ORAL ARGUMENT NOT YET SCHEDULED

No. 24-1129 (and consolidated cases) IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF NEBRASKA, et al.,

Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.

On Petition for Review of Final Agency Action of the Environmental Protection Agency

89 Fed. Reg. 29,440 (Apr. 22, 2024)

BRIEF OF AMICI CURIAE THE NATIONAL LEAGUE OF CITIES AND THE U.S. CONFERENCE OF MAYORS IN SUPPORT OF RESPONDENTS

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DATED: January 21, 2025

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

A. Parties and Amici

Except for the following and those listed in the Identities and Interests section below, all parties, intervenors, and *amici* appearing in this case are listed in the briefs for Petitioners and Respondents: Climate Scientists Michael Oppenheimer, Noah S. Diffenbaugh, Christopher B. Field, Stephen W. Pacala, Daniel P. Schrag, and Susan Solomon.

B. Ruling Under Review

Under review is the action, "Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3," 89 Fed. Reg. 29,440 (Apr. 22, 2024).

C. Related Cases

Related cases are referenced in Private Petitioners' Brief. *Amici curiae* are unaware of any other related cases.

/s/ Michael Burger MICHAEL BURGER

STATEMENT REGARDING SEPARATE BRIEFING, AUTHORSHIP, AND MONETARY CONTRIBUTIONS

Amici National League of Cities and U.S. Conference of Mayors file this separate *amicus* brief in compliance with the word limits set forth in Federal Rules of Appellate Procedure 29(a)(5) and 32(a)(7)(B)(i), excluding the parts excluded by Federal Rules of Appellate Procedure 27(d)(2) and 32(f) and D.C. Circuit Rule 32(e)(1). A single joint brief is not practicable in this case because the other *amicus* briefs do not address the unique perspective of governments that are responsible for local responses to climate change. *See* D.C. Circuit Rule 29(d).

Under Federal Rule of Appellate Procedure 29(a)(4)(E), *amici* state that no party's counsel authored this brief in whole or in part, and no party or party's counsel contributed money intended to fund the preparation or submission of this brief. No person—other than the *amici curiae* or their counsel—contributed money intended to fund the preparation or submission of this brief.

CORPORATE DISCLOSURES

The undersigned counsel for *amici* certifies that no corporation among *amici* has ever issued stock, and that none has a parent company whose ownership interest is 10 percent or greater.

<u>/s/ Michael Burger</u> MICHAEL BURGER

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GLOSSARY OF TERMS

BIL	Bipartisan Infrastructure Law
CPRG	Climate Pollution Reduction Grants
EPA	United States Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
HDV Rule	Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3, 89 Fed. Reg. 29,440 (Apr. 22, 2024)
IRA	Inflation Reduction Act
NLC	National League of Cities
NOAA	United States National Oceanic and Atmospheric Administration

IDENTITIES AND INTEREST OF AMICI CURIAE

The National League of Cities (NLC), founded in 1924, is the oldest and largest organization representing U.S. municipal governments. NLC works to strengthen local leadership, influence federal policy, and drive innovative solutions. In partnership with forty-nine state municipal leagues, NLC serves as a national advocate for more than 19,000 cities, towns, and villages representing more than 218 million Americans. NLC's sustainability and resilience program serves as a resource hub for climate change mitigation and adaptation for cities.

The U.S. Conference of Mayors, founded in 1932, is the official nonpartisan organization of the more than 1,400 U.S. cities that are home to 30,000 people or more. The Conference of Mayors established its Climate Protection Center and its Alliance for a Sustainable Future to assist local governments with implementation of both the 2005 Mayors Climate Protection Agreement and the goal to establish comprehensive decarbonization efforts to keep the global rise in temperature to the 1.5-degree Celsius level.

Amici regularly submit amicus briefs to the Court in support of the broad principles of federalism and the vitality of state and local authority in our federalist system. In this case, *amici* have a significant interest in the proper interpretation and implementation of the Clean Air Act and ensuring appropriate regulation of greenhouse gas (GHG) emissions from heavy-duty vehicles, a significant source of GHGs and health-harming local air pollution within their communities. Local governments have been and will continue to be first responders to the impacts of climate change and have invested significant public funds to mitigate and adapt to the impacts of a changing climate, and they rely on a strong federal partner in the U.S. Environmental Protection Agency (EPA) to reduce pollution from sources outside cities' jurisdiction, such as heavy-duty vehicles. Given the urgency and costs of the climate crisis for our nation's cities, towns, suburbs, and other forms of local government, the Court should uphold EPA's rules described in the briefing in the case.

SUMMARY OF ARGUMENT

In cities across the United States, heavy-duty vehicles emit harmful air pollution into our nation's most vulnerable communities, leading not only to devastating impacts from a changing climate but significant health disparities for vulnerable populations. Congress recognized the dangers of vehicle pollution when it enacted the Clean Air Act, finding "that the predominant part of the Nation's population is located in its rapidly expanding metropolitan and other urban areas," and "that the growth in the amount and complexity of air pollution brought about by urbanization, …and the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare." 42 U.S. Code § 7401(a)(1) & (2). Further, Congress stated "that Federal financial assistance and leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution." 42 U.S. Code § 7401(a)(4).

In other words, Congress acknowledged the particular implications of vehicle pollution in cities, and the role that the Federal government plays in bolstering local government efforts to reduce heavy-duty vehicle pollution. This framework is perhaps nowhere more apt than in the case of heavy-duty vehicles. Large, diesel-powered trucks spew climate-warming greenhouse gases and dangerous local pollutants such as nitrogen oxides (NOx), carbon monoxide, and particulate matter (PM) into cities. Cities bear the harms of this pollution – costly physical implications from extreme weather events and detriments to public health from local air pollution.

While cities experience the brunt of heavy-duty vehicle pollution, they also protect their residents through a host of actions that aim to reduce GHG emissions and dangerous local air pollution, prepare for and protect against future climate impacts, and increase resiliency in the aftermath of climate disasters. Included in these efforts are actions to reduce transportation sector emissions, which often represent a city's largest source of GHG emissions and cause outsize harm in vulnerable communities. Yet, because local governments lack the authority to promulgate vehicle emissions standards, their transportation decarbonization efforts can only go so far, and local governments must rely on federal regulation to support their own actions. Petitioners' claim that EPA's April 2024 Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles, Phase 3, 89 Fed. Reg. 29,440 (HDV Rule) constitutes an electric vehicle mandate triggering the Major Questions Doctrine is unfounded. And their interpretation of EPA's authority under the Clean Air Act would unduly curtail EPA's ability to regulate GHG pollution from motor vehicles in an efficient, costeffective manner, depriving cities of a critical tool to meet their emissions reduction targets and protect and improve public health.

