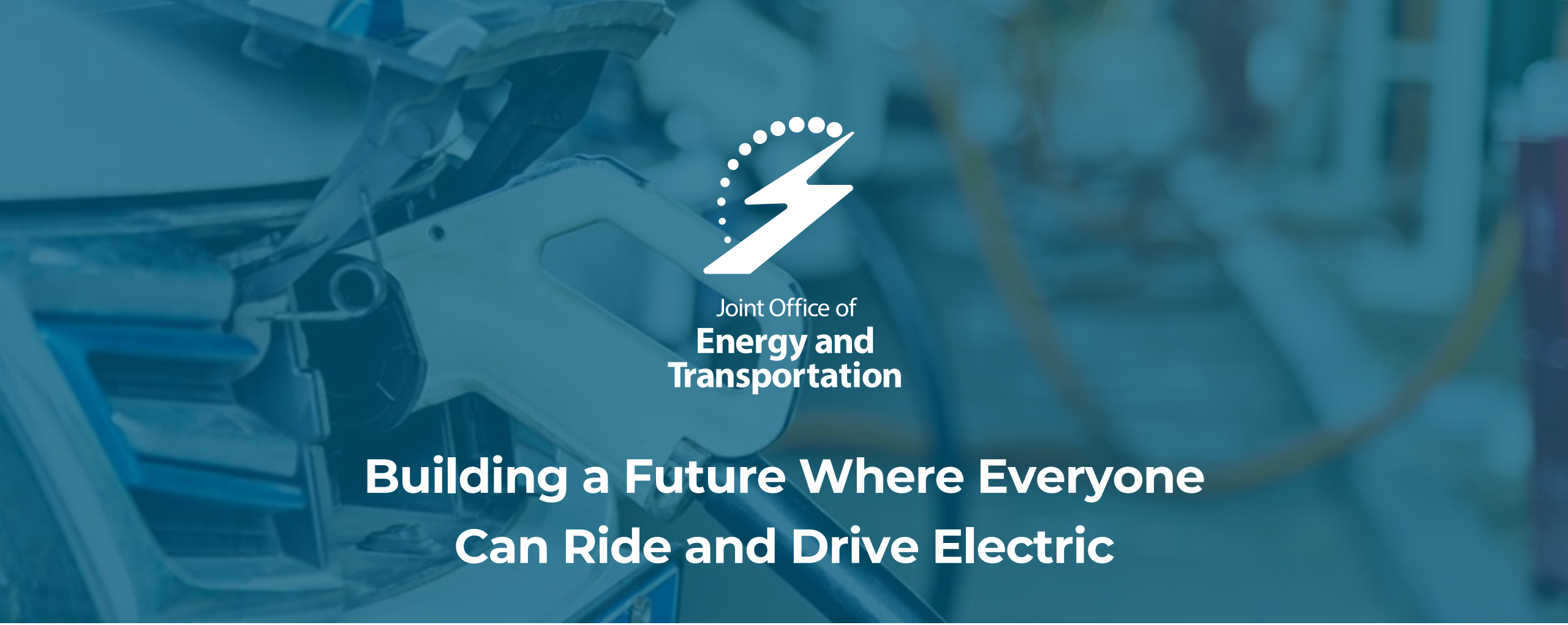


Joint Office of
Energy and
Transportation

Building a Future Where Everyone Can Ride and Drive Electric

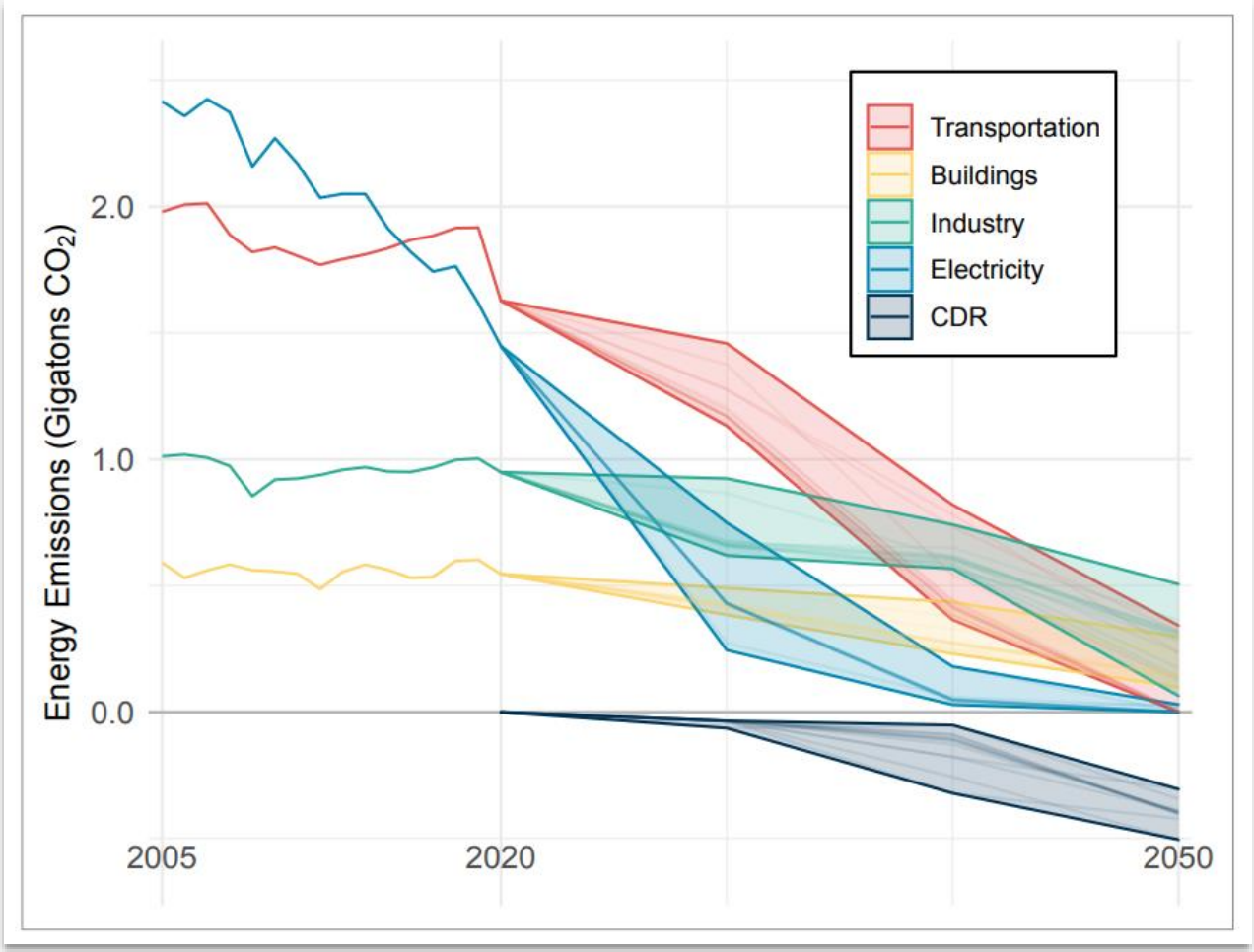
Steve Lommele

Communications and Stakeholder Engagement Lead

January 17, 2024

driveelectric.gov

This is the **biggest change to our transportation system in a century** – and we are right in the middle of it.

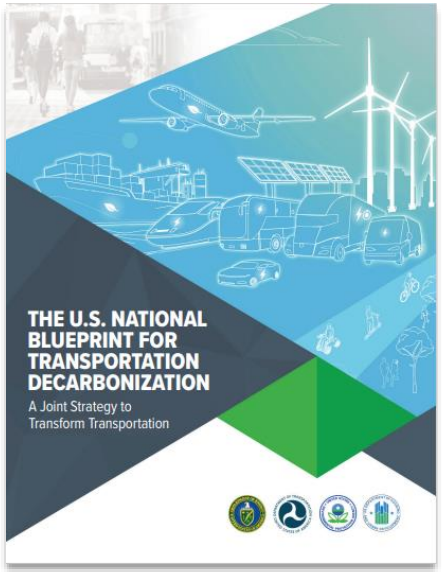


Source: *U.S Department of State and Executive Office of the President November 2021*

