

ITEM 8 – Information

September 20, 2023

New Federal Funding Programs for Carbon Reduction

Background:

The Bipartisan Infrastructure Law and the Inflation Reduction Act have made unprecedented amounts of federal funding available to reduce greenhouse gas emissions. Ms. Morrow will provide an overview of a few of those funding programs that have the potential to reduce greenhouse gas emissions from the on-road transportation sector.



MEMORANDUM

TO: Transportation Planning Board
FROM: Erin Morrow, TPB Transportation Engineer
SUBJECT: Overview of new federal funding programs for reducing greenhouse gas emissions from the on-road transportation sector
DATE: September 14, 2023

The Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL), both signed into law by President Biden in 2022, provide unprecedented amounts of new federal funding dedicated to shifting the United States away from fossil fuel use and reducing greenhouse gas emissions. The purpose of this memo is to provide the TPB with an overview of a few of those funding programs that have the potential to reduce greenhouse gas emissions from the on-road transportation sector. For each of the programs, the TPB's role is noted as well as any briefings the TPB or its committees have received or are scheduled to receive.

The federal programs discussed in this memo are:

- Carbon Reduction Program (CRP)
- Climate Pollution Reduction Grant (CPRG) Program
- Charging and Fueling Infrastructure Discretionary Grant Program (CFI Program)
- National Electric Vehicle Infrastructure (NEVI) Formula Program
- Low or No Emission (Low-No) Vehicle Program

The TPB has made climate change mitigation a priority in its planning process. In June 2022, the TPB adopted goals (50% below 2005 levels by 2030 and 80% below 2005 levels by 2050) and priority strategies for reducing greenhouse gas emissions specific to the region's on-road transportation sector. The funding allocated to the region could help the region implement these priority strategies:

- Improve walk/bike access to all TPB identified high-capacity transit stations.
- Increase walk/bike modes of travel - Complete the TPB's National Capital Trail Network by 2030.
- Convert private and public sector light, medium and heavy-duty vehicles, and public transit buses to clean fuels, by 2030.
- Deploy a region-wide robust electric vehicle charging network (or refueling stations for alternate fuels).
- Add additional housing units near TPB-identified high-capacity transit stations and in COG's Regional Activity Centers.
- Reduce travel times on all public transportation bus services.
- Implement transportation system management & operations (TSMO) improvement measures at all eligible locations by 2030.

CARBON REDUCTION PROGRAM (CRP)

The Carbon Reduction Program (CRP) was established by the Bipartisan Infrastructure Law. The CRP **provides funds for projects** designed to reduce carbon dioxide emissions from on-road transportation and **requires states to develop a Carbon Reduction Strategy** (CRS). Both program components require states to work with applicable Metropolitan Planning Organizations (MPOs). The Federal Highway Administration (FHWA) has developed a Carbon Reduction Program [fact sheet](#) and [Carbon Reduction Program Implementation Guidance](#).

Carbon Reduction Program Funding

The Carbon Reduction Program provides a total of **\$6.4 billion in formula funding nationally for FY 2022 through FY 2026**. Sixty-five percent of each state's apportionment is to be obligated to areas based on the proportion of the state's population residing in that area (federally prescribed)¹ and the remaining 35% of the apportionment can be spent anywhere in the state. The BIL "requires each State, over the period of FY22-26, to make available to each urbanized area with a population of at least 50,000 obligation authority for use with the suballocated CRP funding. [§ 11403; 23 U.S.C. 175(e)(6)] States are required to divide the funding to urbanized areas with a population of at least 50,000 based on the relative population of the areas. [23 U.S.C. 175(e)(3)]"

CRP funding allocations for the metropolitan Washington area for FY 2022 and FY 2023 are:

	FY 2022	FY 2023
District of Columbia	\$3,206,817	\$3,270,954
Maryland	\$3,571,327	\$3,642,754
Virginia	\$5,786,618	\$5,902,350
Total - Metropolitan Washington	\$12,564,762	\$12,816,058

CRP funds are available for obligation for a period of three years after the last day of the fiscal year for which the funds are authorized. The funds **can be used on a wide array of eligible projects to reduce carbon dioxide emissions** as detailed on page two of the CRP fact sheet.

