## Transportation Advisory Panel Meeting 3

October 21, 2020

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## **Meeting Procedures**

#### Before beginning, a few reminders to ensure a smooth discussion:

- Panel members should be on mute when not speaking.
- Video is encouraged for Panel members, in particular when speaking.
- We will not be muting individuals for this discussion; the chair will call on members individually, at which time please unmute.
- If technical problems arise, please contact Gina McIntyre at gina.mcintyre@dot.ny.gov

## Agenda

- Welcome/Introductions
- Clean Transportation Roadmap Presentation
- Developing Recommendations/Assignments
- Liaisons/Cross Sector Collaboration
- Expert/Stakeholder Input
- Next Steps

## Panel Member Introductions

## **Transportation Advisory Panel Members**

Marie Therese Dominguez, Chair NYSDOT

> Jared Snyder NYSDEC

Paul Allen, M. J. Bradley & Associates

Dimitris Assanis, Stony Brook University Steve Finch, AAA Western & Central New York

Albert Gore III, Tesla

Kendra Hems,
Trucking Association
of New York

Elgie Holstein, Environmental Defense Fund Renae Reynolds, New York City Environmental Justice Alliance

Porie Saikia-Eapen, Metropolitan Transit Authority John Samuelsen, Transport Workers Union of America AFL-CIO Nick Sifuentes, TriState Transportation Campaign

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ACT for
Environmental
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Julie Tighe, NYS League of Conservation Voters Craig Turner, Buffalo
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Airlines for America

Bob Zerrillo, New York Public Transit Association

# Clean Transportation Roadmap

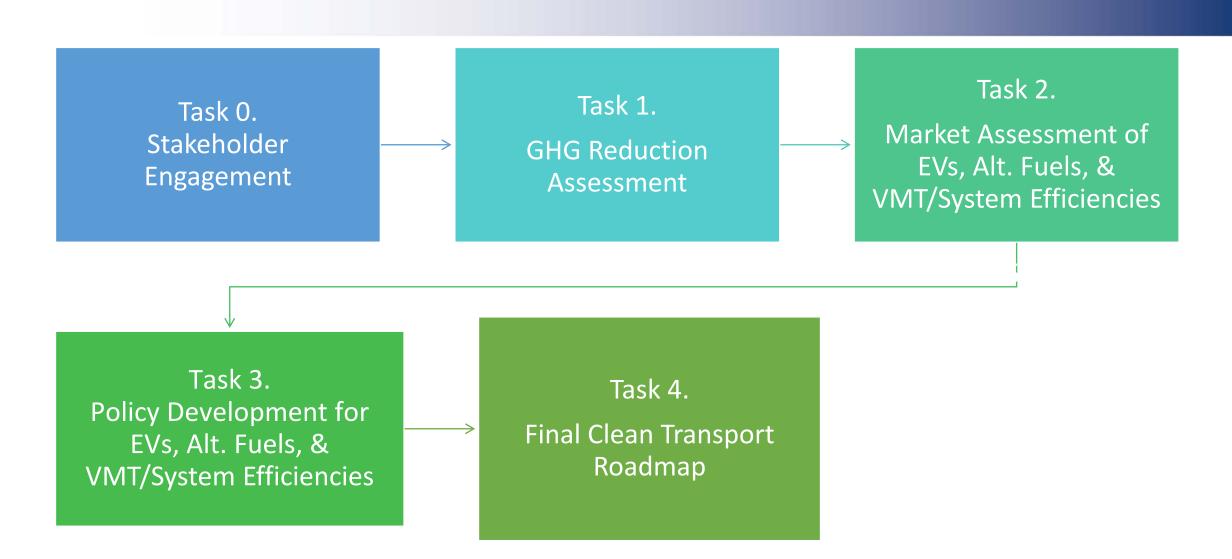
## **Clean Transportation Roadmap**

- > Key Goals
  - Chart possible courses to 2030/2050 GHG emissions targets for transportation sector
  - Inform CAC Transportation Advisory Panel by answering key questions:
    - How much GHG reduction will current transportation policies achieve? How much more is needed to meet 2030/2050 goals?
    - What are current and future trends? What should initial priorities be?
    - What policy options can best accelerate adoption? How much would they cost? How could NYS fund these?
    - How much GHG reductions can come from ZEVs? How much GHG reduction can come from other strategies like clean fuels, increased transit, TDM? What policies help realize these savings?
  - Help align and inform policies of NYS agencies working on clean transportation initiatives
- > Team of consultants led by Cadmus Group
- > Will be complemented by additional analysis of electric grid impacts, EV infrastructure needs

