

# Clean Corridors Meeting



## Webinar #8: U.S. DOE Clean Cities Tasks for Clean Corridors Meeting: Clean Cities Leadership & Vision for Clean Corridors



U.S. Department of Energy

October 28, 2016




# Agenda

1. Welcome
2. Progress Against Workgroup Roadmap
3. Today's Topic #8: U.S. DOE Clean Cities Tasks for Clean Corridors Meeting: Clean Cities Leadership & Vision for Clean Corridors
  - a) Define "Clean Corridors"
  - b) Compile past, successful collaboration efforts (ex. I-90 EVSE Plan) – which corridors are Clean Cities priorities, which have existing plans? ARRA lessons learned.
  - c) What does Clean Cities bring to the table? – leadership and a national network of coordinators and industry professionals, etc.
  - d) Funding sources leveraged by Clean Cities Coalitions (ex. CMAQ)
  - e) Common goals and action items for Clean Cities Coalitions

# Clean Freight Corridors Workgroup Roadmap

Clean Corridors Meeting  
November 2–4, 2016  
RPI, Troy, NY



**7# Hosts Discuss Value  
Clean Corridors and  
Partnerships**  
**September 29, 2016**  
Meeting Hosts share goals  
and expected outcomes.

**5# Designating Clean Corridors**  
**June 23, 2016**  
Review Designation #1413  
Application Process/Support  
Regional/NE States Nomination

**8# Clean Cities Role for Clean  
Corridors**  
**October 28, 2016**  
Clean Cities Coordinators outline  
roles and opportunities to  
advance clean freight corridors.

**3# Regional Freight Flows**  
**April 28, 2016**  
Understanding Freight Flows,  
Bottlenecks and Areas of  
Priority

**6# Part II – Alt. Fuel Corridor  
Applications**  
**July 28, 2016**  
#1413 RFI Review and Existing and  
Needed Alt. Fuel Infrastructure

**1# WG Kick Off**  
**February 18, 2016**  
Importance for Clean Freight  
Corridor Coordination

**4# Defining Clean Corridors**  
**May 26, 2016**  
Clean Corridor Definitions for  
State/Regional Freight Plans

**2# Funding Clean Corridors**  
**March 29, 2016**  
Incentivizing Partnerships for Clean  
Freight Corridors



# 3a. Clean Corridors

## What is a Clean Fuels Corridor?

- Part of NHS, including feeder routes/roads  
([http://www.fhwa.dot.gov/planning/national\\_highway](http://www.fhwa.dot.gov/planning/national_highway) )
- Connects major metropolitan / populous areas
- Carries high passenger and/or freight volumes now or in future
- Have some alt fuel infrastructure now and are part of expansion plans



# Defining Clean Corridors

## What do we mean by “corridor”?

- Heavy freight flow
- Many users travel entire length
- Any mode: highway, rail, marine
- Intermodal nodes
- Feeder routes



# Defining Clean Corridors

## What do we mean by “clean”?

- **Alt fuel** is available, and used by fleets.
- **Idling reduction** is supported, and happens.
- **Cleaner & more fuel-efficient engines** are more widely used.
- **Fewer engine-on hours** are required per trip/move.
- **Clean & more fuel-efficient modes** are chosen.





