Catalog of State GHG Reduction Policy Actions
Transportation and Land Use (TLU)
DRAFT—WORK-IN-PROGRESS

Introduction

This catalog (or matrix) of state-level, greenhouse gas (GHG)–reducing actions and policy options provides a starting point for the Transportation and Land Use (TLU) Strategies Group to consider as they work together to identify additional policy recommendations for the TLU sector that will enhance existing TLU policies to achieve long-term reductions in greenhouse gas (GHG) emissions and emissions that impact the Chesapeake Bay while also providing positive economic, job creation and health benefits for the State. The catalog is organized into the following two general groups: (1) TLU "Programs Being Implemented" by Maryland are listed first because these policies represent the starting point (or baseline) for consideration of additional policies; and (2) "Additional Policies to Consider" that either enhance or expand a program being implemented or identify possible actions not covered by programs being implemented. The "Additional Policies to Consider" includes seven general categories each of which contain subcategories for consideration by the TLU Strategies Group. MDE, MDOT, and MDP with the assistance of CCS developed the initial list of "Additional Policies to Consider" based on a review of over 200 policies or actions undertaken or considered in state-wide climate change action plans by multi-stakeholder groups in a wide cross-section of U.S. states and by state, local and private participants. This catalog is a work in progress, and the Maryland stakeholders are invited to add to this list as well as to more fully define these potential actions, determine where they might overlap with ongoing efforts in the state, and recommend actions that the state should pursue through the stakeholder process.

A **guide** is provided on the following page to the initial rankings provided in seven columns in the catalog that describe the potential direction and, in some cases, magnitude of the impacts of the policies as they relate to important gauges of policy success.

Additional details on each option can be found at the end of this catalog. These details include the following:

- Notes on Ratings of Potential Option Impacts, which provide information related to how the estimates regarding the potential impacts of a policy have been determined, including what assumptions regarding the implementation of the policy have been made that underlie the impact estimates. These notes can also be used to provide additional detail on the types of impacts expected (for example, impacts on non-GHG air pollutant emissions such as sulfur and nitrogen oxides emissions, impacts on water use/water quality, and impacts on land use).

- Data Source, which indicates a source of potential additional information on each option. These data sources are other state or region catalogs or State Climate Action Plans that included each option.

Guide to Ratings of Potential Option Impacts in the Tables That Follow (see footnotes on following page):

Potential GHG Emission Reductions by 2020 [1]	**2050 Outlook**
High (H): At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO_2e) per year by 2020 **Medium (M):** From 0.1 to 1.0 $MMtCO_2e$ per year by 2020 **Low (L):** Less than 0.1 $MMtCO_2e$ per year by 2020 **Uncertain (U):** Not able to estimate at this time	**High (H):** GHG emission reductions will likely be higher in 2050 than in 2020. **Stable (S):** GHG emission reductions are estimated to remain relatively stable from 2020-2050. **Low (L):** GHG emission reductions are likely to decrease from 2020-2050.
Potential Cost or Cost Savings per t CO_2e (US dollars, 2010-2020) [1, 2]	**Potential Impact on Gross State Product (GSP) by 2020** [3]
High (H): \$0-\$100 per metric ton CO_2e (tCO_2e) or above **Low (L):** -\$100-\$0/tCO_2e **Uncertain (U):** Not able to estimate at this time	**Very Positive (++):** Policy likely to increase GSP by >0.1% **Positive (+):** Policy likely to increase GSP by <0.1% **Negative (-)**: Policy likely to decrease GSP **Uncertain (U):** Not able to estimate at this time
Potential Impact on State Employment by 2020 [3, 4]	**Potential Impact on Local Health and Environment** [5]
Very Positive (++): Policy likely to increase state employment by >0.1% by 2020 **Positive (+):** Policy likely to increase state employment by <0.1% **Negative (-)**: Policy likely to decrease state employment **Uncertain (U):** Not able to estimate at this time	**Positive (+):** Policy likely to provide an improvement, overall, in human health and local environmental conditions **Negative (-):** Policy likely to provide a reduction, overall, in human health and local environmental conditions **Uncertain (U):** Not able to estimate at this time, or policy provides mixed positive and negative impacts of uncertain magnitude
Potential Impact on Carbon Intensity [6]	**Potential Impacts on Clean Energy Goals** [7]
Positive (+): Policy likely to reduce carbon intensity overall (reduce the amount of CO_2e emissions associated with accomplishing a given task)	**Positive (+):** Policy likely to assist in developing clean, local energy sources.

