U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

2017 Transportation Technology Deployment Report:

Massachusetts Clean Cities

Expanded Edition

March 2018

Clean Cities
U.S. Department of Energy

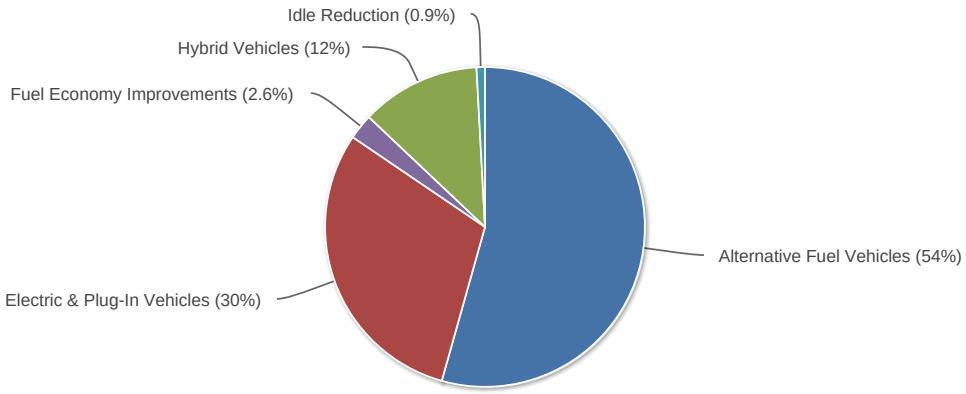
The U.S. Department of Energy's (DOE) Clean Cities program advances the nation's economic, environmental, and energy security by supporting local actions to reduce petroleum use in transportation. A national network of nearly 100 Clean Cities coalitions brings together stakeholders in the public and private sectors to deploy alternative and renewable fuels, idle-reduction measures, fuel economy improvements, and new transportation technologies, as they emerge.

Every year, each Clean Cities coalition submits to DOE an annual report of its activities and accomplishments for the previous calendar year. Coalition coordinators, who lead the local coalitions, provide information and data via an online database managed by the National Renewable Energy Laboratory (NREL). The data characterize membership, funding, projects, and activities of the coalitions. The coordinators also submit data on the sales of alternative fuels, deployment of alternative fuel vehicles and hybrid electric vehicles, idle-reduction initiatives, fuel economy activities, and programs to reduce vehicle miles traveled. NREL and DOE analyze the data and translate them into petroleum-use and greenhouse gas reduction impacts for individual coalitions and the program as a whole. This report summarizes those impacts for Massachusetts Clean Cities.

To view aggregated data for all local coalitions that participate in the Clean Cities program, visit cleancities.energy.gov/accomplishments.

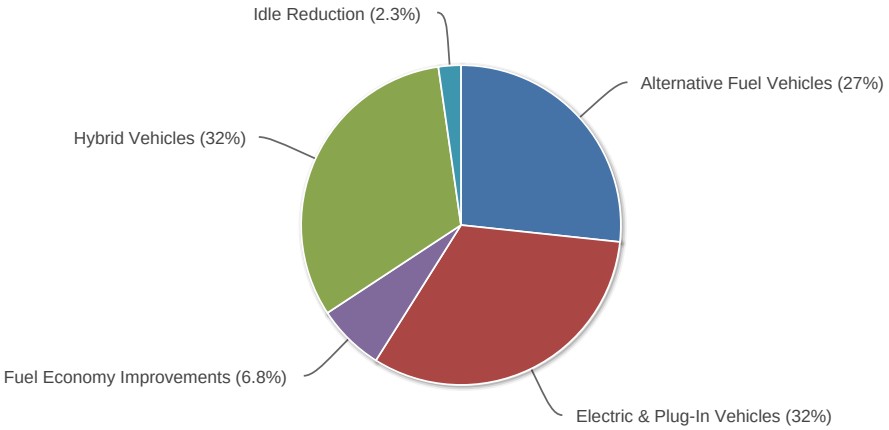
2017 Gallons of Gasoline Equivalent Reduced

