ORAL ARGUMENT NOT YET SCHEDULED

No. 24-1087 (and consolidated cases)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

COMMONWEALTH OF KENTUCKY, *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. 27,842 (Apr. 18, 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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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: *Amici* Center for Environmental Accountability, Growth Energy, Pacific Legal Foundation, The Buckeye Institute, and The International Council on Clean Transportation & The University of California, Davis Institute of Transportation Studies.

B. Ruling Under Review

Under review is the action, "Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles," 89 Fed. Reg. 27842 (Apr. 18, 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.

/s/ Michael Burger
MICHAEL BURGER

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GLOSSARY OF TERMS

CPRG	Climate Pollution Reduction Grants
EPA	United States Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
IRA	Inflation Reduction Act
NLC	National League of Cities
NOAA	United States National Oceanic and Atmospheric Administration
Vehicle Standards	2024 Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, 89 Fed. Reg. 27,842 (Apr. 18, 2024)

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 de-carbonization 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 strong interest in the proper interpretation and implementation of the Clean Air Act and ensuring appropriate regulation of

greenhouse gas (GHG) emissions from light- and medium-duty vehicles, the largest source of transportation sector greenhouse gas emissions and a significant source of 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 motor 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

Cities and other forms of municipal government – large and small, urban and rural, in every region of the country – are championing the response to climate change. In response to the catastrophic effects of the climate crisis, cities protect their residents through a host of actions that aim to reduce GHG emissions and health-harming 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. 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 2024 Vehicle Standards constitute an electric vehicle mandate 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, cost-effective manner, depriving cities of a critical tool to meet their emissions reduction targets and protect and improve public health.

Cities are disproportionately harmed by the increasingly severe impacts of climate change. Not only is the toll on human life great, but so too are the associated costs of climate change, threatening the health of *amici*'s members and their residents and costing cities billions of dollars a year. Transportation emissions contribute the most to climate change out of any sector and localized pollution from vehicle emissions uniquely harms urban residents. Simultaneously, 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 strong vehicle standards, the impacts from and costs associated with climate change will become progressively more relentless.

These standards also preserve the strong 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 strong regulatory partner to address the acute harms of GHG emissions and other forms of vehicle tailpipe pollution borne by urban communities and to bolster city climate efforts. 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 light- and medium- 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, and Lead Efforts to Respond to, the Climate Crisis, and Climate Impacts Will Increase Without Strong EPA Vehicle Standards

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] In this way,

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

cities and other 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 2024 Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, 89 Fed. Reg. 27,842 (Apr. 18, 2024) (hereinafter referred to as the "Vehicle Standards"). *Amici* and their members urge this Court to uphold the Vehicle Standards 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,

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

higher prevalence of infectious diseases, and more frequent and severe storms.[3] The multiple and compounding effects of climate change can amplify cities' existing 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] Looming beyond the frequent serious damage and disruption of nuisance flooding is the extraordinary threat of destructive storm surges, similar or more severe than the ones that accompanied Hurricanes Helene, Ida, Maria, Isabel, Katrina, Rita, Harvey, Florence, Michael, Idalia, Ophelia, and Sandy. In 2023

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[3] *See* Allison R. Crimmins et al., U.S. Glob. Change Rsch. Program, Fifth National Climate Assessment 12-12 (2023), https://rb.gy/qtarzq.
[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), https://sealevel.globalchange.gov/internal_resources/756/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf.

