Secretary Kathleen Theoharides
Massachusetts Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
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March 22, 2021

Subject: Comments on Draft Clean Energy and Climate Plan for 2030

To Secretary Theoharides:

Thank you for providing us an opportunity to comment on the draft interim Clean Energy and Climate Plan (CECP) for 2030. Our organizations all have a stake in the Commonwealth's transportation sector and the state's ability to provide a more sustainable, equitable, accessible, and cleaner transportation system to allow our economy to grow while reducing greenhouse gas (GHG) emissions.

The Commonwealth has made progress on reducing GHG emissions, especially in the electricity sector, through investing in renewable energy and energy efficiency. GHG emissions from transportation, however, remain stubbornly high -- the single largest contributor in the state of any sector of our economy.

The Draft CECP is a good start toward reducing emissions, but must be improved if we are to achieve our goals as a Commonwealth. We recommend that the Executive Office of Energy and Environmental Affairs (EEA) strengthen the 2030 CECP in a number of ways to reflect a multi-pronged approach to reducing transportation emissions, including tailpipe pollution that disproportionately harms marginalized communities. These provisions include: speeding up implementation of the Transportation and Climate Initiative Program equity investments; focusing electric-vehicle (EV) adoption on buses and public fleets; increasing EV sales goals to 50% by 2030; reducing the upfront EV cost burden while including e-bikes; focusing on environmental justice (EJ) populations; implementing strategies to reduce vehicle miles traveled (VMT); and improving and expanding public transportation and biking and pedestrian

infrastructure. Transportation for Massachusetts has outlined specific comments for these and other initiatives in the sections below.

In Section 2.2, Add a New Strategy: *Expand Public Transit Operations Throughout the Commonwealth and Transition to Electric Buses and Trains.*

The 2030 CECP plan glaringly omits investments in public transportation, biking, and walking as strategies to reduce VMT and GHG emissions. In addition to the electrification of the bus fleets and implementing the Rail Vision approved by the MBTA FMCB, promotion of and investment in public transportation are critical to a sustainable clean future. The first recommendation of the Baker Administration's Commission on the Future of Transportation report, completed in December of 2018 is to, "Prioritize investment in public transit as the foundation for a robust, reliable, clean, and efficient transportation system…because high-frequency, high-capacity public transit is the most efficient and sustainable way to move large numbers of people as they go about their daily lives."[1] In addition to investments in public transit, the Commonwealth should make investments in walking and biking infrastructure around public transit stations so pedestrians and cyclists can safely access public transportation.

Investing in public transportation has many co-benefits for public health beyond reducing congestion and reducing single occupancy vehicle (SOV) trips. Studies show that investment in public transit increases physical activity (PA). A 2015 study of transit users in Salt Lake City showed that "public transit users spend approximately 20 min per day in PA on days they use transit and 10 min per day on days they do not use transit, compared with approximately 5–6 min per day in PA for non-transit users."[2] Increased PA improves individual health, reduces the burden on the health care system, lowers health care and employer costs, and improves overall public health. In addition, increased use of public transit will reduce traffic fatalities for Massachusetts residents. According to the Centers for Disease Control (CDC), "An analysis of the transportation fatality risk in the U.S. found that the fatality rates per billion passenger miles traveled between 2000 and 2009 were 0.11 for buses, 0.24 for urban mass transit rail trains, 0.43 for passengers on commuter rails, and 7.28 for drivers or passengers in a car or light truck."[3]

Public transit also produces significantly less GHG emissions per mile than SOVs. We agree with the Commission on the Future of Transportation's report that "Only by attracting and

