Transportation Advisory Panel

Meeting 11

March 9, 2021

www.Climate.ny.gov

NEW YORK STATE OF OPPORTUNITY. | Climate Action Council

Agenda

- Welcome/Introductions
- Review of Cadmus policy briefs on alternative fuel policies and VMT management/system efficiency policies
- Review of Advisory Panel recommendations template for Public Transportation and Smart Growth strategies
- Plans for additional expert input/research
- Next Steps

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: Jesse.Way@cadmusgroup.com**

Panel Member Roll Call

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

Kerene Tayloe, WE ACT for Environmental Justice

Julie Tighe, NYS League of Conservation Voters

Craig Turner, Buffalo Niagara International Trade Gateway Organization

Nancy Young, Airlines for America

Bob Zerrillo, New York Public Transit Association

Transportation Advisory Panel
Opportunities for VMT Management and System Efficiency Improvements

Dr. Abby Morgan, PE
Kittelson & Associates

March 9, 2021

KITTELSON & ASSOCIATES CADMUS

Agenda

- Potential Policies to Manage VMT and Improve System Efficiency
- VMT Management Overview & Example Policies
- System Efficiency Example Policies
- Other Considerations

Example Policies Presented Today

VMT Management:

- Smart Growth Land Use
- Complete Streets
- Shared Mobility Services
- Pricing Strategies

System Efficiency Improvement:

- Employer Telework and Other Travel Demand Management (TDM)

VMT Management | Overview

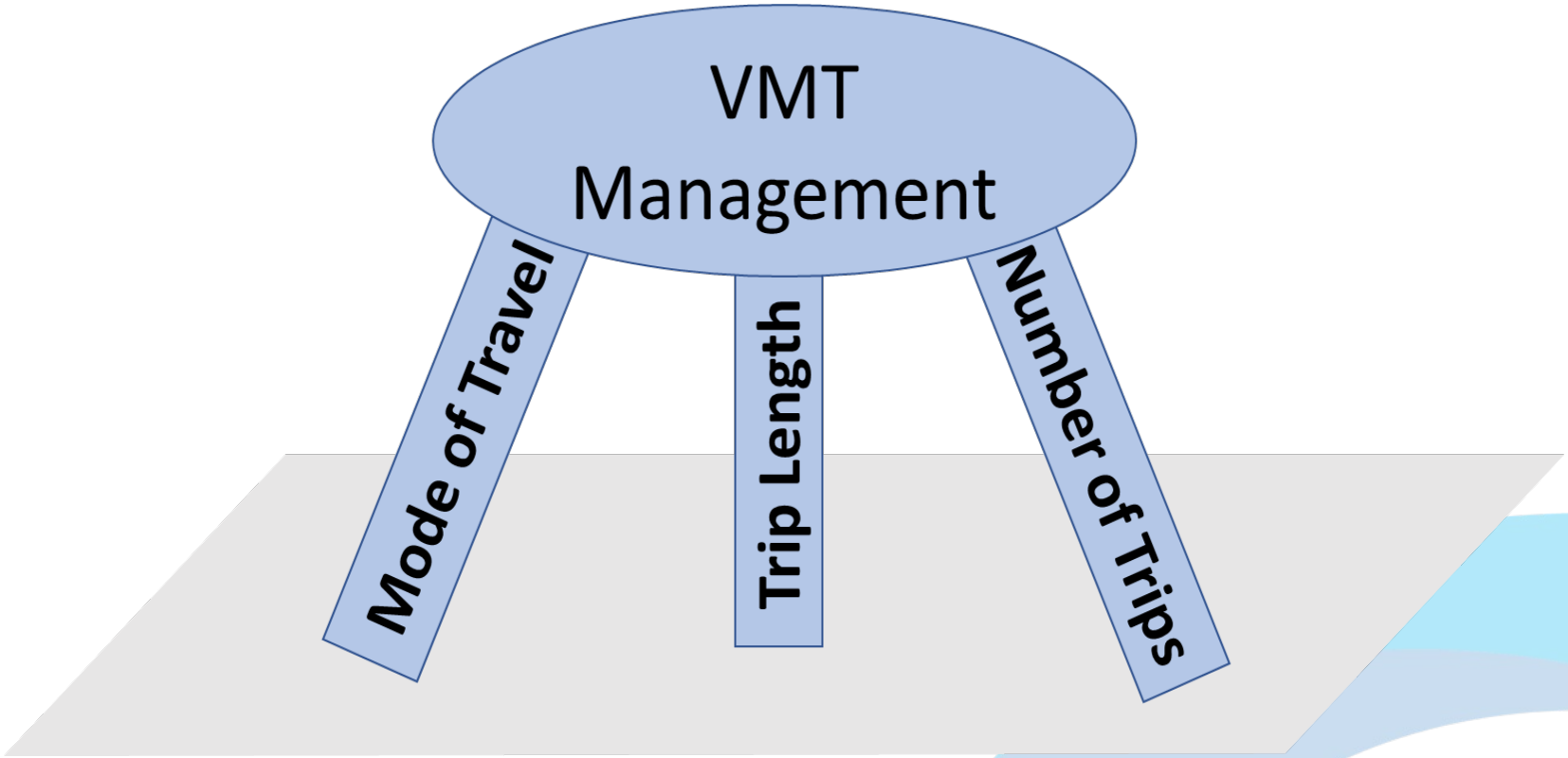
The most effective VMT management policies address all three aspects of VMT: mode of travel (mode choice), trip length (trip distribution), and forgone trips (trip generation).