U.S. National Blueprint for Transportation Decarbonization

Goal:

- Reduce greenhouse gas emissions associated with the transportation sector by 2050 and ensure resilient and accessible mobility options for all Americans



Partners:

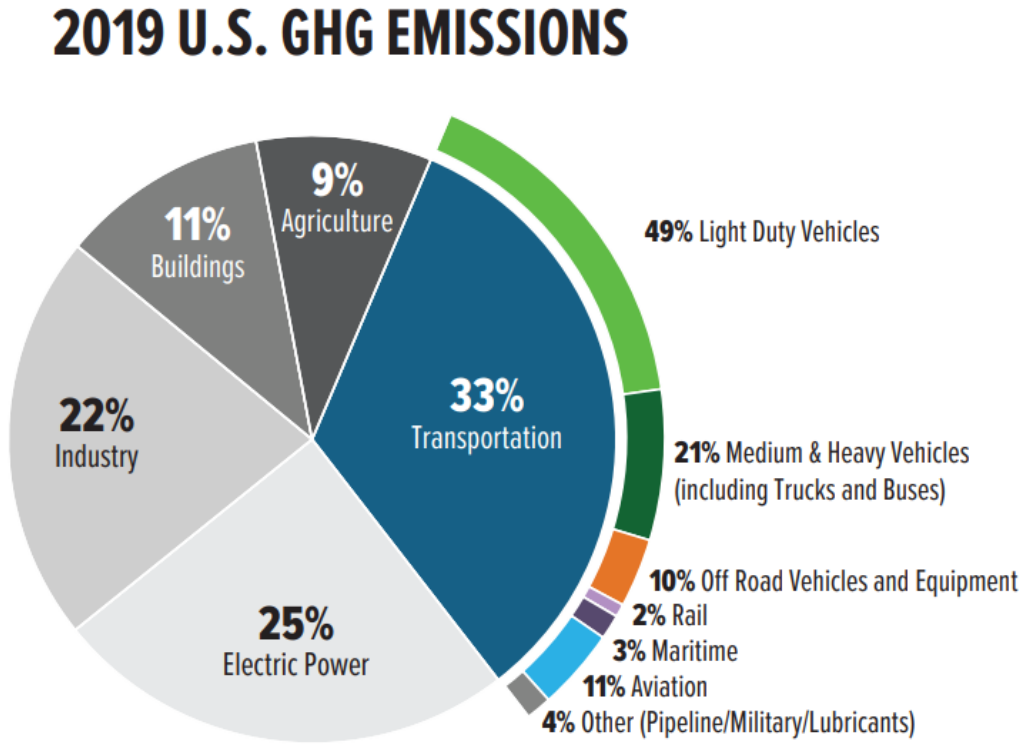


Figure 2. Total 2019 U.S. GHG emissions with transportation and mobile sources breakdown. Data derived from the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks [REF 8]. This Blueprint uses 2019 as a baseline since impacts due to COVID-19 complicate the use of later data.

Source: U.S. National Blueprint for Transportation Decarbonization

Transportation is the leading sector and **light-duty vehicles** are the largest contributor followed by **medium- and heavy-duty vehicles.**

Numerous strategies and solutions are required to tackle transportation emissions

Figure A. Summary of transportation decarbonization strategies.

1 icon represents limited long-term opportunity
2 icons represents large long-term opportunity
3 icons represents greatest long-term opportunity

	BATTERY/ELECTRIC	HYDROGEN	SUSTAINABLE LIQUID FUELS
Light Duty Vehicles (49%)*		–	TBD
Medium, Short-Haul Heavy Trucks & Buses (~14%)			
Long-Haul Heavy Trucks (~7%)			
Off-road (10%)			
Rail (2%)			
Maritime (3%)		†	
Aviation (11%)			
Pipelines (4%)		TBD	TBD
Additional Opportunities	• Stationary battery use • Grid support (managed EV charging)	• Heavy industries • Grid support • Feedstock for chemicals and fuels	• Decarbonize plastics/chemicals • Bio-products
RD&D Priorities	• National battery strategy • Charging infrastructure • Grid integration • Battery recycling	• Electrolyzer costs • Fuel cell durability and cost • Clean hydrogen infrastructure	• Multiple cost-effective drop-in sustainable fuels • Reduce ethanol carbon intensity • Bioenergy scale-up

* All emissions shares are for 2019

† Includes hydrogen for ammonia and methanol

Figure 7. Summary of vehicle improvement strategies and technology solutions for different travel modes that are needed to reach a net-zero economy in 2050 (more details provided in Section 5).

