FACT SHEET

U.S. DEPARTMENT OF TRANSPORTATION

CLIMATE ACTION

A Year in Review

The U.S. Department of Transportation is embracing a once-in-a-generation opportunity to modernize our nation's transportation system, **mitigate carbon pollution**, increase the system's **climate resilience**, and advance **environmental justice**. The **transportation sector is the largest source of carbon pollution** in the United States, responsible for roughly one-third of annual emissions. To address the growing climate crisis, and to meet the goal of **net-zero greenhouse gas emissions economy-wide by 2050, it is critical to decarbonize transportation**.

The Department's progress over the past year is bringing the United States closer to its goal of reducing emissions by 50-52 percent below 2005 levels by the end of the decade. At the COP28 climate conference in Dubai in December 2023, U.S. DOT will build on its leadership on the **U.S. National Blueprint for Transportation Decarbonization** by:

- Previewing an interagency plan to **decarbonize the U.S. maritime sector**.
- Announcing an **intent to undertake a feasibility study** with the United Kingdom (UK) to help identify the most effective and viable maritime routes to establish a **U.S.-UK green shipping corridor**.
- Joining the U.S. Department of Energy (DOE) and Canada to launch a **Rail Decarbonization Task Force**.
- Releasing a *MOMENTUM* **Fleet Electrification toolkit** to guide governments in supporting corporate partners in transitioning their fleets to electric vehicles.

MITIGATING TRANSPORTATION CARBON POLLUTION

Transitioning to Clean Options and Creating Jobs in the U.S.: Clean Fuels and Electrification

Light, Medium, and Heavy-Duty Vehicles

The Bipartisan Infrastructure Law (BIL) includes unprecedented investments and tools to create a national electric vehicle (EV) charging network, spur private sector investment, and ensure U.S. leadership in the global clean transport-clean energy transition.

- In September, the Federal Highway Administration (FHWA) released $100 million for the **Electric Vehicle Charger Reliability and Accessibility Accelerator** to improve the reliability of the current network by repairing or replacing existing EV charging infrastructure.
- In May, the U.S. and Canada launched a first-of-its-kind **Binational Alternative Fuel Corridor** between Kalamazoo, Michigan, and Québec City, Canada, building on tens of thousands of miles of corridors established in the U.S.
- FHWA opened $700 million in funding from the new **Charging and Fueling Infrastructure (CFI) Discretionary Grant**

Program in March to fund EV charging and alternative-fueling infrastructure in communities across the country and along designated highways, interstates, and major roadways.

- In February, FHWA released **Minimum EV Charging Standards and Requirements** for public EV chargers to help ensure the charging experience is consistent and reliable.
- In Summer 2023, U.S. DOT, in coordination with the Joint Office of Energy and Transportation, released an updated **Rural Electric Mobility Toolkit** as well as an associated **tribal companion guide**, and a new **Urban Electric Mobility Toolkit**. These comprehensive informational resources support communities, transportation providers, businesses, and other stakeholders with planning for and installing EV chargers.
- The Federal Transit Administration (FTA) this summer awarded $1.69 billion in grants through the **Low or No Emission and Grants for Buses and Bus Facilities Programs**, bringing the two-year total BIL funding to $3.3 billion and purchasing nearly 1,800 zero-emission transit buses—more than doubling the number of zero-emission transit buses on America's roadways.
- In collaboration with our international partners, U.S. DOT released in May the **Transitioning to Zero-Emission Bus Operations: Considerations for Green Transit** toolkit developed through the ***MOMENTUM*** program to help transit agencies and municipalities shift to zero-emission buses and share best practices.
- Releasing a **Fleet Electrification toolkit** under *MOMENTUM*—U.S. DOT's program to share knowledge and best practices with foreign partners across all modes of transportation—to guide governments in supporting corporate partners to transition their fleets to EVs.

Maritime

At COP27 in November 2022, U.S. DOT joined the **Green Shipping Challenge** announcements and has begun implementing two bilateral workstreams to help lead the transition to zero-emission shipping.