# Defining Clean Corridors

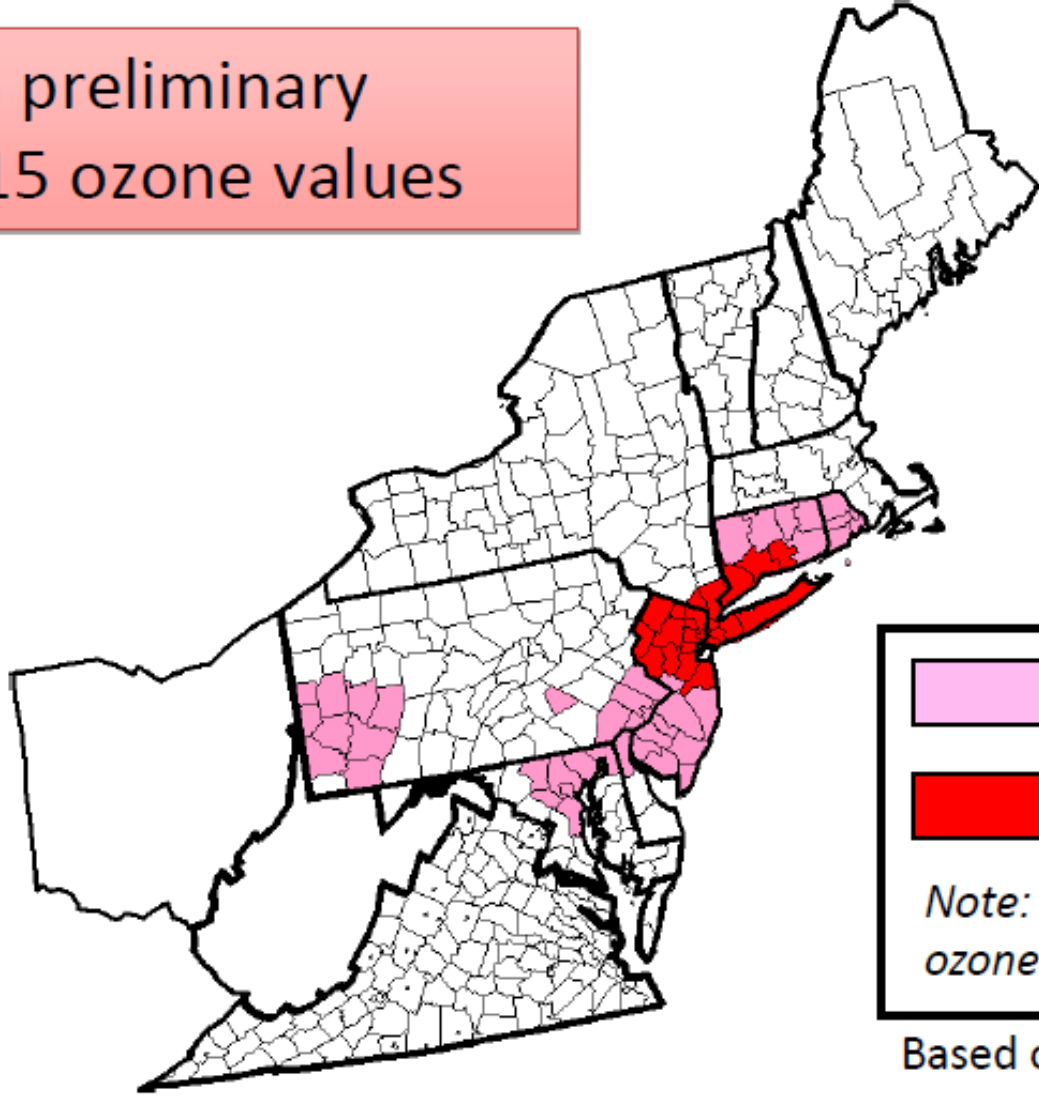
## Putting it together: criteria for “clean corridors”



- Low-performing.
- Where refueling and layovers are likely to occur.
- Where some alt fuel or idle reduction infrastructure exists.
- In heavily-populated areas.
- Corridors ripe for mode shift.



# Potential Nonattainment – 2015 70ppb NAAQS

Based on preliminary  
2013-2015 ozone values



	Marginal
	Moderate

*Note: Not all counties have ozone monitoring*

Based on CBSA Boundaries in most cases



# 3a. Clean Corridors

## Clean Corridor Designations – Selection Criteria:

- Alternative Fuel Facilities
- Corridor Scale/Impact
- Emissions Reductions
- Team Development, Collaboration, & Support

## Brownie Points:

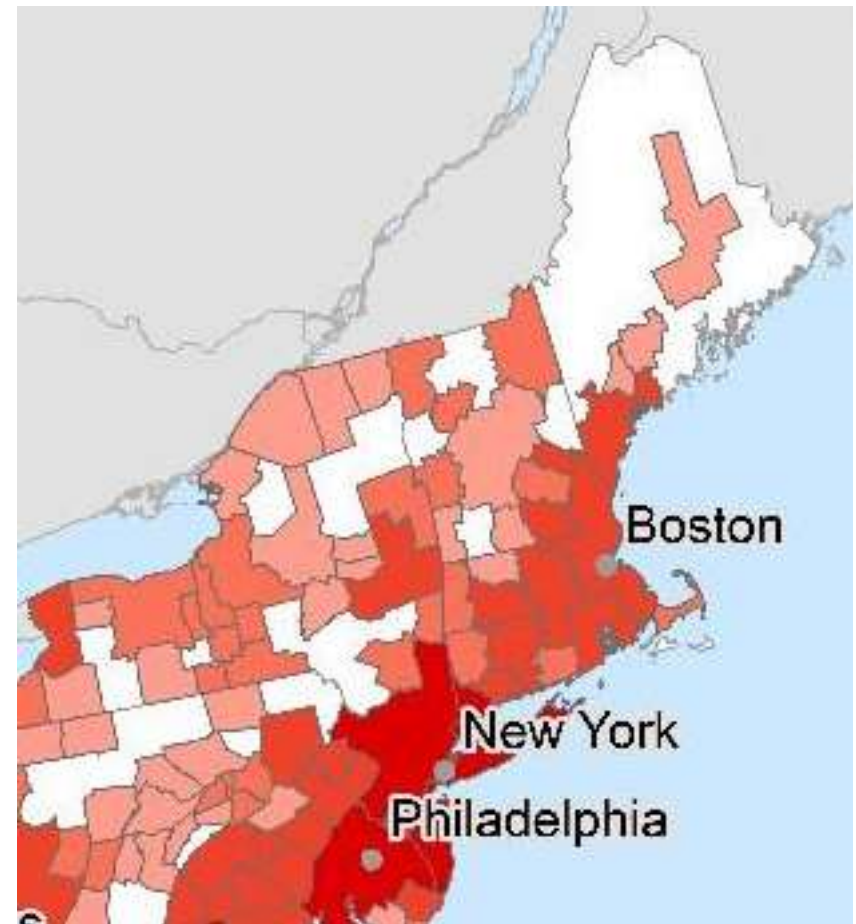
- Corridor runs through nonattainment areas
- Effort addresses US or state GHG reduction goals
- State/local alt fuel vehicle incentives apply
- Analysis of usage & demand for alt fuel
- Maintenance & emergency services for AFVs & stations available



