

THE CITY OF NEW YORK LAW DEPARTMENT 100 CHURCH STREET NEW YORK, N.Y. 10007-2601

October 26, 2018

By Electronic Transmission Environmental Protection Agency Office of Transportation and Air Quality Washington, DC 20460 regulations.gov

#### Re: City of New York Comments on The Safer Affordable Fuel-Efficient ("SAFE") Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Docket ID EPA-HQ-OAR-2018-0283)

To Whom It May Concern:

The City of New York ("City") offers the following comments in response to the August 24, 2018 publication by the United States Environmental Protection Agency ("EPA") and National Highway Traffic Safety Administration ("NHTSA") of a joint proposed rule ("Proposed Rule") to roll back the Corporate Average Fuel Economy ("CAFE") and tailpipe greenhouse gas ("GHG") emissions standards for passenger cars and light trucks, and to establish new standards covering model years 2021 through 2026. *See* 83 Fed. Reg. 42986. The Proposed Rule also seeks to eliminate the waiver granted to California under Section 209 of the Clean Air Act ("CAA"), under which California may adopt more stringent air pollution standards for motor vehicles than the federal government.

The City strongly opposes the Proposed Rule and urges EPA to retain the existing emission standards, which EPA previously determined to be appropriate and reasonable in its January 2017 Final Determination.<sup>1</sup> The City also urges NHTSA to finalize the augural CAFE standards, which are similarly appropriate and reasonable.

This letter will first address how the Proposed Rule to make the existing standards less stringent will adversely affect the City and seriously undermine its current and future efforts

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<sup>&</sup>lt;sup>1</sup>EPA, Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, EPA-420-R-17-001, 81 Fed. Reg. 87927.

to limit the effects of climate change and to protect public health. Second, it will show that the justification for the Proposed Rule is based upon analyses and projections, which on their own are flawed, but which also are contrary to New York City's experience in promoting both lowemission vehicles as well as vehicle and traffic safety. Third, it will discuss the unique risk that climate change poses to New York City and how the Proposed Rule will increase those risks. Fourth, this letter will explain the important role the existing standards play to protect local air quality in the City. Finally, for the reasons set forth in the letter submitted by the California Attorney General on behalf of the Coalition of States and Municipalities ("States' Letter"), which includes New York City as a signatory, the Proposed Rule's rescission of the waiver granted to California is unlawful, and would impermissibly prevent New York State from adopting the California standards under Section 177 of the CAA.

## I. Strong Federal Action and Lawful Application of the Clean Air Act is Necessary to Address Climate Change Emissions from Motor Vehicles

In 2014, the City set an ambitious goal to reduce citywide GHG emissions by 80 percent below 2005 levels by the year 2050, representing the same goal set by the United Nations Framework Convention on Climate Change, to mitigate the dangerous anthropogenic interference with the climate system.<sup>2</sup> Thereafter, in 2017, the City reiterated this commitment by agreeing to follow the principles of the Paris Climate Agreement of limiting global temperature rise to 1.5 degrees Celsius.<sup>3</sup> In furtherance of these goals, the City has committed billions of dollars to reduce its own carbon footprint with investments in energy efficiency for municipal buildings and transitioning its vehicle fleet toward low and zero-emission technologies, and is aggressively pursuing numerous other strategies to reduce citywide emissions.<sup>4</sup> The existing standards and the California waiver are a critical part of the City's efforts to achieve its GHG emissions reduction targets. The Proposed Rule, by proposing less stringent vehicle emission and efficiency standards, risks changing the course of the vehicle market for decades to come by encouraging manufacture of less efficient and less clean vehicles. The ramifications for New York City's air quality and programs designed to minimize the impacts of climate change could be drastic.