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 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] Moreover, non-coastal cities that are not at direct risk from sea level rise will still feel its effects; experts project roughly thirteen million coastal residents in the U.S. may be displaced to non-coastal areas by 2100, placing increased demand on municipal infrastructure.[12]

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[8] *Hurricane Costs*, NOAA Office for Coastal Management, https://rb.gy/gxnhzo (last visited Sept. 15, 2024).
[9] Jonathan Belles et al., *Hurricane Milton Brought Devastation Across Central Florida*, THE WEATHER CHANNEL (Oct. 24, 2024), https://weather.com/storms/hurricane/news/2024-10-09-hurricane-milton-forecast-landfall-florida-storm-surge-wind.
[10] Kelly A. Burks-Copes et al., *Risk Quantification for Sustaining Coastal Military Installation Assets and Mission Capabilities* 9 (2014), https://rb.gy/7bvoyo.
[11] *See* D. Dodman et al., *Cross-Chapter Paper 2: Cities and Settlements by the Sea* in IPCC: Sixth Assessment Report 2022.
[12] *See* Caleb Robinson et al., *Modeling Migration Patterns in the USA Under Sea Level Rise*, PLoS ONE, Jan. 2020, https://rb.gy/axq3lh.

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.[13] For example, Detroit, Michigan, despite having spent hundreds of millions of dollars to improve its stormwater system, is still being deluged with flooding.[14] Fully upgrading Detroit's stormwater systems would cost billions of dollars.[15] 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.[16] Investments to overhaul existing storm sewers and other systems to adapt to increases in precipitation volume is an unexpected financial burden of hundreds of millions or billions of dollars that cities like Moorhead, a relatively smaller city

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

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

[15] *Id*.

[16] 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.

with a population of 45,000, must bear.[17] There appears to be no relief: Asheville, North Carolina is still reeling from and assessing the damage caused by September 2024's Hurricane Helene, which left residents without potable water for 53 days.[18]

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."[19] As temperatures continue to rise, cities that 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.[20] Heat waves are the deadliest

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[17] *Id*.

[18] *See* Corey Davis, *Rapid Reaction: Historic Flooding Follows Helene in Western NC*, North Car. State Climate Office (Sept. 30, 2024), https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flooding-follows-helene-in-western-nc/ *and* Eduardo Medina, *Asheville Gets Drinkable Tap Water Back, 53 Days After Hurricane Helene*, N.Y. TIMES (Nov. 19, 2024), https://www.nytimes.com/2024/11/19/us/asheville-water-hurricane-helene.html.

[19] Julie Arrighi et al., *Climate Change and the Escalation of Global Extreme Heat: Assessing and Addressing the Risks* (May 28, 2024), https://assets.ctfassets.net/cxgxgstp8r5d/5sjPWtBWuPk56xVZKuuL3g/fe050dd8d61e8b2a7e3a315a4b75b22f/Climate_Change_and_the_Escalation_of_Global_Extreme_Heat_Climate_Central.pdf.

[20] *See Shifting U.S. Cities*, CLIMATE CENTRAL (July 13, 2022), https://www.climatecentral.org/climate-matters/shifting-u-s-cities.

type of extreme weather, leading to thousands of deaths each year.[21] Because urban "heat islands" heat up faster and stay hotter longer than suburban and rural areas, city dwellers are disproportionately harmed by heat waves.[22] Heat-related deaths and illnesses are projected to increase, causing additional damages, injuries, and deaths in cities.[23] 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.[24] The summer of 2024, the earth's hottest on record, saw stifling heat domes across the country.[25] In July, temperatures soared in Portland, Oregon, sustaining record-breaking triple-digit temperatures for multiple days, resulting in dozens of deaths in

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[21] *See Austyn Gaffney*, *Heat Deaths Have Doubled in the U.S. in Recent Decades, Study Finds*, N.Y. TIMES (Aug 27, 2024), https://www.nytimes.com/2024/08/27/climate/heat-deaths.html.

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

[23] Crimmins et al., *supra* note 3, at 15-6.

[24] *See supra* note 19.

[25] 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-earths-hottest-on-record.

Portland and cities across the Pacific Northwest, California, and Nevada.[26] Phoenix recorded 113 consecutive days of 100-degree weather.[27]

Extreme heat often stresses urban infrastructure to the breaking point, like in Texas, where one of the multiple 2024 heat waves buckled roads, burst water pipes, and compromised air conditioners.[28] Due to extreme heat, grid operators in Texas and New York have been forced to ask city residents to reduce energy usage because of high energy demand and low reserves.[29] When extreme heat stresses the power system into failure, it can have cascading effects – "transportation, water and wastewater treatment, telecommunications, health services, and many other economic activities are also disrupted."[30]

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[26] *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/.