Carbon Reduction Strategy

The Carbon Reduction Program requires states to **develop a Carbon Reduction Strategy by November 15, 2023, in consultation with any MPO** designated within the State (23 U.S.C. 175(d)(1)). Federal guidance notes that "the State Carbon Reduction Strategy shall support efforts to reduce transportation emissions and identify projects and strategies to reduce these emissions. The Carbon Reduction Strategy must be updated at least once every four years (23 U.S.C. 175(d)(3) and (4)), and **States and MPOs are encouraged to obligate CRP funding for projects that support implementation of the State's Carbon Reduction Strategy.**"

The Carbon Reduction Strategy plan should **identify projects and strategies to reduce transportation**

¹ Urbanized areas: (a) with population greater than 200,000; (b) population between 50,000 and 200,000; (c) population 5,000 to 499,999 and (d) population less than 5,000.

emissions, which could include those that:

- Encourage the use of alternatives to single-occupant vehicle (SOV) trips (including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips)
- Facilitate the use of vehicles or modes with a lower per person-mile of travel emissions rate
- Utilize practices in the construction of transportation assets that result in lower emissions

Federal guidance also notes that “States, in coordination with MPOs, are encouraged to develop their Carbon Reduction Strategies as an integral part of their transportation planning processes, such as by **integrating them into ... the MPO’s Metropolitan Transportation Plan (MTP), or by developing a separate document which is incorporated by reference into the Long-Range Statewide Transportation Plan (LRSTP) and MTP.**”

TPB ROLE

The TPB Technical Committee received a briefing about the CRP in April 2023.

As part of the TPB’s consultation role on the state Carbon Reduction Strategies, the state DOTs are scheduled to present their draft Carbon Reduction Strategies to the TPB Technical Committee and the TPB in October 2023.

As part of the TPB’s coordination role with the states to select the projects for CRP funding, TPB staff are participating in meetings with state DOT staff to discuss the coordination process and the TPB will be briefed about the process as it is developed. Projects funded through the CRP must be identified in the Transportation Improvement Program (TIP).

CLIMATE POLLUTION REDUCTION GRANTS (CPRG) PROGRAM

The [Climate Pollution Reduction Grants \(CPRG\)](#) program, established by the Inflation Reduction Act, provides funding to states, regions, and local governments for greenhouse gas emissions reduction and air pollution projects. The program consists of **two stages: non-competitive planning grants totaling \$250 million and competitive implementation grants totaling \$4.6 billion**. The CPRG program extends across sectors including industry, electricity generation, transportation, commercial and residential buildings, agriculture/natural and working lands, and waste and materials management.

The U.S. Environmental Protection Agency (EPA) has developed numerous resources for the CPRG program, including a [website](#), [program guidance](#) and [training webinars](#).

PHASE I: Planning Grants

COG, through funding allocated to the District of Columbia, is set to receive \$1 million to coordinate planning efforts for the broader Metropolitan Statistical Area (MSA), which will include jurisdictions outside of COG region that wish to participate.² Work on the project is expected to kick-off in fall 2023. The project will **develop a Priority Climate Action Plan (PCAP) and a Comprehensive Climate Action Plan (CCAP) for the MSA**. The components of these two plans are delineated below.