Because the City has an extensive, heavily used public transportation system, it is well positioned to achieve significant reductions in transportation sector GHG emissions with a

<sup>&</sup>lt;sup>2</sup> See One City at 6. The New York City Council has memorialized this commitment in legislation, enacted on November 13, 2014. See New York City, Intro. No. 0378-2014 (Nov. 13, 2014) (amending section 24-803 of the New York City Administrative Code to require that citywide emissions be reduced by eighty percent of 2005 levels by calendar year 2050).

<sup>&</sup>lt;sup>3</sup> See 1.5°C: Aligning New York City With the Paris Climate Agreement (2017), available at http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/1point5-AligningNYCwithParisAgrmtFORWEB.pdf.

<sup>&</sup>lt;sup>4</sup> See generally The City of New York, New York City's Roadmap to 80x50 (2016), available at http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/New %20York%20City's%20Roadmap%20to%2080%20x%2050\_Final.pdf.

62% mode share of New Yorkers using public transportation, walking and biking.<sup>5</sup> Yet, the City still has more car-dependent areas in the outer boroughs where transit access is limited, and distances are too far to walk or bike. As part of *New York City's Roadmap to 80x50*, published in 2016, the City modeled projected emissions through 2050 from the transportation sector under a business as usual scenario. Taking into account the emissions impacts of relevant previously committed and funded initiatives and regulations at the city, state and federal levels, transportation-related GHG emissions in New York City are expected to decline 36 percent by 2030 and 40 percent by 2050 compared to 2005. These projected emission reductions are largely a result of strong federal action, primarily including the existing standards for light-duty vehicles, and are further supported by a lawful application of the Clean Air Act wherein California may adopt its own emission standards and other states may adopt those standards as well.<sup>6</sup> In order to achieve further reductions over the business-as-usual scenario, the City has launched or expanded many programs and initiatives that will help it move to its 80x50 goal. These programs are bolstered by the existing emission standards, which help ensure the availability and affordability of low-emission vehicles in the market.

For example, NYC Clean Fleet is the most comprehensive and ambitious blueprint for municipal fleet sustainability in the nation. Unveiled by Mayor de Blasio in December 2015, Clean Fleet expands on the City's already substantial strides in sustainability by setting concrete targets to reduce the Fleet's consumption of greenhouse gas-emitting petroleumbased fuels—50 percent by 2025 and 80 percent by 2035. In the near term, Clean Fleet committed New York City to add 2,000 electric vehicles (EVs) to its sedan fleet by 2025. In April 2016, the City reinforced its EV commitment by announcing it would purchase only plugin vehicles for all non-emergency sedan orders beginning in fiscal year 2017. And during the 2018 fiscal year the City achieved numerous milestones, including: purchasing its 1,700th electric and plug in vehicle; beginning the use of renewable diesel; and installing 37 solar powered charging carports to charge electric vehicles.

Notably, the City also achieved an average fuel economy of 100 miles per gallon for light duty fleet vehicles purchased during fiscal year 2018 – this nearly doubles the fuel economy from vehicles purchased just three years ago. During this time the City's fleet has also become safer as a result of the complimentary Vision Zero initiative and Safe Fleet Transition Plan, further discussed below. However, there is still a lack of electric models that fit the operational needs of some City agencies, especially in medium and heavy-duty classes. Rolling back existing fuel efficiency and emissions standards risks halting forthcoming innovations, as fuel efficiency and greenhouse gas standards powerfully incentivize manufacturers to develop cleaner, more efficient vehicles that rely less on polluting fossil fuels.

In addition to the improvements to the citywide fleet, Mayor de Blasio has announced a \$10 million investment to install 50 fast-charging electric vehicle stations by 2020 located across all five boroughs, with a goal that at least 20 percent of all new vehicle registrations in New York City be electric by 2025. The City has also utilized funding from New

<sup>5</sup> See NYCDOT Mobility Report *available at* http://www.nyc.gov/html/dot/downloads/pdf/mobility-report-2018-print.pdf

<sup>6</sup> New York City's Roadmap to 80x50 at 81.