Climate change threatens the health of *amici*'s members and their residents and costs cities billions of dollars each year. Transportation emissions contribute the most to climate change out of any sector and localized pollution from vehicle emissions, especially from heavy-duty vehicles, uniquely harms urban residents. Cities are leading the nation's climate mitigation and adaptation efforts, implementing creative solutions to reduce GHG emissions from the transportation sector and make their communities more resilient to climate impacts. Without the federal government to complement cities' efforts with thorough heavy-duty vehicle standards, the impacts from and costs associated with climate change will become progressively more relentless. The HDV Rule also preserves the federal leadership that underlies section 202(a) of the Clean Air Act. The Clean Air Act reserves jurisdiction over mobile sources for the federal government, and as a result cities and other local governments rely on EPA as a regulatory partner to address the acute harms of GHG emissions and other forms of vehicle tailpipe pollution borne by urban communities. If the Court were to unduly limit EPA's authority here, as Petitioners argue it should, cities and communities would be exposed to more unnecessary heavy-duty vehicle emissions, leading to more climate and local air pollution, harming local communities and undermining local governments' climate efforts.

ARGUMENT

I. Cities Bear the Burden of the Climate Crisis and Heavy-Duty Vehicle Pollution, Both of Which Will Increase Without EPA's Strong Heavy-Duty Vehicle Rule

A. Climate Impacts Felt in Cities

Greenhouse gases are emitted by a range of industries nationwide, but the most acute effects of GHG-induced climate change are often felt in cities. So, too, is the financial burden associated with responding to climate disasters, preparing for future extreme weather, and reducing community GHG emissions.¹ Cities and other

¹ See State of the Climate 2023, WORLD METEOROLOGICAL ORG., <u>https://library.wmo.int/viewer/68835/download?file=1347_Global-statement-2023_en.pdf&type=pdf&navigator=1</u>.

local governments rely on EPA to implement robust rules to limit emissions of GHGs and other harmful air pollutants originating outside their jurisdictional authority. EPA did just that with its HDV Rule. Amici urge this Court to uphold the HDV Rule as a proper exercise of EPA's authority under the Clean Air Act § 202 (42 U.S. Code § 7521), in order to safeguard cities' investments to address the impacts of climate change and lessen their continued and costly exposure to additional damage resulting from extreme weather. With over 80% of Americans living in urban areas,² amici's members are tasked with understanding the risks to, and planning for the wellbeing of, the great and increasing majority of Americans. The economic value of cities cannot be overstated - the sheer concentration of people, activity, and infrastructure imbues them with unique importance. But what gives cities their value is also what the climate crisis threatens with increasingly devastating impacts such as more frequent extreme heat events and heat-related deaths, dirtier air, damaged and disappearing coastlines, increased wildfire risk, higher prevalence of infectious diseases, and more frequent and severe storms.³ The multiple and compounding effects of climate change can amplify cities' existing

² See U.S. Cities Factsheet, UNIV. OF MICH. CTR. FOR SUSTAINABLE SYSTEMS, <u>https://css.umich.edu/publications/factsheets/built-environment/us-cities-factsheet</u> (last accessed October 2, 2024).

³ See Allison R. Crimmins et al., U.S. Glob. Change Rsch. Program, Fifth National Climate Assessment 12-12 (2023), https://rb.gy/qtarzq.

challenges, including social inequality, aging and deteriorating infrastructure, stressed ecosystems, and threats to the public health of vulnerable communities.⁴

The specific impacts experienced in U.S. cities vary from place to place. Coastal cities – home to 20% of the total U.S. population – from Florida to Maine to California are preparing for and responding to the overwhelming effects of sea level rise,⁵ the associated high costs of infrastructure corrosion and inundation of coastal property,⁶ and disruptions to daily life resulting from shrinking coastlines. Cities like Charleston, South Carolina and Boston, Massachusetts have already seen huge increases in so called "nuisance flooding" that is further projected to increase as seas rise and land subsides,⁷ and all numerous coastal cities face the extraordinary threat of destructive storm surges, such as those that accompanied Hurricanes Helene, Ida, Maria, Isabel, Katrina, Rita, Harvey, Florence, Michael, Idalia, Ophelia, and Sandy. In 2023 alone, storms caused billions of dollars of damage to municipalities in the Gulf Coast region and up and down the eastern seaboard.⁸ In October 2024, Hurricane Milton devastated parts of Tampa, Sarasota, and St. Petersburg, Florida

⁴ *Id*.

⁵ See D. Hayward et al., IPCC, *Cities, Settlements and Key Infrastructure in* Climate Change 2022: Impacts, Adaptation and Vulnerability at 925. ⁶ *Id.* at 958.

⁷ See Global and Regional Sea Level Rise Scenarios for the United States, NOAA (Feb. 2022), <u>https://sealevel.globalchange.gov/internal_resources/756/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf</u>.

⁸ *Hurricane Costs*, NOAA Office for Coastal Management, <u>https://rb.gy/gxnhzo</u> (last accessed Jan. 14, 2024).

with heavy rain, blistering winds, and over eight-foot storm surges.⁹ In Norfolk, Virginia, another coastal city, these climate impacts also threaten the Naval Station Norfolk – the largest naval station in the U.S. – which could be "completely submerge[d]" by "sea level rise coupled with significant storm surge."¹⁰ The risks to the Naval Station Norfolk are indicative of broader risks to critical infrastructure housed in U.S. cities, such as transport supply chains, airports, ports, and energy infrastructure.¹¹

Climate change is also fueling more intense storms in inland and riverine areas, where *amici* have numerous member cities. Increases in extreme precipitation and decreasing snowpack storage in mountainous regions have led to increases in flooding throughout non-coastal areas of the U.S. Each year, flooding costs the country an amount equal to 1–2% of the U.S.'s total gross domestic product, between \$179.8 and \$496 billion per year, and much of this cost is borne by and in cities.¹² For example, Detroit, Michigan, despite having spent hundreds of millions of dollars

https://weather.com/storms/hurricane/news/2024-10-09-hurricane-milton-forecastlandfall-florida-storm-surge-wind.

