehicle Work Group is held by the Global Automakers. It has merged with another automaker group, the Alliance for Automotive Innovation. The Commission appointed Curt Augustine, Sr. Director of State Affairs, Alliance for Automotive Innovation, to sit on the Work Group.

Commissioner Reports:

- Commissioner Serebrin reported that the Puget Sound Regional Council Executive Board is very close to adopting Vision 2050. Green House Gas reduction goals were included. There also will be a regional equity strategy.
- Commissioners Jennings, Litt, and Restucci participated in a tolling call.
- Chair Litt indicated that in the future staff would report on Commission activities; Commissioners will report on their individual activities.

Draft 2020 Work Plan

- Staff presented the activities of 2020 and suggested the Commission begin to think about how to develop a work plan for 2020.
- Reema Griffith suggested it might be useful to schedule a retreat after new staff are hired.
- Chairman Litt expressed concern about the potential timetable for setting tolls for the expanded Express Toll Lanes.

Legislative Report
Paul Parker reported on the bills of interest to the Commission.

Public Utilities, the Electrical Grid, and Electric Vehicle Markets
Amy Andrews, Policy Director, and Brad Cebulko, Senior Policy Advisor with the Utilities and Transportation Commission (UTC) provided an overview of the role of the UTC. It protects consumers by ensuring that investor-owned utility and transportation services are fairly priced,

available, reliable, and safe. The UTC jurisdiction covers electric, natural gas, telecommunications, water, and solid waste utilities. In transportation, it regulates some aspects of railroads, pipelines, moving companies, buses and charters, and private ferries.

The UTC has statutory authority regarding the adoption and integration of electric vehicles into the transportation network.

- RCW 80.28.320 – Regulated electric utilities may offer battery-charging facilities using ratepayer funds subject to UTC approval.
- RCW 80.28.360 – Allows the Commission to authorize an incentive for electric utilities on capital expenditures for Electric Vehicle Supply Equipment (EVSE) through 2030.

In 2015, the legislature enacted ESHB 1853 to "provide a clear policy directive and financial incentive to utilities for electric vehicle infrastructure build-out." It allows the UTC to provide an incentive rate of return, with a cost cap of no more than 0.25%. The infrastructure must be deployed for benefit of ratepayers and provide "real and tangible benefits" for all ratepayers.

In June 2017 the UTC issued its *Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services*. It adopted a portfolio approach that prioritizes load management and grid benefits over rate base additions.

The UTC also adopted policies supporting:

- Consumer protection.
- Direct benefits to low-income customers.
- Service quality standards.
- Regular and comprehensive reporting.
- Education and outreach; and
- Interoperability.

Utilities have valuable information that can inform regional transportation planning and Washington State Department of Transportation.

Key Issues for Electric Vehicle (EV) Infrastructure and Rate Design:

- WA investor-owned utilities are vertically integrated.
- Low electricity rates in the Northwest.
- Limited experience with EV ratemaking to date.
- Rate design options:
- Cost-based rates.
- EV specific rates.
- Time-of-use rates – time shifting.
- Demand charges.
- Demand response.

All three Investor Owned Utilties in Washington have EVSE Pilot Programs. Avista is the most experienced. Avista launched a three-year EVSE pilot in 2016 with the following primary learning objectives:

- Light-duty EV load profiles, grid impacts, costs, and benefits.
- How the utility may better serve all customers in the electrification of transportation.
- Begin to support early EV adoption in its service territories.

Avista installed a total of 439 EVSE charging ports:

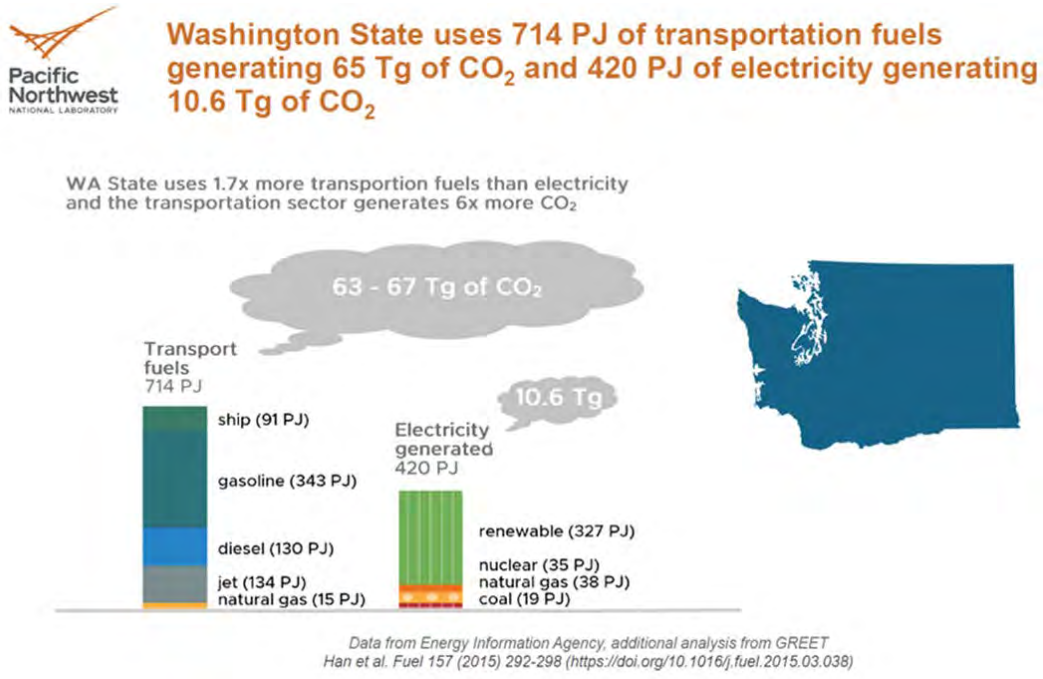
- 226 residential
- 123 workplace
- 24 fleet
- 20 multiple-unit dwelling
- 7 DC fast charging sites

Avista Low Income EVSE Program included direct benefits for disadvantaged communities. The Nissan Leaf used by the Spokane Health District for critical medical appointments has reduced transportation costs by 82%. The electric Mitsubishi that the nonprofit Transitions uses for job skills training, food delivery, and shelter, has reduced its transportation cost by 57%.

Last year, the Legislature enacted two bills to promote transportation electrification:

- SHB 1512 revised RCW 80.28.360 to include DC fast charging. "Electrification of Transportation" plans from utilities must be "approved" by UTC.
- E2SHB 2042 provides an EV sales tax exemption, creates an EV infrastructure grant program, and allows a utility to file electrification of transportation plans.

The UTC staff expects Avista to file an EVSE Transportation Plan within the next few months.



EVSE Impacts to Utility Systems:

- Could grow to sizeable chunk of load, driving need for more electricity production.
- Could provide other services such as reliability, resilience, or grid energy storage through vehicle to grid (V2G) capabilities.
- Average WA household uses 12,000 kWh/year.
- EVs use 3,000-4,000 kWh/year, depending on usage and model
  - Estimate based on 15,000 mi driven/yr.
  - Most EVs on the market get 3-4mi/kWh.
  - Design of experiments (DOE) study showed Nissan Leaf users drove fewer miles in a year (9,697 mi)

Utilities need to Make Electric Vehicle Load "Beneficial Load"

- Electric Vehicles have high demand for short durations.
- This could put stress on the electric grid.
- Must move the peak load into beneficial load.

This can be done through rate design:

- Cost-based rates
- EV specific rates
- Time-of-use rates – time shifting
- Demand charges
- Demand response – a program in which a customer reduces their electricity usage during periods of higher power prices. Customers are compensated. This could involve turning up the temperature on the thermostat to reduce air conditioning, or temporarily slowing down or stopping production at an industrial facility.

Investor-owned Utility EV Supply Equipment Programs

Action: None.
Follow-Up: None at this time.

Kingsgate Transit Oriented Development Report

Anthony Buckley, Director, Innovative Partnerships, WSDOT, provided a status update on the Kingsgate Transit-Oriented Development Project. The Kingsgate Park and Ride currently provides parking space for 502 vehicles. Sound Transit has permission to construct a parking garage for about 500 vehicles, using about 200 current spaces and add housing and retail.

The Report indicates statutory changes that would facilitate transition of park and rides to transit-oriented development (TOD) sites.

- Amend RCWs 47.12.080, .063, and .120 by removing the requirements that WSDOT must declare the property unused, no longer required for transportation purposes, or held for highway purposes, but not presently needed, prior to allowing the disposal or leasing of such property.