5,119,086 gallons

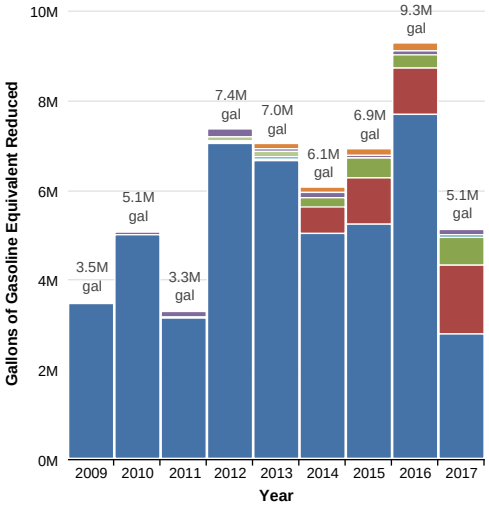


2017 Greenhouse Gas Emissions Reduced

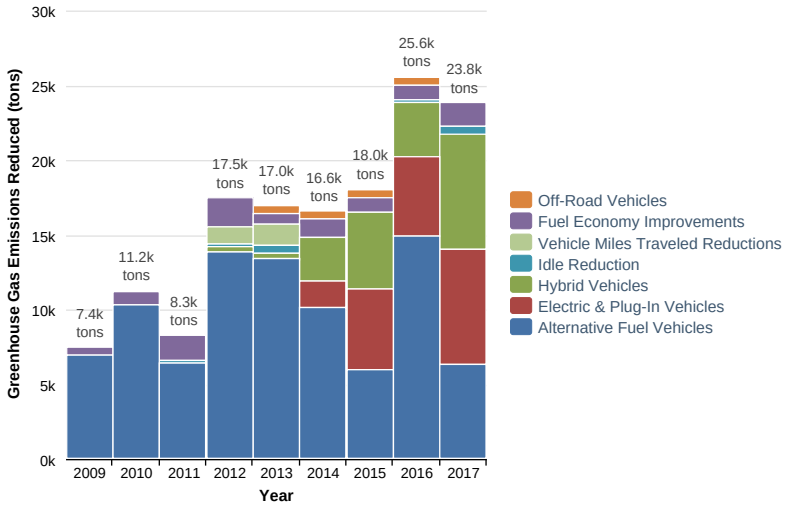
23,846 tons



Historical Gallons of Gasoline Equivalent Reduced

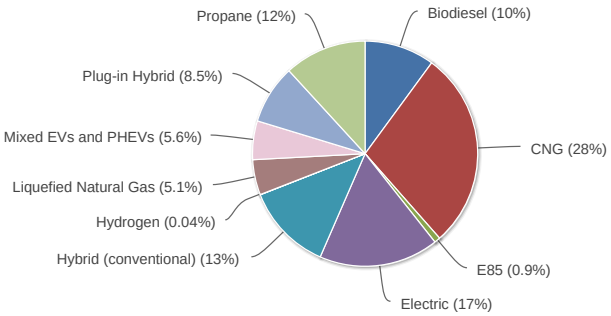


Historical Greenhouse Gas Emissions Reduced



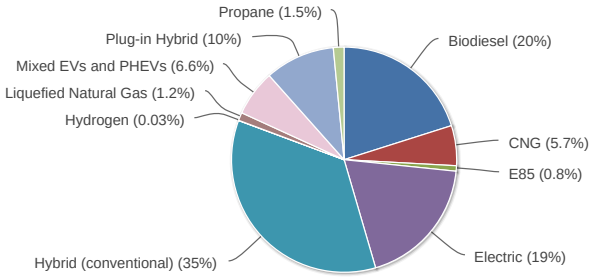
2017 Gallons of Gasoline Equivalent Reduced by Fuel Type for Alternative Fuel Projects

4,944,305 gallons



2017 Greenhouse Gas Emissions Reduced by Fuel Type for Alternative Fuel Projects

21,679 tons



Criteria Pollutant Emissions Reduced

Criteria pollutants are chemicals that have been linked to human health effects and therefore regulated in the Clean Air Act of 1970. The Clean Cities annual report calculates them using the same assumptions and default values as AFLEET 2016, with some adjustments to fit specific data inputs. They are quantified at vehicle tailpipes, as those are the emissions contributing to the regulated “ambient” air quality of a given city. This means that they omit emissions from sources such as electric power plants, refineries, and biofuel feedstock farms (where emissions are sufficiently removed from populations in order to minimize health effects). When a specific pollutant surpasses a given threshold for a given area, the area is considered to be in “nonattainment” for that pollutant. Nonattainment areas for given pollutants can be viewed at www.epa.gov/green-book. To learn more about what your emissions numbers mean, please take the Understanding Emissions or Emissions Compliance courses at Clean Cities University.

