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By Electronic Transmission

**Re: The New York City Mayor's Office of Sustainability Comments on
Draft Memorandum of Understanding for the Transportation Climate
Initiative**

To Whom It May Concern:

The New York City Mayor's Office of Sustainability ("MOS"), in collaboration with the Department of Citywide Administration Services ("DCAS"), the Department of Environmental Protection ("DEP"), the Department of Health and Mental Hygiene (DOHMH), and the New York City Department of Transportation ("NYCDOT"), offers the following comments in response to the Transportation and Climate Initiative's ("TCI") December 17, 2019 request for public input on its draft Memorandum of Understanding ("draft MOU") and initial projections of the potential economic and health benefits of a regional cap and invest program.

The City has been a leader on climate issues, working with a variety of stakeholders to mitigate the worst impacts of climate change through the citywide reduction of greenhouse gas ("GHG emissions") and to manage those impacts that are already manifesting through adaptation and climate resiliency strategies. The City's strategic plan, OneNYC 2050: Building a Strong and Fair City, establishes the City's goal of citywide carbon neutrality by 2050. OneNYC 2050 builds on Local Law 66 of 2014, which requires an 80 percent reduction in GHG below 2005 levels by 2050. New York City has additionally committed to advancing equitable improvements in air quality and has set the goal to have the best air quality of any large city in the United States by 2030.

Addressing climate change requires joint action at the local, regional, national, and global levels. Local governments, especially large cities and counties, are fundamental to the delivery of successful GHG remediation initiatives in transportation. TCI should be designed to give a greater role for high capacity local governments, such as New York City, in the design, governance, and execution of the TCI, treating them as more than mere stakeholders in a state-run process.

That said, the City appreciates the opportunity to provide comments on the proposed regional cap and invest program that aims to curtail emissions from transportation. There are a number of programmatic elements outlined below that warrant further research and clarification from TCI.

- **Evaluate Impacts on New York City Residents**

We appreciate that TCI is committed to investing in and mitigating the impacts of a cap and invest program on low-income and disadvantaged communities that are disproportionately burdened by vehicular pollution, the costs of the current transportation system, the lack of access to clean transportation options, and individuals vulnerable to the impacts of a changing climate. However, further clarification and engagement is needed to specifically identify how to best address these elements through either the final MOU or Model Rule. Specifically, steps should be taken to develop concrete proposals that will minimize the financial burden that this program might have on low-income communities.

By TCI's own modeling, the proposed cap and invest program has the potential to increase the price of gasoline by between \$0.05 and \$0.17 per gallon. This is less than the typical variability of fuel prices due to seasonality and frequent global events and oil industry disruptions. The median income of zero-car households in New York City is \$40,630 compared to the median income of households with vehicles, which is \$85,000, based on the 2015 American Community Survey. New York City surveys and U.S. Census data show that people who rely on transit, walking, and cycling more than driving typically have lower average incomes. The NYC Department of Transportation's 2019 Citywide Mobility Survey shows that only 23% of NYC households with incomes under \$25,000 own one or more vehicles and such households make only 18% of their trips by private motor vehicles.

Although there are unlikely to be significant adverse impacts on low income New York City residents from increased fuel prices, it would be helpful for the subsequent modeling documents to validate our assumptions and confirm that this program will not act as a regressive tax on low income people in the region. It would be equally helpful for modeling to consider potential impacts on costs being passed down to New York City residents through the price of commercial goods and ancillary services.

