

Budget Narrative

This application requests \$248.9 million to support the development and implementation of the Clean Corridor Coalition (C3) regional ZE-MHDV infrastructure network. This budget narrative and all supporting materials for this application were developed in consultation with the following Environmental Protection Agency (EPA) documents:

- RAIN-2019-G02, “Interim General Budget Development Guidance for Applicants and Recipients of EPA Financial Assistance”;
- RAIN-2018-G05-R1, “EPA Guidance on Participant Support Costs”;
- Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements;
- Grants Policy Issuance (GPI) 16-01: EPA Subaward Policy for EPA Assistance Agreement Recipients; and
- All applicable federal laws and regulations, including but not limited to 40 CFR 2.203 and 2 CFR 200.

This budget narrative uses the following budget categories to break out costs associated with implementation of the proposed measures:

Personnel: Direct costs for salaries and wages;

Fringe Benefits: Allowances and services provided by the employer to personnel in addition to regular salaries and wages. These may include the cost of leave, employee insurance, pensions and unemployment, cell phone allowances, holiday bonuses, and similar benefits;

Travel: Costs for transportation services, lodging, per diem, and similar personal expenses allowed under applicable travel policies for trips necessary to implement the proposal;

Equipment: Costs for tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit used by personnel implementing the proposal. Equipment purchased by project participants is classified in the “Other” budget category as participant support costs;

Contractual: Costs associated with contracts to acquire property (including intellectual property) and services needed to carry out the proposal, including shared expenses associated with hiring a Third Party Administrator to support implementation of the C3 and the anticipated design;

Other: Direct costs that do not fit in any of the other budget categories, including participant support costs and subawards to each of the Coalition members to support implementation except the lead agency, NJDEP; and

Indirect: Costs incurred for a common or joint purpose that benefit more than the proposed project that is not readily divisible among cost objectives without efforts disproportionate to the results achieved. Examples include space costs, utilities, accounting services, human resources, etc.

An explanation of costs associated with each measure and a consolidated budget are presented below. A breakdown of costs for each budget category for each measure is provided in the CPRG Implementation Grants Budget Table included with this Clean Corridor Coalition proposal.

Measure

The CPRG Implementation Grants Budget Table included with this proposal itemizes the costs associated with each budget category. However, two of the most important budget items proposed for this measure -- investments in freight truck charging infrastructure and workforce development -- appear across multiple budget categories and line items, so a cross cutting description and justification is provided here.

Charging Infrastructure Costs & Apportionment Among C3 States

The primary expenditures associated with this measure would be grant funding for the development of approximately 24 publicly accessible electric vehicle charging sites suitable for heavy-duty trucks carrying freight along the I-95 corridor – in Connecticut, New Jersey, Delaware and Maryland – and adjacent roadways.

The Coalition developed a simple methodology for estimating infrastructure costs based on data from a 2022 report from the National Renewable Energy Laboratory (NREL). The report estimates the breakeven cost of charging for electric Class 8 tractor trucks under various scenarios which consider different factors such as charging location, installation costs, utility rates, and vehicle adoption rates.

NREL cost estimates were incorporated using the following three-step methodology:

1. Develop illustrative site designs for three different types of ZE freight charging stations;
2. Define the scope of costs to include in this analysis; and
3. Estimate the costs for each charging site, or station.

Additional details about the cost estimation development process and methodologies are in the Technical Appendix.

To help ensure that the build out of zero-emission freight charging sites across the region achieves the best outcomes for communities that are overburdened by air pollution, the grant pool for investments would be apportioned between the four participating states according to relative shares of diesel pollution from freight trucks. The shares were estimated using county-level National Emissions Inventory PM2.5 emissions from on-road vehicles, in 2020. This approach to apportionment was used to determine the total shares of infrastructure investment dollars for each state, as follows:

State	PM2.5 Primary (tons)	Apportionment (percentage)	Charger max power levels ⁽¹⁾			Total share of grant pool ⁽²⁾
			150 kW	350 kW	1000 kW	
Connecticut	472	24%	36	39	33	\$ 54,236,222
Delaware	106	5%	10	9	6	\$ 12,008,683
Maryland	674	34%	47	55	48	\$ 76,421,843
New Jersey	731	37%	55	61	51	\$ 84,133,655

NOTES: (1) While the number of chargers was carefully selected to represent a realistic investment scenario for the purposes of emissions modeling, this is illustrative and actual site designs will likely differ.

(2) The funding levels for infrastructure investments were adjusted to account for Buy America and Davis Bacon requirements (plus 1%) and then further adjusted to account for federal tax incentives.