York State and entities such as the New York State Energy Research and Development Authority ("NYSERDA") and the New York Power Authority ("NYPA") to install electric vehicle charging stations and outlets throughout the City. Programs like these are strengthened by New York State's ability to adopt California's standards, and the effectiveness and viability of those programs depends on the existing standards and the California waiver remaining in effect.

Despite the City's ambitious goals to reduce its GHG emissions, no city can confront the complex challenges of climate change alone. Achieving these objectives requires complementary support from the regulatory systems on which New York City depends, including strong federal emissions standards and the ability of states to adopt California's more stringent standards pursuant to Section 177 of the Clean Air Act. As a City within a state that has adopted the California standards, the City relies on those standards and the innovation that those standards encourage in the automotive industry to meet emission reduction goals. That innovation benefits the City in two ways. First, it increases the amount of light-duty low emission vehicles operating within the City for personal use, thereby helping the City meet its GHG reduction goals. Second, it allows the City to continue to acquire low-emission vehicles in furtherance of its Clean Fleet program goals.

The proposed rollback of fuel efficiency and greenhouse gas emission standards will directly impact the growth of low-emission vehicle models in the light duty sector, thereby limiting the City's ability to reduce emissions to protect the public from the effects of climate change and exposure to harmful air pollutants. Thus, maintaining the existing, more stringent standards as well as the California waiver, is critical to ensuring substantial reductions in citywide GHG emissions and putting the ambitious 80x50 target within reach.<sup>7</sup>

#### II. EPA's Justification of the Proposed Rule is Contradicted by Both EPA's Prior Findings and New York City's Experience

The Proposed Rule frames the existing standards as undesirable because fuel efficient vehicles are allegedly more expensive and less safe. This conclusion is based on severe deficiencies in EPA's modeling and analysis, which are further explained in the States' Letter. Regardless, these claims are wholly contradicted by EPA's prior research and New York City's experiences in acquiring and operating its own municipal fleet.

First, the Proposed Rule's conclusions relating to vehicle safety all rely on the flawed premise that fuel-efficient vehicles will cost more money. While there may be increased up-front costs to purchase a more fuel-efficient vehicle, those costs are offset by the substantial savings in fuel over the long term. Indeed, in its 2017 Final Determination, EPA found that "the projected reduced fuel expenditures more than offset the estimated increase in vehicle cost..."

<sup>&</sup>lt;sup>7</sup> EPA's and NHTSA's efforts are particularly critical in the motor vehicle realm, since municipalities are foreclosed under federal law from mandating improvements in vehicular GHG emissions, and are therefore reliant on federal regulation in this sector. *See, e.g., Metro. Taxicab Bd. of Trade v. City of New York*, 615 F.3d 152 (2d Cir. 2010).

<sup>&</sup>lt;sup>8</sup> EPA, Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation, EPA-420-R-17-001 at 20.

This statement is consistent with New York City's experience in implementing its Clean Fleet program, and complemented by research which indicates the price of low emissions vehicles has decreased at a greater rate than the price of traditional vehicles during a time when those low emission vehicles have become more widely available in the market. Therefore, EPA's new conclusion has no rational justification and is unlawful.

The Proposed Rule further assumes that manufacturers may decrease the weight of vehicles as a way to increase fuel efficiency, resulting in lighter vehicles that are less safe. This assumption, in part, led to EPA's conclusion in the Proposed Rule that the existing standards would lead to more on-road fatalities. Not only is this conclusion verifiably false,<sup>9</sup> but even EPA's own scientists questioned its veracity during the review process.<sup>10</sup> Further, relying on the assumption that fuel efficient vehicles cost more money, the Proposed Rule also makes the specious argument that rising automobile costs (which are exacerbated by pressure to create fuel efficient and low emissions vehicles) prevent American families from purchasing new cars, which have more advanced safety features. Thus, the Proposed Rule asserts that these families will drive older, less safe vehicles longer, leading to an increase in traffic fatalities.