Reductions by Fuel Type*	NOx	VOC	CO	PM10	PM2.5
Biodiesel	0 lb	0 lb	0 lb	0 lb	0 lb
CNG - Compressed Natural Gas	59,679 lb	126 lb	-255,877 lb	6 lb	5 lb
E85 - 85% Ethanol	0 lb	12 lb	0 lb	0 lb	0 lb
Electric (all-electric)	15,477 lb	4,265 lb	74,646 lb	171 lb	158 lb
Hybrid (conventional)	4,128 lb	681 lb	-1,802 lb	7 lb	5 lb
Hydrogen	63 lb	1 lb	7 lb	0 lb	0 lb
LNG - Liquefied Natural Gas	32,606 lb	0 lb	-132,187 lb	0 lb	0 lb
Mixed EVs and PHEVs	737 lb	1,261 lb	17,899 lb	28 lb	26 lb
Plug-in Hybrid	3,372 lb	5,147 lb	94,507 lb	149 lb	138 lb
Propane	26,903 lb	-4,390 lb	-118,294 lb	12 lb	14 lb
Total:	**142,964 lb**	**7,102 lb**	**-321,101 lb**	**375 lb**	**348 lb**

* This table accounts for criteria pollutants from alternative fuel vehicle, hybrid vehicle, and VMT reduction projects only. It does not include fuel economy, idle reduction, or off-road projects. Negative values indicate an increase in emissions.

COALITION

Massachusetts Clean Cities - MA

http://www.mass.gov/energy/cleancities

Designated: 03/18/1994
Boundaries: Entire state of Massachusetts

COORDINATORS

	Address	Telephone	Fax
Mike Manning	C-6 Shipway Pl Boston, MA 02129		
Stephen Russell	100 Cambridge St, Ste 1020 Boston, MA 02114		

Number of coordinators	2
Coordinator(s) hours per week on Clean Cities	45 hours
Other staff hours per week on Clean Cities	40 hours
How long have you been the coordinator?	8 years

OPERATING INFORMATION

Host organization	Government - State

Stakeholders

Number of stakeholders	486
Number of private stakeholders	255
Does the State Energy Office provide any financial support to the coalition or stakeholders?	Yes
Explain State Energy Office's support	Salary, Office space, admin support
How would you rate the quality of the data on your survey?	Good
How do you obtain most of your data for the survey?	Paper, e-mail, or spreadsheet questionnaire to stakeholders, Phone calls to stakeholders
Has your coalition registered with www.grants.gov?	Yes

2017 Outside Funding

Stakeholder dues collected	$0
How much funding is obtained from other sources to cover coalition operating expenses?	$60,000
Non-DOE or ARRA grant and matching funds spent in 2017	$1,203,000
Total non-DOE or ARRA funding in 2017	$1,263,000

Alternative Fuel & Vehicles

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
ABC Disposal	Heavy-Duty	CNG	25	100% of time	138,309 gal	116.5 tons
Miles traveled per vehicle: 25,000 mi **Average vehicle fuel economy:** 3 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Refuse **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Allied Republic	Heavy-Duty	CNG	4	100% of time	22,129 gal	18.6 tons
Miles traveled per vehicle: 25,000 mi **Average vehicle fuel economy:** 3 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Refuse **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Bunker Hill community College	Heavy-Duty	CNG	4	100% of time	3,508 gal	3.0 tons
Miles traveled per vehicle: 22,829 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Government - State **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No						
Cape Cod Biofuels	Heavy-Duty	Biodiesel (20%)	600	47,654 gal	10,160 gal	89.0 tons
Market: General/Unknown **Vehicle type:** Unknown/Other **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
This operation sold 47,654 gallons of B-20 that was used exclusively in the transportation sector. They are a a small biodiesel produced that collects used cooking oil from restaurants on Cape Cod. They received a grant form Massachusetts DOER/ Clean Cities to expand their operation.						
Charles River TMA	Heavy-Duty	CNG	12	100% of time	55,556 gal	46.8 tons
Miles traveled per vehicle: 30,126 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Corporate Fleet **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
City of Boston Central fleet	Light-Duty	Propane	25	50% of time	4,436 gal	6.3 tons
Miles traveled per vehicle: 12,138 mi **Average vehicle fuel economy:** 17 MPGge **Market:** Government - Local **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
City of Boston School bus fleet	Heavy-Duty	Propane	247	100% of time	478,271 gal	187.5 tons
Miles traveled per vehicle: 14,000 mi **Average vehicle fuel economy:** 6 MPGde **Market:** Government - Local **Vehicle type:** Bus: School **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
This fleet is on its way to convert all 700 of their school buses to Propane						