# Defining Clean Corridors

## Why try?

- Influence corridor **designations**.
- Improve cross-state **planning**.
- Focus agency **resources**.
- **Incentivize** industry.
- Improve freight **productivity**.
- Reduce **emissions**.



# 3b. Clean Cities Collaborations

- Examples of successful collaborations – state, region, & national (ex. I-90 EV Charging Plan, Northeast Biodiesel Producer Group, etc.)
- Which corridors are Clean Cities priorities & have plans? (ex. I-95, I-90, etc.)
- ARRA – lessons learned
  - \$300M matched with > \$500M
  - 9,035 AFVs deployed – Displaced 154M GGEs petroleum
  - 1,380 Alternative Fuel Stations - Displaced 254,000 tons of GHGs



# 3b. Clean Cities Collaborations

## NYS

## NE Region

## Nationally

- EVSE Implementation Plans for I-90 & Tompkins County
- CNG Infrastructure and Vehicle Implementation: National Grid, Waste Management, Casella Waste, CENTRO
- NYSERDA EVSE Level 2 Implementation

# 3c. Why Clean Cities?






# 3d. Funding Opportunities

- CMAQ
- VALE
- TIGGER
- DERA

Clean Cities Project Awards					
Year	Proposals	Awards	DOE \$ (million)	Cost Share <sup>a</sup> \$ (million)	Total \$ (million)
1998	90	34	\$2.6	\$18.7	\$21.3
1999	104	53	\$3.7	\$11.1	\$14.8
2000	138	54	\$3.8	\$23.0	\$26.8
2001	127	54	\$4.3	\$10.9	\$15.2
2002	135	55	\$4.5	\$21.4	\$25.9
2003	141	68	\$5.3	\$29.9	\$35.2
2004	156	66	\$5.4	\$37.5	\$42.9
2005	153	70	\$5.4	\$35.3	\$40.7
2006–2008 <sup>b</sup>	78	16	\$8.4	\$26.4	\$34.8
2009–2010 <sup>b</sup>	116	23	\$13.7	\$17.9	\$31.5
2011–2012 <sup>b</sup>	69	16	\$8.5	\$1.9	\$10.4
2013	66	20	\$11.1	TBD <sup>c</sup>	\$11.1
2015	60	11	\$6	\$3.2	\$9.2
<b>Total</b>	<b>1,373</b>	<b>529</b>	<b>\$82.7</b>	<b>\$237.2</b>	<b>\$319.8</b>
2009–2010 (ARRA) <sup>b,d</sup>	89	25	\$300.0	\$506.4	\$806.4
<b>Grand Total</b>	<b>1,522</b>	<b>565</b>	<b>\$382.7</b>	<b>\$743.6</b>	<b>\$1,126.2</b>

Source: NETL regional managers

<sup>a</sup> Cost share includes both matching funds and in-kind contributions.

<sup>b</sup> Multiyear project awards: These projects received incremental funding that spanned multiple fiscal year budgets. This chart reflects total project funding.

<sup>c</sup> The actual cost share amount is subject to negotiations prior to finalizing the award.

<sup>d</sup> One-time funding from the American Recovery and Reinvestment Act of 2009 (ARRA)



## 3e. Clean Cities Goals / Action Items

- Connect Clean Cities with State DOTs – esp. with Freight Plans/Regional MPO plans – advisory committee/working groups.
- Take active role in moderated discussions during the meeting.
- Make value of Clean Cities known – technical insight, partnerships, techs/fuels, grants, project management, fuel/technology neutral.
- Arrange Clean Cities webinars for corridor coalitions (I-95 Corridor Coalition)
- NECFC can be the connector – promote partnerships/ID funding opportunities