⁹ Jonathan Belles et al., *Hurricane Milton Brought Devastation Across Central Florida*, THE WEATHER CHANNEL (Oct. 24, 2024),

¹⁰ Kelly A. Burks-Copes et al., *Risk Quantification for Sustaining Coastal Military Installation Assets and Mission Capabilities* 9 (2014), <u>https://rb.gy/7bvoyo</u>.

¹¹ See D. Dodman et al., Cross-Chapter Paper 2: Cities and Settlements by the Sea in IPCC: Sixth Assessment Report 2022.

¹² Taylor Delandro, *Flooding costs US billions of dollars per year: Report*, THE HILL (Jun. 11, 2024), <u>https://thehill.com/changing-america/resilience/natural-disasters/4714466-flooding-costs-us-billions-of-dollars-per-year-report/.</u>

to improve its stormwater system, is still being deluged with flooding.¹³ Fully upgrading Detroit's stormwater systems would cost billions of dollars.¹⁴ In Minnesota, a \$3 billion river-flood diversion project in Moorhead will offer protection against river flooding but not against costly flooding from extreme rain events.¹⁵ Asheville, North Carolina is still recovering from and assessing the damage caused by September 2024's Hurricane Helene, which left residents without potable water for 53 days.¹⁶

Cities are also experiencing heat waves made more frequent, hotter, and longer by climate change, and these are increasingly harming *amici*'s members and their residents. Researchers have noted that "human-induced climate change manifests through more intense and frequent weather events, with heat waves being the most dramatically affected."¹⁷ As temperatures continue to rise, cities that

https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flooding-followshelene-in-western-nc/ and Eduardo Medina, Asheville Gets Drinkable Tap Water Back, 53 Days After Hurricane Helene, N.Y. TIMES (Nov. 19, 2024),

 ¹³ See Casey Crownhart, Cities Are Scrambling to Prevent Flooding, MIT TECH. R. (July 20, 2021), https://bit.ly/3ywGKAg.
 ¹⁴ Id.

¹⁵ Dan Gunderson, *Cost is a barrier as cities prepare for wild weather in a changing climate*, MPR NEWS (Aug. 26, 2024),

https://www.mprnews.org/story/2024/08/26/cost-is-a-barrier-as-cities-prepare-for-wild-weather-in-a-changing-climate.

¹⁶ See Corey Davis, *Rapid Reaction: Historic Flooding Follows Helene in Western* NC, North Car. State Climate Office (Sept. 30, 2024),

https://www.nytimes.com/2024/11/19/us/asheville-water-hurricane-helene.html. ¹⁷ Julie Arrighi et al., *Climate Change and the Escalation of Global Extreme Heat: Assessing and Addressing the Risks* (May 28, 2024),

already acutely experience the effects of extreme heat – like Houston, Texas and Phoenix, Arizona – could experience average summer high temperatures at least six degrees Fahrenheit warmer than what they are now.¹⁸ Heat waves are the deadliest type of extreme weather, leading to thousands of deaths each year.¹⁹ Because urban "heat islands" heat up faster and stay hotter longer than suburban and rural areas, city dwellers are disproportionately harmed by heat waves.²⁰ Heat-related deaths and illnesses are projected to increase: A Natural Resources Defense Council analysis of National Oceanic & Atmospheric Administration (NOAA) data found that 45 major U.S. urban areas could see 28,000 more deaths each year from extreme summer heat by the 2090s.²¹ During the summer of 2024, the earth's hottest on record, cities across the country experienced stifling heat domes.²² In July 2024, temperatures soared in Portland, Oregon, sustaining record-breaking triple-digit temperatures for

https://www.nytimes.com/2024/08/27/climate/heat-deaths.html.

https://assets.ctfassets.net/cxgxgstp8r5d/5sjPWtBWuPk56xVZKuuL3g/fe050dd8d 61e8b2a7e3a315a4b75b22f/Climate_Change_and_the_Escalation_of_Global_Extr eme_Heat_Climate_Central.pdf.

¹⁸ See Shifting U.S. Cities, CLIMATE CENTRAL (July 13, 2022),

https://www.climatecentral.org/climate-matters/shifting-u-s-cities.

¹⁹ See Austyn Gaffney, Heat Deaths Have Doubled in the U.S. in Recent Decades, Study Finds, N.Y. TIMES (Aug 27, 2024),

²⁰ Crimmins et al., *supra* note 3, at 15-6; IPCC, AR6 Synthesis Report: Climate Change 2023, at 50 (2023) [hereinafter IPCC AR6 SR].

²¹ See supra note 19.

²² Hayley Smith, *As California swelters, climate officials declare Summer 2024 the hottest on record*, L.A. TIMES (Sept. 6, 2024),

https://www.latimes.com/environment/story/2024-09-06/summer-2024-was-earthshottest-on-record.

multiple days, resulting in dozens of deaths in Portland and cities across the Pacific Northwest, California, and Nevada.²³ Phoenix recorded 113 consecutive days of 100-degree weather.²⁴

Anthropogenic climate change is also increasing the frequency, size, and severity of wildfires in the United States.²⁵ With more than 55,550 wildfires reported in the U.S. in 2023,²⁶ the Western U.S. has been particularly affected. During the record setting year of 2020, wildfires consumed more than 10 million acres in the region.²⁷ Western cities like Los Angeles, California; Eugene, Oregon; Salt Lake City, Utah; and Denver, Colorado are ranked among the most polluted cities in the

²³ See Anita Snow, *Things to know about heat deaths as a dangerously hot summer shapes up in the western US*, CAPRADIO (July 16, 2024),

https://www.capradio.org/articles/2024/07/16/things-to-know-about-heat-deaths-as-a-dangerously-hot-summer-shapes-up-in-the-western-us/.

²⁵ Tzeidle N. Wasserman & Stephanie E. Mueller, *Climate influences on future fire severity: a synthesis of climate-fire interactions and impacts on fire regimes, high-severity fire, and forests in the western United States*, 19 FIRE ECOLOGY 43 (2023), https://fireecology.springeropen.com/articles/10.1186/s42408-023-00200-8;

²⁴ Walter Berry, *Phoenix ends its streak of 100-degree days at 113 consecutive days*, ASSOCIATED PRESS (Sep. 17, 2024), <u>https://apnews.com/article/phoenix-summer-heat-cooler-temperatures-6a0093da70f5887336fdf5b2c75c07f9</u>.

Yizhou Zhuang et al., *Quantifying contributions of natural variability and anthropogenic forcings on increased fire weather risk over the western United States*, PROCS. OF THE NAT'L. ACAD. OF SCIS. OF THE U.S., Nov. 1, 2021, https://rb.gy/ak0rds.