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
Clean Uniform	Heavy-Duty	CNG	1	100% of time	1,100 gal	0.9 tons
Miles traveled per vehicle: 13,123 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Clean Vehicle Program CNG conversions	Heavy-Duty	CNG	58	100% of time	16,044 gal	13.5 tons
Miles traveled per vehicle: 25,000 mi **Average vehicle fuel economy:** 100 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Refuse **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No *this grant provided grants for 10 fleets to covert to CNG*						
Clean Vehicle Program propane conversions	Light-Duty	Propane	30	100% of time	23,424 gal	33.1 tons
Miles traveled per vehicle: 11,712 mi **Average vehicle fuel economy:** 15 MPGge **Market:** Government - Local **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No *This represents two fleets coverted to propane*						
Consolidated utilities	Light-Duty	CNG	10	100% of time	5,324 gal	6.9 tons
Miles traveled per vehicle: 12,138 mi **Average vehicle fuel economy:** 17 MPGge **Market:** Corporate Fleet **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
Courtyard by Marriot	Heavy-Duty	CNG	2	100% of time	1,754 gal	1.5 tons
Miles traveled per vehicle: 22,829 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Commuters **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No						
Dennis K Burke	Heavy-Duty	Biodiesel (20%)	19	76,830 gal	8,190 gal	71.7 tons
Market: General/Unknown **Vehicle type:** Unknown/Other **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No *This is B 100 biodiesel sold to various fleets in Massachusetts in various percentages including the state fleet recorded separately last year. I do not know the number of vehicles that used this fuel. It does include Boston Coach, the Duck Boats and some small buses used at hotels in Eastern MA. Communities using biodiesel include Towns of: Cambridge, Somerville, Marblehead, City of Boston, Uxbridge,Hanover, Kingston , Water Resources and Harvard University.*						
Dennis K Burke	Light-Duty	E85 (blender pump)	100	71,830 gal	31,138 gal	121.5 tons
Market: General/Unknown **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No *This is wholesale sales of E-85 by Dennis K Burke, a stakeholder.*						

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
Dennis K Burke retail station	Heavy-Duty	Biodiesel (20%)	2	6,986 gal	1,489 gal	13.0 tons
Market: Government - State **Vehicle type:** Unknown/Other **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
In addition to selling B-20 at their retail station Dennis K Burke has the Statewide Biodiesel contract and those b- 20 volumes are reported under Their wholesale #s. Those deliveries are done to centrally fueled fleets across the State and are not purchased at the retail station.						
Dennis K Burke retail station	Light-Duty	E85	11	9,586 gal	4,156 gal	16.2 tons
Market: General/Unknown **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
Dennis K Burke is an Active Stakeholder and promotes the use of Alternative fuels. He sells it at the pumps						
Department of Environmental Protection	Light-Duty	CNG	6	100% of time	2,161 gal	2.8 tons
Miles traveled per vehicle: 11,244 mi **Average vehicle fuel economy:** 23 MPGge **Market:** Government - State **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
These are vehicles are used to support staff in the various DEP offices.						
Eversource	Light-Duty	CNG	20	100% of time	3,549 gal	4.6 tons
Miles traveled per vehicle: 12,138 mi **Average vehicle fuel economy:** 17 MPGge **Market:** Utility **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No						
Gulf/Cumberland Farms	Heavy-Duty	LNG	44	100% of time	250,044 gal	250.8 tons
Miles traveled per vehicle: 66,768 mi **Average vehicle fuel economy:** 7 MPGde **Market:** General/Unknown **Vehicle type:** Truck: Semi-trailer **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Gulf Oil Cumberland Farms	Light-Duty	E85	20	18,056 gal	7,827 gal	30.5 tons
Market: General/Unknown **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
This is the total fuel sold at the 3 E-85 retail stations on the Mass Pike. Gulf/ cumberland farms is an active stakeholder in the coalition.						
Knight's Airport Limo service	Light-Duty	Propane	45	127,268 gal	72,256 gal	102.1 tons
Market: Airport **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
They converted 45 vans to run on propane through our Clean Vehicle Grant						
Massachusetts DOT (highway)	Heavy-Duty	CNG	2	100% of time	1,831 gal	1.5 tons
Miles traveled per vehicle: 13,239 mi **Average vehicle fuel economy:** 12 MPGde **Market:** Government - State **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
Mass highway is now moving back to CNG now that there are manufacturers producing the CNG option						