Source: U.S. National Blueprint for Transportation Decarbonization

Joint Office of Energy and Transportation

Established in the Bipartisan Infrastructure Law to address areas of joint interest to the Departments of Energy and Transportation

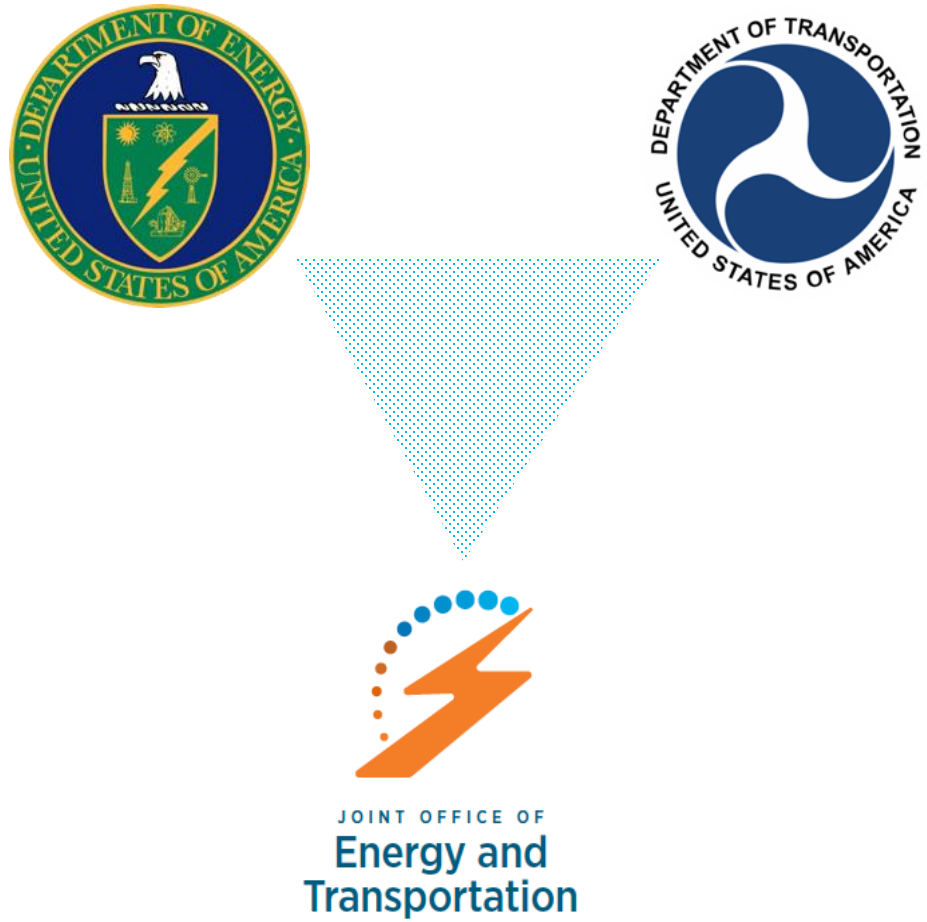
$300M

in FY22 funds to DOT
with transfer authority to DOE

9

major areas of emphasis

Mission and Vision



Mission

To accelerate an electrified transportation system that is affordable, convenient, equitable, reliable, and safe.

Vision

A future where everyone can ride and drive electric.