These arguments ignore the crucial point that increased fuel efficiency and safety are not mutually exclusive. Indeed, New York City's experience proves that both increases in vehicle and traffic safety and fuel efficiency can be achieved at the same time. New York City's Vision Zero initiative seeks to improve street safety through, among other things, increasing enforcement of moving violations, reducing speed limits, and improving street design. Since launching the Vision Zero initiative the City has seen a 26% decline in overall traffic fatalities and a 42% decline in pedestrian related fatalities since the end of 2013. This reduction has occurred despite the trend of increasing traffic-related fatalities nationwide. In support of the City's Vision Zero initiative, the Safe Fleet Transition Plan also formalizes a set of best-practice vehicle safety technologies for all City vehicles to prevent and mitigate crashes. The Vision Zero initiative and the NYC Clean Fleet program are being implemented to achieve combined goals of reduced costs, reduced emissions, reduced injuries, and improved safety. This concurrent application of vehicle safety measures and promotion of fuel economy have led to success on both fronts in recent years.<sup>11</sup> Specifically, from fiscal year 2014 to 2018 the total fuel economy for the City fleet improved by 78%, while crash rates decreased by 17% and fatality rate decreased by 33%.12

<sup>9</sup> See States' Letter Attachment at 59.

<sup>10</sup> See 12866 Review Materials for *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*, Email from William Charmley to Chad S. Whiteman, May 31, 2018, Docket EPA-HQ-OAR-2018-0283.

<sup>11</sup> As an example, New York City procures Toyota products as part of its Clean Fleet program. Toyota now provides a full package of safety implementation, called Toyota Safety Sense, at no additional cost to the consumer and available for many of their most fuel efficient models. This serves as evidence that safety, fuel-efficiency and affordability can be achieved at the concurrently.

<sup>12</sup> Department of Citywide Administrative Services ("DCAS"), Vehicle Fleets and Maintenance Report *available at* 

Finally, while the analysis in the Proposed Rule assumes that fuel-efficient vehicles will be lighter and less safe, it completely excludes any discussion on the dangers of heavier vehicles. Research suggests that while heavier vehicles have a slightly higher rate of crash survival, the danger to those outside the vehicle (*i.e.*, pedestrians) has outstripped those safety gains. Research by the Insurance Institute for Highway Safety has shown that pedestrian fatalities involving SUVs have surged by 81 percent since 2009 – and may be a prime driver in national fatality trends.<sup>13</sup> Moreover, according to a 2015 report issued by NHTSA, pedestrians are two to three times "more likely to suffer a fatality when struck by an SUV or pickup than when struck by a passenger car."<sup>14</sup> The Proposed Rule's failure to account for this increased risk to pedestrians in calculating the projected number of traffic fatalities under the existing standards versus the Proposed Rule makes its projections unreasonable and unreliable.

While the City takes traffic safety very seriously, attempting to remedy the alleged safety issues highlighted by the Proposed Rule through rulemaking based upon statutes enacted for the purposes of protecting the environment (*i.e.*, the Clean Air Act) and energy conservation (*i.e.*, EPCA), is fundamentally misplaced. The City encourages the federal government to aggressively tackle the epidemic of traffic-related deaths, but is confident that it can be done without sacrificing environmental quality or public health.

# III. Climate Change is Already Impacting New York City and Will Have Catastrophic Consequences on the City in the Future.

The climate of the New York metropolitan region is changing—annual temperatures are hotter, heavy downpours are increasingly frequent, and the sea is rising. These trends are projected to continue and even worsen in the coming decades due to higher concentrations of greenhouse gases in the atmosphere caused by the burning of fossil fuels.<sup>15</sup> According to the most recent Intergovernmental Panel on Climate Change ("IPCC") Report, released on October 8, 2018, limiting climate change will require rapid and far-reaching transitions in the transportation sector, which heavily relies on fossil fuels.<sup>16</sup> By proposing less

https://www1.nyc.gov/assets/operations/downloads/pdf/mmr2018/vehicle\_fleets\_and\_maintenan ce.pdf. These specific statistics come from an analysis by DCAS of the data included in the Mayor's Management Reports ("MMR") across fiscal years 2014-2018.