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

[28] Acacia Coronado and Juan Lozano, *Deadly heat wave in the central US strains infrastructure, transportation and the Texas power grid*, AP NEWS (Aug. 23, 2023) https://apnews.com/article/summer-heat-wave-fd19c3995992c93121ef4baedcbcf07e.

[29] Barbara Russo-Lennon, *Latest NYC heat wave: New Yorkers urged to conserve energy as temperatures will feel like over 100 degrees this week*, AMNY (July 15, 2024), https://www.amny.com/news/nyc-heat-wave-july-15-2024-energy-conservation/.

[30] Crimmins et al., *supra* note 3, at 18-6.

Anthropogenic climate change is also increasing the frequency, size, and severity of wildfires in the United States.[31] With more than 55,550 wildfires reported in the U.S. in 2023,[32] 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.[33] Western cities like Los Angeles, California; Eugene, Oregon; Salt Lake City, Utah; and Denver, Colorado are ranked among the most polluted cities in the 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.[34] While the fires themselves are generally concentrated in the Western United States, cities across the country feel their effects. Smoke from fires that originate in Canada blows south, decreasing air

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[31] 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; 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.

[32] *Wildland Fire Summary and Statistics Annual Report 2023*, NAT. INTERAGENCY COORDINATION CTR. (2023), https://www.nifc.gov/sites/default/files/NICC/2-Predictive%20Services/Intelligence/Annual%20Reports/2023/annual_report_2023_0.pdf.

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

[34] *State of the Air: 2024 Report*, AMERICAN LUNG ASS'N. (2024), https://www.lung.org/getmedia/dabac59e-963b-4e9b-bf0f-73615b07bfd8/State-of-the-Air-2024.pdf.

quality in cities like Philadelphia, Pennsylvania; New York City; and Hartford, Connecticut, to name just a few, and exposing their residents to wildfire smoke.[35] The fall of 2024, however, saw a record level of wildfire risk in the Eastern United States fueled by historic droughts in the region.[36] Exposure to wildfire smoke can damage the heart, lungs, and brain,[37] and exposure during pregnancy correlates with pre-term births, low birth weights, and negative maternal health outcomes.[38] As climate change continues to increase wildfire smoke exposure in cities across the country, exposure to smoke may lead to mortalities on the scale of the temperature-related mortalities described above,[39] and may create compound events with other climate change impacts like heat waves.[40]

In addition to the aforementioned climate impacts that vehicle sector emissions substantially contribute to, cities and their residents across the country

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[35] *See* Gloria Oladipo, *New York City faces lower air quality from Canada wildfires*, THE GUARDIAN (Oct. 2, 2023), https://www.theguardian.com/us-news/2023/oct/02/new-york-city-air-quality-smoke-canada-wildfires.

[36] Haley Thiem, *Unusual fire risk across the Northeast in fall of 2024*, NOAA (Nov. 21, 2024), https://www.climate.gov/news-features/event-tracker/unusual-fire-risk-across-northeast-fall-2024.

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

[38] 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.

[39] 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.

[40] IPCC AR6 SR, *supra* note 22, at 51.

experience serious and direct harms to human health from pollutants emitted by vehicle tailpipes. Vehicle emissions are exacerbated by traffic congestion and greatly degrade air quality, particularly near large roadways.[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] 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, experiences high air pollution levels due to vehicle traffic and has some of the highest asthma rates in the country.[44]

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[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/.

[42] *Mobile Source Pollution*, U.S. ENV'T. PROTECTION AGENCY, https://www.epa.gov/mobile-source-pollution/learn-about-how-mobile-source-pollution-affects-your-health (last accessed Nov. 19, 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] *Air pollution and public health in the South Bronx*, South Bronx Unite, https://www.southbronxunite.org/air-pollution-and-public-health (last accessed Nov. 19, 2024).