It would also be helpful to model the income stratified distribution of benefits of different investment scenarios. Simple methods might be used to do this. For example, a study by the Institute for Transportation and Development Policy and University of California Davis in 2014 modeled the income-distributed effects of different transport investment scenarios at a regional and global level. This study evaluated how investments affect the amount of mobility by mode by income group. It found that a low carbon investment scenario was likely to boost mobility by the lowest income groups and to reduce excessive mobility growth by the most affluent, yielding reduced inequality of access.¹

¹ Replogle, Michael A., Lewis M. Fulton, *A Global High Shift Scenario: Impacts and Potential for More Public Transport, Walking, and Cycling With Lower Car Use*, Institute for Transportation and Development Policy, September 2014. https://itdpdotorg.wpengine.com/wp-content/uploads/2014/09/A-Global-High-Shift-Scenario_WEB.pdf

Through the City's GHG inventory, we know that over 80 percent of on-road transportation sector GHG emissions come from passenger vehicles. Although buses as well as medium and heavy duty trucks are a smaller share of citywide GHG, these vehicles have a disproportionately high impact on localized air quality issues. According to a study conducted by DOHMH, particulate matter from mobile sources cause 320 premature deaths and 870 emergency room visits annually. More than half of these premature deaths are directly attributable to particulate matter from trucks and buses in NYC. High-poverty neighborhoods bear the brunt of these impacts with 9.3 times the rate of emergency room visits (relative to more affluent neighborhoods) for respiratory issues caused by emissions from trucks and buses in NYC.²

Addressing GHG emissions from passenger vehicles and investing in electric vehicles is a vital early action step to achieve rapid reduction in GHG. It is equally as important to sustain and expand the share of trips by sustainable modes. The City's goal is that 80 percent of trips in 2050 will be taken using a bike, sidewalk or mass transit. As of 2017, 68 percent of trips in NYC were taken using one of these sustainable modes, up from 60 percent in the late 1990s.

Achieving an 80 percent sustainable mode share requires creating a car optional city and reallocating street and curb space to favor walking, cycling, transit, and efficient last-mile freight modes. The City recognizes that vehicles also act as a mobility tool for people with disabilities, and that sustainable modes may not serve every New Yorker's accessibility needs. The City favors strategies that help boost average vehicle occupancy and more efficient vehicle operations and network management, for example by reducing the number of miles driven by for-hire vehicles without passengers. Considering this framework for 2050, the City recommends investments in mass transit, fleet electrification, and active walking and cycling modes, as well as intermodal integration, such as high capacity bike parking at transit nodes and more efficient last-mile freight systems including cargo cycling and micro-freight distribution hubs.

TCI's illustrative scenarios for how TCI revenues could be spent are helpful. As part of the final MOU or the Model Rule or both, the TCI should include procedures to identify, evaluate, and advance strategies that are likely to minimize, avoid, and remediate the burden on low-income communities and to ensure such communities and transportation disadvantaged individuals are the beneficiaries of enhanced access to opportunities supported by TCI expenditures.

- **Ensure Transparency**

Transparency in both the reporting of emissions for regulated entities and in the Model Rule development process for States is a critical component of any cap and invest program. Stakeholders, including New York City residents, must have the ability to review and verify information submitted by regulated entities to States to ensure accountability, as increased costs on regulated entities are likely to be passed-through to consumers. This transparency will discourage regulated entities from overstating costs and from relaying those costs to members of the public, whom this type of program is intended to benefit.

² *New York City's Roadmap to 80x50*, 2016, p. 80.
https://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New%20York%20City's%20Roadmap%20to%2080%20x%2050_Final.pdf

In addition, it is important that when developing a Model Rule, States engage with relevant stakeholders and provide an opportunity for input and participation. This effort would include, but not be limited to, encouraging input on how funds generated from this program would be used, as well as data on how much funding will be generated.

The City attended a public meeting on Climate and Transportation on February 25, 2020 that was hosted by the NYS Department of Environmental Conservation (NYSDEC), NYS Department of Transportation (NYSDOT) and the New York State Energy Research and Development Authority (NYSERDA). Preliminary modeling results were shared during this meeting. We appreciate that the modeling has carved out New York City as a unique use case for the impacts of the proposed cap and invest program. We encourage TCI to share the results of localized level air quality impacts and financial impacts. Localized data are a key resource to allocating funds equitably throughout New York State. There are also considerations for which investments make the most sense based on the distinct challenges urban, suburban and rural communities face in rapidly decarbonizing the transportation sector.