Example Strategies

Mode shift: Better transit service and higher parking costs

Trip length: Mixed-use development and other land development policies typical of Smart Growth

Number of trips: Teleworking and other policies that use technology to replace physical travel



VMT Management | Smart Growth Land Use

Encourage smart growth land uses through fee waivers, density bonuses, and expedited review processes in exchange for high-density, mixed-use, affordable, and transit-oriented developments.

Scope	Housing, land use/zoning, infrastructure development
Jurisdiction	State, local
Implementation Timing	Near- to mid-term (1-5 years)
Barriers addressed	Vehicle-oriented development patterns and land uses that prevent more efficient modes
Effectiveness	High
Economic/Financial	Medium
Equity/Public Health	High

Considerations

- NYC VMT per capita and emissions is already 40% lower than other parts of NYS because of land use, availability of transportation options
- Aggressive policies supporting compact development could achieve 10% reduction in VMT per capita, but will take time for savings to materialize
- Smart Growth perceived to favor gentrification – needs focus on social equity, public health
- Benefits accrue because of growth in property taxes and cheaper infrastructure service
- Costs accrue because design standards can result in more expensive construction

VMT Management | Complete Streets

Policy that manages VMT by encouraging travelers to use bicycle, pedestrian, and transit modes, thus reducing VMT per capita.

Scope	Roadway infrastructure
Jurisdiction	State, regional, local
Implementation Timing	Near- to mid-term (1-5 years)
Barriers addressed	Vehicle-reliant neighborhoods
Effectiveness	Medium
Economic/Financial	Medium
Equity/Public Health	High

Considerations

- Past research: Complete Streets reduces VMT per capita by 1-2%
- Low marginal cost when incorporated in design phase ($1M-$4M per mile in other states)
- Study in NYC shows positive impact on retail sales from neighborhoods with complete streets
- Planning should weigh impacts on all road users to find the right solution

VMT Management | Shared Mobility Services

A suite of policy approaches to support and invest in energy-efficient mobility: public transit, automated/connected/shared micromobility, and microtransit services.

Scope	Multiple modes: rail, bus, van, bike, scooter, etc.
Jurisdiction	State, regional, local
Implementation Timing	Near- to mid-term (1-5 years)
Barriers addressed	Single occupancy vehicle travel, last-mile travel need
Effectiveness	High
Economic/Financial	High
Equity/Public Health	High

Considerations

- Past research: 1% to 8% VMT per capita reduction, depending on the amount invested on improved services and the existing transit infrastructure in each community.
- State provides approximately $5.7 billion in new direct State assistance/State-authorized dedicated revenues annually in Statewide Mass Transportation Operating Assistance (STOA), and other transportation assistance, to approximately 120 transit operators.