- Amend RCW 47.04.295 and RCWs 47.12.080, .063, and .120 to grant WSDOT discretion in whether or not to charge fair market value for the lease or disposal of park and ride real property when the lease or disposal is for the purpose of providing affordable housing or multimodal transportation infrastructure.
- Amend Chapter 47.46 RCW to model it on the successful public-private partnership (P3) laws in other states.
- Dedicate more funding in the capital budget to support specific public benefits within TOD on public land, e.g., a new TOD set-aside in the State Housing Trust Fund that does not reduce or compete with other important set-asides.
- Amend 47.04 RCW to authorize WSDOT and transit agencies operating WSDOT owned park and ride lots to charge a fee for parking and enforce parking rules, including issuing citations.
- Give WSDOT explicit discretion to enter into agreements that would enable use of park and ride stalls for other purposes at such times as there is excess capacity due to lack of demand for their primary purpose.
- Establish a fund in which the revenues from the sale or lease of park and ride facilities would be deposited. Authorize WSDOT to spend those funds on park and ride facility improvements, including those supportive of TOD. Create a mechanism by which WSDOT could harness a portion of increased property values due to development in order to pay for improvements on the site or for future transportation investments.
- Amend RCW 47.12.270 and 47.04.295 to authorize conversion of motor vehicle parking stalls to other multimodal transportation purposes, including entering into agreements with third party mobility providers if the conversion would help move more people or will aid in the conservation of energy resources.

Action: None.
Follow-Up: None at this time.

US 97 Naming WWII Veterans Memorial Highway - Action

David Barta and Colonel John D. Miller (retired) proposed naming US 97 through Klickitat County the WW II Veterans Memorial Highway. Chair Litt read Draft Resolution 738.

Commemorating World War II Veterans

Action: Commissioner Jennings moved adoption of Resolution 738. Commissioner Restucci seconded the motion and it was adopted unanimously.

Follow-Up: None

Joint Legislative Audit and Review Committee Final Report 19-07:
Follow-Up on WSDOT's Long-Term Estimates of Bridge Preservation Needs

Aaron Cavin, Research Analyst and Eric Whitaker, Research Analyst, Joint Legislative Audit and Review Committee (JLARC), reported on the JLARC follow up of WSDOT's long-term estimates of bridge preservation needs.

The Report concluded that WSDOT has taken steps to improve its long-term estimates of bridge preservation needs, but needs to continue its work to provide complete and reliable estimates for its 3,932 bridges and structures.

JLARC staff noted that WSDOT reported needing $2.7 billion for bridges, an estimate that it considers incomplete because it is out of date and does not include:

- Border bridges
- Moveable bridge components
- Seismic retrofits

The estimate is out of date because it was created in 2016 and since then costs have increased by hundreds of millions.

Keith Metcalf clarified that WSDOT is on a par with other states for preservation cost estimates. WSDOT has worked hard at developing an asset management system.

WSDOT Long-Term Estimates of Bridge Preservation Needs

Action: None.
Follow-Up: None at this time

SR 520 Certification Of Toll Rate Sufficiency

Jason Richter, Deputy State Treasurer, briefed the Commission on the sufficiency of toll rates on the SR 520 Bridge. Master Bond Resolution No. 1117 requires a "Certificate of Treasurer Representative" when revisions to the SR 520 Toll Rate Schedule are proposed to provide assurance that "the adoption of the revised Toll Rate Schedule will not cause the State to fail to comply with its covenants." Because there currently are no proposed revisions to the SR 520 Toll Rate Schedule, a Certificate is not required at this time. However, to assist with the management of the SR 520 project, Office of the Special Trustee (OST) has provided a Certificate to confirm that updated toll revenue projections are expected to be sufficient to allow the State to comply with its covenants and commitments.

The Certificate of Treasurer Representative is based upon the information contained in:

- Draft SR 520 Traffic and Revenue Forecast, February 2020, Stantec
- Draft SR 520 Net Toll Revenue Update, February 2020, WSP
- OST's 520 Financial Model, February 11, 2020

Coverage and sufficiency requirements met in all years, and no draws from the Rate Stabilization Account are required, but FY 2020 Repair & Replacement Fund deposit reduction is required. The cumulative result of November 2019 refunding is a savings of over $100 million on SR 520 project.