Areas of Emphasis Summary

1) **Technical assistance for zero emission vehicle charging and refueling infrastructure**
2) data sharing
3) performance of a national and regionalized study vehicle charging
4) training and certification programs
5) a program to promote renewable energy generation, storage, and microgrids in the transportation rights-of-way
6) Study and planning for high-voltage transmission; and pilots for medium and high-voltage transmission in the interstate rights-of-way
7) Research, strategies, and actions to mitigate the effects of climate change
8) development of a streamlined utility accommodations policy for transmission in the transportation right-of-way
9) any other issues that the Secretary of Transportation and the Secretary of Energy identify as issues of joint interest

Infrastructure Investment & Jobs Act (IIJA) Programs Supported by the Joint Office

The Joint Office provides unifying **guidance**, **technical assistance**, and **analysis** to support the following programs:

National Electric Vehicle Infrastructure (NEVI) Formula Program (U.S. DOT)
$5 billion for states to build a national electric vehicle (EV) charging network along corridors, including a **$100 million** funding opportunity to repair and replace chargers

Charging & Fueling Infrastructure Discretionary Grant Program (U.S. DOT)
$2.5 billion in community and corridor grants for EV charging, as well as hydrogen, natural gas, and propane fueling infrastructure

Low-No Emissions Grants Program for Transit (U.S. DOT)
$5.6 billion in support of low- and no-emission transit bus deployments

Clean School Bus Program (U.S. EPA)
$5 billion in support of electric school bus deployments

Discretionary Grant Program for Charging and Fueling Infrastructure –

Applications for FY 22 and 23 are now closed

$700M in FY22 and FY23 funding

- Application period closed **June 13th**

Program is divided into two distinct **$1.25 billion grant programs:**

- **Corridor** Grant Program
- **Community** Grant Program

Awards announced last week!

Eligible Entities

- States or political subdivision of States
- Metropolitan planning organizations
- Unit of local governments
- Special purpose districts or public authorities with a transportation function, including port authorities
- Indian tribes
- U.S. Territories
- Authorities, agencies, or instrumentalities or entities owned by one or more entities listed above
- Group of entities listed above
- State or local authorities with ownership of publicly accessible transportation facilities **(applies to Community Program only)**