VMT Management | Pricing Strategies

Congestion pricing, VMT fees/road user fees, CBD tolling, etc. incentivizes lower driving mileage by pricing road use on a per-mile basis. Effectiveness depends on driver willingness and ability to pay or change trip and on fee enforcement.

Scope	Passenger vehicles and/or trucks
Jurisdiction	State, national
Implementation Timing	Mid- to long-term (5-11+ years) with some NYC congestion pricing sooner
Barriers addressed	Current lack of price-based signals to drivers that represent the full societal costs of driving
Effectiveness	Low to High (depends on fee amount)
Economic/Financial	Medium to High (depends on fee amount)
Equity/Public Health	Medium

Considerations

- London's downtown toll charge of ~$15 reduced traffic by 15%
- Truck VMT taxes are applied in some states (incl. NYS 0.8-5.5 cents per mile though tax evasion estimated at 33-50%)
- Oregon program: 1.8 cents per mile pilot program. 32% of people thought VMT fee is fair. 42% think VMT fee disadvantages rural people

System Efficiency| Employer Telework and Other Travel Demand Management (TDM)

A teleworking policy creates flexibility for workers and should be accompanied by a program to fully support remote workers' needs. TDM programs offer additional opportunities to reduce commuting VMT.

Scope	Public and private employees
Jurisdiction	State, local
Implementation Timing	Near- to mid-term (1-5 years)
Barriers addressed	Reduces the need to travel for commutes
Effectiveness	High
Economic/Financial	Low
Equity/Public Health	Medium

Considerations

- System Efficiency Opportunity: Reducing the need to travel reduces the number of trips made.
- Past research: Unmonitored employer-based TDM programs (meaning that the TDM program is voluntary on the part of the employer and has no performance targets) might reduce commute trip VMT by 1% to 6%.
- Challenge: Getting high-speed, broadband service to localities without it. Getting computer facilities to lower-income households.

Other Considerations

- Technology-neutral strategies
- Empowering agency staff
- Social equity and public health

Thank you!

Dr. Abby Morgan, PE
amorgan@kittelson.com

KITTELSON & ASSOCIATES CADMUS

Review of Advisory Panel recommendations template

- TAP sub-work strategies will be presented for Panel review on or before the April 9 meeting.

- Recommendations will be presented to the CAC in May, after which they will be made available to the public via the Climate Act website, climate.ny.gov.

Mitigation Strategy – Enhanced Public Transportation/Mobility

Draft Material

Initiative #	Description	Action type	Emissions impact	Ease of implementation	Cost
1	Identify implementable strategies to significantly enhance the availability; accessibility; reliability; and affordability of public transportation services with an emphasis on unserved/underserved communities. This includes: • Doubling the service availability/accessibility of municipally sponsored upstate and downstate suburban public transportation services statewide; and. • Implementing policies and programs that support system reliability/network expansion projects identified by the Metropolitan Transportation Authority (MTA) in their current five-year capital pan/twenty-year needs study.	Legislative, Regulatory, Financial	Low-Medium	Medium	$$$$

Transportation Oriented Development Overview

Draft Material

Description:	Transportation Oriented Development		
Action type:	Legislative, Regulatory, Financial		
GHG reduction by 2030:	Low-Medium	**GHG reduction by 2050:**	Medium
Cost and funding considerations:	• Requires new incentives to incorporate community/public transportation friendly development/redevelopment. • Disincentivizing auto dependency/congestion through pricing/parking strategies. • Compels - as a condition of funding/environmental approval - Industrial Development Agencies (IDA) and Metropolitan Planning Organizations (MPO) to participate in the development/implementation of integrated transportation/land-use plans.		
Ease of implementation:	Medium/High – May infringe upon exiting local "Home Rule" governance authority.		

Risks / Barriers to success	Possible mitigants
1. Requires fundamental changes to local land use planning/local home rule. 2. May separate the construction/purchase of parking spaces from residential/commercial development. 3. Funding and finance policies to support recommended strategies.	1. Rely on incentives to encourage community-based development approach as opposed to requirements. 2. Develop integrated transportation/land-use plans. 3. Create special assessments/districts to support projects (e.g., TIF, Congestion/Parking Pricing, proceeds from market-based policies).