Priority Climate Action Plan (PCAP), due March 1, 2024

- Simplified GHG inventory
- Quantified GHG reduction measures
- Low-income and disadvantaged communities' benefits analysis
- Review of authority to implement

Comprehensive Climate Action Plan (CCAP), due summer-fall 2025

- Comprehensive GHG inventory
- GHG emissions projections (2030-2035 and 2050)
- GHG reduction target setting (GHG reduction targets will be consistent with the United States' formal commitments to reduce emissions 50-52% relative to 2005 levels by 2030 and to reach net-zero emissions by 2050)
- Quantified GHG reduction measures
- Benefit analysis of co-pollutants
- Low-income and disadvantaged communities benefits analysis
- Review of authority to implement
- Plan to leverage other federal funding
- Workforce planning analysis

² Local jurisdictions in the MSA that are outside the COG region that will be invited to participate in COG's CPRG work are: City of Fredericksburg, VA, Clarke County, VA, Culpeper County, VA, Fauquier County, VA, Rappahannock County, VA, Spotsylvania County, VA, Stafford County, VA, Warren County, VA, Jefferson County, WV.

PHASE II: Implementation Grants

The CPRG Phase II implementation grants will be awarded through a competitive process to entities covered by plans developed with planning grants. EPA expects to announce the notice of funding in September 2023, with applications due in April 2024. Implementation grants will be awarded through a competitive process to implement measures contained in plans developed with planning grants. Entities included in, or covered by, such plans will be eligible to apply for implementation funding.

TPB ROLE

The TPB Technical Committee and TPB will receive a briefing on the CPRG program at the September 2023 meetings.

The work for the MSA funded by the CPRG planning grant has not officially started yet. The work will be led by COG and supported by staff in the Department of Environmental Planning (DEP) as the work for the CPRG program will cover all sectors. TPB staff will coordinate with DEP staff on tasks related to on-road transportation. State DOTs and TPB member jurisdictions will be part of the study team. The TPB's role will be defined as the project develops.

CHARGING AND FUELING INFRASTRUCTURE DISCRETIONARY GRANT PROGRAM (CFI PROGRAM)

The [Charging and Fueling Infrastructure Discretionary Grant](#) Program (CFI Program) was established by the Bipartisan Infrastructure Law “to strategically deploy publicly accessible electric vehicle charging and alternative fueling infrastructure in the places people live and work – urban and rural areas alike – in addition to along designated Alternative Fuel Corridors (AFCs)...This program provides **two funding categories of grants: (1) Community Charging and Fueling Grants (Community Program); and (2) Alternative Fuel Corridor Grants (Corridor Program)**. The Bipartisan Infrastructure Law provides **\$2.5 billion over five years for this program.**”

A [Notice of Funding Opportunity](#) (NOFO) was released on March 14, 2023. Applications were due on June 13, 2023. The NOFO made “**\$700 million from Fiscal Years 2022 and 2023** funding available to strategically deploy electric vehicle (EV) charging infrastructure and other fueling infrastructure projects in urban and rural communities in publicly accessible locations, including downtown areas and local neighborhoods, particularly in underserved and disadvantaged communities.”

In response to the NOFO, COG submitted a [Request for Funding on behalf of seven jurisdictions](#)³ for 48 proposed locations across metropolitan Washington, 30 (63 percent) of which are located in or near disadvantaged communities (14 or 29% are within disadvantaged communities and 16 or 33% are nearby and can serve these communities). The application also noted that “all proposed projects will follow... the National Capital Region Transportation Planning Board (TPB) safety policies, programs, and guidance.” The proposed projects would be publicly accessible and located at existing local government facilities. The work on the Request for Funding was coordinated through COG’s [Regional Electric Vehicle Deployment \(REVD\) Working Group](#). Additional proposals supporting EV charging infrastructure deployment in the region were submitted by the [District of Columbia](#), City of Alexandria, [Prince William County](#), [Montgomery County](#), and the Maryland Clean Energy Center.

TPB ROLE

To assist states and local jurisdictions with EV infrastructure planning and applications for future funding opportunities from federal programs such as the CFI Program, TPB staff have commissioned the development of a Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy. The plan document will be developed, with the assistance of COG staff, by the TPB’s on-call consultant, ICF, and funded through the TPB’s Unified Planning Work Program’s (UPWP) Technical Assistance Program.