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.[45] The average annual losses to residential homes due to flooding are projected to increase 67% to $34 billion over the next thirty years.[46] By 2050, over $100 billion worth of coastal property will likely be below sea level.[47] 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.[48] Furthermore, the monetized health and climate change damages from on-road vehicle emissions in the U.S. is extraordinary, reaching $260 billion in 2017 alone, according to one

[45] Crimmins et al., *supra* note 3, at 1-17.
[46] *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), https://www.whitehouse.gov/wp-content/uploads/2023/03/climate_budget_exposure_fy2024.pdf.
[47] *Climate Change Impacts on Coasts*, U.S. ENV'T. PROTECTION AGENCY, https://www.epa.gov/climateimpacts/climate-change-impacts-coasts (last accessed Sept. 24, 2024).
[48] *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), https://doi.org/10.1007/s10584-021-03179-w.

estimate.[49] All of 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 Vehicle Standards are a strong regulatory tool that will help cities mitigate or avoid the worst of climate and localized air pollution impacts.

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 in particular, light- and medium-duty vehicle emissions, represent a substantial portion of municipal GHG emissions.[50] The Vehicle Standards support cities in doing just that; robust standards for reducing vehicle emissions limit the sector's contribution to global climate

[49] 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, https://pmc.ncbi.nlm.nih.gov/articles/PMC8713776/.

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

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.[51] Under the landmark 2022 Inflation Reduction Act (IRA),[52] eighty-one of the nation's largest metropolitan areas received grants under the Climate Pollution Reduction Grants (CPRG) program to create climate action plans that include specific priority measures to reduce climate pollution in their communities.[53] 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 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 Trump administration's decisions to roll back national clean car standards, writing that "a clean, efficient, and high-

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[51] *City Climate Policy*, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/content/city-climate-policy/ (last accessed Sept. 19, 2024).
[52] Pub. L. No. 117-169 (2022).
[53] *Priority Climate Actions Plans for States, MSAs, Tribes, and Territories*, U.S. ENV'T PROTECTION AGENCY, https://www.epa.gov/inflation-reduction-act/priority-climate-action-plans-states-msas-tribes-and-territories#state-msa (last accessed Sept. 19, 2024).

performance vehicle fleet is an essential component" of our transportation systems, and in 2023 a network of mayors and local officials wrote to EPA urging the agency to adopt ambitious standards for this rule.[54] In particular, the letter elaborates that "[a]mbitious federal standards, coupled with actions we are taking in our cities and towns to accelerate the use of clean vehicles, will enable our localities to more quickly cut transportation pollution[.]"[55] 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, and reduce the adaptation costs that local governments will incur over the coming decades and centuries. Without strong federal support in the form of the Vehicle Standards, 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[56] separate

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[54] *EPA: We Need Strong Vehicle Pollution Standards*, SIERRA CLUB, https://www.regulations.gov/comment/EPA-HQ-OAR-2022-0829-0732 (last accessed Dec. 3, 2024).

[55] *Id*.

[56] *2023 – Cities Adaptation Actions*, CDP, https://data.cdp.net/Adaptation-Actions/2023-Cities-Adaptation-Actions/4ubf-r8fc/about_data (last accessed Sept. 20, 2024) (data filtered for U.S. cities).

climate adaptation actions. 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 to EPA under the IRA's CPRG 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.[57]

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.[58] 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.[59] Annapolis, Maryland developed a first-in-the-nation Cultural Resources Hazard Mitigation Plan in 2018 to mitigate climate