Convenience/Connectivity Overview

Draft Material

Description:	Convenience/Connectivity		
Action type:	Legislative, Regulatory, Financial		
GHG reduction by 2030:	Low-Medium	**GHG reduction by 2050:**	Medium
Cost and funding considerations:	• Operating and capital costs to: ▪ Provide first mile/last mile connectivity through accessible and integrated infrastructure. ▪ Increase the number of destinations that are accessible by public transportation, walking and biking. ▪ Provide high-quality amenities at public transportation facilities/stops. ▪ Accelerating new phone/app-based application technologies that provide real-time schedule information/makes transit easier to use.		
Ease of implementation:	Medium – Requires expanding travel technology development/deployment to public transportation.		

Risks / Barriers to success	Possible mitigants
1. Access to/understanding of new technology/trip planning platforms. 2. Funding and finance policies to support recommended strategies. 3. Influences of emerging technologies on services, workforce, deployment of new technologies.	1. Partner with State/county departments of labor and health and human service organizations to create neighborhood-based mobility management/travel training centers. 2. Create special assessments/districts to support projects (e.g., TIF, Congestion/Parking Pricing, proceeds from market-based policies). 3. Develop/partner with existing community-based organizations on STEM initiatives.

Fleet Modernization Overview

Draft Material

Description:	Fleet Modernization		
Action type:	Legislative, Regulatory, Financial		
GHG reduction by 2030:	Medium	**GHG reduction by 2050:**	High
Cost and funding considerations:	• Procuring new zero-emission public transportation vehicles appropriate for the community being served. • Partnering with utility companies to consider opportunities for transportation right-of-way to generate energy for public transportation services. • Investigating developments in hydrogen fuel cell bus technologies/other renewable fuels.		
Ease of implementation:	Medium – Requires new workforce skills to operate/maintain rollingstock; manufacturer capacity/capability to support.		

Risks / Barriers to success	Possible mitigants
1. Funding and finance policies to support recommended strategies. 2. Influences of emerging technologies on services, workforce, deployment of new technologies. 3. Availability of parts/supplies.	1. Create special assessments/districts to support projects (e.g., TIF, Congestion/Parking Pricing, proceeds from market-based policies). 2. Develop/partner with existing community-based organizations on STEM initiatives. 3. Establish price signals to suppliers/manufactures to ensure availability.

Mitigation strategies – Components of the initiatives

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** (*Entities that need to be engaged)*
Procure/deploy all-electric/zero-emission public transportation vehicles/recharging capacity.	DOT/OGS	7-10 years	NYSDEC, NYSOGS, NYSERDA, Manufacturers utilities, municipal sponsors/authorities.
Provide new incentives to incorporate community-based/public transportation friendly development/redevelopment that mitigates harmful GHG emissions.	DOS/NYSERDA	1-2 years	DEC, DOT, OGS, municipal sponsors/authorities, NYS Commercial Association of Realters, Environmental Justice Alliance, NYS Association for Affordable Housing, other.
Enhance service availability; accessibility; and affordability.	DOT, municipal sponsors/authorities	2-5 years	Federal Transit Administration, Industrial Development Agencies.
Make ready costs for support facilities.	NYPA/Utilities	1-2 years	DEC, NYSERDA, DOT.
Utility Rate Design Changes	DPS	6 months-2 years	NYPA, NYSERDA, Utilities.
Develop market-based policies to support transit use/generate funding.	DEC	3-years	NYSERDA
Require inclusion of public transportation considerations early in local/regional planning and development processes.	DOS	3-years	DOT, municipalities, developers/realters.