Negative (-): Policy likely to increase carbon intensity overall **Uncertain (U):** Not able to estimate at this time, or policy provides mixed positive and negative impacts of uncertain magnitude	**Negative (-):** Policy likely to reduce the rate at which clean, local energy sources are developed. **Uncertain (U):** Not able to estimate at this time, or policy provides mixed positive and negative impacts of uncertain magnitude
Potential Impacts on the Bay	**Total Cost**[8]
Positive (+): Policy likely to improve the health of the Chesapeake Bay through improved air quality, erosion control or other environmental benefits. **Negative (-):** Policy likely to harm the Chesapeake Bay. **Uncertain (U):** Not able to estimate at this time, or policy provides mixed positive and negative impacts of uncertain magnitude	**High (H):** TBD **Medium (M):** TBD **Low (L):** TBD
Cost to Individuals/Business/Government[9]	**Disparate Benefits**[10]
High (H): TBD **Medium (M):** TBD **Low (L):** TBD	**Positive (+):**TBD **Negative (-):** TBD **Uncertain (U):** TBD
Implementation Approach[11]	**Feasibility**[12]
Positive (+):TBD **Negative (-):** TBD **Uncertain (U):** TBD	**Positive (+):**TBD **Negative (-):** TBD **Uncertain (U):** TBD

[1] Several measures may overlap in terms of emissions reductions and/or cost impacts. Estimates assume measures would be implemented independently of other measures.

[2] Costs are denoted by a positive number. Cost savings (i.e., "negative costs") are denoted by a negative number.
[3] The "typical" impacts on gross state product and on state employment are based roughly on the results of modeling studies of the potential impact of similar policies on a limited number of US states. In addition, the macroeconomic impacts of a given policy action are highly dependent on how the action is designed and implemented. Finally, economy-wide macroeconomic modeling is by its nature uncertain, as it depends on interactions between economic sectors that are affected by multiple factors and are often difficult to obtain reliable data for. Moreover, all the contributing economic factors are constantly changing in ways that are difficult to predict as the economy grows and changes.
[4] Employment impacts denote the effects of policy actions on the number of jobs in the economy by 2020. Employment impacts as modeled are highly dependent on the structure of the state economy, on which goods and services are provided domestically, imported, or exported, and on labor productivities of the sectors. Employment impacts are also potentially strongly affected by the design of policy actions.
[5] The impacts of policies on local health and the environment, including, for example, impacts on local non-GHG air pollutant emissions and their health impacts, impacts on water quality, and a host of other concerns, can vary significantly in both nature and scope with how a policy is implemented. For any given policy, some impacts may be positive and others negative, and a policy may provide positive health and environmental impacts in one geographical area, while causing negative impacts in another.
[6] The impacts of policies on carbon intensity of energy use will typically, but not always, be closely related to CO_2–equivalent emissions reductions. An improvement (decrease) in carbon intensity implies that the same or similar services to society are provided with reduced emissions of carbon dioxide from fossil (or other long-lived) sources. Carbon intensity impacts are assumed to include impacts on emissions of other GHGs as well as CO_2.
[7] The impacts of an option on Clean Energy Goals are considered positive when the policy helps to reduce the use of polluting fuels, improve energy supply security by increasing domestic production and use of clean and renewable fuels, or otherwise accelerate the transition to a clean energy economy.
[8] Total Cost is intended to be a measure of the total upfront investment cost of a measure.
[9] Cost to Individuals/Business/Gov would indicate the party or parties expected to bear the costs of the policy.
[10] Disparate Benefits is intended to indicate whether a particular policy might primarily benefit just rural or just urban areas. Other types of disparate benefits could also be considered under this metric.
[11] Implementation Approach would be used to indicate whether any needed legislation is already in place, whether no legislation is needed, or if new legislation would be required to implement a measure. Other key elements of the implementation approach could also be included in this metric (e.g., related to funding, implementing agency, etc.)
[12] Feasibility is intended to indicate the expected level of political and/or public acceptance of a policy.