- U.S. DOT and federal agency partners announced an **intent to undertake a feasibility study** with the UK to help establish a **U.S.-UK green shipping corridor**.
- The Great Lakes-St. Lawrence Seaway Development Corporation in partnership with Canada is establishing a **Green Shipping Corridor Network in the Great Lakes and St. Lawrence Seaway System** and has convened a Collaborative Forum to help implement the Green Shipping Corridor.

U.S. DOT has also been striving to reduce emissions from maritime by:

- Releasing a **preview of the U.S. Maritime Decarbonization Action Plan**, an addendum to the U.S. National Blueprint on Transportation Decarbonization, along with U.S. interagency partners. The preview highlights decarbonization pathways including vessels, ports, fuels, workforce, and partnerships.
- Working with other U.S. agencies this summer to advance the **International Maritime Organization (IMO) 2023 Strategy on Reduction of GHG Emissions from Ships**, the most far-reaching climate action achieved at the IMO that paves the way for future climate negotiations to implement the Strategy and achieve its climate targets.
- Publishing in September **Decarbonizing the Maritime Shipping Industry: A Starter Guide to Reducing Greenhouse Gas Emissions from Maritime Shipping**, a *MOMENTUM* toolkit that provides strategies and approaches to help partner countries and ports prepare for the climate and fuels transition by reducing emissions from maritime shipping.
- Announcing in November more than $220 million in funding under the **FTA Ferry Program** for passenger ferry projects across the nation, including projects to deploy electric ferries. In January, FTA awarded $97.6 million in funding under the **Electric or Low-Emitting Ferry Pilot Program** for electric ferries and charging equipment as well as low-emitting ferries that reduce carbon pollution by using alternative fuels or on-board energy storage systems.

Aviation

U.S. DOT and the Federal Aviation Administration (FAA) have undertaken a series of significant steps since COP27 to achieve the aviation sector's goal of net zero carbon emissions by 2050.

- In November, U.S. DOT and FAA led the U.S. delegation to the International Civil Aviation Organization's Third Conference on Aviation and Alternative Fuels (CAAF/3), which adopted a global aspirational quantitative target to reduce the average carbon intensity of the global jet fuel pool by 5% by 2030 – equal to at least **7 billion gallons of high-integrity sustainable aviation fuel (SAF) by 2030**. This is an important market signal to catalyze investment in SAF production worldwide.
- In September, FAA launched the **Fueling Aviation's Sustainable Transition Grant Program** (FAST) making $245 million available to support the deployment of SAF and other low emission aviation technologies.
- U.S. DOT, in partnership with the UK Department for Transport and other partners, convened a series of roundtables to highlight aviation's decarbonization goals and focus investor attention on the need for boosting investment in SAF across our countries and around the world.
- FAA is working with universities through the Aviation Sustainability Center (ASCENT) and Volpe Transportation Center to support the development of domestic supply chains and deployment of SAF. In recent months, ASCENT launched a related effort called **"Collaborative Research Network for Global SAF Supply Chain Development"** with the World Bank and international partners to develop SAF supply chains in sub-Saharan Africa, Latin America, the Caribbean, and southeast Asia.
- U.S. DOT and FAA developed a **concept paper** on Aviation Green Lanes with Japan's Civil Aviation Bureau and Singapore's Ministry of Transport that charts a framework for expediting the decarbonization of aviation along specific international routes while preserving important principles of international aviation such as the equal opportunity to compete.
- The FAA has implemented additional optimized arrival approach routes for aircraft, saving millions of gallons of fuel and reducing greenhouse gases. Additionally, U.S. DOT and FAA are also working in partnership with other federal agencies to implement Inflation Reduction Act tax credits for SAF, which provide up to $1.75 per gallon of qualifying SAF produced.

Rail

U.S. DOT marks the year with several initiatives to progress rail decarbonization.

- U.S. DOT, U.S. DOE, and Canada are launching a **Rail Decarbonization Task Force**.
- The Federal Railroad Administration (FRA) announced the award of **Consolidated Rail Infrastructure and Safety Improvements Grant Program** grants supporting FRA's Locomotive Replacement Initiative to fund the replacement of dozens older, less efficient locomotives with cleaner, efficient ones, including the purchase of fifteen zero-emissions battery-electric switcher locomotives.
- To further rail decarbonization beyond our borders, in August, U.S. DOT and Mongolia signed a **Memorandum of Cooperation** to initiate a technical assistance program to enhance rail safety and sustainability as Mongolia expands its rail network.