[57] City of Omaha, *Priority Climate Action Plan* (Mar. 2024), https://www.epa.gov/system/files/documents/2024-03/omaha-council-bluffs-ne-msa-priority-climate-action-plan.pdf; State of Nebraska, *Priority Climate Action Plan* (Mar. 2024), https://www.epa.gov/system/files/documents/2024-03/nebraska-pcap.pdf.
[58] *See* City of Phoenix, Arizona, *Office of Heat Response and Mitigation*, https://www.phoenix.gov/heat (last accessed Sept. 20, 2024).
[59] City of Miami, Florida, *Heat Action Plan* (2022), https://www.miamidade.gov/environment/library/2022-heat-action-plan.pdf.

impacts on important cultural and historic landmarks,[60] and the Eastern Shore Climate Adaptation Partnership has brought together local governments from across the Eastern Shore to prepare for climate impacts.[61] 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 help guide the city's response to impacts such as flooding, extreme winter events, and tornadoes.[62]

Cities will need to invest billions of dollars to properly equip themselves for future climate impacts.[63] 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.[64] Cities' adaptation costs are high, and they stand to turn stratospheric absent a strong federal framework for limiting GHG emissions from vehicles. In promulgating the Vehicle Standards, EPA appropriately exercised its Clean Air Act section 202 authority to protect communities across the country from ever-worsening climate harms.

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[60] *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 visited Sept. 20, 2024).
[61] *Resilient People*, *supra* note 59.
[62] City of Chicago, *Climate Action Plan* (2022), https://www.chicago.gov/content/dam/city/sites/climate-action-plan/documents/Chicago-CAP-071822.pdf.
[63] Crimmins et al., *supra* note 3, at 31-24.
[64] *Id*.

B. Mitigation Efforts

Alongside EPA rules like the Vehicle Standards, 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 essential to limit GHG emissions to the levels needed. 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. Strong federal action in the form of EPA's Vehicle Standards 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, many of them *amici*'s members.[65] To achieve their climate goals,

[65] *See, e.g., List of Participants*, Race to Zero, https://climatechampions.unfccc.int/whos-in/ (last accessed Nov. 19, 2024) (data filtered to U.S. cities).

cities' efforts to reduce operational and community-wide GHG emissions anticipate electrification of most communities' highest or second highest emitting sector: transportation.[66] 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 IRA,[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 Vehicle Standards.

Rapid decarbonization of the transportation sector is necessary to reach cities' climate commitments, with EVs representing the "preferred technology for achieving this end." [69] Local governments are participating in and preparing for this proliferation by procuring EV fleets, investing in EV charging infrastructure, and

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[66] *Sources of Greenhouse Gas Emissions*, U.S. ENV'T. PROTECTION AGENCY, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions; *see, e.g.*, *MSA PCAPs and Grantee Information*, U.S. ENV'T. PROTECTION AGENCY, https://www.epa.gov/inflation-reduction-act/priority-climate-action-plans-states-msas-tribes-and-territories#state-msa (last accessed Nov. 25, 2024).

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

[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] *Id.*

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 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] Ann Arbor, Michigan has electrified 25% of its light-duty fleet and has more on order;[72] and Madison, Wisconsin, boosted by IRA benefits, reached 100 EV fleet vehicles in 2023,[73] to name just a few. In Arizona, Phoenix has already installed EV chargers in six public library locations as part of the city's goal of installing 500 public charging stations by 2030, as laid out in the Phoenix Transportation Electrification Action Plan.[74] Milwaukee, Wisconsin, received nearly $15 million in

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[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/april/MunicipalFleetElectrificationInitiative.html.

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

[72] City of Ann Arbor, *City of Ann Arbor Electrifies 25% of its Light Fleet*, https://www.a2gov.org/news/Pages/article.aspx?i=1038# (last accessed Nov. 18, 2024).

[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 Phoenix, *Transportation Electrification Action Plan* (2022), https://www.phoenix.gov/sustainabilitysite/MediaAssets/sustainability/electric-vehicles/Draft%20Transportation%20Electrification%20Action%20Plan.pdf.

federal funding to install EV chargers at 53 sites citywide,[75] while 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.[76] Local governments across the country are finding that electrifying their fleets is a smart, cost-effective investment to reduce transportation sector emissions.[77]

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 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.[78] Additionally, more local building codes include EV charging or EV-

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[75] *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-available-electric-vehicle-chargers-has-doubled-start.

