



NORTHEAST CLEAN FREIGHT CORRIDORS SUPPORT FOR ALTERNATIVE FUEL CORRIDORS DESIGNATION

PREFACE

The purpose of the following statement is to support state and local agencies participating in the Northeast Clean Freight Corridors (NEFC) Workgroup IN applying for Alternative Fuel Corridor designation under Fixing America's Surface Transportation (FAST) Act Section 1413, pursuant to a solicitation by the Federal Highway Administration published in the Federal Register on July 22, 2016 [FHWA Docket No. FHWA-2016-0017]. Agencies may wish to include all or portions of this language in their applications.

NEFC is an initiative of the Northeast Diesel Collaborative (NEDC), and was formed to facilitate the adoption of cleaner fuels, technologies and strategies by freight carriers in the Northeast by coordinating across agencies, sectors, boundaries and modes to focus on key freight corridors. Participation and support for NEFC¹ comes from federal, state and local environment, transportation and energy agencies; the I-95 Corridor Coalition; U.S. Department of Energy (DOE) Clean Cities Coalitions; port authorities, trucking associations, railroads, and shippers; alternative fuel and clean technology companies; and academic, nonprofit and consulting groups.

The NEFC initiative derives in part from the U.S. DOT Volpe Center 2014 New England Transportation Forum: Freight Issues, at which state transportation commissioners called for improved cross-jurisdictional coordination to address freight needs and impacts.² In 2015, the NEFC was formed at the freight-focused NEDC Partners Meeting³ in Providence, Rhode Island during the Meeting's Clean Corridor Congress session. Since its inception, NEFC has staged a series of educational and coordinating webinars that lead up to, a Northeast Regional Clean Corridor Meeting to be held at RPI on November 2 – 4, 2016 in Troy, New York.

NEFC provides a regional platform for coordination among state and local agencies to promote cleaner and more efficient freight corridors, and seeks to support Northeast state and local agencies interested in submitting applications under the FAST Act for Alternative Fuel Corridors designation. With support from the I-95 Corridor Coalition, U.S. DOE Clean Cities Coalitions, the NEDC and other established partners, we look forward to advancing the clean corridors identified by NEFC stakeholders in applications to FHWA.

¹ <https://www.northeastdiesel.org/freight.html#CleanFreightCorridorsWorkgroup>

² <https://www.volpe.dot.gov/event/new-england-transportation-forum-freight-issues>

³ <https://www.northeastdiesel.org/pdf/2015partnersmeeting/nedc-2015-partnership-meeting-pic-overview.pdf>

NORTHEAST CONTEXT, TRENDS AND OPPORTUNITIES

Nowhere in the U.S. is it more important to take a corridor and network view of transportation than in the Northeast, given the high proportion of end-to-end trips crossing multiple state lines; high and growing population density, and the goods movement demand it generates; existing and predicted roadway congestion; and exposure of urban populations to nearby transportation emissions. As FHWA is well aware, the Northeast is a powerhouse of density and economic output, producing 20 percent of the nation's GDP with 17 percent of the population, on just 2 percent of the nation's land area. Over the next generation, the Northeast will add 17 million new residents. This population growth will demand an increase in passenger and freight transportation infrastructure capacity, as well as mitigation of criteria air pollutant and greenhouse gas emissions from vehicle engines. Forecasts of a 30 to 40 percent increase in freight volumes for the Northeast by 2040 are typical, and that picture will be dominated by truck movements in terms of whole-trip, last-mile, dray, and intermodal hauls.

While most Northeast peak period highway congestion currently occurs in metro areas, by 2040 congestion will spread to inter-city corridors. A budding trend toward greater use of east coast ports by the marine shipping and cruise industries will likely generate additional highway congestion given how little on- or near-dock rail exists. Addressing bottlenecks to improve capacity and reduce emissions will be difficult in this region, due to congested networks and therefore the risk of merely moving the bottleneck further down the line. Establishing much-needed expanded truck parking capacity will also be difficult due to prevailing land-use policy and close juxtaposition of disparate uses, but potentially made easier if idle-minimization (“truck stop electrification”) infrastructure were provided to reduce environmental and abutter impacts.