Summary:
$102.25 million increase in total net revenues after Operations & Maintenance from FY 2019 - 2056, reflecting:

- $70.85 million in increased adjusted gross toll revenues

- $32.41 million in decreased O&M costs
- $1.01 million RSA deposit for FY 2020
- $56.69 million increase in net revenues after required deposits, reflecting:
- $47.12 million of increased R&R costs

Coverage and sufficiency requirements are met in all years, but the coverage and sufficiency ratios remains constrained through FY 2021, until debt service savings of R-2021A refunding reaches $5 million annually (starting in FY 2022).

No changes to existing Toll Rates are necessary at this time.

SR 520 Certification

Action: None.
Follow-Up: None at this time.

Debt Affordability Study and State Debt Report

Jason Richter, Deputy State Treasurer, briefed the Commission on the state's debt levels. The state has $21.1 billion in debt and other financial obligations, with $2.1 billion of debt service due in FY 2020. It is one of the most highly leveraged states in the country.

Transportation debt, as of the end of FY 2019, totaled $6.7 billion of Motor Vehicle Fund general obligation debt. Because of the Motor Vehicle Fuel Tax (MVFT) or Vehicle Related Fees (VRF) pledge, these bonds are excluded from the debt limit:

- Motor Vehicle Fuel Tax G.O. Bonds (Nickel, Third-party administrator, Transportation Partnership Act (TPA), Connecting Washington, older authorizations
- Triple-Pledge Bonds (520, 405/167, Gateway)

Grant Anticipation Revenue Vehicle (GARVEE) and Transportation Infrastructure Finance and Innovation Act (TIFIA) bonds are excluded from the debt limit because they are not secured by the state's full faith and credit or general state revenues

Washington State Debt Limit

Action: None.
Follow-Up: None at this time.

Autonomous Vehicle 4.0 Guidance Overview and Comparison with International Regulatory Approaches to Autonomous Vehicle Development

Virginia Lingham, WSP USA Consulting, briefed the Commission on the USDOT Autonomous Vehicle 4.0 Guidance issued in January 2020, and international regulatory approaches to Autonomous Vehicle (AV) development.

Autonomous Vehicle 4.0 guidance was a joint effort between the National Science & Technology Council and USDOT.

The principal focus of the update was to align U.S. Government agencies to ensure a standardized federal approach to AVs.

1. Prioritize Safety
    - Address safety risks
    - Enhance life-saving potential
    - Strengthen public confidence
    - Enforce existing laws to ensure no deceptive claims

2. Emphasize Security and Cybersecurity
    - Safeguard against threats to security and public safety
    - Work with industry to ensure prevention, mitigation and investigation of crimes and security threats
    - Safeguard privacy rights, civil rights and civil liberties
    - Develop and promote physical and cybersecurity standards

3. Ensure Privacy and Data Security

4. Enhance Mobility and Accessibility

5. Remain Technology Neutral

6. Protect American Innovation and Creativity

7. Modernize Regulations

8. Promote Consistent Standards and Policies

9. Ensure a Consistent Federal Approach

10. Improve Transportation System-Level Effects

USDOT AV 4.0 Key Takeaways:
- More of an affirmation of the government position than a new policy document
- Greatly increased emphasis on coordinating activities across Federal Government
- Focus on promoting choices in mobility options
- Directly addresses deceptive marketing and overstatement of capabilities
- Acknowledges the importance of the 5.9GHz spectrum and states USDOT's strong support for preservation for transportation safety applications

Ms. Lingham stated Washington is providing leadership and its AV Work Group has recommended future policy that strongly aligns with AV 4.0 Guidance.

The European Union and Asia are both moving forward with AV development and regulations.

In Asia, Japan will use 2020 Olympics to showcase AV and China aims for mass adoption of AVs by 2027. Chile will host first AV demonstration in Central and South America.

Smarter vehicles can collect and distribute road infrastructure information to transportation infrastructure providers.

AV Guidance Overview

Action: None.
Follow-Up: None at this time.

Joint Transportation Committee Comprehensive Needs Assessment
David Ward, Senior Analyst, Joint Transportation Committee told the Commission that the JTC Comprehensive Needs Assessment has four goals:

- Task 1 - Needs Assessment and prioritization
  - Categorical investments
  - High-impact investments
- Task 2 - Funding Options
  - Existing sources
  - Potential sources
- Task 3 - Economic Impact
  - 10 to 12 case studies
- Task 4 - Facilitate Advisory Panel

The assessment looks at the following jurisdictions: state, cities, counties, tribal nations, port districts, and public transit agencies.