Workforce Development Funding Levels & Apportionment Among C3 States

The goal of the proposed workforce development program (as described in Section 4a., Community Benefits) is to train 400 skilled workers to support projected build out of MHD charging infrastructure in C3 states. Recently published analysis on MHD electric charging infrastructure and associated workforce estimates were used to estimate the scale of workforce needs for this C3 proposal. ICCT projects that nearly 10,000 full-time equivalent workers will be needed to build 84,000 new MHDV chargers in the U.S., in 2030 (ICCT, Table A5). Accounting for projected levels of electricity demand from MHD trucks in Connecticut, Delaware, Maryland and New Jersey in that year (ICCT, table A6), over 400 full-time workers will be needed for MHD charging build out across the four states in the C3 region.

For budgeting purposes, Connecticut looked back at years of cost data from workforce training performed through programs run by the Connecticut Office of Workforce Strategies and the Connecticut Department of Labor and

estimated that \$10,000 in state funding per worker was commonly needed. While costs will vary across states and training types, Connecticut's experience is instructive for budgeting purposes.

Accounting for an estimated need for 400 skilled workers prior experience in the State of Connecticut, the Coalition has estimated that it will require a total workforce training budget of about \$4,000,000. These funds will be utilized to support three purposes:

\$1,750,000 apportioned among the member states for contractual support – procured through competitive processes – to implement training curricula and other workforce development services in each state. These funds will be apportioned using the same methodology described for the allocation of subawards. **These funds are included in the subaward amounts identified for each state, listed under the “Other” category in the budget spreadsheet, apart from New Jersey’s portion, identified separately under the Lead Agency “Contractual Services” budget.**

\$1,750,000 for participant support costs distributed among the member states using the same methodology described above. The funds will be utilized to provide support services such as transportation and childcare and other eligible expenditures, as needed to enable participation in workforce training activities, particularly by individuals from LIDACs. **These funds are also included in the subaward amounts identified for each state, listed under the “Other” category in the budget spreadsheet, apart from New Jersey’s portion (also listed under “Contractual Services” in the Lead Agency budget).**

\$500,000 set aside for any costs that may be required for the Administrator to provide both programmatic and ad hoc support for the member states, including but not limited to curriculum development that will be available for use by all C3 states, based on identified training needs that are specific to ZE-MHDV charging. **These funds are identified under the “Contractual Services” in the lead agency (NJDEP) budget because they will be coordinated by the Third Party Administrator, hired by NJDEP.**

Lead Agency

The State of New Jersey Department of Environmental Protection (NJ DEP) is the lead agency for this proposal. NJ DEP has agreed to serve as the administrator of all funds distributed to the other states as subrecipients. Therefore, the administrative burden is expected to be highest at NJ DEP, where 4 full-time equivalents (FTEs) will be dedicated to supporting this project.

The Coalition has agreed that NJDEP intends to administer this project using in-kind labor support, leveraging the work of staff paid from other funding sources to support the project management, contracting services, legal reviews, and engagement required to execute this effort. This contribution will reduce the burden on CPRG expenses, making additional resources available for distribution to the member states through subawards to support implementation.

Key staff involved in the administration of this project from NJDEP will include Peg Hanna and Melissa Evanego, whose experience is described in the Staff Expertise section.

Travel

Travel to support this project is expected to be relatively limited. Because the coalition states span several hundred miles of the East Coast, the budget includes a modest travel set-aside for each state to travel regionally – 2,000 miles per agency, per year – to attend site visits and to conduct community engagement. The Coalition intends to leverage these resources to learn from each other and maintain community across the Coalition member states, and ensure consistency and efficiency of program implementation throughout the project lifecycle.

Equipment

This proposal does not include any funding for equipment apart from the procurement of ZE-MHDV charging equipment, which is reflected in the contractual budget section for the lead agency, and in the “Other” section for the subawardees.

Supplies

The coalition has included a modest set-aside of \$7,500 cumulatively distributed across the member states for minor supply purchases to support a ramp-up period of administration for the member states.

Contractual

The coalition members have agreed that NJ DEP will contract with a third-party administrator on behalf of all coalition states to provide administrative, technical, public engagement, facilitation and other support for measure-related activities. Line items for each of these activities are shown in the budget spreadsheet under NJ DEP because the contract will be administered through, and held by, NJ DEP, but they represent expenditures which will be shared equally by the coalition members.

The coalition intends for the third-party administrator “Administrator” to play a key role in the implementation of this project across the region. This would include:

\$2.0 Million – for supporting general project administration and management, including facilitating processes for decision making by Coalition members.