In sum, capacity expansion to improve freight and passenger flows can only partly address the problems created by demand. Providing alternative fuel infrastructure along key Northeast corridors and at key freight facilities will be essential to promote the adoption of advanced transportation technologies powered by natural gas, electricity, hydrogen fuel cells, and propane, as well as to encourage the use of idle reduction technologies for trucks, locomotives, and ships to shut down main and/or auxiliary engines during layovers at origin/destination facilities and en route. Federal, state and local agencies and businesses in the Northeast have built a number of natural gas fueling stations and electrified parking facilities⁴ over the last decade, but these efforts have not been coordinated from a corridor and regional perspective; some are underutilized and some are no longer in operation. The Transportation Climate Initiative of the Northeast and Mid-Atlantic states has in recent years focused state priorities and resources on building out a network of electric charging stations and spaces for passenger vehicles. The same need exists to coordinate among Northeast states, across disciplines, and hand-in-hand with shippers

⁴ See <http://www.afdc.energy.gov/tools> (Alternative Fueling Station Locator, and Truck Stop Electrification Sites) and <http://www.altfuelstations.com/>

and carriers to site new alternative fuel infrastructure for freight fleets along corridors where it will be beneficial both to the supply chain and the environment.

This is where NECFC comes in. As Northeast state Department of Transportation (DOT) agencies and Metropolitan Planning Organizations (MPOs) develop and renew freight plans, state Department of Energy (DOE) agencies target their next energy infrastructure investments, and state Department of Environmental Protection (DEP) agencies seek to develop workable approaches to reducing freight emissions, NECFC provides a regional platform for communication and collaboration across all agencies and partners.

CORRIDOR PRIORITIES

FAST Act Section 1413 signifies that Congress and FHWA see the essential connection between maintaining an economically competitive, dynamic and complex freight system, and operating that system in the most environmentally sustainable manner possible. In the Northeast as much as anywhere else in the U.S., the vital corridors that connect people and businesses to goods and services are of growing concern in terms of their functioning, impacts and resilience.

The following are corridors that the NECFC has discussed and supports for designation under the FAST Act Section 1413.

I-95 Corridor

The I-95 highway corridor, including its feeder and parallel rail and marine routes, are a primary focus for NECFC. Many sections in the Northeast are low-performing in terms of trip variability, delay and total travel time, exacerbating emissions. Long- and short-haul trucks require refueling and lay over on and near the corridor. Some public alternative fuel and idle reduction infrastructure already exists on the corridor, and some carriers that ply the corridor (including partners in U.S. Environmental Protection Agency's SmartWay Transport Partnership) have indicated readiness to use such infrastructure for their fleets if a more plentiful network of fueling and layover facilities were available. I-95 runs through heavily populated areas of Rhode Island, Connecticut, New York and New Jersey likely to be in marginal or moderate non-attainment of the new 8-hour ozone standard⁵, and most of the Northeast suffers from a high per capita rate of asthma.

“Northeast Triangle”

This network consists of several related linear sections: I-87 and related routes from Greater NYC north to Albany; I-90 (including Berkshire Extension) from Albany east to Worcester & Greater Boston; I-95 & related routes north to coastal NH (Portsmouth) and south to coastal MA, RI, CT and Greater NYC; and I-84 from Worcester MA to

⁵ See https://ozoneairqualitystandards.epa.gov/OAR_OAQPS/OzoneSliderApp/index.html#

I-87 (Hudson Valley). Freight is transported primarily truck, but rail intermodal with CSX exists in Worcester and Albany areas. All portions have high existing and forecasted freight flows, with congestion worst in NY and Boston metro areas and on bridges over waterways.

Expanded truck parking is needed in several locations, and these facilities should be equipped with alternative fueling options and electric (no-idle) connections for standby-ready onboard cab comfort, auxiliary and transport refrigeration unit equipment. The I-95 Corridor Coalition's real-time truck parking locator project could evolve to highlight alternative fuel/layover features. En-route alternative fueling facilities are present, but additional stations are needed to provide adequate supply, and correct spacing between facilities.

I-84, I-90, I-87, I-78, and I-80 Corridors

Other corridors with potential as multi-state priorities for designation, for reasons similar to the I-95 case, include I-84, I-90 and I-87. NECFC would also support applications by states and MPOs for corridors I-78 and I-80 that are priorities for only one or two states in the Northeast, but have important beyond-region potential.

THIS APPLICATION

[LEAD ORGANIZATION NAME]'s request that U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) designate [CORRIDOR NAME & SEGMENT] as an Alternative Fuel Corridor is submitted in acknowledgement of its importance not only within the network that serves [STATE/MPO], but to the Northeast mega-region. Existing [CORRIDOR NAME] passenger and freight flows, fueling and truck layover practices, and current alternative fuel infrastructure support future investment in augmenting alternative fuel availability. Federal designation will better enable [LEAD ORGANIZATION NAME] to justify focusing planning and resources on [CORRIDOR NAME], and to collaborate via the Northeast Clean Freight Corridors (NECFC) Workgroup across jurisdictions for a more holistic and beneficial corridor-based outcome.

Applicants should refer to the solicitation <https://www.gpo.gov/fdsys/pkg/FR-2016-07-22/pdf/2016-17132.pdf> for criteria and other universally applicable specifics that each proposal must address. See [Highlights](#) section below for an informal interpretation of main features of the solicitation, and some resources to help gather needed information.