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
Massachusetts DOT (highway)	Light-Duty	CNG	115	100% of time	104,909 gal	135.9 tons
Miles traveled per vehicle: 14,596 mi **Average vehicle fuel economy:** 12 MPGge **Market:** Government - State **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
MassPort (Logan Airport)	Heavy-Duty	CNG	22	100% of time	5,702 gal	4.8 tons
Miles traveled per vehicle: 11,244 mi **Average vehicle fuel economy:** 24 MPGde **Market:** Airport **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
MassPort (Logan Airport)	Light-Duty	CNG	9	100% of time	22,734 gal	29.5 tons
Miles traveled per vehicle: 23,576 mi **Average vehicle fuel economy:** 7 MPGge **Market:** Airport **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
MBTA - Massachusetts Bay Transportation Authority	Heavy-Duty	CNG	94	100% of time	957,027 gal	805.8 tons
Miles traveled per vehicle: 31,285 mi **Average vehicle fuel economy:** 3 MPGde **Market:** Government - State **Vehicle type:** Bus: Transit **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
MBTA - Massachusetts Bay Transportation Authority	Heavy-Duty	Hydrogen	1	930 kg	1,811 gal	7.2 tons
Market: Government - State **Vehicle type:** Bus: Transit **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
Newport Biodiesel	Heavy-Duty	Biodiesel (99%)	450	50% of time	478,059 gal	4,186.4 tons
Miles traveled per vehicle: 15,000 mi **Average vehicle fuel economy:** 6 MPG **Market:** General/Unknown **Vehicle type:** Unknown/Other **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No						
This is the Amount of B-99 sold to Peterson oil company in Massachusetts for use in Vehicles. They have several contracts with cities and Town in Massachusetts. Have asked for specifics from Peterson but have not recieved them yet.						
Republic Waste	Heavy-Duty	CNG	2	100% of time	11,065 gal	9.3 tons
Miles traveled per vehicle: 25,000 mi **Average vehicle fuel economy:** 3 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Refuse **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
Save that stuff	Heavy-Duty	CNG	3	100% of time	16,597 gal	14.0 tons
Miles traveled per vehicle: 25,000 mi **Average vehicle fuel economy:** 3 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Refuse **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Schwan's - Medium-duty Propane	Heavy-Duty	Propane	2	8,936 gal	6,088 gal	2.4 tons
Market: Corporate Fleet **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 100% **National Clean Fleets Partnership:** Yes						
South Bay Shopping Center	Heavy-Duty	CNG	1	100% of time	877 gal	0.7 tons
Miles traveled per vehicle: 22,829 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Commuters **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No						
Steamship Authority	Heavy-Duty	CNG	1	25,500 GGE	22,950 gal	19.3 tons
Market: Government - State **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No						
Stop and shop	Heavy-Duty	CNG	3	100% of time	10,318 gal	8.7 tons
Miles traveled per vehicle: 65,897 mi **Average vehicle fuel economy:** 5 MPGde **Market:** Corporate Fleet **Vehicle type:** Truck: Semi-trailer **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No						
Transaction Associates	Heavy-Duty	CNG	1	100% of time	1,754 gal	1.5 tons
Miles traveled per vehicle: 22,829 mi **Average vehicle fuel economy:** 7 MPGde **Market:** Commuters **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
Total:			**1,991**		**2,782,549 gal**	**6,364 tons**

Electric, Hybrid & Plug-in Vehicles

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
Aerovironment charging stations	Light-Duty	EV-PHEV	1,453	1,453 gal	7.5 tons
Electricity used: 20,344 kWh **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:** *This represents 40 charging stations installed under a grant from Clean Cities. AV has stopped collecting data so I am assuming that usage is the same even though we have more EVs registered in the State in 2017.* *Breaking this down it is 203.43 MWh - 348 KWh per outlet and average of 209 sessions - 4.26 KWh per session* *the number of vehicles listed are the number of rebates issued by our office to consumers.*					