Mitigation strategies
Benefits and impacts

Draft Material

Anticipated Benefits and Impacts	
Disadvantaged communities	• Mitigating transportation related pollution levels in overburdened communities by accelerating the deployment of zero-emission bus fleets/modernizing rollingstock support facilities. • Enhancing service availability; accessibility; and affordability; of public transportation services for individuals in rural and urbanized areas. • Making public transportation easier to use/understand. • Providing direct connectivity to longer-distance bus/passenger rail services.
Health and co-benefits	• Reducing harmful pollutants/enhancing air quality. • Mitigating higher asthma/other respiratory illnesses caused by carbon/pollutants. • Facilitating a holistic approach to community development/reducing the environmental footprint of transportation on communities. • Reducing per capita growth in vehicle miles traveled.
Just transition: businesses and industries, workers	• Creating new targeted opportunities/investments in STEM initiatives/disadvantaged communities. • Developing new supply chain/manufacturing capability/capacity and workforce. • Accelerating deployment/implementation of new technologies that support travelers/makes transit easier to use. • Developing/implementing new sustainable building practices and renewable energy innovation into stations/support facilities.
Other	• Provide increased access to existing/attract new retail, hospitality, entertainment venues located within an enhanced transportation improvement district.

Enabling strategy summary

Draft Material

Initiative #	Description	Action type	Ease of implementation	Cost
1	Align state and local policies and funding, as well as roadways and development, around Public Transportation-Oriented Development (PTOD)	Legislative, Agency/Program	Hard	$$
2	Expand partnerships with businesses, economic development authorities, and local government to increase smart growth and transit use	Agency/Program	Medium	$
3	Expand low carbon transportation modes (biking, walking, carpooling, ride-sharing, micro-transit) for first/last mile connections to transit and destinations; encourage the business and economic development community to work more closely with public transportation officials in business location and expansion projects	Agency/Program	Medium	$

Enabling Initiative – Public Transportation Oriented Development Overview

Draft Material

Description:	Broaden the traditional concept of Transit-Oriented Development (TOD) into the concept of Public Transportation-Oriented Development (PTOD) for purposes of aligning land use, development and transportation funding with the goals of doubling public transportation expansion goals; support TOD in the process.
Action type:	Legislative, Agency/Program
Cost and funding considerations:	$$; will require considerable alignment and coordination and inclusion of supportive services in programs.
Ease of implementation:	Hard

Risks / Barriers to success	Possible mitigants
Will require a great deal of inter-governmental, inter-program coordination. The regional, multi-municipal nature of the effort may invoke Home Rule concerns.	Consider building off of existing regional entities and plans, such as the REDCs, NYSERDA Regional Sustainability Plans, NYSERDA Clean Energy Regional Coordinators and DEC Climate Smart Regional Coordinators.

Enabling Initiative – PTOD Components of the strategy

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** *(Entities that need to be engaged)*
Encourage and/or require collaboration among local authorities, transit operators, freight operators and economic development entities to more closely incorporate transportation options into land use planning, transportation planning, and economic development decisions	DOS, DOT, NYSERDA, DEC, ESD	1-2 years	Municipalities, planners, developers, Chambers, transit operators, freight operators, economic development authorities
Provide technical support for local governments to improve their planning and zoning process to reflect transportation oriented development	DOT, DOS	1 year	REDCs, Chambers, planners, transit operators
Encourage and/or require local governments to offer density bonuses around transit, reduced parking requirements, complete streets, other programs that improve transportation system	DOS, DOT	1-3 years	Municipalities, planners, developers
Adopt alternative traffic data analysis systems in addition to Level-of-Service (LOS) for evaluating transportation investment decisions	DOT	1-2 years	Planners, researchers
Produce research and materials that demonstrate links between planning & transportation, impacts on local finances	DOT, DOS, DEC, NYSERDA	1-2 years	REDCs, Chambers, municipalities, developers, transit operators

Enabling Initiative – PTOD
Components of the strategy (continued)

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** (*Entities that need to be engaged)*
Encourage businesses seeking economic development incentives to consult transit agencies early and locate or expand in an area locate in areas with existing multi-modal options or provide services for employees	ESD	2-3 years	REDCs, Transit operators, planners, regional planning councils
Prioritize, incentivize and expand access to funding for bike, pedestrian and complete streets projects that serve employment centers.	DOT	1-2 years	Transit operators, mobility providers, municipalities
Support the infrastructure required to shift freight to lower-emission modes, like rail	DOT	1-2 years	Freight operators, municipalities
Support local projects to establish low-emission transportation zones, car-free streets, and similar concepts	DOT, DOS, NYSERDA	2-3 years	Municipalities
Support the inclusion of freight considerations in planning and zoning decisions	DOS, DOT	2-3 years	Freight operators, municipalities