In addressing the Collaboration criterion, be sure to include, in addition to relevant area Clean Cities Coalitions, the Northeast Clean Freight Corridors Workgroup and (if applicable) the I-95 Corridor Coalition.

For further assistance in drawing upon NECFC Workgroup resources and stakeholders to support your application, contact any of the co-chairs listed on the last page of the group's charter: <https://www.northeastdiesel.org/pdf/clean-freight-corridors-workgroup-charter.pdf> You are also encouraged to

avail yourself of information presented on NECFC webinars:
<https://www.northeastdiesel.org/freight.html#CleanFreightCorridorsWorkgroup>

HIGHLIGHTS FROM DESIGNATION OF ALTERNATIVE FUEL CORRIDORS SOLICITATION

Who can apply:

State and local officials. For multi-jurisdiction nominations, one agency leads and serves as POC.

When applications are due:

August 22. “Late submissions will be considered to the extent practicable.”

Note: only swift methods of submission are via fax, and via <https://www.regulations.gov/>. If using the website, enter FHWA–2016–0017 in the search box, and then choose the Comment Now! Button.

Eligible fuels/technologies:

- Electric vehicle (EV) charging
- Hydrogen fueling
- Propane fueling
- Natural gas fueling

Note: Providing Truck Stop Electrification (TSE)—providing electric power for cab/hotel loads and transport refrigeration units-- is no longer a main focus, but can be included as supportive of corridor electrification, and the emissions reduction and other goals of corridor designation.

FHWA’s mandate & goals:

For designated corridors, FHWA (with the help of nominations) needs to:

- identify near-and long-term need & demand for, and location of, this infrastructure
- at strategic locations along major national highways
- to improve mobility of passenger and commercial vehicles.

FHWA also wants to:

- develop national signage and branding for Zero Emission (electric & hydrogen) and Alt Fuel (propane & nat gas) corridors
- encourage multistate and regional cooperation and collaboration
- bring together a consortium of stakeholders to promote corridor designations with DOE.

Defining “corridors”:

- a segment of the National Highway System (NHS), including feeder routes/roads (see http://www.fhwa.dot.gov/planning/national_highway_system/)
- segment can be intra- or inter-state
- are now or can be part of a national alt fuel network
- can serve mainly freight, mainly passenger, or both
- should serve major metropolitan areas and/or intermodal facilities
- connect or run through populous areas
- benefit disadvantaged areas (see <https://www.epa.gov/ejscreen>)
- carry high passenger or freight volumes now or in future, and maybe experience congestion
- have some alt fuel infrastructure now, and are part of short- (2020) and long- (2040) term plans to provide it
- stakeholders show interest and support for alt fuel facilities there

Note: While intermodal facilities are mentioned, multi-modalism (rail, marine, etc) is no longer a main focus.

Selection criteria (in priority order):

1. **Alternative Fuel Facilities:** ample existing/planned; at right intervals; accessible; and likely to be used, based on prior experience.
2. **Corridor Scale/Impact:** connects to other segments of network; connects major metro areas or is multi-state; connects to intermodal (freight or passenger) facilities.
3. **Emission Reductions:** achieves reductions in GHGs or criteria pollutants, to meet national and state goals.

4. **Team Development, Collaboration and Support:** includes agency with jurisdiction over corridor; DOE Clean Cities Coalitions (see <https://cleancities.energy.gov/coalitions/>); other (non-DOT) federal agencies; relevant partners from industry (technology/fuel providers and fleets), local/state government, and nonprofits (advocacy groups); evidence of interest/support from users & local officials.

Extra credit:

- Corridor runs through nonattainment areas for ozone, CO, or PM. (See <https://www.epa.gov/airquality/greenbook/>.)
- Effort addresses US or state GHG reduction goals.
- State/local alt fuel vehicle incentives apply.
- Analysis of usage and demand for alt fuel, and how to close gaps in availability.
- Availability of Truck Stop Electrification or other alt fuels on corridor.
- Maintenance and emergency services for alt fuel stations & vehicles available.

Miscellaneous:

Don't try to locate your alt fuel facility on an Interstate ROW (e.g., rest area) unless it was created before 1960, because USC Title 23 Section 111 prohibits charging for fuel. (See footnote 2 on page 2 of the solicitation, and <https://www.fhwa.dot.gov/map21/docs/title23usc.pdf>.)

Applications (including attachments) cannot exceed 20 pages.

All "comments" (nominations) will be posted & visible at www.regulations.gov.

DOT is supposed to designate these corridors by December 4, 2016.

Every 5 years, DOT must update and re-designate corridors. FHWA plans to establish a process for taking nominations and making designations on a rolling basis.

No cap on # of corridors.

Questions:

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