The REVII Strategy is being designed to support state and local governments as they prioritize locations for publicly accessible EV infrastructure deployment. The strategy will provide electric vehicle projections for three forecast scenarios and recommend priority sites for EV infrastructure by county. The REVII plan will address equity considerations of the site recommendations.

COG’s REVD Working Group will be the primary group overseeing the development of the REVII Strategy. The TPB Technical Committee will be briefed on the REVII Strategy project in September 2023. The TPB Technical Committee will receive a presentation on the draft results in January

³ City of Alexandria, City of Fairfax, City of Manassas, Arlington County, Fairfax County, Frederick County, and Prince George’s County

2024, and both the TPB Technical Committee and the TPB will receive presentations on the final REVII Strategy in spring 2024. EV infrastructure projects for potential incorporation into the TIP may be informed by the REVII Strategy.

TPB staff expect that COG will again lead the development of any future region-wide EV infrastructure funding proposal through the REVD Working Group. The TPB will continue to support applications by agencies in the region through support letters and will make amendments to the Transportation Improvement Program (TIP) to include any CFI Program funding that may be awarded. Another round of CFI Program funding is expected to be announced in early 2024.

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM

The [National Electric Vehicle Infrastructure \(NEVI\) Formula Program](#) was established by the Bipartisan Infrastructure Law and provides \$5 billion in funding from FY 2022 through FY 2026 for “states to strategically deploy EV charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability.” The Federal Highway Administration has developed resources for the NEVI Formula Program including [Program Guidance](#), [Frequently Asked Questions](#), and [Infrastructure Standards and Guidance](#).

The NEVI Formula Program funding allocations for the District of Columbia, Maryland, and Virginia for FY 2022 and FY 2023 are:

	FY 2022	FY 2023
District of Columbia	\$ 2,468,807	\$ 3,552,641
Maryland	\$ 9,298,080	\$ 13,380,042
Virginia	\$ 15,745,244	\$ 22,657,583

Each state, including the District of Columbia and Puerto Rico, is **required to develop a statewide plan**. The initial plans were due on August 1, 2022, and all **plans were approved by FHWA by September 27, 2022**. The initial plan was to focus on locations along designated FHWA Alternative Fuel Corridors (AFCs). If a state determined that all AFCs in the state had been fully developed, then the state could propose alternative public locations and roads for EV charging station installation.

The approved Fiscal Year 2022 plans are available on the FHWA website:

[District of Columbia](#)

[Maryland](#)

[Virginia](#)

States are required to update their plans annually. The first plan update was due on August 1, 2023.

TPB ROLE

The NEVI Program Guidance states that **States should consult with MPOs**. The TPB Technical Committee received a briefing on all three state NEVI plans in [October 2022](#). The TPB’s Freight Subcommittee received briefings on the state NEVI plans in [March 2023](#) (DC) and [April 2023](#) (Maryland and Virginia).

LOW OR NO EMISSION (LOW-NO) VEHICLE PROGRAM

The Federal Transit Administration's [Low or No Emission \(Low-No\) Vehicle Program](#) “supports transit agencies in purchasing or leasing low- or no-emission buses and other transit vehicles that use technologies such as battery electric and fuel-cell power to provide cleaner, more efficient transit service in communities across the country” The Low-No Vehicle Program is not a new program, but the Bipartisan Infrastructure Law increased the amount of funding available for this competitive grant program from **\$84 Million in FY 2019 to \$1.22 Billion in FY 2023**.

The [FY 2023 round of grants](#) included four awards in the TPB region: WMATA (\$104 million), University of Maryland (\$40 million), City of Alexandria (\$24 million), and Loudoun County (\$14 million).

TPB ROLE

The TPB continues to support applications by agencies in the region through support letters and makes amendments to the Transportation Improvement Program (TIP) to ensure the receipt of federal funding.