The Coalition proposes **\$6.3 million** for the following technical assistance-related activities:

- Developing a Request for Information (RFI) on behalf of the coalition to invite ideas regarding criteria for commercial ZE-MHDV charging station site selection and elements of program design.
- Collecting public input from communities near potential charging sites and freight facilities, as well as potential fleets and charging infrastructure customers. Collating, summarizing and sharing public input with coalition members.
- Reviewing upcoming Department of Energy studies on ZE-MHDV deployment and conduct in-depth research to understand the technology implementation challenges this project might face.
- Developing a model Request for Proposals (RFP) to promote a consistent approach to site design and selection criteria that each coalition member could use for their own individual solicitations. The model RFP would also include standards and site specifications and incorporate federal standards for ZE-MHDV charging infrastructure. The model RFP would also be guided by site selection criteria and other outputs of the DOE studies.
- Developing tools, resources, and Q&A materials for potential vendors, developing public information and communication materials to support community engagement, and additional support to help coalition states make their RFP processes efficient, equitable, and broadly accessible.
- Developing proposed methods for testing, monitoring, and tracking performance (for charging infrastructure sites, workforce development programs, and additional activities) of measure implementation in ways that enable efficient and comprehensive reporting to EPA, including for community benefits.

In addition to the above administrative and technical support, the Coalition proposes **\$1.7 million** for policy support and facilitation activities that would include:

- Coordinating complementary policy development, including strategies identified in the [Multi-State Medium- and Heavy-Duty ZEV Action Plan](#) and the National ZEF Corridor Strategy;
- Engaging with neighboring states, including New York and other jurisdictions along the freight corridor (via existing multi-state regional collaboration processes), to strategically plan a broader network of commercial ZE-MHDV infrastructure investments building from this coalition measure;
- Engaging metropolitan planning organizations (MPOs), regional planning authorities, port authorities, and other local governments to coordinate freight emissions reduction planning and investments;

- Conducting meaningful community engagement and outreach to local governments, community-based organizations, and other community partners; and
- Exploring how additional federal funding can support complementary investments in commercial ZE-MHDV infrastructure (such as port electrification).

As noted above, the Coalition also requests **\$500,000** for the Administrator to support workforce development by developing model curricula for workforce training that each state can use to support their own workforce development programs.

Cost estimates were developed using conservative estimates of person-hour fees for architecture and engineering firms with national scale and profile.

Other

The primary cost associated with the “other” category for this project are subawards to coalition members and for participant support costs associated with Workforce Development programs that would be implemented within each of the C3 states.

Subawards: Subawards to Connecticut DEEP, DelDOT, MDOT and MDE would be distributed as follows:

Connecticut DEEP:	\$56,434,943
Delaware DOT:	\$13,637,863
Maryland Department of the Environment:	\$2,459,672
Maryland DOT:	\$77,675,629

This funding would be used to support implementation of this C3 GHG reduction measure within each of the coalition states, including through the following activities:

Participating in C3-related planning and decision making processes, which would be facilitated by the Administrator;

Tracking and reporting to NJ DEP on project progress, accomplishments and key milestones;

Staffing and contractual costs necessary to fulfill the coalition members roles and responsibilities under this proposal;

- Developing and issuing RFPs for charging sites in Connecticut, Delaware and Maryland that are guided by a model RFP.
- Reviewing applications, selecting projects, and entering into agreements with project developers.
- Disbursing funds to project sponsors and overseeing projects.
- Developing and issuing RFPs for workforce development programs, including training and participant support services.
- Planning and implementation meetings, and convenings necessary to perform community and stakeholder outreach and education within the coalition member’s jurisdiction;
- Modeling and analytical costs, including purchase or licensing of software, data, or tools;
- Studies, assessments, data collection, etc. needed to track, measure, and report actual accomplishments related to this measure;
- Evaluation and metrics-tracking activities;
- Training and staff capacity-building costs;
- Incidental costs related to the above activities, including without limitation: travel, membership fees, and indirect costs; and

- Other allowable activities as necessary to fulfill the coalition members' roles and responsibilities under this proposal.

Each of the Coalition members identified their own personnel and/or contractual support needs to effectively fulfill the above listed roles and responsibilities. Detailed breakdowns of subawardee budgets are available upon request.

Workforce Development (NJ DEP): \$645,108 – The purpose of this budget item is to provide support services such as transportation and childcare and other eligible expenditures, as needed to enable participation in workforce training activities, particularly by individuals from LIDACs.