²⁶ Wildland Fire Summary and Statistics Annual Report 2023, NAT. INTERAGENCY COORDINATION CTR. (2023), <u>https://www.nifc.gov/sites/default/files/NICC/2-</u> <u>Predictive%20Services/Intelligence/Annual%20Reports/2023/annual_report_2023</u> <u>0.pdf</u>.

²⁷ Manas Sharma et al., *The Age of the "Megafire,"* REUTERS GRAPHICS (Feb. 1, 2021), https://tmsnrt.rs/3yx2uvw.

United States based on ozone and annual particulate matter pollution, with wildfires as the major contributor to the "increasing number of days and places with unhealthy levels of particle pollution" in recent years.²⁸ Even now, in January 2025, wildfires are overwhelming Los Angeles, burning tens of thousands of acres surrounding the city and more than 10,000 structures within it, and exhausting public resources.²⁹ The wildfires also emitted plumes of polluted smoke laden with toxic chemicals from burning cars and homes that degraded air quality to "dangerous," presenting an exceptionally harmful public health risk.³⁰

Exposure to wildfire smoke can damage the heart, lungs, and brain,³¹ and exposure during pregnancy correlates with pre-term births, low birth weights, and negative maternal health outcomes.³² As climate change continues to increase wildfire smoke exposure in cities across the country, exposure to smoke may lead to

²⁸ State of the Air: 2024 Report, AMERICAN LUNG ASS'N. (2024),

https://www.lung.org/getmedia/dabac59e-963b-4e9b-bf0f-73615b07bfd8/State-ofthe-Air-2024.pdf.

²⁹ L.A. Fires Live Updates, WASH. POST (Jan. 13, 2025), https://www.washingtonpost.com/weather/2025/01/13/los-angeles-fires-californiaupdates-palisades-eaton/#link-QD6ALXNQE5BG5MMMUN7I2ET76A.

³⁰ Ariel Wittenberg, *Cancer is the unseen danger in the Los Angeles fires*, E&E NEWS (Jan. 13, 2025), <u>https://www.eenews.net/articles/cancer-is-the-unseen-danger-in-the-los-angeles-fires/</u>.

³¹ Alison Saldanha et al., *Dangerous Air: As California Burns, America Breathes Toxic Smoke*, KCRW (Sept. 28, 2021), https://kcrw.co/3ISH4Oh.

³² Mona Abdo et al., *Impact of Wildfire Smoke on Adverse Pregnancy Outcomes in Colorado*, 2007–2015, INT'T J. OF ENV'T RSCH. AND PUB. HEALTH, Oct. 2019, https://bit.ly/3q2c1ab.

mortalities on the scale of the temperature-related mortalities described above,³³ and may create compound events with other climate change impacts like heat waves.³⁴

Cities are already incurring costs running into the billions of dollars because of climate impacts. The U.S. now experiences, on average, a billion-dollar weather or climate disaster every three weeks; one estimate puts the per year price tag of extreme weather events in the U.S. at \$150 billion.³⁵ The average annual losses to residential homes due to flooding are projected to increase 67% to \$34 billion over the next thirty years.³⁶ By 2050, over \$100 billion worth of coastal property will likely be below sea level.³⁷ And in a scenario where emissions keep rising unabated and infrastructure is not adapted to a changing climate, hundreds of billions of dollars of infrastructure damage per year is expected by 2090.³⁸ Furthermore, the monetized health and climate change damages from on-road vehicle emissions in

³³ Marshall Burke et al., *The Changing Risk and Burden of Wildfire in the United States*, PROCS. OF THE NAT'L ACAD. OF SCIS. OF THE U.S., Jan. 12, 2021, https://bit.ly/3F4s1yD.

³⁴ IPCC AR6 SR, *supra* note 20, at 51.

³⁵ Crimmins et al., *supra* note 3, at 1-17.

³⁶ Budget Exposure to Increased Cost and Lost Revenue Due to Climate Change: A Preliminary Assessment and Proposed Framework for Future Assessments, WHITE HOUSE OFFICE OF MGMT. & BUDGET (Mar. 2023), <u>https://www.whitehouse.gov/wpcontent/uploads/2023/03/climate_budget_exposure_fy2024.pdf.</u>

³⁷ *Climate Change Impacts on Coasts*, U.S. ENV'T. PROTECTION AGENCY, <u>https://www.epa.gov/climateimpacts/climate-change-impacts-coasts</u> (last accessed Sept. 24, 2024).

³⁸ See James E. Neumann et al., *Climate effects on US infrastructure: the economics of adaptation for rail, roads, and coastal development*, 167 CLIMATIC CHANGE 4 (Aug. 19, 2021), <u>https://doi.org/10.1007/s10584-021-03179-w</u>.

the U.S. is extraordinary, reaching \$260 billion in 2017 alone, according to one estimate.³⁹ These impacts fall in significant part at the feet of *amici* and their members.

In this context of ever-rising costs attributable to damage from climate change, cities of all sizes, spanning every region of the country, more than ever need a supportive approach to reducing transportation sector emissions. The HDV Rule will help cities mitigate or avoid the worst of climate and localized air pollution impacts.

B. Harms from Heavy-Duty Vehicle Pollution

In addition to the climate impacts that vehicle sector emissions substantially contribute to, cities and their residents across the country experience serious and direct harms to human health from pollutants emitted by vehicle tailpipes, including NOx, carbon monoxide, and particulate matter. Heavy-duty vehicles, which only make up 10% of on-road vehicles, produce more than half of particulate matter from on-road vehicles, largely due to the prevalence of diesel engines, low-fuel economy, and traveling more miles compared to other vehicles.⁴⁰ Vehicle emissions are

³⁹ Ernani Choma et al., *Health benefits of decreases in on-road transportation emissions in the United States from 2008 to 2017*, PROC. NAT'L ACAD. OF SCI., Dec. 2021, <u>https://pmc.ncbi.nlm.nih.gov/articles/PMC8713776/</u>.