<sup>13</sup> See Insurance Institute for Highway Safety, Status Report: On Food, At Risk, May 8, 2018, available at https://www.iihs.org/externaldata/srdata/docs/sr5303.pdf.

<sup>14</sup> See NHTSA New Car Assessment Program, 80 Fed. Reg. 78547 (December 16, 2015).

<sup>15</sup> New York City Panel on Climate Change, *Building the Knowledge Base for Climate Resiliency: New York City Panel on Climate Change 2015 Report* ("NPCC 2015 Report"), Annals of the New York Academy of Science, Vol. 1336 (Jan. 2015), at 9 (hereinafter "*New York City Panel on Climate Change 2015 Report*"), available at http://onlinelibrary.wiley.com/doi/10.1111/ nyas.2015.1336.issue-1/issuetoc.

<sup>16</sup> IPCC Report, *Global Warming of 1.5 Degrees Celsius* ("IPCC 1.5 Degree Report"), *available at* http://www.ipcc.ch/report/sr15/. The NPCC 2015 Report sets forth the future risks that the

stringent emission standards, the Proposed Rule ignores the way in which vehicle emissions exacerbate climate change and undermines the efforts of both New York City and other municipalities around to the country to protect their residents and infrastructure from the drastic effects of climate change.

The changing climate increases the risks to the people, economy, and infrastructure of New York City and other coastal communities throughout the country and around the world. Indeed, the City has already experienced firsthand the impacts of climate change, as evidenced by Hurricane Sandy in 2012. Sandy, as well as the storms in recent years that caused massive damage in Texas, Florida, Puerto Rico, and North Carolina have demonstrated the scale of devastation that storms intensified by climate change can impose on coastal areas; the high winds and unprecedented storm surge that accompanied Sandy left forty-four people dead in the City and countless others injured, with at least \$19 billion in damages and lost economic activity in New York City alone.<sup>17</sup>

Sea level rise in New York City has averaged 1.2 inches per decade since 1900, nearly twice the observed global rate, with a total increase of more than a foot. In New York City, approximately 60 percent of the observed sea level rise is driven by climate-related factors, with the remainder attributable to land subsidence.<sup>18</sup> As sea levels rise, coastal storms are more likely to cause flooding over a larger area and to cause already at-risk areas to flood more frequently and severely than today. For example, the approximately 12 inches of sea level rise in New York City since 1900 may have expanded Hurricane Sandy's flood area by approximately 25 square miles, flooding the homes of more than 80,000 additional people in New York and New Jersey alone.<sup>19</sup> Thus, long-term changes in climate mean that when extreme weather events strike, they are likely to be increasingly severe and damaging.

City faces using as a basis the Fifth Assessment Report of the Intergovernmental Panel on http://ar5and available at 2013 Climate Change, issued in syr.ipcc.ch/ipcc/ipcc/resources/pdf/IPCC SynthesisReport.pdf. The 1.5 Degree Report is challenging the world, including New York City, to undertake massive mitigation by every possible avenue. It notes specifically, that a dramatic reduction in emissions across all sectors and regions is required, in the near term, to avert the worst impacts of climate change. Should the federal government elect to reverse course by blatantly rejecting clear mitigation pathways to limit warming to 1.5 degrees - as it does through the Proposed Rule - it becomes all the more important for cities to plan for the high end risks stated in the Report.

<sup>17</sup> See City of New York, A Stronger, More Resilient New York (2013) at 5, at www.nyc.gov/ html/sirr/html/report/report.shtml; see generally id. at 10-18. While this report lists the Sandy death toll as forty-three, an additional fatality was identified by the medical examiner's office after the report was released, bringing the City's death toll to forty-four. See City of New York, One City Built to Last: Transforming New York City's Buildings for a Low-Carbon Future (2014) at 19, at http://www.nyc.gov/html/builttolast/assets/downloads/pdf/OneCity.pdf (hereinafter "One City").