Definition of "Priorities for Analysis" (far right column in the table below, to be filled in as Climate Action Planning proceeds):

- **High:** High-priority options will be analyzed first.
- **Medium:** Medium-priority options will be analyzed next, time and resources permitting.
- **Low**: Low-priority options will be analyzed last, time and resources permitting.

Priorities for analysis will be defined as Maryland considers the different attributes of each policy, adjusts the policies and modifies the initial rankings of policy impacts as needed, and ultimately provides the Advisory Council with its input on which options are, in its opinion, the best candidates for further, more detailed development and analysis. The Advisory Council will then decide upon which options should be developed further.

Option No.	GHG Reduction Policy Option	Links Between Existing Programs and New Policies	Potential GHG Emission Reductions by 2020	2050 Outlook	Potential Cost or Cost Savings per t CO_2e (USD, 2010 – 2020)	Potential Macroeconomic Impact by 2020		Potential Impacts on:				Total Cost	Cost to Individuals/ Business/ Gov	Disparate Benefits	Implement-ation Approach	Feasi-bility	Priority for Analysis
						Gross State Product	Employ-ment	Local Health and Environ-ment	Carbon Intensity	Clean Energy Goals	Chesa-peake Bay						
Programs Being Implemented																	
I-1	Maryland Clean Cars Program	N-6															
I-2	National Fuel Efficiency & Emissions Standards for Medium- and Heavy- Duty Trucks	N-6															
I-3	Clean Fuel Standard	N-6															
I-4	The Transportation and Climate Initiative (TCI)	N-6															
I-5	Public Transportation Initiatives	N-2															
	Charm City Circulator and Hampden Neighborhood Shuttle *Locally Operated Transit Systems* *SmartCard Implementation* *Transit Oriented Development* *Maryland Commuter Tax Credit* *Guaranteed Ride Home* *College Pass* *Ride Share* *Commuter Connections- Washington DC/Baltimore Region* *Baltimore Collegetown Network* *Hunt Valley Shuttle* *Kent Street Transit Plaza* *University of Maryland College Park Carpool Program and Shuttle Bus Service* *PlanMaryland*																

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I-6	Initiatives to Double Transit Ridership by 2020	N-2															
	MARC East Baltimore Station *Expand Transit (Purple Line, Corridor Cities Transitway, Red Line)* *MARC Growth and Investment Plan*																
I-7	Intercity Transportation Initiatives	N-2															
	MARC Station Parking Enhancements *Refurbishing MARC and other rail vehicles* *Update on Maryland High Speed Rail*																
I-8	Bike and Pedestrian Initiatives	N-2															
	Bike/Pedestrian Enhancements *Bike Racks on Buses, MARC, Subway, Light Rail* *Construction of Bike Lanes and Bike Paths* *East Coast Greenway* *Bike Stations* *Bike Rentals* *Bike Racks*																
I-9	Pricing Initiatives	N-5															
	Electronic Toll Collection *High Occupancy Toll Lanes* *VMT Fees* *Congestion Pricing and Managed Lanes* *Parking Impact Fees* *Employer Commute Incentives*																
I-10	Transportation Technology Initiatives	N-6															