⁴⁰ Jimmy O'Dea, *Ready for Work, Now Is the Time for Heavy-Duty Electric Vehicles*, Union of Concerned Scientists (last accessed Jan. 13, 2024), https://www.ucsusa.org/sites/default/files/2019-12/ReadyforWorkFullReport.pdf.

exacerbated by traffic congestion and greatly degrade air quality, particularly near large roadways, where heavy-duty vehicles are most concentrated.⁴¹ Individuals living near major roads are at an increased risk for health problems including: difficulty breathing, coughing and sore throats, damaged and inflamed airways, lung diseases like asthma, emphysema, and chronic bronchitis, chronic obstructive pulmonary disease, and lung infection due to localized pollutants like ozone and particulate matter.⁴² In fact, vehicle pollution leads to thousands of premature deaths each year.⁴³ These harmful health impacts are often experienced in low-income communities and communities of color, which are disproportionately sited near major trucking routes.⁴⁴ According to one study, such communities experience an

⁴¹ Kai Zhang and Stuart Batterman, *Air pollution and health risks due to vehicle traffic*, SCI. TOTAL ENV'T (April 2015),

https://pmc.ncbi.nlm.nih.gov/articles/PMC4243514/; *Major Freight Corridors*, U.S. Dep't. of Transp. (2022),

https://ops.fhwa.dot.gov/freight/freight_analysis/freight_story/major.htm.

⁴² *Mobile Source Pollution*, U.S. ENV'T. PROTECTION AGENCY, <u>https://www.epa.gov/mobile-source-pollution/learn-about-how-mobile-source-pollution-affects-your-health</u> (last accessed Jan. 14, 2024).

⁴³ Calvin Arter et al., *Mortality-based damages per ton due to the on-road mobile sector in the Northeastern and Mid-Atlantic U.S. by region, vehicle class and precursor*, 16 ENV'T RES. LETT., June 2021,

https://iopscience.iop.org/article/10.1088/1748-9326/abf60b.

⁴⁴ Mary Angelique G. Demetillo et al., *Space-Based Observational Constraints on NO2 Air Pollu8on Inequality From Diesel Traffic in Major US Cities*, 48 GEOPHYSICAL RSCH. LETTERS 17 (Aug. 25, 2021), https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021GL094333.

average of 28 percent more nitrogen dioxide pollution than higher-income, majoritywhite areas, largely driven by emissions from heavy-duty trucks.⁴⁵

With higher traffic congestion in urban areas, these harms are amplified for *amici*'s members. For example, the South Bronx neighborhood of New York City, a disadvantaged community situated next to multiple major roadways and industrial hubs, experiences high air pollution levels due to vehicle traffic and has one of the highest asthma rates in the country.⁴⁶ Moreover, heavy-duty vehicle traffic patterns are changing rapidly as e-commerce companies race to build warehouse distribution facilities near their customers. These facilities are the sites of significant freight vehicle traffic, and are a major driver of emissions of GHGs and local air pollution, traffic congestion, and harmful health impacts, especially in low-income communities and communities of color.⁴⁷ To put it another way, cities experience significant heavy-duty vehicle traffic, which emits local air pollution that sickens and even kills their residents, but the authority to address the source of these harms

⁴⁵ *Id*.

⁴⁶ Air pollution and public health in the South Bronx, South Bronx Unite, <u>https://www.southbronxunite.org/air-pollution-and-public-health</u> (last accessed Nov. 19, 2024).

⁴⁷ Aileen Nowlan, *Making the Invisible Visible: Shining a Light on Warehouse Truck Air Pollution*, ENVT'L DEF. FUND (Apr. 2023), <u>https://globalcleanair.org/wp-content/blogs.dir/95/files/2023/04/EDF-Proximity-Mapping-2023.pdf</u>.

rests with the federal government. EPA's HDV Rule addresses diesel pollution from trucks in a way that local governments cannot.

II. Unduly Limiting EPA's Regulatory Authority Would Frustrate Cities' Efforts to Address and Adapt to Climate Change

Cities not only experience climate impacts – they also lead climate adaptation and mitigation efforts nationwide. Reducing transportation emissions is essential to these efforts, as transportation sector emissions, and specifically heavy-duty vehicle emissions, represent a substantial portion of U.S. GHG emissions.⁴⁸ The HDV Rule supports cities in doing just that; robust standards for reducing vehicle emissions limit the sector's contribution to global climate change and localized air pollution, thus lessening the cost to cities to adapt and bolstering cities' own efforts to lessen climate pollution.

More than 350 mayors have adopted the Paris Agreement goals for their cities and 125 cities have pledged to transition to 100% clean energy.⁴⁹ Under the landmark 2022 Inflation Reduction Act (IRA),⁵⁰ eighty-one of the nation's largest metropolitan areas received grants to create climate action plans that include specific

⁴⁸ DOT Report to Congress: Decarbonizing U.S. Transportation, U.S. DEP'T OF TRANSP. (July 2024), <u>https://www.transportation.gov/sites/dot.gov/files/2024-07/Decarbonizing%20U.S.%20Transportation_July%202024.pdf</u>.

⁴⁹ *City Climate Policy*, CTR. FOR CLIMATE & ENERGY SOLUTIONS, <u>https://www.c2es.org/content/city-climate-policy/</u>.

⁵⁰ Pub. L. No. 117-169 (2022).

priority measures to reduce climate pollution in their communities.⁵¹ Yet, local governments have limited control over what circumstances are imposed on them from outside their jurisdiction, and GHG emissions from sources beyond municipal regulatory authority – such as heavy-duty vehicle pollution – still impact people, infrastructure, and resources inside them.

For these reasons, cities have previously supported strong EPA regulations for vehicle emissions. In 2018, elected officials representing more than 50 cities in over 25 states signed onto a declaration to challenge the first Trump administration's decisions to roll back national clean car standards, writing that "a clean, efficient, and high-performance vehicle fleet is an essential component" of our transportation systems,⁵² and in 2024, a network of mayors and local government officials wrote to EPA urging the agency to adopt ambitious standards for this rule. In particular, 75 Mayors urged the EPA to finalize "the strongest proposed [HDV] rule," emphasizing that it would "protect public health, address the climate crisis, and align with the heavy-duty vehicle industry's commitment to transition to zero-emission

⁵¹ Priority Climate Actions Plans for States, MSAs, Tribes, and Territories, U.S. ENV'T PROTECTION AGENCY, <u>https://www.epa.gov/inflation-reduction-act/priority-climate-action-plans-states-msas-tribes-and-territories#state-msa</u> (last accessed Jan. 14, 2024).

⁵² Local Leaders' Clean Car Declaration, AMERICA'S PLEDGE (2018), https://www.americaspledgeonclimate.com/news/state-attorneys-general-mayorssign-declaration-strongly-oppose-trump-administration-decision-roll-back-cleancar-standards/.

vehicles.⁵³ Section 202 of the Clean Air Act is a vital tool available to the federal government to regulate vehicle emissions, support local initiatives to deliver climate solutions in the transportation sector. Without thorough federal support in the form of the HDV Rule, local governments will bear ever increasing costs in the coming years and their actions to expand the adoption of EVs and associated infrastructure will be harmed.