What We Know: Significant Gaps Persist:

- At the state level, there are challenges to implementing high impact projects or preserving the existing system
- At the local level, we are investing about half of what's needed in city streets
- Funding gaps reflected in:
  - Unmet needs for system capacity expansion
  - Longer, less efficient preservation cycles
  - Accumulation of deferred maintenance
  - Slower achievement of other related goals (e.g., Americans with Disabilities Act (ADA) compliance, stormwater management)
- Transit faces a nearly $600 million funding gap to restore transit service to pre-recession levels and $2.59 billion funding gap to meet planned expansion needs (2019-2028)

The total estimated need for 2022 -2031 will be calculated using historical expenditures, cost estimates for preservation needs, deferred maintenance, and capacity expansion. Additional considerations include:

- Fish barrier removal: Supreme Court decision, tribal fishing rights, ecosystem health

- Safety: Target Zero, Washington State Highway Safety Plan
- ADA compliance: State and local ADA transition planning, accessibility improvements
- Non-motorized infrastructure: walking and biking facilities

The funding options will provide policy makers with an order-of-magnitude estimate for receipts to weigh tradeoffs among revenue options.

Economic Case studies will highlight economic and fiscal impacts of transportation investments to the State and review other effects of transportation investment.

The Advisory Panel, of up to 16 participant, will review the needs assessment findings and develop recommended investment priorities and revenue options for the Legislature to consider in the 2021 session. The Advisory Panel will meet 4 - 5 times from late spring to early fall 2020.

Statewide Transportation Needs Assessment

Action: None.
Follow-Up: None at this time.

Secretary's Report
Keith Metcalf gave a shout out to the WSDOT maintenance forces that have faced floods and landslides. He said the winter weather has exacerbated preservation challenges: SR 17 is posted at 35 mph due to potholes and disrepair.

WSDOT would like to revisit the 47.04.280 policy goals; we like the point of the bill to measure projects against the policy goals.

Washington State Ferries Fare Simplification Study and Low-Income Fare Pilot
Ray Deardorf, Senior Planning manager, Washington State Ferries (WSF) reported that WSF has analyzed its current fare structure and has identified ways to simplify it, if appropriate, including policy considerations for future action.

Key Questions:
- Is the WSF fare structure more complex relative to similar ferry systems?
- Are there elements or features of the current fare structure that add complexity while contributing to policy, operational or customer impacts?
- Since the fare structure was designed to achieve various policy, financial and operational outcomes, what should be the goal for fare simplification?

The current structure has evolved in response to policy objectives/directives while balancing operational constraints and customer concerns.
- Tariff Route Equity(distance-based fares)–customers pay roughly in proportion to the time spent on a ferry
- CUBE(space-based fares)–vehicle customers pay roughly in proportion to the amount of space used

- Demand management policies designed to spread demand, particularly for vehicle traffic, among routes and across sailings and encourage use of available capacity
- Discounts to account for impacts on overall customer costs (frequent use, youth and child pricing, in-need organizations, commercial fleet use) and other policy directives (senior and disabled pricing consistent with federal regulations)

WSF's current structure is generally consistent with other systems reviewed:

- Vehicle fares vary according to length of route, season, vehicle size and/or type
- Passenger fares recognize price variance among regular adult, youth/child, senior and disabled passengers
- Various policies designed to favor or otherwise distinguish among regular customers and infrequent users

All systems appear to base their fare tables on some combination of:

- Market factors: number of routes, customer types
- Consumption: what they use (time and space)
- Demand: when they use it (time-of-day, day-of-week, time-of-year)
- Customer characteristics: who they are (age, disability, frequency of use, dependency on service)

The complexity of fare structure primarily impacts WSF operations and ferry customers.

- Operational challenges in determining fares at the tollbooth, due to vehicle type (class and/or length and height) and passengers (qualified youth, senior and disabled)
- Customer impacts:
  - Regular customers having to use multiple products to obtain frequency benefits (passenger, small car, standard vehicle, motorcycle)
  - Challenge of fare determination for infrequent users (not knowing vehicle length and/or changing vehicles after pre-purchasing tickets online

WSF has 371 fares; BC fares has nearly twice as many. The large number of unique fares in the system is a result of decisions to align prices with customer and market characteristics (number of routes, number of length-based vehicle categories). It is not a significant factor contributing to operational or customer impacts. Of the 37 fare categories, 31 are related to vehicles.