## **How the Roadmap Fits In**

	CAC Transportation Advisory Panel	Clean Transportation Roadmap
Core Activity	Develop GHG emission reduction policy recommendations for the transportation sector for NYS	<ul> <li>Conduct GHG emission reduction analysis and modeling, and identification of potential policy packages, for the transportation sector for NYS</li> </ul>
Expected Results	Recommendations of clean transportation policies for the CAC to put forward	<ul> <li>Report outlining potential clean transportation policy mixes to get to 2030/2050 GHG emission reduction goals</li> <li>Accompanying analysis of underlying market factors and expected policy impacts of various actions that could be taken</li> </ul>
Project Structure	Appointed outside expert panel led by NYSDOT	<ul> <li>NYSERDA and State agency steering committee directing consultant, informed by outside experts</li> </ul>
Timeline	<ul> <li>Draft recommendations by Dec 2020</li> <li>Final recommendations by Spring 2021</li> </ul>	<ul> <li>EV policy analysis by Nov 2020</li> <li>Other policy analysis by Mar 2020</li> <li>Final report May 2020</li> </ul>

## **Roadmap Task Overview**



## **Roadmap Timeline**

Deliverable	<b>Expected Completion Date</b>	Briefings for Advisory Panel	
EV Market Assessment	September 2020	11/3: EV mkt assessment 11/19: EV & EVSE forecasts	
EV Policy Analysis	November 2020	12/18: EV policy analysis	
Mobility Market Assessment	February 2021	2/18: Mobility mkt assessment	
Alt Fuel Market Assessment	February 2021	2/18: Alt fuel mkt assessment	
Mobility Policy Analysis	March 2021	3/18: Mobility policy analysis	
Alt Fuel Policy Analysis	March 2021	3/18: Alt fuel policy analysis	
Economic Impacts Analysis	April 2021	TBD: Econ impact analysis	
Final Report	May 2021	TBD: Final report	

### Roadmap Roles and Responsibilities

Expert Advisory Council

Technical input

NY-specific context

Listening Sessions

Frontline communities

Just transition & workforce

Steering Committee

Direction, guidance

Coordination on data & deliverables

**NYSERDA** 

Direction, guidance

Project management

Climate Action Council

Transportation Advisory Panel

## **Modeling Overview**

Model	Purpose	Туре	Modes
Diffusion Model	Estimates ICEV, BEV, PHEV, HEV, FCEV annual sales between today and 2050 at the county-level under various policies.	Consumer choice diffusion model based on stated preference model	Light-duty vehicles
VE-State	Used to estimate VMT, mode shift, and costs of various policies.	Multi-stage hybrid model	All on-road vehicles
NY-VISION	Integrate all sub-sectors and all modeling together	Spreadsheet / PowerBI accounting tool	All modes (on-road, rail, marine, air)
IMPLAN	Estimate economic impacts of various policies and programs.	Economic input-output model	Linked to NAACS code sectors of economy
EVSE Acct. Tool	Estimate number, typology, and electricity load of EV chargers	Hybrid model	All ELECTRIC on-road vehicles
Side Analyses	TCO of vehicles, TCO of refueling infrastructure	Various	Various

## **Complementary Research**

- > Distribution System Analysis
  - Led by Nexant
  - Analyzing the impacts from additional electrification of the transportation sector on the electric grid at the distribution level
  - Results expected in January 2021, to inform broader Roadmap analysis
- > Integration with Pathways
  - Led by E3
  - Integrating modeling results from Roadmap and distribution system analysis back into the Pathways model
  - Analyzing the impacts from additional electrification of the transportation sector on the electric grid at the transmission level
  - Results expected in April 2021