<sup>18</sup> New York City Panel on Climate Change 2015 Report, Chapter 2.

<sup>19</sup> New York City Panel on Climate Change 2015 Report, Chapter 2.

Similarly, as global temperatures warm due to climate change, heat waves are expected to become more frequent, last longer, and intensify—posing a serious threat to the City's power grid and New Yorkers' health.<sup>20</sup> By the 2050s, the middle range projections for average temperature increase in New York City are 4.0 to 5.7 degrees Fahrenheit and the number of days with temperatures rising above 90 degrees will increase two to three-fold.<sup>21</sup> The high-range projections estimate an average temperature increase by 6.6 degrees Fahrenheit. These warming temperatures exacerbate or introduce a wide range of health problems, including cardiovascular and respiratory diseases, pollution and allergen-related health problems, and vector-borne diseases.<sup>22</sup> As discussed further below, the health consequences of climate change disproportionately affect our most vulnerable populations – the elderly, children, and low-income communities who already experience elevated instances of cardiovascular and respiratory diseases.<sup>23</sup>

The effects of these changes on the City will be significant. Heat waves strain the City's power grid, cause deaths from heat stroke, and exacerbate chronic health conditions, particularly for vulnerable populations like the elderly.<sup>24</sup> Without significant mitigation that involves limiting the release of GHGs into the atmosphere, hotter summers predicted for the 2020s (based on projections by the New York City Panel on Climate Change) could cause an estimated 30 to 70 percent increase in heat-related deaths, or about 110 to 260 additional heat-related deaths per year on average in New York City.<sup>25</sup>

Rising sea levels will expose the homes, businesses, streets, wastewater treatment plants, and power plants that line our 520 miles of coastline to increased hazards. More extreme weather will also leave the City and its essential infrastructure susceptible to more frequent violent storms and severe flooding; at other times, the new extremes could subject the City to prolonged periods of drought.<sup>26</sup> An increase of both intermittent droughts and flooding is

<sup>21</sup> See New York City Panel on Climate Change 2015 Report at 22, 31.

<sup>22</sup> A Stronger, More Resilient New York at 78-82.

<sup>23</sup> See DOHMH, Air Pollution and the Health of New Yorkers: The Impact of Fine Particles and Ozone at 4, at https://www1.nyc.gov/assets/doh/downloads/pdf/eode/eode-air-quality-impact.pdf; see also Globalchange.gov, The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment Ch. 9, Populations of Concern (April 2016), at https://health2016.globalchange.gov/populations-concern. See also comments submitted regarding the Proposed Rule by the American Lung Association, also signed by the City of New York.

<sup>24</sup> A Stronger, More Resilient New York at 26.

<sup>25</sup> As compared to the baseline period for analysis of 1998-2002. A Stronger, More Resilient New York at 31.

<sup>26</sup> See generally A Stronger, More Resilient New York at 23-27. For a comprehensive discussion of the likely effects of climate change on New York City's watershed and water delivery

<sup>&</sup>lt;sup>20</sup> A Stronger, More Resilient New York at 27.

expected to severely impact the City's water supply infrastructure by reducing available drinking water, increasing turbidity and eutrophication in the City's reservoirs and their tributaries, and potentially hampering the disinfection of drinking water. Further, flooding in future storm events may compromise City water distribution and wastewater management infrastructure along the City's shorelines.<sup>27</sup> While the City's Department of Environmental Protection ("DEP") is taking extraordinary measures to prepare for and attempt to mitigate these consequences,<sup>28</sup> such efforts are very costly, and the City will never be able to fully address the risks that future extreme weather events present.