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
Brauns Express	Heavy-Duty	HEV	1	938 gal	11.6 tons
Average vehicle fuel economy: 8 MPG **Miles traveled per vehicle per year:** 42,526 mi **Market:** Corporate Fleet **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Massachusetts Clean Cities funded the hybrid technology addition to this truck.					
Cambridge Landscape	Heavy-Duty	HEV	2	493 gal	6.1 tons
Average vehicle fuel economy: 8 MPG **Miles traveled per vehicle per year:** 15,326 mi **Market:** Corporate Fleet **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 80% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Mass Clean Cities provided funding for the purchase of this technology.					
Chargepoint	Light-Duty	EV-PHEV	8,048	245,938 gal	1,278.3 tons
Electricity used: 1,722,254 kWh **Market:** General/Unknown **Vehicle type:** Car **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
ChargePoint is a stakeholder in the Massachusetts coalition. They reported 75,506 GWh used in the 293 EVSEs they operate in Massachusetts. Massachusetts has 14,052EVs registered in the State but the number used above is the rebated vehicles. The number of vehicles listed above is the total number of EVs rebated since the program began in 2014.					
City of Boston	Heavy-Duty	HEV	4	968 gal	11.9 tons
Average vehicle fuel economy: 15 MPG **Miles traveled per vehicle per year:** 5,000 mi **Market:** Government - Local **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
The City of Boston has 4 bucket trucks that are now Electric hybrids					
City of Boston	Light-Duty	Electric	4	1,338 gal	7.0 tons
Miles traveled per vehicle per year: 10,345 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
The City of Boston continues to use battery electric vehicles in their fleet.					
City of Boston	Light-Duty	HEV	125	38,967 gal	480.0 tons
Average vehicle fuel economy: 32 MPG **Miles traveled per vehicle per year:** 10,345 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
The City of Boston has replaced all their Gasoline powered vehicles with Prius hybrids. They reduced their fleet using zip car technology by 20 vehicles using car share technology.					

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
City of Boston	Light-Duty	PHEV	10	2,371 gal	12.3 tons
Average vehicle fuel economy: 40 MPG **Miles traveled per vehicle per year:** 10,345 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
The City of Boston has continues to add Electric vehicles based on their duty cycle. These plug in Hybrids continue to be used.					
DCR - Enviornmental Police	Light-Duty	HEV	25	2,890 gal	35.6 tons
Average vehicle fuel economy: 21 MPG **Miles traveled per vehicle per year:** 12,138 mi **Market:** Government - State **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This department added XL hybrid technology to their Vans					
Department of Conservation and Recreation(DCR)	Light-Duty	HEV	20	1,806 gal	22.2 tons
Average vehicle fuel economy: 21 MPG **Miles traveled per vehicle per year:** 12,138 mi **Market:** Government - State **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
DCR added Hybrid electric technology to 20 of their E350 Vans used by their Clean up program.					
Department of Enviornmental Protection	Light-Duty	HEV	15	2,832 gal	34.9 tons
Average vehicle fuel economy: 46 MPG **Miles traveled per vehicle per year:** 12,000 mi **Market:** Government - State **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
These are state cars used in the various Department of Environmental Protection offices.					
Diesel Direct	Heavy-Duty	HEV	1	413 gal	5.1 tons
Average vehicle fuel economy: 9 MPG **Miles traveled per vehicle per year:** 13,239 mi **Market:** Corporate Fleet **Vehicle type:** Truck: No Trailer **Percentage from coalition:** 80% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Massachusetts Clean Cities funded the hybrid technology addition to this fuel delivery truck.					
EV school bus pilot	Heavy-Duty	Electric	3	1 gal	0.0 tons
Electricity used: 6 kWh **Market:** Government - Local **Vehicle type:** Bus: School **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
The average Efficiency,kWh/m 2.38, 1.73, and 1.77 on each bus These vehicles have traveled 10,529 miles					