CFI Awards

- ~$88 million for H2

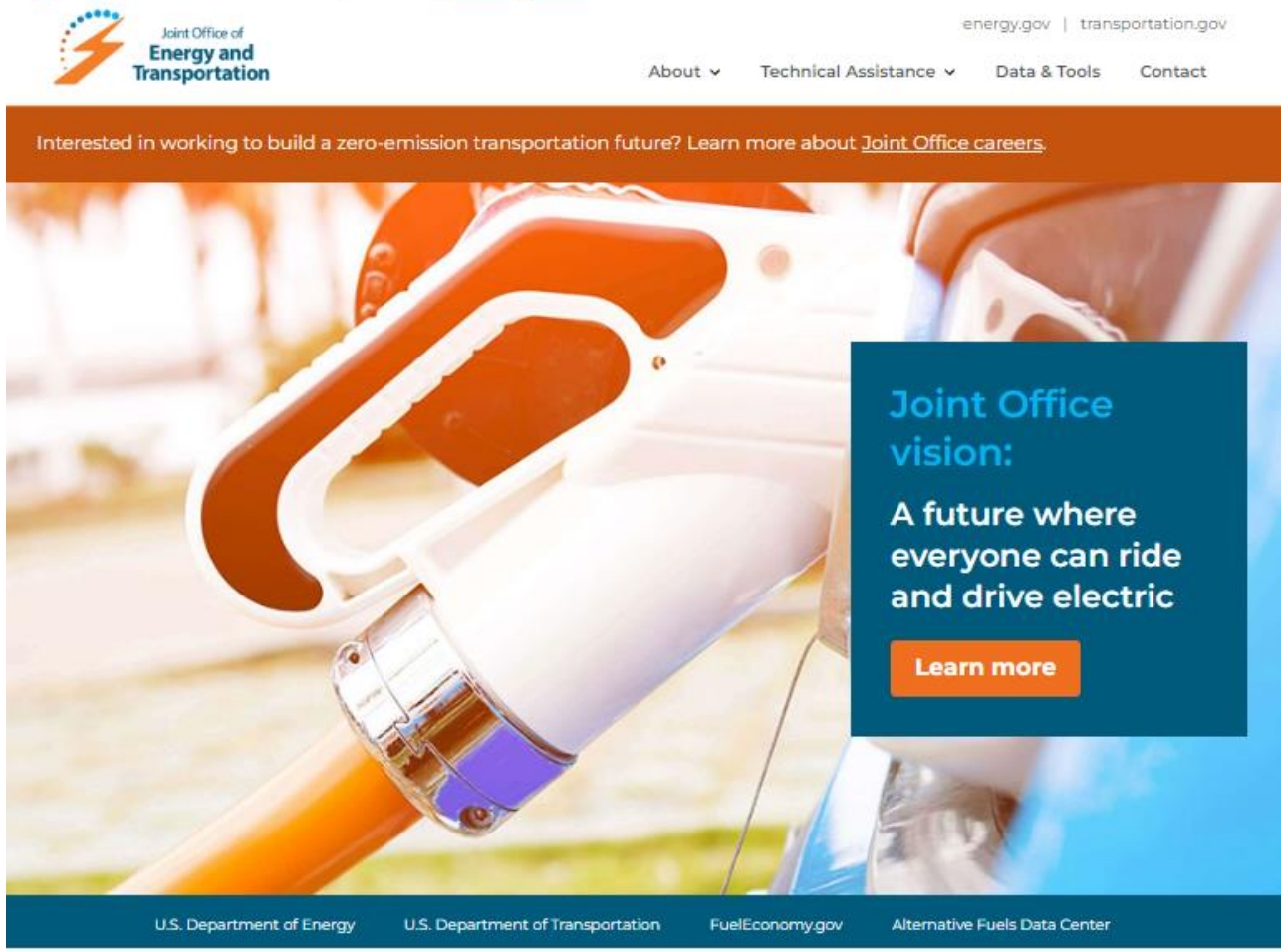
I. Summary of MHDV Awards

Applicant	Title	State	Fuel	Fed. ($)	Sites	Stations/ Ports
City of Blythe	I-10 Truck Charging Terminal	CA	EV	19,635,156	1	DCFC: 30 (LDV), 30 (MHDV)
Cal State LA	Workforce and Renewable Hydrogen for LDV & HDV ZEV	CA	H2	7,156,982	1	H2: 2
S.J.V. Air Pollution Control District	San Joaquin Valley I-5 Electric Freight Corridor Project	CA	EV	56,008,096	2	DCFC: 90 (LDV), 85 (MHDV) MCS: 17
Colorado State University	Colorado Hydrogen Refueling Infrastructure on I-25 (Hy-25)	CO	H2	8,977,947	3	H2: 3
New Mexico DOT	Medium & Heavy-Duty Vehicle Electric Corridors along I-10	NM	EV	63,898,809	2	DCFC: 18 MCS: 18
New York City DOT	Hunts Point Food Distribution Center *Recharge Hub*	NY	EV	15,000,000	1	L2: 8 DCFC: 20
North Central Texas CoG	TX Hydrogen & Electric Freight Infra. (Tx-HEFTI)	TX	H2	70,000,000	5	H2: 5
Northwest Seaport Alliance	Catalyzing ZE Drayage Trucking Infra. (Seattle-Tacoma Region)	WA	EV	12,000,000	1+	TBD
Total				**252,676,990**	**14+**	**H2: 10 DCFC: 273 MCS: 35 L2: 8**

DriveElectric.gov

Website connects state DOTs and other stakeholders to resources, including:

- Infrastructure planning and implementation guidance
- Data and tools
- News and events
- Technical assistance request form



A modernized and interagency approach to support the deployment of zero-emission, convenient, accessible, equitable transportation infrastructure

The Joint Office of Energy and Transportation was created through the Bipartisan Infrastructure Law (BIL) to facilitate collaboration between the U.S. Department of Energy and the U.S. Department of Transportation. The Joint Office will align resources and expertise across the two departments toward leveraged outcomes. The office will be a critical component in the implementation of the BIL, providing support and expertise to a multitude of programs that seek to deploy a network of electric vehicle chargers, zero-emission fueling infrastructure, and zero-emission transit and school buses. The scope of the Joint Office will continue

Joint Office of
Energy and Transportation

Thank You

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