A. Adaptation Efforts

Across the nation, cities are taking action to protect their residents from the most severe impacts of climate change: in 2023, U.S. cities reported 879 separate climate adaptation actions.⁵⁴ In some states, cities are the only level of government to implement adaptation strategies. For example, both Nebraska and the City of Omaha submitted Priority Climate Action Plans under an EPA program, but while Omaha's plan centers adaptation as a key priority, the State of Nebraska's does not use the word "adaptation" a single time.⁵⁵

⁵³ 75 Mayors Urge President Biden to Finalize the Strongest Possible EPA Heavy Duty Vehicle Rules, U.S. CLIMATE MAYORS (Feb. 5, 2024), https://tinyurl.com/5are6d5x.

 ⁵⁴ 2023 – Cities Adaptation Actions, CDP, <u>https://data.cdp.net/Adaptation-Actions/2023-Cities-Adaptation-Actions/4ubf-r8fc/about_data</u> (last accessed Jan. 13, 2025) (data filtered for U.S. cities).

⁵⁵ City of Omaha, *Priority Climate Action Plan* (Mar. 2024), <u>https://www.epa.gov/system/files/documents/2024-03/omaha-council-bluffs-ne-msa-priority-climate-action-plan.pdf;</u> State of Nebraska, *Priority Climate Action*

Climate adaptation costs to cities are significant, but the costs of *not* adapting would be far higher. Phoenix, Arizona, a city that experiences dangerously high temperatures, created the nation's first Office of Heat Response and Mitigation to protect residents from the hazard of urban heat.⁵⁶ Miami, which routinely clocks upper ninety degree temperatures, appointed its first Chief Heat Officer in 2022, and subsequently released its Extreme Heat Action Plan to prepare residents for and protect them from extreme heat events.⁵⁷ Annapolis, Maryland developed a first-inthe-nation Cultural Resources Hazard Mitigation Plan in 2018 to mitigate climate impacts on important cultural and historic landmarks,⁵⁸ and the Eastern Shore Climate Adaptation Partnership has brought together local governments from across the Eastern Shore to prepare for climate impacts.⁵⁹ Chicago, Illinois, recognizing the importance of "tak[ing] action to minimize the impact of change we can no longer avoid[,]" embraced five adaptation objectives in its 2022 Climate Action Plan to

⁵⁶ See City of Phoenix, Arizona, Office of Heat Response and Mitigation, <u>https://www.phoenix.gov/heat</u> (last accessed Sept. 20, 2024).

⁵⁷ City of Miami, Florida, *Heat Action Plan* (2022),

Plan (Mar. 2024), <u>https://www.epa.gov/system/files/documents/2024-03/nebraska-pcap.pdf</u>.

https://www.miamidade.gov/environment/library/2022-heat-action-plan.pdf.

 ⁵⁸ See Weather It Together: A Cultural Resource Hazard Mitigation Plan for the City of Annapolis (2018), https://bit.ly/3re60rG; Resilient People, EASTERN SHORE LAND CONSERVANCY, https://bit.ly/3fkQR2d (last accessed Jan. 14, 2025).
 ⁵⁹ Resilient People, supra note 58.

help guide the city's response to impacts such as flooding, extreme winter events, and tornadoes.⁶⁰

Cities will need to invest billions of dollars to properly equip themselves for future climate impacts.⁶¹ And without investing in adaptation measures, the costs of climate change could reach into the *hundreds* of billions of dollars by the end of the century.⁶² Cities' adaptation costs are high, and they stand to turn stratospheric absent an effective federal framework for limiting GHG emissions from vehicles. In promulgating the HDV Rule, EPA appropriately exercised its Clean Air Act section 202 authority to protect communities across the country from ever-worsening climate harms.

B. Mitigation Efforts

Alongside EPA rules like the HDV Rule, local governments of all sizes around the U.S. are working to reduce their own contributions to global GHG pollution. As the transportation sector is the first or second largest source of GHG pollution in essentially every U.S. city, reducing transportation sector emissions is

⁶⁰ City of Chicago, *Climate Action Plan* (2022), <u>https://www.chicago.gov/content/dam/city/sites/climate-action-plan/documents/Chicago-CAP-071822.pdf</u>.

⁶¹ Crimmins et al., *supra* note 3, at 31-24. ⁶² *Id*.

vital to limit GHG emissions to the levels needed.⁶³ Local interventions to reduce vehicle emissions include procuring electric vehicle (EV) fleets, upgrading public and active transportation infrastructure, and developing EV charging networks. In addition, local governments are increasingly seeking to reduce GHG emissions in an equitable manner, emphasizing the reduction of local pollutants that result from vehicle emissions in disadvantaged communities. Though cities' efforts to reduce local GHG emissions are ambitious and wide-ranging, they only go so far as municipal jurisdiction does. Federal action in the form of EPA's HDV Rule is necessary to get close to the economy-wide GHG emission reductions needed to stave off the worst impacts of climate change.

Hundreds of local governments have made ambitious and specific GHG reduction commitments, many of them including targets to reach net zero emissions by 2050 or sooner.⁶⁴ To achieve their climate goals, cities' efforts to reduce operational and community-wide GHG emissions anticipate electrification of most

⁶³ See Sources of Greenhouse Gas Emissions, U.S. ENV'T. PROTECTION AGENCY, <u>https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions;</u> See, e.g., *MSA PCAPs and Grantee Information*, U.S. ENV'T. PROTECTION AGENCY, <u>https://www.epa.gov/inflation-reduction-act/priority-climate-action-plans-states-msas-tribes-and-territories#state-msa</u> (In each Priority Climate Action Plan (PCAP), municipal statistical areas inventoried their GHG emissions by sector, with the transportation sector representing the largest or second large sector-source of GHG emissions) (last accessed Jan. 13, 2024).
⁶⁴ See, e.g., List of Participants, Race to Zero,

https://climatechampions.unfccc.int/whos-in/ (last accessed Jan. 14, 2024) (data filtered to U.S. cities).

communities' highest or second highest emitting sector: transportation.⁶⁵ The transportation sector must reach near total electrification if cities are to achieve their GHG emissions reduction targets. Cities are therefore steadily electrifying their municipal fleets with crucial federal funding provided by the IRA⁶⁶ and the Bipartisan Infrastructure Law (BIL),⁶⁷ and in August 2024, a network of nearly 350 mayors committed to electrifying at least 50% of their municipal fleets by 2030.⁶⁸ In other words, cities are already anticipating changes consistent with and even more ambitious than the HDV Rule.