Enabling Initiative – PTOD
Components of the strategy

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** **(***Entities that need to be engaged)*
Establish a definition and criteria for PTOD to be used by state, regional and local entities to evaluate projects and project funding; incorporate the definition of PTOD into the State Smart Growth Public Infrastructure Policy Act.	DOT/DOS	6-9 months	Transit agencies, developers
Achieve Horizontal, Regional coordination—possibly built around or within the REDCs--among Public Transportation entities and Planning, Economic Development and Sustainability/Climate interests (including DOS Smart Growth, REDCs, Regional Planning Councils, NYSERDA and DEC Regional Coordinators, universities, CBOs and other relevant public and private entities).	DOS/DOT/NYSERDA /DEC	1 year	REDCs, Chambers
Work with IDAs to and transit agencies to develop and proliferate tax incentive policies that incentivize transit planning, infrastructure and access.	ESD/DOT/Transit Agencies	1-2 years	IDAs, Chambers, developers, planners
Ensure that transit entities and MPOs (where relevant) are consulted on any plan or GEIS/EIS being produced by a municipality for a development project or re-zoning that is proximate to, or impacts, public transit (rail station or BRT hub).	DOS/DOT	1 year	Transit agencies, planners/regional planning councils
Adopt alternative traffic data analysis systems in addition to Level-of-Service (LOS) track daily travel behavior—i.e., when, where, how far people drive and how many individual car trips they take	DOT	6 months	Think tanks

Enabling Initiative – PTOD
Components of the strategy (continued)

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** *(Entities that need to be engaged)*
Create policies that support local efforts to reduce parking requirements to support infill development near public transportation.	DOT/DOS	1-2 years	Municipalities
Incentivize location of intermodal facilities (i.e. rail/truck) near transportation corridors eliminating need for longer- distance deliveries.	DOT	1 year	Truckers, transit agencies
Expand/emulate the MTA's policies with New York City Zoning Department to require easements and access improvements in exchange for density bonuses for projects around rail to other areas and transit entities in the State.	DOT/MTA	1-2 years	
Create a revolving fund or grant program to support GEIS' for re-zonings and projects in TOD districts or overlay zones—if a developer agrees to build according to the TOD zoning and accepts certain community benefits components, such as affordable housing, green infrastructure, green building or public spaces, the developer will pay back into the fund a portion of the cost of the GEIS.	DOT/DOS	1-2 years	Municipalities
consider using TIFs for this purpose.	DOT	2 years	IDAs, municipalities
Support and inform the MTA's efforts to develop a "First-Mile/Last-Mile Toolkit"; adapt the tool-kit to Upstate transit areas.	DOT	2 years	Truckers, municipalities

Enabling Initiative – PTOD Benefits and impacts

Draft Material

Anticipated Benefits and Impacts	
Disadvantaged communities	Expanding Public transportation, with concomitant land use alignment and coordination, will help lower-income households that spend a disproportionate amount of income and time commuting. Both TOD and PTOD provide enhanced opportunities for affordable/mixed-income housing within existing communities, which helps address displacement and gentrification.
Health and other co-benefits	Any reduction in VMT/transportation-based GHG emissions will improve air quality and help reduce the incidence of disease caused or exacerbated by air pollution. Communities that are walkable/bikeable and provide safe and accessible outdoor spaces promote greater physical activity, which yields concomitant health outcomes (often referred to as "Active Living by Design"). Communities that enable and promote social interaction, partly through safe and accessible public gathering spaces and walkable design, will generate positive mental health outcomes by reducing social isolation, particularly for older New Yorkers who suffer greater incidences of depression and anxiety due to isolation. Access to health care facilities will also be enhanced. The health care system, like the energy system, has become more dispersed and distributed. Locating health clinics and other facilities within communities, and ensuring proximity and access to such services through walkable, bikeable and transit-friendly infrastructure, will help overcome health disparities if disadvantaged communities/communities of color.
Just transition: businesses and industries, workers	As jobs and job locations shift, public transportation and land use will need to align with those changes. In the past, lower-paying/-skilled jobs were an afterthought, leaving disadvantaged communities behind; this initiative allows the state to plan simultaneously with the transition to a clean energy economy.
Other	Investments in smart growth—particularly re-development of existing buildings in developed areas—yields significantly greater tax revenues per acre for a municipality and requires significantly less infrastructure costs (construction and maintenance) than sprawling development.

