Transportation Advisory Panel Meeting December 21, 2021 | 11:00am-1:00pm

Attendees

Members present:

- Chair, Marie Therese Dominguez, Commissioner, New York State Department of Transportation
- Jared Snyder, Deputy Commissioner, New York State Department of Environmental Conservation
- Albert Gore, Policy and Business Development, Tesla
- Bob Zerrillo, Policy Director, New York Public Transit Association
- Craig Turner, Executive Director, Buffalo Niagara International Trade Gateway Organization
- Elgie Holstein, Senior Director for Strategic Planning, Environmental Defense Fund
- Julie Tighe, President, New York League of Conservation Voters
- Kendra Hems, President, Trucking Association of New York
- Kerene Tayloe, Director of Federal Legislative Affairs, WE ACT for Environmental Justice
- Nancy Young, Vice President, Environmental Affairs, Airlines for America
- Nick Sifuentes, Executive Director, Tri-State Transportation Campaign
- Renae Reynolds, Transportation Planner, New York City Environmental Justice Alliance
- Steve Finch, Senior Vice President, Automotive Services, AAA Western & Central New York
- Paul Allen, Senior Vice President, M. J. Bradley & Associates
- Porie Saikia-Eapen, Director, Environmental Sustainability and Compliance, Metropolitan Transportation Authority

Members not present:

- Dimitris Assanis, Assistant Professor, Stony Brook University
- John Samuelsen, International President, Transport Workers Union

Key staff present:

- Adam Ruder, New York State Energy Research & Development Authority
- Carolyn Ryan, New York State Department of Transportation

Guest Presenter:

Geoff Morrison, Cadmus

Meeting Notes

Introduction

- Commissioner Dominguez welcomed everyone and introduced the agenda.
 - Commissioner Dominguez also went over meeting procedures and noted the goal of the advisory panel is to discuss strategies they've been progressing with their individual subworking groups and how they will formulate these strategies to create recommendations.
 - Commissioner Dominguez also noted that today the panelists will hear from Cadmus on the State of Transportation Electrification in NYS Roadmap. Then they will go through

updates from the sub-working groups and discuss how they will begin refining some recommendations.

- At the end of the meeting, the goal is to decide what future meetings will cover and determine what policies and/or strategies they will pursue.
- Then the panelists will go over next steps for how recommendations will come together from the different sub-working groups.

Report out on Market-based Measures/Finance Roundtable – Commissioner Dominguez Introduction with Paul Allen Providing Summary

- Commissioner Dominguez gave a high-level overview of what was covered during recent subgroup meetings.
- Paul Allen: Had a two plus hour discussion with experts on the subject of market-based measures and finance, noting it was great to speak with some individuals with capital at risk.
- Key members that attended this meeting included:
 - Presentation Rajinder Sahota from the California Air Resources Board. Noted involvement with CA's cap and trade program and described the low-carbon fuel standard in place.
 - Professor Pastore, who noted disparities between general population and DACs' exposure to mobile and stationary sources of pollution. Focused primarily on stationary sources of pollution and the impact market-based solutions can have on exacerbating the impacts felt by DACs.
 - Dallas Burtraw, from RFF spoke about performance standards like LCFS. Noted that higher credits don't always correlate to higher gas prices.
 - Bruce Ho from NRDC discussed his experiences with transportation Climate Initiative programs.
 - Trish Hendren from Eastern Transportation Coalition. Noted the dilemma of transitioning to cleaner transportation is the burden on fuel taxes and the trickle-down impact it will have on infrastructure due to declining tax revenues.
 - Ben Rogers, a Senior Advisor at Duke Energy, explained the role of electric utilities in electrifying transportation and their ability to supply Capex. Noted utilities are not great sources of innovative ideas, but should be part of the discussion due to their large balance sheets.
 - Margarita Parra from Clean Energy Works focused on school bus electrification,
 highlighting the impact pay-as-you-save programs can have on this sector in particular.
 - Dave Rinder from Ares Management invests in infrastructure and power assets. Notes utilization guarantees for EVSE can help reduce the upfront risk associated with these projects.
 - Michael Linds is a capital investor and explained regulatory risk and how that impacts investment opportunities. Noted there is a constant concern about a potential mess of regulations across states and federal government
- Paul Allen noted the diversity of speakers. They heard wide range of views from the vantage point of people who put money at risk, but he highlighted the concern that current market-based solutions do not adequately address certain economic and EJ inequities.
- Discussion
 - Renae Reynolds: Emphasized the need for continued conversation around market-based plans and stressed the importance of considering the ground-level impacts on EJ

communities. Want the panelists to see how many other voices from CA can be heard on EJ issues and their experience with some of the programs that have already been implemented in the state. Notes that Manuel Pastore is from academic space, but imagines it would likely be worthwhile to hear from community members on the EJ topic as well.