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
Kiessling transit	Heavy-Duty	HEV	33	23,155 gal	285.2 tons
Average vehicle fuel economy: 9 MPG **Miles traveled per vehicle per year:** 22,829 mi **Market:** Commuters **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Massachusetts clean cities funded the differential cost to hybridize their vans Hydraulic Hybrid technology					
Massachusetts Clean Cities MOR-EV consumer rebate program	Light-Duty	Electric	1,125	510,070 gal	2,651.1 tons
Miles traveled per vehicle per year: 10,614 mi **Market:** General/Unknown **Vehicle type:** Car **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This is the number of BEVs that were either purchased or leased as a direct result of rebates issued. We do not know the mileage traveled.					
Massachusetts Clean Cities MOR-EV consumer rebate program	Light-Duty	PHEV	1,596	403,998 gal	2,099.8 tons
Average vehicle fuel economy: 53 MPG **Miles traveled per vehicle per year:** 10,614 mi **Market:** Commuters **Vehicle type:** Car **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This is the number of PHEVs that were either purchased or leased as a direct result of rebates issued. We do not know the mileage traveled.					
Massachusetts State light duty executive office fleet	Light-Duty	HEV	206	31,357 gal	386.2 tons
Average vehicle fuel economy: 50 MPG **Miles traveled per vehicle per year:** 11,788 mi **Market:** Government - State **Vehicle type:** Car **Percentage from coalition:** 55% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Massachusetts Clean Cities funded the installation of hymotion batteries into 10 of the 206 hybrid vehicles.					
Massachusetts State light duty executive office fleet	Light-Duty	HEV	206	31,357 gal	386.2 tons
Average vehicle fuel economy: 50 MPG **Miles traveled per vehicle per year:** 11,788 mi **Market:** Government - State **Vehicle type:** Car **Percentage from coalition:** 55% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Massachusetts Clean Cities funded the installation of hymotion batteries into 10 of the 206 hybrid vehicles.					
Mass clean cities Clean vehicle Project	Light-Duty	HEV	61	4,980 gal	61.3 tons
Average vehicle fuel economy: 28 MPG **Miles traveled per vehicle per year:** 11,048 mi **Market:** Corporate Fleet **Vehicle type:** Car **Percentage from coalition:** 100% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
these reflect 6 private fleets that received the differential cost to add hybrid technology to their vehicles.					

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
Mass DOT Highway fleet	Light-Duty	PHEV	23	2,719 gal	14.1 tons
Average vehicle fuel economy: 42 MPG **Miles traveled per vehicle per year:** 13,239 mi **Market:** Government - State **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
These vehicles are Volts					
Mass Electric Vehicle Incentive Program(MAssEVIP)	Light-Duty	Electric	174	62,145 gal	323.0 tons
Miles traveled per vehicle per year: 11,048 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This is a rebate program funded by Department of Environment Protection and the coalition was instrumental in putting this EV rebate program together for Cities and Towns across the State. These are funded through penalty funds levied by DEP					
Mass Electric Vehicle Incentive Program(MAssEVIP)	Light-Duty	EV-PHEV	97	27,062 gal	140.7 tons
Average vehicle fuel economy: 53 MPG **Miles traveled per vehicle per year:** 11,048 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This is a rebate program funded by Department of Environment Protection and the coalition was instrumental in putting this EV rebate program together for Cities and Towns across the State. These are funded through penalty funds levied by DEP. These are the charging wires that were funded					
Mass Electric Vehicle Incentive Program(MAssEVIP)	Light-Duty	PHEV	51	10,088 gal	52.4 tons
Average vehicle fuel economy: 52 MPG **Miles traveled per vehicle per year:** 11,048 mi **Market:** Government - Local **Vehicle type:** Car **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
This is a rebate program funded by Department of Environment Protection and the coalition was instrumental in putting this EV rebate program together for Cities and Towns across the State. These are funded through penalty funds levied by DEP					
MassPort (Logan Airport)	Heavy-Duty	Electric	100	240,256 gal	962.0 tons
Average electric fuel economy: - kWh/100mi **Miles traveled per vehicle per year:** 11,244 mi **Market:** Airport **Vehicle type:** Unknown/Other **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
These are electric ground support equipment used on the airport at Logan					
MassPort (Logan Airport)	Heavy-Duty	HEV	32	22,620 gal	278.6 tons
Average vehicle fuel economy: 4 MPG **Miles traveled per vehicle per year:** 11,244 mi **Market:** Airport **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
MassPort (Logan Airport)	Light-Duty	HEV	9	6,028 gal	74.3 tons
Average vehicle fuel economy: 4 MPG **Miles traveled per vehicle per year:** 23,576 mi **Market:** Airport **Vehicle type:** Car **Percentage from coalition:** 25% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
MBTA bus fleet	Heavy-Duty	HEV	250	449,799 gal	5,540.5 tons
Average vehicle fuel economy: 6 MPG **Miles traveled per vehicle per year:** 36,424 mi **Market:** General/Unknown **Vehicle type:** Bus: Transit **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Square One Daycare Center fleet	Light-Duty	HEV	5	464 gal	5.7 tons
Average vehicle fuel economy: 20 MPG **Miles traveled per vehicle per year:** 14,596 mi **Market:** General/Unknown **Vehicle type:** Pickup/SUV/Van **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Mass Clean cities funded the conversion with funds from Mass DEP. XL hybrid technology was installed on 5 of their E 250 Vans and they are achieving a 20% savings					
Worcester Regional Transit Authority	Heavy-Duty	Electric	6	35,249 gal	141.1 tons
Average electric fuel economy: - kWh/100mi **Miles traveled per vehicle per year:** 36,424 mi **Market:** Government - Local **Vehicle type:** Bus: Transit **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No **Workplace Charging Challenge:**					
Worcester continues to operate these Battery Electric Proterra buses They have added a second DCFC this year to reduce demand charges that take place when they have to charge rapidly.					
Total:			**13,685**	**2,161,756 gal**	**15,315 tons**