Rapid decarbonization of the transportation sector is necessary to reach cities' climate commitments, and electrifying heavy-duty vehicles can contribute to those efforts while mitigating a range of environmental and public health risks.⁶⁹ Local

⁶⁵ See supra note 63.

⁶⁶ See, e.g., CTA Receives \$25 Million to Advance its Electric Bus Fleet, Chicago Transit Authority (June 27, 2023), <u>https://www.transitchicago.com/cta-receives-25-million-to-advance-its-electric-bus-fleet-/</u>.

⁶⁷ See, e.g., Biden-Harris Administration Announces \$635 Million in Awards to Continue Expanding Zero-Emission EV Charging and Refueling Infrastructure, U.S. DEP'T OF TRANSP. (Jan. 10, 2025),

https://highways.dot.gov/newsroom/investing-america-biden-harris-administrationannounces-635-million-awards-ev-charging.

⁶⁸ Climate Mayors Announces Major New Commitment from Nearly 350 Mayors to Accelerate US Electric Vehicle Transition, CLIMATE MAYORS (Aug. 13, 2024), https://www.climatemayors.org/post/electrify50-ev-announcement.

⁶⁹ Electrifying Heavy-Duty Vehicles Will Benefit the U.S. Economy, Environment, and Public Health, U.S. JOINT ECON. COMM. (Apr. 4, 2024),

https://www.jec.senate.gov/public/index.cfm/democrats/2024/4/electrifying-heavyduty-vehicles-will-benefit-the-u-s-economy-environment-and-public-health.

governments are participating in and preparing for this transition by procuring EV fleets, investing in EV charging infrastructure, and enacting policies that incentivize private property owners to do so. Investment in EVs and EV charging infrastructure is well under way in dozens of cities. EV fleet and charging infrastructure purchases by municipalities are surging – Chicago recently committed \$42 million to electrify its fleet;⁷⁰ Columbus, Ohio has procured over 200 EVs for its municipal fleet;⁷¹ Denver, Colorado is doubling its electric school bus fleet to over 100 electric buses;⁷² Madison, Wisconsin, boosted by IRA benefits, reached 100 EV fleet vehicles in 2023;⁷³ and through a mix of federal funding, New York City purchased 180 electric buses in 2024 and will build a freight-focused electric truck and vehicle charging depot,⁷⁴ to name just a few. Cities are also supporting the build-out of vehicle

https://coloradosun.com/2023/09/01/colorado-education-electric-school-buses/.

⁷⁰ Office of the Mayor, *City of Chicago Commits \$42M to Municipal Fleet Electrification Initiative* (Apr. 21, 2023),

https://www.chicago.gov/city/en/depts/mayor/press_room/press_releases/2023/apri l/MunicipalFleetElectrificationInitiative.html.

⁷¹ Sarah Wessler, *Cities can play a key role in the transition to electric vehicles* (Aug. 30, 2021), <u>https://yaleclimateconnections.org/2021/08/cities-can-play-a-key-role-in-the-transition-to-electric-vehicles/</u>.

⁷² Erica Breunlin, 67 more electric school buses are coming to Colorado, but diesel buses still dominate roads, COLORADO SUN (Sep. 1, 2023),

⁷³ Dean Mosiman, *Madison's electric fleet is growing fast, as the city aims to lead the nation*, WISC. ST. J. (Oct. 27, 2023),

https://madison.com/news/local/government-politics/electric-vehicles-madison-fleet/article 57f83b04-72b8-11ee-89e4-a7abe87d899d.html.

⁷⁴ City of New York, Mayor Adams Announces \$77 Million in Federal Grants to Electrify School Buses, Build First-in-the-Nation Electric Truck Charging Depot

charging networks. In Arizona, Phoenix has a goal of installing 500 public charging stations by 2030,⁷⁵ while Milwaukee, Wisconsin, received nearly \$15 million in federal funding to install EV chargers at 53 sites citywide.⁷⁶ Detroit is continuing to develop sophisticated highly visible electric vehicle corridors with the help of a \$23.4 million federal Charging and Fueling Infrastructure grant.⁷⁷ Local governments across the country are finding that electrifying their fleets and building charging networks are smart, cost-effective investments to reduce transportation sector emissions.⁷⁸

Petitioners, on the other hand, overstate the level of practical difficulty of adopting EV fleets as well as the cost-prohibition of that transition. To be sure, pursuant to the National Electric Vehicle Infrastructure Program, every state in the

 ⁷⁵ City of Phoenix, *Transportation Electrification Action Plan* (2022), https://www.phoenix.gov/sustainabilitysite/MediaAssets/sustainability/electricvehicles/Draft%20Transportation%20Electrification%20Action%20Plan.pdf.
 ⁷⁶ Number of Publicly Available Electric Vehicle Chargers Has Doubled Since Start of Biden-Harris Administration, U.S. DEP'T OF TRANSP. (Aug. 27, 2024), https://highways.dot.gov/newsroom/investing-america-number-publicly-availableelectric-vehicle-chargers-has-doubled-start.

⁷⁷ City of Detroit Awarded \$23.4 Million in Federal Funding for Electric Vehicle Charging Infrastructure Program, CITY OF DETROIT (Aug. 30, 2024), <u>https://detroitmi.gov/news/city-detroit-awarded-234-million-federal-funding-</u> electric-vehicle-charging-infrastructure-program.

⁽Mar. 18, 2024), <u>https://www.nyc.gov/office-of-the-mayor/news/206-24/mayor-adams-77-million-federal-grants-electrify-school-buses-build#/0</u>.

⁷⁸ See Drew Veysey and Hannah Thonet, *Businesses and Local Governments: It's Never Been a Better Time to Electrify Your Vehicle Fleet*, RMI (Oct. 24, 2024), <u>https://rmi.org/businesses-and-local-governments-its-never-been-a-better-time-to-electrify-your-vehicle-fleet/</u>.