- Elgie Holstein: Concurred with Renae. His main takeaway was that market-based solutions should not be rejected due to EJ concerns, but rather that they need to be realistic from a policy and economic standpoint and fully consider the opportunities that both lenses bring to the discussion. While market-based solutions often help generate cash that is needed to bring about dramatic risk reductions and transformation, there needs to be just as much thinking and creativity to ensure there are real measurable benefits that are predictable over time. This will help ensure policies create benefit for the EJ communities. NYS needs to see these two as collaborative opportunities to reconcile inherent opposition between the two.
- Kerene Tayloe: Agreed with Renae and Elgie that it would be helpful to hear from additional EJ advocates from CA. Notes that she has not heard many CA EJ advocates talk positively of the market based policies to date.
- o Paul Allen: Emphasized that the panelists and NYS can learn a lot from the CA experience and approach to date, but highlights don't need to replicate CA. CA began with setting limits and cap-and-trade policies, but have recently needed to come back to setting standards (light-duty vehicles example). Although they were the first state to do it, CA may have taken a suboptimal approach in sequencing their measures to reaching the State's end goals. May be a more effective order in which to do things in NY.
 - Julie Tighe: Concurred with Paul, noting there is an advantage to not being first state as it grants NY the ability to learn and adjust. Renae is right that we should hear more from community-led EJ groups and see where they can help us make improvements. Lets identify goals first, then what measures we need to accomplish the goals, then worry about cost yet noting there are not unlimited state dollars.
 - Kendra Hems: we need to hear from AAA, trucking, and other end users on the impacts they are feeling as well. There is a need to balance environmental goals, EJ, etc., but want to make sure they are not burdening personal car owners in rural areas, small businesses, etc.
- Paul Allen: Initially in CA, CPUC began with view that the competitive markets would deliver necessary EVSE for electrifying the transportation sector and that their was little need for utilities to play a large role. It took a few years for everyone to realize that this assumption was not going to happen, there needs to be collaboration and shared risk. After a fair amount of difficulty, CA changed course and instructed utilities to bring forward different forms of EVSE, light duty vehicle investment models, etc. CA is an opportunity for NY to see successes and failures and the State needs to take the opportunity to draw the right lessons in a values-driven way that establishes objectives for equitable outcomes and then work back from there. The opportunity to hear from people who put their money or investors money at risk is very helpful, because they won't confuse the reality of what it takes to bring private capital to match state government funding.

Jared Snyder: It can take a lot of money to make the transitions we are talking about here and private capital will be important. A lot of companies are investing in electric trucks due to long-term benefits already. This will reduce need for public money to get clean trucks deployed.

Report out on progress of the New York State Clean Transportation Roadmap project: State of Transportation Electrification in NYS (Geoff Morrison – Cadmus)

- Jared Snyder introduced the project, Geoff Morrison, and Cadmus' work to date.
- Geoff Morrison's Presentation (see meeting presentation for details)
 - Update on Clean Transportation Roadmap for New York State, with particular focus on electrification but with other elements included as well.
 - Agenda included project status update, State of transportation electrification in NYS,
 GHG projections: reference case, and policy insights. Also went over project timeline.
 - o Currently at the point they can begin drawing insightful takeaways from their models.
 - Jared Snyder question on Slide 12: Do the vehicle findings for light duty vehicles include federal incentives?
 - Geoff Cadmus: No, they do not.
 - Nancy Young Question slide 17: Does the reference case take COVID impacts into account?
 - Geoff Cadmus: Not at the moment, since we are looking long-term, though it
 has been considered at length. Don't want to make assumption about long-term
 impacts of COVID before they become reality.
 - Nancy Young notes her group may have some data to provide regarding COVID impacts on aviation that could be helpful.
 - o Julie Tighe question on slide 19: Are you assuming we meet the ZEV goals, which we are currently very far away from?
 - Geoff Cadmus: Yes, but these are very early assumptions, and by the time Cadmus completes roadmap new methodology/updates on vehicle adoption and emissions reductions will have adjusted.
 - o Jared Snyder question on slide 20: *Is this slide looking at charging infrastructure needed or charging that will occur absent further intervention?*
 - Elgie Holstein: Batteries have been improving very quickly, with companies like Kia planning to bring several new vehicles to market with up to 300 miles of range. Why does Cadmus still assume hybrid cars will have such a significant market share in future years and when will batteries get good enough to make hybrid vehicles irrelevant?
 - Geoff Cadmus: Can't really answer that question at the moment as we haven't looked into that specific question. The current model is based on a sophisticated model that takes into account survey and academic findings inputs and this is what these sources are projecting.
 - Elgie Holstein: How should we be thinking about battery performance/range on what it will take to drive adoption of EVs?
 - Geoff Cadmus: No consensus in literature, automakers are still trying to figure this question out.
- Discussion