Enabling Initiative – Business/Transit/Local Planner Partnerships and Collaboration Overview

Draft Material

Description:	Launch an Expansive, Multi-Dimensional, Grass-Roots Public Education Campaign on the Links Among Land Use (Smart Growth), Public Transportation and Housing and their roles in reversing climate change.
Action type:	Agency/Program
Cost and funding considerations:	$; will utilize existing programs and resources, but would likely require consultant services.
Ease of implementation:	Medium

Risks / Barriers to success	**Possible mitigants**
None	None

Enabling Initiative – Business/Transit/Local Planner Partnerships and Collaboration Components of the strategy

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** **(***Entities that need to be engaged)*
Develop public relations and marketing materials for the public, municipalities and stakeholders that cogently explains the links among municipal/county/regional planning and public transportation infrastructure, jobs, housing, equity and climate change, among others. Incorporate these materials and messages into all relevant state, regional and local venues.	DOT/DOS/DEC/NYSERDA	1 year	REDCs, Chambers, transit agencies
Help develop fiscal impact analyses of smart growth compared with sprawl, regarding both public infrastructure investments for each and tax revenues generated.	DOS	1-2 years	REDCs, Chambers, municipalities, developers
Work with and support the LULG AP's recommendation to create an on-line, iterative, interactive Sustainable Development/Climate Handbook with case studies to help municipalities, CBOs and developers navigate and integrate state assistance	DOS	1 year	Municipalities

Enabling Initiative – Business/Transit/Local Planner Partnerships and Collaboration Benefits and impacts

Draft Material

Anticipated Benefits and Impacts	
Disadvantaged communities	Smart growth and expanded public transportation provides enhanced opportunities for affordable/mixed-income housing within existing communities, which helps address displacement and gentrification. A comprehensive, aggressive and persistent educational and awareness campaign provides greater opportunities to teach and infuse the concepts of equity into planning, development and public transportation.
Health and other co-benefits	Any reduction in VMT/transportation-based GHG emissions will improve air quality and help reduce the incidence of disease caused or exacerbated by air pollution. Communities that are walkable/bikeable and provide safe and accessible outdoor spaces promote greater physical activity, which yields concomitant health outcomes (often referred to as "Active Living by Design"). Communities that enable and promote social interaction, partly through safe and accessible public gathering spaces and walkable design, will generate positive mental health outcomes by reducing social isolation, particularly for older New Yorkers who suffer greater incidences of depression and anxiety due to isolation. Access to health care facilities will also be enhanced. The health care system, like the energy system, has become more dispersed and distributed. Locating health clinics and other facilities within communities, and ensuring proximity and access to such services through walkable, bikeable and transit-friendly infrastructure, will help overcome health disparities if disadvantaged communities/communities of color.
Just transition: businesses and industries, workers	As jobs and job locations shift, public transportation and land use will need to align with those changes. In the past, lower-paying/-skilled jobs were an afterthought, leaving disadvantaged communities behind; this initiative allows the state to plan simultaneously with the transition to a clean energy economy. An educational component to this transition will raise public awareness about this esoteric and misunderstood concept.
Other	This educational campaign provides an ideal forum in which to raise awareness of the fiscal benefits of smart growth.

Enabling Initiative – Expand low carbon modes Overview

Draft Material

Description:	Encourage the business and economic development community to work more closely with public transportation officials in business location and expansion projects
Action type:	Agency/Program, Legislative
Cost and funding considerations:	$; requires inter-agency coordination and public/private coordination.
Ease of implementation:	Medium
Example case studies:	See Appendix

Risks / Barriers to success	Possible mitigants
Some might view this as an impediment to business recruitment by adding another requirement or consideration as businesses make location decisions. Absence of a dedicated funding source.	Handle this as an educational matter, not a mandate; provide incentives, where feasible, such as in IDA tax policies, local planning/zoning incentives and enhanced programmatic assistance.