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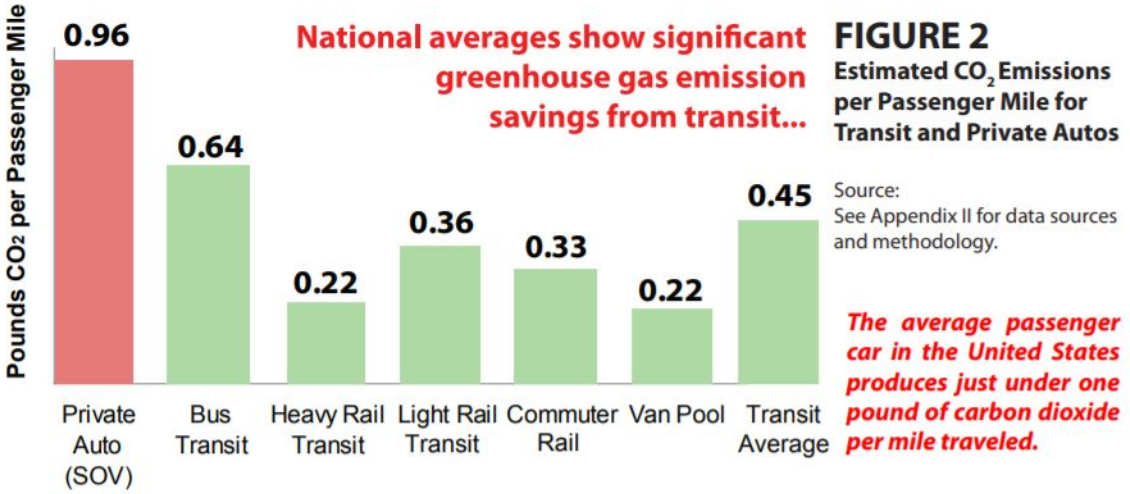
[1] Commission on the Future of Transportation, *Choices for Stewardship:Recommendations to Meet the Transportation Future: Volume 1;* Page 36, 2018. https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download

[2] Harvey J. Miller, et al."Public transit generates new physical activity: Evidence from individual GPS and accelerometer data before and after light rail construction in a neighborhood of Salt Lake City, Utah, USA," Health Place, September 1, 2015. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4679466/

[3] https://www.cdc.gov/policy/hst/hi5/publictransportation/index.html from Savage I. Comparing the fatality risks in United States transportation across modes and over time. Research in Transportation Economics. 2013;43(1):9-22.

retaining new riders can the Commonwealth see the benefits that transit can provide for GHG reduction, congestion relief, economic growth, and community revitalization."[4] A 2010 study by the Federal Transit Administration shows that "heavy rail transit, such as subways and metros...produce 76% less in greenhouse gas emissions per passenger mile than an average single-occupancy vehicle (SOV). Light rail systems produce 62% less and bus transit produces 33% less." See the graphic below:



Source:
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf

To promote more equity in the transit systems and increase access to public transit for EJ communities, the MBTA and Regional Transit Authorities (RTAs) should adopt low-income fares for those who qualify. The CECP should set targets for increased investment in public transit including promotion of ferry, bus, commuter bus, commuter rail, and subway services. Access to transit is a lifeline to many who have no other means of transportation to reach destinations, such as jobs, schools, grocery stores and healthcare facilities, safely and reliably.

EEA should encourage transit-oriented development (TOD) that disincentivizes private vehicle use while providing greater access to public transit. TOD projects must also build and preserve affordable and family-oriented housing to ensure that those who would most benefit from improved access to transit can afford to live closest to it. The Administration signed into law an

[4] Commission on the Future of Transportation, Choices for Stewardship:Recommendations to Meet the Transportation Future: Volume 1; Page 36, 2018. https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download

important provision in the Economic Development Bond Bill that expands multifamily zoning in MBTA communities, which is a vital first step. However, this measure and other efforts to use TOD to reduce transportation emissions will only be successful if coupled with investments in a robust, reliable, and affordable public transit system.