- Jared Snyder: You project total ownership parity this year (2021), and price parity in 2027, though the proportion of vehicle sales that are EVS are relatively small out through 2050. What accounts for the fact that people are not buying EVs that are less expensive by 2027?
 - Geoff Cadmus: there's a general thinking that once price is right that everyone will shift over to EVs, but the current model accounts for all barriers to vehicle electrification, with price being just one. These barriers include availability of size class and EVSE infrastructure. However, we do have another scenario that can show an unconstrained version that largely looks at price, in which EV sales will go up quite rapidly.
- Julie Tighe: The current reference case is assuming everything is continuing as is. Will there be an opportunity to look at impacts as NY implements new policies?
 - Geoff Cadmus: We are currently evaluating this sort of thing and considering the
 most likely bundle of policies that could be implemented. We looked at
 advanced clean trucks and advanced clean cars first, as those seemed to be the
 highest priority.
 - Adam Ruder: We showed the first step of this with this analysis, which focuses on advanced clean cars and trucks regulations. We do intend to incorporate a number of different policy scenarios, and want to make sure these reflect what the policy panel is considering.
- Nancy Young: I don't think the base case scenario is accurate. Have you taken into account aviation GHG emissions reduction commitments when you estimate 2050? It seems like you assume all sectors do something except aviation. I suggest you refer to the ATAG Waypoint 2050 Report:
 - https://aviationbenefits.org/media/167187/w2050_full.pdf
 - Adam Ruder: Not suggesting these are the only two policies that will be evaluated, but we appreciate this information and we will see how we can integrate this information into the analysis.
- Albert Gore: encouraged by GHG impacts of ACC2 and ACT, but it is an important point that we need to increase EVs on the road and also understanding we have a fair amount of ground to make up on GHG reductions that are assumed by the reference case. Want to flag this because there are a number of challenges that need to be adequately accounted for in policies the council is going to recommend, and we need to fully understand the actual GHG impacts of policies recommended. Need to take into account challenges in the existing implementation models and how all that is going to impact bigger regulations as they are debated by the larger climate action council. Looking forward to some thoughts on the distribution model in the next iteration of the Cadmus report.
- Jared Young: Does the base reference case assume the ZEV mandate or the 850,000 EVs goal? ZEV mandate works based on battery capacity, which leads to fewer vehicles needing to be sold.
 - Geoff Cadmus: the current model assumes the 307,000 EV in ZEV mandate by PHEVs and BEVs evenly split.
- o Julie Tighe: Is the presentation available?
 - Adam Ruder: all slides will be made available publicly.

Report out on Electrification/Fuels Sub-group (Kendra Hems)

- Kendra Hems reported on findings from the Electrification/Fuels Roundtable. The main points are summarized below:
- A lot of things this sub-work group is looking at tie into Geoff's presentation.
 - Considerations include adopting many of the CA policies already in effect, which will include ACC2, ACT, EV incentives, feebate, EV infrastructure, EV outreach and education, utility rates. Also investigating broader policies that will support alternative fuels, as well as infrastructure investments.
- On January 15, the electrification sub-work group met with the sub-work group of power generation advisory panel and will continue to collaborate further in the future. The imagine this will help them understand electric grid capabilities and impacts EV and EVSE may have on the grid as they become increasingly prevalent.
- Discussion
 - Elgie Holstein: what is your goal in respect of biofuels and the integration of other alternative fuels? We need to be making sure we have transition fuels available as we move toward electrification plans.
 - Adam Ruder: [referring back to Cadmus presentation] some of the policies around other fuels are still in initial phases of discussion, but biofuels are not the only option being evaluated by our model.
 - Julie Tighe: LCFS is a tool that can bused in support of electrification.
 - o Nancy Young: as we get further into this work and talk about LCFS, want to discuss optin of aviation and sustainable fuels.