Enabling Initiative – Expand low carbon modes
Components of the strategy

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** **(***Entities that need to be engaged)*
Increase communication, coordination and mutual assistance among ESD, the IDAs, local transit entities and local planners early in the business recruitment and location process to incorporate public transit planning, service and accommodations into projects and locate along existing transit routes.	ESD	1 year	REDCs, Transit agencies, planners, regional planning councils
Provide assistance and incentives to businesses seeking to locate or expand in an area to provide public transportation access to employees (Employee-Based Trip Reduction programs, transit/micro-transit services, ride-sharing, bike-sharing, cycling accommodations, free/reduced transit passes…)	ESD	6 months	REDCs, Transit agencies, planners, regional planning councils
Expand micro-transit options and ride-sharing.	DOT	3 years	Transit agencies
Develop partnerships with truck freight in community planning, particularly complete streets, to find a balance between walkable/bikeable streets and trucking accommodations.	DOT	1 year	Truckers, municipalities

Enabling Initiative – Expand low carbon modes Components of the strategy (continued)

Draft Material

Components required for delivery *(Brief description of action required)*	**Implementation lead** *(Entity responsible for completing)*	**Time to implement** *(Time required to implement)*	**Other key stakeholders** **(***Entities that need to be engaged)*
Develop mode-shifting policies for freight to lower emission modes, such as rail	DOT	1 year	Truckers
Develop policies on last-mile freight delivery/warehousing in the context of community planning	DOT/DOS		Truckers, municipal planners
Expand technological systems/apps to make public transportation more attractive, accessible and user-friendly—e.g., accelerate the use of OMNY for the MTA and help other transit authorities to develop and implement similar public sector apps to easily access first-mile/last-mile connections to public transportation.	DOT/MTA	2 years	
Support Transportation Demand Management behavioral and perceptual changes, such as public art and aesthetic architectural design of stations.	DOT/NYSCA	1 year	Transit agencies
Prioritize, incentivize and expand access to funding for bike, pedestrian and complete streets projects that serve employment centers.	DOT	1 year	REDCs, Chambers, MPOs

Enabling Initiative – Expand low carbon modes Benefits and impacts

Draft Material

Anticipated Benefits and Impacts	
Disadvantaged communities	Providing and expanding access to public transportation in the context of business location and economic development will largely help provide access to jobs among lower-income/lower-skilled employees since those individuals often need to travel the farthest and spend more money to commute to those jobs.
Health and other co-benefits	Any reduction in VMT/transportation-based GHG emissions will improve air quality and help reduce the incidence of disease caused or exacerbated by air pollution. Communities that are walkable/bikeable and provide safe and accessible outdoor spaces promote greater physical activity, which yields concomitant health outcomes (often referred to as "Active Living by Design"). Communities that enable and promote social interaction, partly through safe and accessible public gathering spaces and walkable design, will generate positive mental health outcomes by reducing social isolation, particularly for older New Yorkers who suffer greater incidences of depression and anxiety due to isolation. Access to health care facilities will also be enhanced. The health care system, like the energy system, has become more dispersed and distributed. Locating health clinics and other facilities within communities, and ensuring proximity and access to such services through walkable, bikeable and transit-friendly infrastructure, will help overcome health disparities if disadvantaged communities/communities of color.
Just transition: businesses and industries, workers	As jobs move and change in the transition to a clean energy economy, businesses will need to accommodate their employees' commuting needs.
Other	

Plans for additional expert input/research

Next Steps/Open Discussion

- Evaluate any refinements to the recommendations based on public input, cross panel/work group coordination and expert engagement.
- Work with Land Use and Local Government and other panels to identify adaptation and resilience strategies.
- Aggregate emissions impact of panel recommendations.
- Finalize recommendations for CAC in template format provided.
- March 18, 2021 TAP Meeting 11am-1pm.
- An additional TAP meeting has been scheduled for April 9, 1-3pm.