These impacts on the City's residents and infrastructure were reiterated in the National Climate Assessment report issued in May 2014,<sup>29</sup> which details the many climate risks in the Northeast region—including heat waves, coastal and river flooding, sea level rise, and intense precipitation events—which will pose a growing challenge to the region's environmental, social, and economic systems.<sup>30</sup> Potential impacts to the City's critical coastal infrastructure from sea level rise and coastal flooding cited in the report include, among others, increased saltwater encroachment and damage to low-lying infrastructure in the communications, energy, transportation, and water and waste sectors; exacerbated flooding of streets, subways, tunnel and bridge entrances, and sewers; and the potential associated structural damage to these assets.<sup>31</sup>

systems, *see* The New York City Department of Environmental Protection Climate Change Program, Assessment and Action Plan (May 2008), at http://www.nyc.gov/html/dep/ pdf/climate/climate\_complete.pdf. Details of climate change impacts on the City's wastewater treatment system are presented in DEP's NYC Wastewater Resiliency Plan: Climate Risk Assessment and Adaptation Study (Oct. 2013), at http://www.nyc.gov/html/dep/html/about\_dep/ wastewater resiliency plan.shtml.

<sup>27</sup> See generally A Stronger, More Resilient New York at 209-14.

<sup>28</sup> See generally A Stronger, More Resilient New York at 215-18; see also DEP, City Announces Major Expansion of Nationally Recognized Green Infrastructure Program to Further Improve the Health of Local Waterways (November 10, 2014), at http://www.nyc.gov/html/dep/ html/press releases/14-089pr.shtml#.VGYqGDTF98E.

<sup>29</sup> More recently, in the U.S. Global Change Research Program's Fourth National Climate Assessment issued in October 2017, new observations and new research have increased the scientific community's understanding of past, current, and future climate change and numerous lines of evidence demonstrate it is extremely likely that human influence has been the dominant cause of warming since the mid-20<sup>th</sup> century. U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment*, Vol. 1 (2017), at 12 (hereinafter *"Fourth National Climate Assessment"*) available at https://science2017.globalchange.gov/.

<sup>30</sup> See generally U.S. Global Change Research Program, National Climate Assessment (2014), Chap. 16, at http://nca2014.globalchange.gov/.

<sup>31</sup> 2014 National Climate Assessment at 379.

Despite the flawed analysis in the Proposed Rule which greatly understates the projected impacts from the roll back, NHTSA acknowledges that the Proposed Rule will result in a 9 percent national increase in GHG emissions through 2100.<sup>32</sup> Given the projected future and current effects of climate change being felt throughout the country, this increase is not acceptable. The City therefore urges EPA to maintain the existing standards, which will result in critical reductions in GHG emissions from motor vehicles.

## IV. Strong Emissions Standards are Critical for Improving Local Air Quality and Public Health

The Proposed Rule will result in an increase of emissions from fossil fuelpowered vehicles and will impair the City's efforts to reduce harmful criteria and hazardous air pollutants. While the analysis of the Proposed Rule attempts to obfuscate the obvious fact that less stringent emissions standards will lead to higher levels of harmful pollutants in the atmosphere (as is discussed in States' Letter in greater detail), it is clear that the existing more stringent standards will reduce emissions from mobile sources and produce significant public health benefits as compared to the proposed standards. This is especially true in urban areas like New York City, where high population density, high densities of light-duty vehicle activity and large numbers of individuals with health vulnerabilities overlap.

Vehicles subject to the Proposed Rule are significant contributors to primary PM2.5, NOx, and VOC emissions—all pollutants that have negative public health consequences. Based on EPA's 2014 National Emissions Inventory, it is estimated that in the five counties that make up New York City, light-duty vehicles account for approximately 5 percent, 16 percent, and 22 percent of total annual emissions of primary PM2.5, NOx, and VOCs, respectively.<sup>33</sup> In addition, four of the five New York City counties (New York, Kings, Bronx, and Queens counties) are the four most densely populated counties in the United States.<sup>34</sup> These four counties also have the highest emissions density (in tons per square mile) of primary PM2.5, NOx, and VOC emissions from light-duty vehicles. Therefore, as compared to other U.S. cities, New York City is particularly vulnerable to criteria pollutant emissions from these vehicles, as we have the highest density of residents living in close proximity to the highest density of light-duty vehicle emissions.