Report out on Public Transportation Sub-group (Bob Zerrillo)

- Bob Zerrillo reported on findings from the Public Transportation/Smart Growth Roundtable.
 Main points are summarized below:
- The sub-work group has looked at a number of strategies so far, with funding being a key to expanding transportation across NYS. A lot of positive signs with new Federal Administration and Governor's goals.
 - o Governor did mention in budget a number of strategies for expanding MTA and other strategies in NY metro area and are a noted priority.
- A number of the strategies that are discussed are contingent on market-based strategy
 discussion, including opportunities that have been explored in CA like cap-and-trade. Want to
 reemphasize concern on fuel taxes being used for transportation policies and reiterate this may
 impact funding in other areas if tax revenues are decreased. NYS can't fall behind on basic
 transportation infrastructure. First-mile last mile and micro mobility have continued to be a
 priority for this sub-work group.
- Deployment of new technology is key to increasing ridership and promoting public transportation. There have been thoughts about standardizing technologies throughout the state.
- Discussion
 - Julie Tighe: Is there a magnitude of money we are talking about for pursuing these initiatives?
 - Bob Zerillo: I don't have one currently. Not sure what DOT means by wanting to declare a doubling of public transportation.

- Jared Snyder: Is the public transportation subgroup looking at electrifying transportation busses or has that been left to electrification subgroup? What assumptions have been made around congestion pricing?
 - Bob Zerillo: That has been left that to electrification subgroup to this point.
 Assume MTA and their MTA capital/financing plan would continue to work on assumptions around these topics.
- Renae Reynolds: is this sub-work group's conversation around public transit considering mass transit funding from federal level?
 - Bob Zerillo: new Federal Administration's outlook on transit and infrastructure funds could create a much better opportunity. No specifics yet, but that should be part of the discussion and projections (Federal Reauthorization Bill is a key source of funding in addition to state funding, local, private).
 - Jared Snyder: this makes clear the need to remain nimble throughout process.
 May not just be funding, could be federal standards and this group must continue to adjust accordingly.
 - Paul Allen: oftentimes with federal funding programs, there is expected to be a local match of that money. This is a way to leverage federal financing. Typically, a cost sharing arrangement.

Report out on Smart Growth Sub-group (Porie Saikia-Eapen)

- Porie Saikia-Eapen provided an overview of upstate/downstate public transportation.
- This group has been looking at transit infrastructure, climate change, and energy efficiency. They have been discussing smart growth in this context, encapsulating all three key areas.
 - Have also invited land use and local government subgroups, as these two groups seemed to be an integral/complimentary part of decision-making in this area.
- Two strategies that this subgroup has focused:
 - o Public transport integrated development
 - Supporting low/zero-carbon transportation
- Don't think their sub-work group's goals can be achieved without working closely with public transportation sub-work group. Need to make sure transit authorities are at same table as community planning professionals before thinking of final strategies. This will also take mass public education on the importance of integration with public transportation, land use, and other groups mentioned above.
 - Also focusing on technological opportunities to make public transportation more accessible and help business recruitment processes.
- Discussion
 - No discussion

Open Panel Discussion on Policy Recommendations – (Julie Tighe) & Next Steps – (Jared Snyder)

- Jared Snyder: I want to hear anything that is a key priority, looking at EJ and other key factors.
 - o Don't have time today, but want to have discussion next meeting on February 18 or have another meeting in February if that is preferred by the group.
- Julie Tighe: I think it would be helpful to discuss work planning process in addition to more panel discussions.

- Jared Snyder: We need to take time to discuss how we will formulate our policies and recommendations moving forward.
- Jared Snyder: asked council members if they had any input on the recommendations template that was shared via PowerPoint at the CAC meeting last week.
- Jared Snyder: I want to discuss work plan that articulates how we plan to get to goals by the end of March, which was distributed by Carolyn.
 - Carolyn Rya: in the month of January plan to continue working with sub-groups and panelists to gather as much info as possible to put forth best recommendations. We will refine recommendations in February. There have been some discussions to engage climate justice and just transition working groups so they can influence policies under considerations. In March, we will want to look at cost, benefits, and other priorities. No CAC meeting in March, with report out by Commissioner Dominguez in April
 - Jared Snyder: Although report will be at April meeting of recommendations, Council has asked for recommendations sooner so they can think about them and respond in the April meeting. May also schedule another meeting with Council in April to go through the sub-group's work. We will also need to schedule a public meeting in February in addition to two panel meetings.
- Renae Reynolds: where will market-based program input from EJ groups from CA come in regarding timeline and work planning?
 - o Jared Snyder: I'd like to see program/policy recommendations from EJ groups, which will enable us to put policies in place that benefit EJ communities from the outset.
- Julie Tighe: electrification members have been working on recommendation documents, are other subgroups doing the same?
 - o Porie Saikia-Eapen: we are putting together recommendations as well.
 - o Jared Snyder: Maybe we can share these recommendations between sub-work groups in an upcoming meeting.
- Meeting close