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	Traffic flow improvements (Coordinated Highways Action Response Team program) *Truck stop electrification* *Timing of highway construction schedules* *Electronic toll collection* *Traffic signal synchronization* *Variable message sign* *Telework partnership with employers* *Light-emitting diode traffic signals* *Vehicle technologies* *Transportation fuels* *Other areas*																
I-11	Electric Vehicle Initiatives	N-6															
	Vehicle-to-Grid *Electric Vehicles—Recharging locations* *Maryland Electric Vehicle Initiative* *Maryland Transit Administration Support for Howard County Electric Bus Project* *Clean and Efficient Strategies* *Baltimore City Electric Vehicle Infrastructure*																
I-12	Low Emitting Vehicle Initiatives	N-6															
	Howard Transit Para-transit Fleet Replacement Vehicles *Clean and Efficient Strategies*																
I-13	Evaluate the GHG Emissions Impacts from Major New Projects and Plans	N-1															
	Actively Participate in Framing National GHG Emissions Evaluation Policy *Evaluation of GHG Emissions through the National Environmental Policy Act Process* *Evaluation of GHG Emissions through Statewide/Regional Planning*																
I-14	Airport Initiatives	N-3, N-6															

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	Compressed Natural Gas Buses *Air Emissions Reductions* *BWI Energy Audit* *BWI Utility Master Plan* *BWI Energy Efficiency* *Enhanced Access to BWI by Other Travel Modes* *BWI's Periodic Air Quality Assessments*																
I-15	Port Initiatives	N-3, N-6															
	Port of Baltimore Initiatives																
I-16	Freight and Freight Rail Strategies	N-3															
	Auxiliary Power Units for Existing Locomotives *Technology Advances for Non-highway Vehicles*																
I-17	Federal Renewable Fuels Standard	N-6															
I-18	Corporate Average Fuel Economy (CAFE) Standards: Model Years 2008-2011	N-6															
I-19	Promoting Hybrid and Electric Vehicles	N-6															
	Electric Vehicle Infrastructure Program *Maryland Hybrid Truck Goods Movement Initiative*																
I-20	Pay-As-You-Drive® Insurance in Maryland	N-5															

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I-21	Reducing GHG Emissions from the Transportation Sector through Land Use and Location Efficiency	N-1, N-2, N-4, N-5															
	Maryland Sustainable Growth Commission *PlanMaryland*																
I-22	GHG Targets for Local Government's Transportation and Land Use Planning	N-1, N-2, N-4, N-5															
I-23	Land Use Planning GHG Benefits	N-1, N-2, N-5															
I-24	Growth Boundary GHG Benefits	N-1, N-2, N-4, N-5															
Additional Policies to Consider																	
N-1 Comprehensive Sustainability Planning																	
N-1-1	SB375 Concepts in Maryland	I-21, I-24															TBD
N-1-2	Enhance Bay Restoration/WIP Offset Program	I-21, I-24															TBD
N-1-3	Enhance Bay Nutrient Trading Program	I-21, I-22, I-23, I-24															TBD
N-1-4	Offer Developer Incentives	I-21, I-24															TBD
N-1-5	Fix-It-First and Location-Efficient Funding Strategies	I-21, I-22, I-24															TBD

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						Gross State Product	Employ-ment	Local Health and Environ-ment	Carbon Intensity	Clean Energy Goals	Chesa-peake Bay						
N-1-6	Alternative Transportation Funding to Incentivize Driving Less	I-5, I-22															TBD
N-1-7	Jobs-Housing Balance	I-21, I-22															TBD
N-1-8	Improved Land Use Mix	I-4, I-21, I-23, I-24															TBD
N-1-9	Improved Regional Accessibility	I-5, I-7															TBD
N-1-10	Tax and Building Code Reform	I-23															TBD
N-1-11	Density Bundle	I-21, I-23															TBD
N-1-12	Infill and Brownfield Redevelopment	I-21, I-22, I-23, I-24															TBD
N-1-13	Cancellation of Road and Highway Expansions that Boost GHGs from the Baseline	I-13															TBD
N-1-14	Revise Allocation of Transportation Funds away from Single Occupancy Vehicles towards Public Transportation	I-5, I-6															TBD
N-1-15	Urban Growth Bundle	I-21, I-23															TBD
N1-16	VMT/GHG Offset Requirements for Large Developments	I-21, I-23, I-24															TBD