We believe the MOU should explicitly state that the model's methodology and results will be made publicly available and highlight that investments will take into consideration local community needs.

- **Clarify Treatment of Biofuels**

The MOU and any proposed Model Rule should address and clarify how biofuels, such as biodiesel and renewable diesel, will be regulated and/or incentivized under any new cap and invest program. Biofuels achieve modest reductions in tailpipe emissions compared to petroleum fuels and substantially lower lifecycle GHG emissions. According to data provided by the Department of Energy, biofuels produce 74% lower GHG emissions on a lifecycle basis.³ It is our opinion that these lifecycle emission benefits should be considered, perhaps in the form of a higher allowance price based on the magnitude of lifecycle GHG "savings" compared to a petroleum counterpart. The rules should act as incentives and spurs to the further development of domestic, renewable, and local sources of biofuels. .

Implementing a discount based on lifecycle GHG emissions will have the added benefit of disincentivizing the use of biofuels that could degrade local air quality. The discount should create a market incentive for renewable diesel over other alternatives such as biodiesel blends. Biodiesel specifically has been shown to have higher emissions of pollutants such as volatile organic compounds (VOCs) when compared to petroleum diesel.⁴ We acknowledge that all biofuels still create tailpipe emissions and do not achieve zero emissions. However, they are an important stepping-stone as states and municipalities attempt to curb transportation emissions at an accelerated pace. Biofuels are also the most readily available green alternative for the tens of thousands of existing trucks and off-road equipment pieces in operation today.

³ US DOE. *Biodiesel Vehicle Emissions*. https://afdc.energy.gov/vehicles/diesels_emissions.html

⁴ Correa, S. M., & Arbilla, G. (2008). Carbonyl emissions in diesel and biodiesel exhaust. *Atmospheric environment*, 42(4), 769-775.

Under Local Law 73 of 2013, the City requires the use of biofuel blends in City diesel on-road trucks. The law excludes police and emergency services but all our emergency service agencies have in fact successfully implemented biodiesel despite the exemption. The City currently relies on biodiesel blends between 5 and 20 percent by volume (*i.e.*, B2 to B20) to fuel its municipal fleet and to achieve its GHG emission reduction under its OneNYC 2050 and Clean Fleet plans. DCAS piloted 900,000 gallons of renewable diesel (RD) and intends to secure a long-term RD contract for medium and heavy duty vehicle and off-road equipment fueling. Based on preliminary modeling done by NYC Fleet and the Mayor’s Office of Sustainability, replacing all the City’s use of ultra-low-sulfur diesel with renewable diesel would reduce fleet GHG emissions by 47 percent from a 2005 baseline. Additionally, Mayor Bill de Blasio signed Executive Order 53 in February 2020, which commits NYC to an all-electric fleet by 2040. Biofuels are an important turnkey solution to decarbonizing transportation while zero tailpipe emission models continue to expand in availability across medium and heavy duty classes. Biofuels are equally important as we look for zero emissions options for our nearly 5,000 off-road support equipment units like front end loaders or utility tractors.

Any implementation of rules in participating jurisdictions must account for the overlay between existing state-specific fuel standards and the new cap and invest program. For example, there have been recent efforts in New York State to establish a low carbon fuel standard program intended to reduce carbon intensity from the on-road transportation sector. Participating jurisdictions should consider how these programs, with similar goals, might work together.

IV. Conclusion

New York City has undertaken great efforts to reduce air pollution and climate change at the local level and is working to reduce our own emissions of criteria pollutants and greenhouse gases while preparing for the inevitable effects of climate change. The City supports efforts to create a sustainable and equitable regional cap and invest program proposal to limit greenhouse gas emissions from the transportation sector. However, additional clarification on the how the program will be implemented is needed to determine both the program’s effectiveness and its impacts on New Yorkers.

Sincerely,

A handwritten signature in black ink, appearing to be 'M. Chambers', with a long, sweeping horizontal line extending to the right.

Mark Chambers, R.A.