Finally, Massachusetts should require companies of a certain size to offer pre-tax commuter benefits for their employees. Cities and states, including San Francisco and New Jersey, have adopted laws to mandate offering these benefits to employees. A 2016 report to the California legislature on the effects of commuter-benefit mandates showed that an estimated 44,000 employees in the San Francisco Bay Area shifted from driving alone to another form of transportation. This resulted in a reduction of an estimated 35,778 tons of CO2 emissions over the first 12 months of the program's implementation. There is no reason to believe that similar results would not materialize if Massachusetts were to adopt a statewide mandate.

Section 2.2 Strategy T1: ***Cap Transportation Sector Emissions & Invest in Clean Transportation Solutions***

The Baker Administration's leadership on The Transportation and Climate Initiative Program (TCI-P) has put Massachusetts at the forefront of tackling GHG emissions from the transportation sector. We applaud the Administration for its work on this important program. For TCI-P to work equitably to benefit all Massachusetts residents, especially those living in EJ communities that have been historically disproportionately impacted by GHG emission from transportation, the Administration should prioritize an inclusive and open process. The signing of the Memorandum of Understanding by Massachusetts, Connecticut, Rhode Island, and the District of Columbia was an important step, but more work remains. Adoption of TCI-P follows the recommendation of the Commission on the Future of Transportation, which wrote that a cap-and-invest program for transportation, "Will expand more efficient and lower carbon forms of transportation, including public transit, electric vehicles, biking and walking, and other options, and this investment should result in job creation within the region and consumer savings."[5]

Specifically, the Administration needs to develop a detailed public plan for a public engagement/decision-making process to determine how to spend TCI-P revenue, including specifying investment targets in walking, transit, and biking infrastructure. In addition to this plan, we support increasing the investments of TCI-P revenue in EJ communities from 35% to at least 70% and outlining the specific makeup and appointment process for the Equity Advisory Body by the end of 2021.

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[5] Ibid, pg. 56.https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download

Our organizations are pleased to see in the CECP the inclusion of a Low Carbon Fuel Standard (LCFS) for Massachusetts and surrounding states. The CECP should specify which fuels qualify for the standard. What biofuels would meet the LCFS? The transportation of biofuels could occur by truck that results in increased emissions in communities along truck routes and near fuel blending facilities. At present, those facilities are disproportionately located in environmental justice populations. The CECP needs to outline a plan that avoids negative impacts associated with the transportation of biofuels and mitigate potential impacts on EJ populations.

Section 2.2 Strategy T2: ***Implement Coordinated Advanced Clean Vehicle Emissions & Sales Standards***

We support the CECP's inclusion of targets to transition from internal combustion engine vehicles (ICEVs) to zero-emission vehicles, including a target of 750,000 on our roads by 2030. But the CECP should also set targets for public transit vehicle transition from diesel to zero-emission vehicles. We recommend establishing targets for school buses, public transit buses, regional rail, and state and municipal fleets. We recommend that the final 2030 CECP set targets to electrify public transit and school buses by 2030.

Electrifying our public transit systems and school buses will result in improved air quality and will reduce the burdens associated with air pollution hotspots. Other recommendations include:

- Implementing the MBTA Bus Transformation Office approved by the Fiscal and Management Control Board recommendations from November 2019 by prioritizing new electric bus procurements on routes serving EJ populations. The MBTA must begin immediate planning and design work for 100% electric bus facilities to meet the goal of having a 100% electric bus fleet by 2030.
- Implementing the MBTA Rail Vision approved by the Fiscal and Management Control Board in November 2019 with priority electrification for the Fairmount Line, Newburyport/Rockport Line through Lynn, and Providence/Stoughton Line by 2024. Plan to electrify the remainder of the commuter rail system by 2035.
- The 2030 CECP must set targets to electrify state and municipal fleets by 2035: Fleets owned, leased, or operated by the Commonwealth or municipalities should transition to zero-emission vehicles with priority in locations that are air pollution hotspots in EJ populations.