There are two areas where simplification could yield significant benefits:

1. Options that would enhance operational efficiency and/or effectiveness

2. Options that would improve the customer experience and/or simplify how customers understand and use ferry services

CUBE Policy Options (space-based fares)

- Reduce length categories (11 fare categories) by consolidating categories beyond 40 feet (40'-60', and per foot over 80')
- Change from strict length-based fare categories to those based on vehicle types while maintaining a relationship to amount of deck space consumed

- Charge trailers as a separate add-on fare (small, medium and large); does not apply to semi-trailers
- Support space

Tariff Route Equity Policy Options (distance-based fares and route groups)

- Combine Southworth-Fauntleroy and Vashon Routes into a single route group
- Create a Whidbey Island group by combining Mukilteo-Clinton and PT-Coupeville
- Create a single passenger fare group for all routes that connect directly with ORCA partner services

Selectively Add Toll Model to WSF System

- Build a fare structure around two distinct fare collection models: a new toll highway model and the current blended highway/transit

Options focused on Operations

- Replace the current "trip-based" frequent user and passenger pass products with a system where reduced frequent use fares are earned and credited to an account
- Restructure the current passenger fare system to better align with pre-sales and app-based transactions; support future congestion pricing; and accurate ridership data:

Options focused on Customer Experience

- Enhance the customer fare information portion of the WSF website to integrate a vehicle selection process to more accurately make fare determination decisions

Mr. Deardorf also reported on initial analysis toward a low-income fare pilot. Analysis indicates potential users may qualify for about 175,000 trips/month. WSF assumes the discount would be at half fare. Conservatively, this amounts to a fare loss estimated at $2 million/year.

WSF recommends waiting to implement on a few routes rather than system-wide, when the next generation ORCA is rolled out. Next steps: begin development in Fall 2020.

Commissioner Serebrin noted WSF's $2 million is a $2 million benefit to low-income residents.

WSF Fare Simplification Study
WSF Low Income Fare Update

Action: None.
Follow-Up: None at this time.

2020 Ferry Riders Opinion Group (FROG) – Survey Program

Chelsea Benning, Director of Design and Analysis, Pacific Market Research, briefed the Commission on her firm's history and expertise. Its mission is "to bring people, information and ideas together to enrich lives and build community."

FROG, the online community of roughly 24,000 ferry riders, provides an ongoing opportunity to weigh in on ferry issues through surveys.

The 2020 Surveys will be:

- Winter Performance (2020 and 2021) targeting commuters via FROG panel.
- Freight Survey, targeting WSF freight customers via executive telephone survey.
- Summer Recreational Survey, targeting out of state riders via on-board intercepts.
- Summer Performance, targeting commuter and social/recreational riders via FROG panel.

WSF 2020 - 2021 Performance & Experience Research

Action: None.
Follow-Up: None at this time.

Reflections and Recommendations
Commissioner Restucci: UTC Briefing was valuable – relates to AV development.

Commissioner Litt added that the evolution to electric vehicles and AVs is very connected. US 97 naming very moving. He appreciated the JLARC Report. A little concerned about the AV 4.0 Fast Action committee.

Commissioner Jennings: Lot of information from UTC; need more info from them.

Commissioner Serebrin: It would be interesting to have UTC back – want to know more about their transportation role. She is concerned that the AV consultant emphasized the need to be responsive to industry; we need to identify what we want from AV development.

Commissioner Tortorelli: You need to bring back UTC; the future is coming fast. Still concerned that the generation and transmission doesn't measure up to the need.

Next Meeting March 17 & 18, 2020 - Cancelled

TRANSPORTATION COMMISSION

_____
JERRY LITT, Chair

_____
ROY JENNINGS, Vice-Chair

_____ABSENT_____
SHIV BATRA, Member

_____
JAMES A. RESTUCCI, Member

_____
HESTER SEREBRIN, Member

_____
JOE TORTORELLI, Member

_____ABSENT_____
DEBBIE YOUNG, Member

ATTEST:

_____
REEMA GRIFFITH, Executive Director

_____
DATE OF APPROVAL