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N-1-17	Development Standards, Low Impact Development and Use of Form-Based Code to Help Link Public Spaces with Private Spaces	I-23															TBD
N-1-18	Center-Oriented Growth	I-21, I-23															TBD
N-1-19	Targeted Open-Space, Natural Resource and Recreation Protection	I-23, I-24															TBD
N-1-20	Land Use, Building Code and Zoning Reform	I-21															TBD
N-2 Corridor-based Planning																	
N-2-1	US Rt. 40 Carbon Neutral Corridor Project	I-10, I-21, I-22, I-23, I-24															
N-2-2	Transit-oriented and Mixed-use Planning and Development	I-5, I-8, I-21, I-23, I-24															TBD
N-2-3	Site Planning and Design Strategies to Promote Walking, Bicycling, Ridesharing and Transit Use	I-5, I-8, I-21															TBD
N-2-4	First Mile/Last Mile Bike, Pedestrian and Circulator Connections	I-8															TBD

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N-2-5	Develop Green Alleys and Redevelop Existing Alley-ways	I-21, I-23															TBD
N-2-6	Transit Priority	I-6															TBD
N-2-7	Sustainable Road Design Standards	I-21															TBD
N-2-8	Residential Density	I-21, I-22															TBD
N-2-9	Improved Transportation Network Connectivity	I-7, I-21															TBD
N-3 Enhanced Freight Movement Initiatives																	
N-3-1	Intermodal Freight Initiatives	I-14, I-15, I-16															TBD
N-3-2	Promote Strategies to Move Freight in More GHG-Efficient Ways	I-2, I-16															TBD
N-3-3	Dedicated Truck Corridors																TBD
N-3-4	Marine Highways																TBD
N-4 Local Government Partnership Initiatives																	
N-4-1	Prioritize State and Local Funding	I-23															
N-4-2	Streamlining Development Projects that Reduce VMT, Energy Consumption, and Transportation Impact	I-21															TBD

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						Gross State Product	Employ-ment	Local Health and Environ-ment	Carbon Intensity	Clean Energy Goals	Chesa-peake Bay						
N-4-3	Mixed-Income and Affordable Housing Funding	I-21, I-23															TBD
N-4-4	Joint Development Strategies	I-4, I-22															TBD
N-4-5	RGGI for Transport and Development Projects	I-3, I-4, I-5, I-13, I-16, I-21															TBD
N-5 Enhanced Public Outreach/ Behavior Change to Promote Sustainable Growth																	
N-5-1	Sacramento MPO (SACOG) Blueprint Interactive Mapping Process to Promote Sustainable Growth Plan	I-21, I-22, I-23, I-24															TBD
N-5-2	Convene Best Practices Workshops for Locals																
N-5-3	Public Involvement																TBD
N-5-4	Improve Public Schools in Priority Infill Neighborhoods																TBD
N-6 Enhanced Transportation Technologies																	
N-6-1	Vehicle Electrification	I-4, I-10, I-11, I-19															
N-6-2	Intelligent Communications Technology	I-10															
N-6-3	Add-on Technologies (Low Friction Oil, Low-Rolling Resistance Tires)	I-10															TBD

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						Gross State Product	Employ-ment	Local Health and Environ-ment	Carbon Intensity	Clean Energy Goals	Chesa-peake Bay						
N-6-4	Procurement of Low-GHG Fleet Vehicles	I-1, I-11, -12, I-14, I-19															TBD
N-6-5	Zoning Ordinances and Policies to Promote Alternative Vehicles and Accelerated Fleet Mix	I-1, I-11, I-12															TBD
N-7 Enhanced Idling Initiatives																	

N-1-1 SB375 Concepts in Maryland
Background Information on Option Impacts:
Atmospheric deposition of NO_x and CO_2 contribute to the nitrogen load and acidication of waterways respectively. A small fraction of dissolved nitrogen in waterways will decompose to N_2O. The net cost per ton of carbon reduction will vary depending on the vitality of GHG markets.