Pipelines

While pipelines primarily transport fossil fuels today, pipelines could also transport fuels like hydrogen and SAF as well as carbon dioxide to injection wells for carbon capture and sequestration and to other end users in the future. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is working to **update standards for carbon dioxide pipelines** in response to the anticipated significant expansion of pipeline infrastructure transporting carbon dioxide in all phases to ensure it occurs in a manner that is transparent, safe, equitable, and protective of the environment.

Transportation System Efficiency

Efficiency is a key decarbonization strategy.

- In November, FRA awarded $16.4 billion under the **Federal-State Partnership for Intercity Passenger Rail Program** for 25 passenger rail projects along the Northeast Corridor. This program that will encourage mode shift to rail, which is more efficient than flying or driving.
- During the summer, the U.S. National Highway Traffic Safety Administration (NHTSA) issued a notice of proposed rulemaking for raising **Corporate Average Fuel Economy Standards** to an average of 58 miles per gallon by 2032, building on decades of incremental fuel efficiency improvements aimed at saving consumers money at the pump. The proposal is expected to prevent more than 900 million tons of carbon pollution, the equivalent of taking more than 233 million vehicles off the road from 2022 through 2050.
- PHMSA is addressing methane leaks from our nation's pipelines. The agency is making available $1 billion over the next 5 years through its **Natural Gas Distribution Infrastructure Safety and Modernization Grants Program**, awarding nearly **$200 million** in April. PHMSA also proposed **the Gas Pipeline Leak Detection and Repair Rule** to improve operational safety and further reduce emissions from pipelines.

Enhancing maritime shipping, port logistics, and intermodal transport infrastructure is key to transportation efficiency given maritime is more efficient than other modes of freight movement.

- In November, the U.S. Maritime Administration announced $653 million in funding awards under the **Port Infrastructure Development Program**, which will grow capacity and increase efficiency at U.S. ports, including by reducing port emissions and other air pollution.
- In April, FHWA began implementation of the new **Reduction of Truck Emissions at Port Facilities Program**, making $160 million in funding available for projects that help reduce congestion and emissions at ports.
- Additionally, U.S. DOT is engaging with international partners in this space and will continue and expand upon current multilateral cooperation through the ASEAN-U.S. Transportation Dialogue Partnership, the Mekong-U.S. Partnership, and with the Pacific Island countries to offer technical assistance and capacity building programs under *MOMENTUM*.

Transportation System Convenience

A convenient transportation system and land use plan ensures access to job centers and other destinations with shorter commute and delivery routes, safe and reliable options to take transit, walk, or bike, and optimized goods movement operations. Transit-oriented development both gives commuters more convenient options and encourages land use density, supporting shorter freight goods trips as well.

- Recently, FHWA released a final **greenhouse gas performance measure** to better integrate greenhouse gas emission reduction targets and analysis into system-level planning, investment priorities, and performance targets for states and Metropolitan Planning Organizations.
- In August, U.S. DOT made $13.4 million in funding available for projects that link public transportation, land use, and housing to create communities that are connected to transit and walkable through the **Transit-Oriented Development Planning Pilot Program**.
- FTA also updated its **Joint Development Guidance** to support the development of joint projects for transit agencies, creating flexibility for transit agencies to support transit-oriented development.
U.S. DOT is committed to supporting safe, convenient opportunities to walk, bike, and roll. This year, the Department took action by:
- Awarding two rounds of funding under the **Safe Streets and Roads for All Program** to support planning and demonstration projects to prevent roadway deaths and serious injuries: $880 million to more than 700 communities, benefiting more than half of United States' population. Much of this funding supports improved

safety for those walking, biking, and rolling to get where they need to go, thereby supporting safe, convenient zero-emission trips.