We support the decision to adopt California's Advanced Clean Car Standard, Advanced Clean Truck (ACT) Rule, and Advanced Clean Fleets Rule. However, California needs a waiver from the EPA before the Advanced Clean Truck rule can come into effect and be enforced by Massachusetts. Further, California is expected to finalize regulations for the Clean Car Standard II in 2022 and the policy goes into effect only in 2026. Instead of waiting for later in the decade

to take action, it is crucial that Massachusetts immediately develop and implement policies and programs to accelerate EV adoption and begin the rulemaking process immediately.

Section 2.2 Strategy T3: ***Reduce Upfront ZEV Purchase cost Burden***

Incentivizing ZEVs for individuals, businesses, and institutions at the point of sale with rebates through the MOR-EV program will continue to bring down the upfront costs of ZEVs over time. This strategy, however, falls short of widespread adoption in EJ communities as ZEVs continue to be priced much higher than ICEVs.

We recommend Massachusetts commit to implementing a ZEV rebate program for moderate-and-low income residents, and mandating MOR-EV rebates at point of purchase by the end of 2021.

In addition to rebates for EVs sold for passenger cars and light and heavy duty vehicles, the MOR-EV program should expand the definition of vehicles to include electric bikes (e-bikes) and offer upfront incentives for e-bike purchases. Municipalities like Ashland, OR offer incentives for e-bikes including up to $300 incentives and British Columbia currently offers $1,050 rebates. Lowering the upfront costs of e-bikes will make them more accessible to more residents -- especially low-income residents in EJ populations -- while also promoting mode shift and transportation alternatives to reduce dependency on single-occupancy vehicles.

The Commonwealth should investigate utilizing the "Mass Save" brand for its vehicle incentives programs. "Mass Save" has high awareness and familiarity with Massachusetts residents, and the brand value of "Mass Save" can help automobile dealers in the Commonwealth sell zero-emission vehicles.

To incentivize EV adoption for larger fleets including municipalities and the Commonwealth, Massachusetts should establish a group purchasing program to lower costs for state/municipal ZEV procurements by the end of 2021.

Section 2.2 Strategy T4: ***Deploy Electric Vehicle Supply Equipment & Enable Smart Charging***

To achieve widespread adoption of EVs for both individual and commercial vehicles the commonwealth must increase EV charging infrastructure and set goals for the number of charging stations for both commercial and residential properties.

To achieve success, Massachusetts should:

- Set a numeric target for the number of charging stations that need to be built in the next decade to meet ZEV goals. The EV- Pro Lite tool can be used to estimate the charging needs and impacts on load profile. According to the Commission on the Future of Transportation's report "While Massachusetts is among the top ten states in terms of the number of charging stations and outlets presently available, more work needs to be done to provide a sufficient charging infrastructure to support vehicle electrification."[6]
- Launch curbside/utility pole charging programs in collaboration with municipalities, and establish incentives for other challenging sectors.
- Require utilities to propose alternative rate structures and consumer incentive programs to encourage charging overnight or at other beneficial times.
- EV charging should be designed to accommodate EVs, e-bikes, and e-scooters, and other forms of micro-mobility.
- Provide incentives for purchase of residential charging stations to promote EV adoption.

Section 2.2 Strategy T5: *Engage Consumers & Facilitate Markets*

Raising awareness of EV programs like MassEVolve, MOR-EV-Trucks, and Drive Green programs is crucial to further adoption of EVs statewide. To gauge the success of these initiatives EOEEA should provide an annual report on the strategy actions in the 2030 CECP including the ACTNow and the MassCEC pilot programs on medium- and heavy-duty ZEVs, urban delivery & fleet electrification, and EV charging infrastructure discussed in this section. In addition, DOER should consider folding incentives for EVs, including e-bikes, and residential charging stations under the MassSave program brand to easily raise awareness for these initiatives.

Section 2.2 Strategy T6: *Stabilize Light-Duty VMT & Promote Alt Transportation Modes*

Reducing vehicle-miles-traveled (VMT) is perhaps the most important strategy to reduce GHG emissions from the transportation sector and the 2030 CECP falls short on the strategies and policies to address VMT and promote alternative transportation modes. The Commonwealth cannot just "stabilize VMT" -- we must reduce VMT on an annual basis through the CECP and other strategies. If we do not provide opportunities for Massachusetts residents to do less driving, we simply won't be able to meet our environmental and quality-of-life goals.