Data Source: MDE, N-1.1

N-1-2 Enhance Bay Restoration/WIP Offset Program
Background Information on Option Impacts:

Data Source: MDE, N-1.2

N-1-3 Enhance Bay Nutrient Trading Program
Background Information on Option Impacts:

The Ecosystem Services Working Group interim report identifies 5 ecosystems: wetlands, streams and waterways, critical areas, species and habitat, forests. The latter represents the largest potential for carbon reduction; however, existing legislation (FCA) only intends on reducing the rate of deforestation; it is not intended as a no net loss program.

Data Source: MDE, N-1.3

N-1-4 Offer Developer Incentives
Background Information on Option Impacts:

Data Source: MDE, N-1.4

N-1-5 Fix-It-First and Location-Efficient Funding Strategies
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: NY TLU Catalog, TLU4.5

N-1-6 Alternative Transportation Funding to Incentivize Driving Less

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: NY TLU Catalog, TLU 6.10. Included in NY State Climate Action Plan (ref no. in plan is NY TLU-6)

N-1-7 Jobs-Housing Balance
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SB 375 Policy List. See:
http://arb.ca.gov/cc/sb375/policies/jhbalance/jhbalance_brief.pdf

N-1-8 Improved Land Use Mix
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SB 375 Policy List. See: http://arb.ca.gov/cc/sb375/policies/mix/landusemix_brief.pdf

N-1-9 Improved Regional Accessibility
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SB 375 Policy List. See: http://arb.ca.gov/cc/sb375/policies/regaccess/regaccess_brief.pdf

N-1-10 Tax and Building Code Reform
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake. Received 1 vote in Maryland balloting.

Data Source: MD TLU Catalog, TLU 2.1.5

N-1-11 Density Bundle
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 3.1

N-1-12 Infill and Brownfield Redevelopment
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 1.1. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-7)

N-1-13 Cancellation of road and highway expansions that boost GHGs from the baseline
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: NY TLU Catalog, TLU 5.10

N1-14 Revise Allocation of Transportation Funds Away from Single Occupancy Vehicles towards Public Transportation
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: NY TLU Catalog, TLU 13.2

N-1-15 Urban Growth Bundle
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: SCAG TLU Catalog, TLU 2.3. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-3)

N-1-16 VMT/GHG Offset Requirements for Large Developments
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 2.4

N-1-17 Development Standards, Low Impact Development and Use of Form-Based Code to Help Link Public Spaces with Private Spaces
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 2.6

N-1-18 Center-Oriented Growth
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: SCAG TLU Catalog, TLU 2.2

N-1-19 Targeted Open-Space, Natural Resource and Recreation Protection
Background Information on Option Impacts:

Data Source:

N-1-20 Land Use, Building Code and Zoning Reform
Background Information on Option Impacts: Atmospheric deposition of NOx and CO2 contribute to the nitrogen load and acidication of waterways respectively. A small fraction of dissolved nitrogen in waterways will decompose to N2O. The net cost per ton of carbon reduction will vary depending on the vitality of GHG markets.