U.S. has already developed an electric-vehicle buildout plan and now has access to billions of federal dollars to help build EV chargers across 75,000 miles of highways.⁷⁹ Additionally, more local building codes include EV charging or EVreadiness requirements, including in New York City;⁸⁰ Seattle;⁸¹ Oakland, California:⁸² Atlanta:⁸³ and Fort Collins, Colorado.⁸⁴ Other cities meanwhile require or incentivize electric vehicle chargers through their zoning codes; Salt Lake City mandates one electric vehicle charging space for every 25 parking spaces in new multi-family buildings.⁸⁵ Chenango, New York simplifies deployment by permitting EV charging stations as an accessory use in all zoning districts.⁸⁶ These are just a few of the countless ways cities are investing in EVs and preparing for an economywide adoption of EVs. If this Court were to take Petitioners at face value, one would expect to see cities actively working against EV proliferation, but the opposite is true: cities, propelled with funding from the IRA and BIL,⁸⁷ are putting more and

⁷⁹ All Fifty States Plus D.C. and Puerto Rico Greenlit to Move EV Charging Networks Forward, Covering 75,000 Miles of Highway, U.S. DEP'T OF TRANSP. (Sept. 27, 2022), <u>https://www.transportation.gov/briefing-room/historic-step-all-fifty-states-plus-dc-and-puerto-rico-greenlit-move-ev-charging</u>.

⁸⁰ City of New York, N.Y. Intro. No. 0017-2024 (2024).

⁸¹ City of Seattle, Ore. Elec. Code § 625.27.

⁸² City of Oakland, Cal. Code § 15.04.3.11010.

⁸³ City of Atlanta, Ga. Ord. 17-O-1654 (2017).

⁸⁴ City of Fort Collins, Colo. Code § 5-30-E3401.5 (2019).

⁸⁵ City of Salt Lake City, Utah, Code Ch. 21A.44.040.B (2019).

⁸⁶ Town of Chenango, N.Y. Code § 74B-3.

⁸⁷ See Pub. L. No. 117-58 (2021).

more effort into EV adoption and infrastructure to cost-effectively reduce emissions and localized pollution.

Cities' efforts to reduce emissions of GHGs and other harmful air pollutants take on particular importance in light of the disproportionate health impacts of air pollution presently and historically experienced by disadvantaged communities. The adverse public health consequences from air pollution, and the increased exposure of these communities, are well-documented.⁸⁸ In promulgating the HDV Rule, EPA addressed environmental justice concerns by "meaningful[ly]" involving environmental justice groups in the rulemaking process.⁸⁹ While EPA's HDV Rule stands to result in large reductions of GHG emissions and local pollution, disadvantaged communities near major roadways – often truck routes – will particularly benefit from the reduction in local pollution from the HDV Rule.⁹⁰ In so doing, the HDV Rule buttresses local governments' efforts to address climate change in an equitable manner responsive to the needs of disadvantaged communities.

⁸⁸ See Disparities in the Impact of Air Pollution, AM. LUNG ASS'N, <u>https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities</u>; *EPA Research: Environmental Justice and Air Pollution*, U.S. ENV'T PROTECTION AGENCY, <u>https://www.epa.gov/ej-research/epa-research-environmental-justice-and-air-pollution</u> (last accessed Jan. 13, 2024).
⁸⁹ See 89 Fed. Reg. 29,440, 29,736.
⁹⁰ Id. at 29,697.

III. EPA Has Authority to Promulgate the HDV Rule, and Doing So Fulfills Its Obligations of Federal Leadership under Section 202 that Support Cities' Climate Efforts

EPA's section 202(a) mandate is to set technology-based standards for classes of vehicles that cause or contribute to air pollution that endangers the public health or welfare. 42 U.S.C. § 7521(a)(1)–(2). The HDV Rule falls squarely within EPA's regulatory authority by setting GHG and other pollutant emission limitations based on a broad range of emission-reducing technologies. As Respondent EPA explains, the HDV Rule does not implicate a major question. Resp't Br. 57–73.

Not only is the HDV Rule clearly within EPA's authority, it is also critical to ensuring the federal government upholds its leading role in mobile source regulation within the Clean Air Act's statutory framework. The Clean Air Act's opening provision states, "air pollution brought about by . . . the increasing use of motor vehicles, has resulted in mounting dangers to the public health and welfare" and "Federal financial assistance and leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution." 42 U.S.C. § 7401. To preserve EPA's role in this framework, EPA must set effective standards for GHG emission reductions pursuant to its statutory mandates. *Amici* and their member cities rely on this steadfast "Federal . . . leadership," *id.*, to complement their adaptation and mitigation efforts as they shoulder the heaviest burdens of the climate crisis.

Having a capable federal partner is all the more important in the context of mobile sources because states and local governments have limited regulatory authority: section 209(a) broadly preempts states from adopting vehicle air pollution standards that are different from the federal standards (with a limited exception through the section 209(b) waiver). 42 U.S.C. § 7543(a), (b). Yet, cities are uniquely harmed by GHG and other pollutant emissions from heavy-duty vehicles—for example, in densely populated environmental justice communities abutting highways.⁹¹ Cities have an obligation to protect those communities but are constrained in their authority to do so. Thus, EPA must fulfill its statutory mandate to set protective standards, as it has done by promulgating the HDV Rule.

CONCLUSION

For cities across the country, EPA's HDV Rule represents an essential complement to local efforts to mitigate and adapt to climate change, and is critical to lessening the burden to *amici*'s members in addressing damage from climate events. EPA was well within its Clean Air Act authority in promulgating the HDV Rule, which protects cities and their residents from pollution that local governments do not have sufficient authority to regulate themselves. Accordingly, *amici* urge the

⁹¹ TRAFFIC-RELATED AIR POLLUTION 498–501 (Haneen Khreis et al. eds., 2020), https://www.sciencedirect.com/science/article/pii/B978012818122500020X.

Court to uphold EPA's authority to regulate GHG emissions from heavy-duty vehicles through the HDV Rule.

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing brief complies with the type-volume limitations set forth in D.C. Circuit Rule 32(e)(3) and Federal Rules of Appellate Procedure 32(a)(7)(B)(i) and 29(a)(5) because this brief contains 6,397 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and D.C. Circuit Rule 32(e)(1). The foregoing brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Office Word 2010 in 14-point Times New Roman font.

/s/ Michael Burger MICHAEL BURGER

CERTIFICATE OF SERVICE

I hereby certify that on this 21st day of January 2025, I caused a true and correct copy of the foregoing to be electronically filed with the Clerk of the Court of the United States Court of Appeals for the District of Columbia Circuit by using the CM/ECF system. I certify that all participants in the case are registered CM/ECF users, and that service will be accomplished by the CM/ECF system.

> /s/ Michael Burger MICHAEL BURGER