Under the status quo, VMT is projected to increase 21% from 2010-2030. By the 2030 CECP's own admission, "Since 1990, the number of vehicle-miles traveled (VMT) annually has steadily increased and passenger vehicle purchases have trended toward larger vehicles (e.g., sport utility

[6] Ibid, pg. 26. https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download

vehicles) in the last decade. The increase in VMT and vehicle size has largely offset the emissions benefit from more stringent federal fuel efficiency standards." If we reduce VMT, it makes all of our goals on transforming our fleets and greening our grid easier to achieve, while also delivering substantial, lasting co-benefits in cost-effective ways. If we reduce VMT, it makes all of our goals on transforming our fleets and greening our grid easier to achieve, while also delivering substantial, lasting co-benefits in cost-effective ways. Measures to reduce VMT must be paired with efforts to accelerate the transition to electric vehicles. Both strategies will be critical.

We appreciate the clear goal to reduce commuter VMT per employee by 15% by 2030. To build on this, we suggest applying this goal to all trips, rather than just commutes. California has already adopted this same target of reducing VMT per capita by 15% by 2030. We must invest in a transportation system where residents can use public transit or active transportation for the 87% of daily trips that are not commutes.

The Commonwealth needs to include land use and housing policies in a holistic approach to the transportation sector. This involves including DHCD, in addition to EEA, MassDEP, and MassDOT in the coordinated approach to reducing VMT. The development of housing in the right locations at affordable cost levels is a critical component of a state-wide approach to reducing VMT. Shifting land use patterns and improving multi-modal options has many co-benefits, including improving economic mobility, reducing commute times, improving public health outcomes by reducing air pollution and traffic fatalities, and conserving open space, which is necessary for carbon sequestration to be a successful mitigation tool. Mode-shift should be an explicit goal for the Commonwealth.

Telecommuting is not a policy solution. Promoting "telecommuting" would exacerbate inequities, resulting in higher-income office workers staying home during the workday, and lower-income service and retail workers needing to commute via car or on transit that would be even harder to fund due to reduced ridership. Furthermore, many workers who expect to continue telecommuting after the public health restrictions are lifted still anticipate returning to the office at least some of the time. We need more frequent public transit service that is able to accommodate increasingly flexible commuting patterns if we want to prevent the return of a congestion crisis.

MassDOT should establish a plan and target date to implement congestion or road pricing in Greater Boston. Studies of cities and regions around the world show that congestion pricing reduces car traffic and congestion in some cases up to 30%. Congestion pricing in Massachusetts could provide a consistent source of funding for commuter rail, bus, and subway service, and improve quality of life for residents. Based on an analysis of expected revenue loss from the gas tax and EV uptake, the need to establish a plan and target date to implement road pricing is only

more important the longer it takes to accomplish this. The Commission on the Future of Transportation also recommends that "MassDOT should consider various congestion pricing strategies that compel changes in default transportation behaviors on corridors that are or could be served by transit and/or new mobility options. In order to provide an economic market signal, MassDOT should consider and pilot congestion-pricing strategies."[7] The Legislature recently passed a roadway and congestion pricing commission as part of the transportation bond bill that was vetoed by Governor Baker that would have started this process. Out of the ten most populous metropolitan areas in the country, metro Boston is the *only one* that does not use some form of time of day roadway pricing to control congestion.

Thank you for you for allowing us to comment on the Draft 2030 CECP and we hope you will incorporate our recommendations to set targets for fleet electrification, implement congestion pricing, expand incentives for EV infrastructure and e-bikes, reduce rather than stabilize VMT, coordinate between agencies to implement TOD projects, and invest and promote public transportation.

Signed,

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[7] Ibid, pg 42.
https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download

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