Consolidated Budget by Year

Cost-Type	Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Direct Costs		\$0	\$0	\$0	\$0	\$0	\$0
	Total Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0
	Total Travel	\$1,340	\$1,340	\$1,340	\$1,340	\$1,340	\$6,700
	Total Equipment	\$0	\$0	\$0	\$0	\$0	\$0
	Total Supplies	\$0	\$0	\$0	\$0	\$0	\$0
	Total Contractual	\$1,862,721	\$2,188,766	\$20,845,045	\$31,052,261	\$42,129,013	\$98,077,806
	Total Other	\$1,335,943	\$1,567,461	\$31,639,310	\$50,446,854	\$65,863,647	\$150,853,215
	Total Direct	\$3,200,003	\$3,757,567	\$52,485,694	\$81,500,455	\$107,994,001	\$248,937,720
	Total Indirect	\$0	\$0	\$0	\$0	\$0	0
Total Funding		\$3,200,003	\$3,757,567	\$52,485,694	\$81,500,455	\$107,994,000	\$248,937,720

Expenditure of Awarded Funds

New Jersey DEP will expend and account for awarded funds in accordance with state laws and procedures for expending and accounting for the state's own funds. The financial management system for NJ DEP complies with the requirements of 2 CFR 200.302(b).

New Jersey DEP will contract with a third-party administrator on behalf of all coalition states to provide technical assistance support services. These shared expenses are shown in the budget spreadsheet under NJ DEP because the contract will be administered through, and held by, NJ DEP. Those technical assistance activities will provide the basis of analysis and policy implementation throughout the next phase of the project: entering into subaward agreements with each coalition member prior to disbursement of subaward funds. These agreements will include all applicable pass-through requirements for subrecipients in accordance with 2 CFR 200, [EPA's Subaward Policy](#) and [EPA's General Term and Condition for Subawards](#).

Once funds are distributed, the subawardees will use them to procure their own vendors to complete the site selection, preparation, construction and installation of ZE-MHDV charging equipment and implement workforce development programs within their respective jurisdictions.

The semi-annual reports and final report will include a breakdown of expenditures associated with implementation of this proposal.

Reasonableness of Costs

This Coalition proposal includes many features and activities with inherent efficiencies because of how the measure would be implemented across several states, along an interconnected and vital freight corridor:

The Administrator would develop a model RFP, with common site selection criteria and design features, which will help to reduce consulting costs by each of the coalition states.

The coordination of implementation from the start would vastly reduce the potential for construction delays that could occur later if states took a patchwork approach to building out and scaling-up the deployment of infrastructure that spans across multiple jurisdictions that share a common freight transportation network.

Moving together as a coalition on large-scale investments in public charging infrastructure for ZE-MHDVs will also send a signal to the market that is far more likely to spur private investments than if individual states were to act individually, at different times and/or through different approaches.

Sharing the development of curricula for training skilled workers -- while investing in workforce training at the scale needed to support the construction, operations and maintenance of ZE-MHDV charging infrastructure throughout the region -- will reduce bottlenecks to deployment, while giving LIDAC communities opportunities to participate in economic opportunity and upward mobility.

Leveraging insights from the forthcoming DOE studies will quicken the pace of spending the awarded funds. Given the active involvement of electric utilities in these studies, there is an opportunity to prioritize investments in locations that will more efficiently upgrade the grid that could otherwise slow the pace of infrastructure deployment.

By collaborating on policy and stakeholder engagement, the Coalition will be in a much better position to quickly scale up infrastructure build-out across all four states, while creating replica models and resources that will spill over and provide benefits to neighboring states, as well as metropolitan areas and for the private sector.

This budget was developed with thoughtful input from each of the Coalition members with technical support from Atlas Public Policy, and the Georgetown Climate Center. Variable input costs like personnel rates, fringe benefit calculations, indirect costs, and incidentals were localized in accordance with each member state's rules and policies. Global costs like Third Party Administration fees were estimated based on coalition members' experience with professional services firms hired to support similar functions. Contractual expenses and subaward amounts were estimated using recently available data from NEVI and CFI build-outs in Coalition member states, as well as California. Infrastructure cost assumptions used in this proposal (detailed in the Technical Appendix) are based on the best data available at the time of the analysis. However, estimating the costs associated with building charging stations for commercial electric trucks presents significant challenges due to the nascent nature of the electric truck market and the limited number of existing charging stations. Additionally, most existing electric truck charging stations are located at privately owned facilities, such as distribution centers or fleet depots, and companies often consider financial details to be proprietary.

Additional details on the methodological considerations for budget development and measure development are included in the Technical Appendix.