- Launching the new **Active Transportation Infrastructure Investment Program**, a dedicated program for investing in active transportation networks, which support zero-emission trips like walking and biking.
- Implementing several other programs that received significant funding over five years from BIL that can support active transportation trips, including the **National Highway Performance Program**, funded at $148 billion, the Surface Transportation Block Grant Program **Transportation Alternatives** set aside of $7.2 billion, and the **Highway Safety Improvement Program**, funded at more than $15 billion.
- Releasing **new bicycle and pedestrian guidance** to provide updated information on the range of opportunities available under the BIL to improve conditions for bicycling, walking and shared micromobility, along with a **waiver** to accelerate Complete Streets-related activities, and planning and design **resources** that State and local agencies can use to address safety and connectivity among multiple modes of travel.

INCREASING RESILIENCE TO CLIMATE IMPACTS

The Biden Administration in September released the **U.S. National Climate Resilience Framework**, which outlines an approach to aligning federal actions on and investments in climate resilience, and which U.S. DOT helped author and is working to implement. U.S. DOT is working to ensure transportation infrastructure is resilient to climate impacts by:

- Incorporating climate resilience into grant program criteria with a grant application **climate change checklist** to assist applicants.
- Implementing resilience programs like the **Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Grant Program**. This year, the program's first discretionary grant funding opportunity for up to $848 million opened for projects to improve the resilience of highways, public transportation, ports, and intercity passenger rail.
- Developing tools and resources to support transportation agencies in incorporating resilience throughout the transportation project planning and development process.
    - In 2023, FHWA published a new handbook on **Addressing Resilience to Climate Change and Extreme Weather in Transportation Asset Management**, providing strategies and approaches to address climate change risk in asset management.
    - FHWA also released the **Pavement Resilience: State of Practice** report that provides an examination of pavement resilience and describes the state of knowledge, practice, and future needs and a **Geohazards, Extreme Weather Events, and Climate Change Resilience Manual** to support transportation agencies in adopting a proactive approach to geohazards and climate change.
- Supporting emergency relief efforts and helping communities recover from disasters while building more resilient transportation infrastructure. It is impossible for any community to respond to or recover from a natural disaster without functioning transportation networks so that first responders can reach emergency sites.
    - In 2023, the Department provided $750 million in **FHWA Emergency Relief Program** funding to 39 states, the District of Columbia and Puerto Rico and $102.3 million in funding through the **FTA Emergency Relief Program** to 17 transit agencies, cities, and planning councils to help them repair equipment and facilities damaged during floods, hurricanes, and tornadoes.

DELIVERING ENVIRONMENTAL JUSTICE

U.S. DOT is committed to ensuring investments and programs from President Biden's infrastructure law advance equity and environmental justice, including to Tribal, rural, and other historically underserved communities.

This year, U.S. DOT awarded funding from the following programs in pursuit of advancing equity and environmental justice:

- $185 million in funding for the **Reconnecting Communities Program** (RCP), the first-ever Federal program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure.
- $21 million in funding through the **Thriving Communities Program**, which aims to ensure that disadvantaged communities adversely or disproportionately affected by environmental, climate, and human health policy outcomes have the technical tools and organizational capacity to compete for federal aid and deliver quality infrastructure projects that enable their communities and neighborhoods to thrive.
- $20 million in funding through FTA's **Areas of Persistent Poverty Grant Program** to create better transit access for residents with limited or no transportation options.

U.S. DOT released a second funding opportunity for the RCP combined with the Neighborhood Access and Equity Program totaling $3.35 billion, called the **Reconnecting Communities and Neighborhoods Program**. The **Neighborhood Access and Equity Program** has similar goals as the RCP, providing funding for projects that improve walkability, safety and affordable transportation access and community connectivity, especially in disadvantaged or underserved communities

U.S. DOT is actively updating an Environmental Justice Strategy in support of Executive Order 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All. As part of the **Justice40 Initiative**, U.S. DOT is developing tools to assist communities in understanding the cumulative impacts that result from the lack of affordable, safe, multimodal transportation options, and how to connect components of disadvantage to the benefits projects are expected to deliver. U.S. DOT created and released the first-of-its-kind transportation-specific tool, the **Equitable Transportation Community (ETC) Explorer**, which supports decision-making on how resources and programs can best uplift under-resourced and transportation-disadvantaged communities.