Emissions from motor vehicle traffic exert a considerable public health burden on City residents. A 2016 study found that emissions from on-road mobile sources in the 28-county New York metropolitan region contributed to 320 deaths and 870 hospitalizations and emergency department visits annually within New York City due to PM2.5 exposures,

<sup>&</sup>lt;sup>32</sup> See Draft Environmental Impact Statement for the Safer Affordable Fuel-Efficient Vehicles Rule for Model Year 2021-2026 ("DEIS"), at S-14.

<sup>&</sup>lt;sup>33</sup> EPA, 2014 National Emissions Inventory (NEI) Data, *at* https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data (last visited Sept. 6, 2017).

<sup>&</sup>lt;sup>34</sup> U.S. Census American FactFinder, Table GCT-PH1: Population, Housing Units, Area, and Density: 2010 - United States -- County by State; and for Puerto Rico, 2010 Census Summary File 1, *available at* https://factfinder.census.gov/ (last visited October 11, 2018).

accounting for 5,850 years of life lost.<sup>35</sup> Of this burden, passenger vehicles on roadways within the City were estimated to contribute to 100 deaths and 250 hospitalizations and emergency department visits annually within the City due to PM2.5 exposures, accounting for 1,750 years of life lost.<sup>36</sup> Both the exposures to PM2.5 from passenger vehicles and their associated health impacts were found to be greater in low-income communities, as compared to more affluent communities. Approximately 60 percent of emergency room visits related to PM2.5 triggered asthma take place in the City's highest poverty neighborhoods, a stark reminder that it is the most vulnerable who face the gravest health impacts from tailpipe pollution.

Emissions from motor vehicles also contribute to chronic pollution hot-spots throughout the City. The New York City Community Air Survey, prepared by the New York City Department of Health and Mental Hygiene, used data from 60 monitoring sites throughout the City to develop spatial models of air pollution exposure and assess sources contributing to high levels in areas within the City. From 2009 through 2016, the survey found that traffic density was statistically significantly associated with levels of PM2.5, NO2, and NO levels near the monitoring sites.<sup>37</sup>

By making emissions and fuel economy standards less stringent, the Proposed Rule will result in an increase of these harmful emissions as compared to the existing standards. This increase in emissions will pose a great health risk to the City's residents and its already vulnerable population. The City therefore strongly urges EPA and NHTSA to keep the existing standards in place, as they are most protective of public health and the environment.

#### V. Conclusion

New York City has been a leader in addressing 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 Proposed Rule undermines these local efforts and threatens the City's ability to protect both public health and the environment by rolling back existing emissions and efficiency standards and revoking the California waiver. For the reasons set forth above and in the States' Letter, the City strongly urges EPA and NHTSA to maintain the existing standards, which are most protective of public health and the environment.

<sup>36</sup> Id.

<sup>&</sup>lt;sup>35</sup> Kheirbek I, Haney J, Douglas S, Ito K, Matte, T, "The contribution of motor vehicle emissions to ambient fine particulate matter public health impacts in New York City: a health burden assessment," *Environmental Health* 15:89 (2016), *available at* https://ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0172-6. The cited figures represent the 95 percent Confidence Interval in the study.

<sup>&</sup>lt;sup>37</sup> New York City Department of Health and Mental Hygiene, "New York City Community Air Survey, Neighborhood Air Quality 2008-2015" (April 2018), *available at* https://www1.nyc.gov/assets/doh/downloads/pdf/environmental/comm-air-survey-08-15.pdf.

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