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

[77] *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), https://rmi.org/businesses-and-local-governments-its-never-been-a-better-time-to-electrify-your-vehicle-fleet/.

[78] *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), https://www.transportation.gov/briefing-room/historic-step-all-fifty-states-plus-dc-and-puerto-rico-greenlit-move-ev-charging.

readiness requirements, including in New York City;[79] Seattle;[80] Oakland, California;[81] Atlanta;[82] and Fort Collins, Colorado.[83] 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.[84] Chenango, New York simplifies deployment by permitting EV charging stations as an accessory use in all zoning districts.[85] These are just a few of the countless examples of cities investing in EVs and preparing for an economy-wide 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 Bipartisan Infrastructure Law,[86] are putting more and more effort into EV adoption and infrastructure to cost-effectively reduce emissions and localized pollution. And while these electrification efforts are essential to reducing sector-specific GHG emissions, their overall success may hinge on the federal government fulfilling its

[79] City of New York, N.Y. Intro. No. 0017-2024 (2024).
[80] City of Seattle, Ore. Elec. Code § 625.27.
[81] City of Oakland, Cal. Code § 15.04.3.11010.
[82] City of Atlanta, Ga. Ord. 17-O-1654 (2017).
[83] City of Fort Collins, Colo. Code § 5-30-E3401.5 (2019).
[84] City of Salt Lake City, Utah, Code Ch. 21A.44.040.B (2019).
[85] Town of Chenango, N.Y. Code § 74B-3.
[86] *See* Pub. L. No. 117-58 (2021).

duty of promulgating ambitious vehicle emissions standards, an action that lies outside of municipal jurisdiction.

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.[87] In promulgating the Vehicle Standards, EPA addressed environmental justice concerns by "meaningful[ly]" involving environmental justice groups in the rulemaking process.[88] While EPA's Vehicle Standards stand to result in large reductions of GHG emissions and local pollution, disadvantaged communities near major roadways will particularly benefit from the reduction in local pollution from the Vehicle Standards.[89] In so doing, the Vehicle Standards buttress local governments' efforts to address climate change in an equitable manner responsive to the needs of disadvantaged communities.

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[87] *See Disparities in the Impact of Air Pollution*, AM. LUNG ASS'N, https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities; *EPA Research: Environmental Justice and Air Pollution*, U.S. ENV'T PROTECTION AGENCY, https://www.epa.gov/ej-research/epa-research-environmental-justice-and-air-pollution (last accessed Nov. 20, 2024).
[88] *See* 89 Fed. Reg. 27,842, 28,136.
[89] *Id*. at 39,992.

III. EPA Has Authority to Promulgate the Vehicle Standards, 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 Vehicle Standards fall squarely within EPA's regulatory authority by setting GHG and other pollutant emission limitations based on a broad range of emission-reducing technologies and, as Respondent EPA explains, the Vehicle Standards do not implicate a major question. Resp't Br. 61–81.

Not only are the Vehicle Standards clearly within EPA's authority, they are 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 robust standards for GHG emission reductions pursuant to its statutory mandates. *Amici* and their member cities rely on this strong "Federal ... leadership," *id.*, to complement their adaptation and mitigation efforts as they shoulder the heaviest burdens of the climate crisis.

Having a strong 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 cars—for example, in densely populated environmental justice communities abutting highways.[90] 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 Vehicle Standards.

CONCLUSION

For cities across the country, EPA's Vehicle Standards represent an essential complement to local efforts to mitigate and adapt to climate change, and are 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 Vehicle Standards, which protect cities and their residents from pollution that local governments do not have sufficient authority to regulate themselves. Accordingly,

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

amici urge the Court to uphold EPA's authority to regulate GHG emissions from light- and medium-duty vehicles through the Vehicle Standards.

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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 6,173 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 6th day of December 2024, 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
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