## Developing Recommendations

### **Developing Recommendations**

#### Structure- Develop recommendations in subject areas:

- Electrification and fuels
- Market-based programs, funding and financing
- Public transportation
- Smart Growth/System Optimization

#### Designate work groups for each

### **Electrification and Fuels**

- Pathways goals for 2030
  - Electrification: 60-70% passenger vehicle sales; 35-50% of medium/heavy duty truck sales
  - Fuels: 40% of diesel is renewable
- Initiatives underway include:
  - Passenger cars: DEC's ZEV mandate, subsidies
  - o **Trucks**: Medium/Heavy Duty MOU, VW, transit bus electrification initiative
  - Charging infrastructure: Make Ready, NYPA programs, NYSERDA incentives, Climate Smart Communities funding

### **Electrification and Fuels**

#### • Policies/programs to drive the transition to electrified cars and trucks

- Potential regulatory policies could include next generation ZEV rules adopted by California to implement the 2035 100% sales target;
   Advanced Clean Truck rule adopted by California.
- Potential complementary policies could include incentives, pricing, charging infrastructure/technology, and policies to ensure benefits to disadvantaged communities
- Analyses needed:
  - Identify infrastructure requirements to support the transition and mechanisms to deploy that infrastructure
  - o Identify challenges/opportunities and lifecycle cost/benefit

#### • Policies/programs to reduce the carbon intensity of transportation fuels

- Potential regulatory policy could be a Low Carbon Fuel Standard: eligible low-carbon fuels could include electricity, green hydrogen and advanced renewable biofuels
- Consider life-cycle emissions
- Evaluation of challenges/opportunities, including reduction of co-pollutants and cost impacts, considering experience in other states.

#### Discussion

## Market-Based Policies, Financing and Funding

#### Programs underway, in development or under consideration

- Transportation and Climate Initiative: potential multistate cap-and-invest program that would cap and reduce emissions and provide a funding source for investments with emphasis on investing for the benefit of disadvantaged communities
- New York Green Bank
- Identify challenges/opportunities and contribution to CAC goals; evaluate adequacy of funding for clean transportation investments needed

#### Potential policies and programs

- Market-based: could include participation in TCI or other approaches
- o Financing: strategies to animate private capital; based on the Green Bank or other approaches?
- Other ways of funding transportation investments

#### Discussion

## **Public Transportation**

- Identify policies and programs that would double the availability/accessibility of public transportation services statewide - other than the Metropolitan Transportation Authority (MTA) - by 2035
  - Identify resources to support network expansion projects identified by MTA in their twenty-year needs study
  - Identify strategies to provide operating/capital support
  - Identify strategies to address transit deserts
  - Assess options for vehicle types/connectivity with micro transit
  - Invest in pedestrian infrastructure to enhance safety/access to bus stops
  - Identify strategies for using tax increment financing for modernization/enhancement of bus/rail facilities/equipment
- Discussion

## **Smart Growth/System Optimization**

- Adopt policies that incentivize construction of all new roadway, residential, and commercial development along certain census tracts to be adjacent to public transportation routes by 2035
  - Identify supportive land use/infrastructure polices that provide access to transportation for users of all abilities
  - Identify barriers such as home rule and provide incentives to address
  - Develop policies on last-mile freight delivery/warehousing
  - Incorporate strategic design features including sidewalks, pedestrian and facilities, crosswalks and pedestrian, other into reconstruction activities
  - o Identify modal bottlenecks that result in excess idling and carbon emissions for candidate projects

#### Discussion

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## Liaisons/Cross Sector Collaboration

### Areas of cross sector-collaboration

- Land Use & Local Government Panel This Panel will also be reviewing the topic of Adaptation and Resilience: Anticipate meeting in late Oct 2020 and mid-November
- Agriculture and Forestry: Anticipate meeting in mid-November
- Power Generation: Anticipate meeting in mid-November
- Just Transition Working Group: Anticipate meeting in late Oct 2020 and Feb 2021
- Climate Justice / Environmental Justice Working Group: Anticipate meeting in late Oct 2020 and Feb 2021

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## Expert/Stakeholder Input

## **Expert/Stakeholder input**

- Stakeholder/expert groups for informal outreach
- Schedule for public input

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## Next Steps/Open Discussion

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