Data Source: MDE

N-2-1 US Rt. 40 Carbon Neutral Corridor Project
Background Information on Option Impacts:

Data Source: N-2.1

N-2-2 Transit-oriented and Mixed-use Planning and Development

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 1.2. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-1, TSI-3)

N-2-3 Site Planning and Design Strategies to Promote Walking, Bicycling, Ridesharing and Transit Use

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 2.8. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-8, TSI-3)

N-2-4 First Mile/Last Mile Bike, Pedestrian and Circulator Connections

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 5.1. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-10)

N-2-5 Develop Green Alleys and Redevelop Existing Alley-ways

Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: SCAG TLU Catalog, TLU 1.6

N-2-6 Transit Priority

Background Information on Option Impacts: This policy should reduce fuel consumption, but the effects on criteria air pollutant benefits could be positive or negative.

Data Source: SCAG TSI Catalog, TSI 2.6

N-2-7 Sustainable Road Design Standards

Background Information on Option Impacts:

Data Source: SCAG TSI Catalog, TSI 2.8. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TSI-9)

N-2-8 Residential Density

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SB 375 Policy List. See: http://www.arb.ca.gov/cc/sb375/policies/ped/ped_brief.pdf

N-2-9 Improved Transportation Network Connectivity

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SB 375 Policy List. See: http://www.arb.ca.gov/cc/sb375/policies/connectivity/netconnectivity_brief.pdf

N-3-1 Intermodal Freight Initiatives

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: NY TLU Catalog, TLU 9.1. Included in NY State Climate Action Plan (ref no. in plan is NY TLU-8)

N-3-2 Promote Strategies to Move Freight in more GHG-Efficient Ways

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: NY TLU Catalog, TLU 9.3. Included in NY State Climate Action Plan (ref no. in plan is NY TLU-8)

N-3-3 Dedicated Truck Corridors

Background Information on Option Impacts: Policies aimed at improving GHG efficiency of goods movement should have positive impact on criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TSI Catalog, TSI 5.10

N-3-4 Marine Highways

Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: NY TLU Catalog, TLU 12.8

N-4-1 Prioritize State and Local Funding

Background Information on Option Impacts:

Data Source: N-4.1

N-4-2 Streamlining Development Projects that Reduce VMT, Energy Consumption, and Transportation Impact

Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 2.15

N-4-3 Mixed-Income and Affordable Housing Funding
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 5.2. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-9)

N-4-4 Joint Development Strategies
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 3.4

N-4-5 RGGI for transport, development and projects
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: NY TLU Catalog, TLU 13.3

N-5-1 Sacramento MPO Blueprint Interactive Mapping Process to Promote Sustainable Growth Plan
Background Information on Option Impacts:

Data Source: N-5.1

N-5-2 Convene Best Practices Workshops for Locals
Background Information on Option Impacts:

Data Source: N-5.2

N-5-3 Public Involvement
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 3.3

N-5-4 Improve Public Schools in Priority Infill Neighborhoods
Background Information on Option Impacts: Any policy aimed at reducing VMT will have criteria air pollutant reductions. Criteria air pollutant benefits will also help improve the health of the Chesapeake.

Data Source: SCAG TLU Catalog, TLU 5.6

N-6-1 Vehicle Electrification
Background Information on Option Impacts:
Data Source: N-6.1

N-6-2 Intelligent Communications Technology
Background Information on Option Impacts:

Data Source: N-6.2

N-6-3 Add-on Technologies (Low Friction Oil, Low-Rolling Resistance Tires)
Background Information on Option Impacts: From MD TLU Catalog. Received 1 vote in Maryland balloting.

Data Source: MD TLU Catalog, TLU 1.1.4

N-6-4 Procurement of Low-GHG Fleet Vehicles
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: NY TLU Catalog, TLU 1.3. Included in NY State Climate Action Plan (ref no. in plan is NY TLU-3)

N-6-5 Zoning Ordinances and Policies to Promote Alternative Vehicles and Accelerated Fleet Mix
Background Information on Option Impacts: This policy should reduce fuel consumption, but is not estimated to have criteria air pollutant benefits.

Data Source: SCAG TLU Catalog, TLU 4.1. Selected as priority for analysis by CEDP/PSC (catalog policy renumbered as SCAG TLU-5)