FUEL ECONOMY

Fuel Economy Improvements

Fleet Name	Previous Fuel	Current Fuel	Number of Vehicles	Miles Traveled per Vehicle	GGE Reduced	GHG Reduced
Brauns express	7 MPG	8 MPG	185	22,000 mi	46,188 gal	572.7 tons
Method: Trailer aerodynamic packages **Vehicle class:** Heavy-Duty **Market:** Corporate Fleet **Vehicle type:** Truck: Semi-trailer **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
This fleet uses SmartWay technology to reduce fuel use in his rolling stock.						
Brauns express	7 MPG	8 MPG	60	75,000 mi	51,068 gal	633.3 tons
Method: Other **Vehicle class:** Heavy-Duty **Market:** Corporate Fleet **Vehicle type:** Truck: Semi-trailer **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No						
This fleet uses speed technology to reduce fuel usage Maximum speed set at 65 Miles per hour using the ECM 5% fuel savings						

Fleet Name	Previous Fuel	Current Fuel	Number of Vehicles	Miles Traveled per Vehicle	GGE Reduced	GHG Reduced
Brauns Express	6 MPG	7 MPG	60	22,000 mi	16,219 gal	201.1 tons
Method: Tires - Low-rolling resistance **Vehicle class:** Heavy-Duty **Market:** Corporate Fleet **Vehicle type:** Truck: Semi-trailer **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No *they have a fuel savings of 4-10%*						
Knessling Transportaion	11 MPG	14 MPG	33	33,000 mi	17,605 gal	218.3 tons
Method: Vehicle - Hydraulic hybrid **Vehicle class:** Heavy-Duty **Market:** Commuters **Vehicle type:** Bus: Shuttle **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No *Massachusetts Clean cities funded these Bus retrofits*						
Total:			**338**	**152,000 mi**	**131,080 gal**	**1,625 tons**

IDLE REDUCTION

Idle Reduction

Project Name	Number of Vehicles	Idling Reduced per Vehicle	Fuel Saved per Vehicle	GGE Reduced	GHG Reduced
Brauns express	53	360 mins/day 200 days/year	1 gal/hr	28,852 gal	357.8 tons
Type of project: Auxiliary power unit (APU) **Type of vehicle:** Heavy-Duty - Truck: Long-Haul **Percentage from coalition:** 50% **National Clean Fleets Partnership:** No *This technology has saved 1000 gallons of Diesel fuel on each truck per year*					
Idle-Reduction Signage project	1,000	15 mins/day 180 days/year	0 gal/hr	14,850 gal	184.1 tons
Type of project: Policies **Type of vehicle:** Heavy-Duty - Bus: School **Percentage from coalition:** 75% **National Clean Fleets Partnership:** No *The coalition working with the region 1 EPA has acquired 300 Anti idling signs that will be distributed to all the public schools in Boston along with many of the MBTA transportation centers. Not able to quantify how much idling is reduced. so numbers above are estimates.* *These signs were arrived in 2017*					
Total:	**1,053**			**43,702 gal**	**542 tons**

FUEL STATIONS

New Stations

Fuel	Public Stations	Private Stations
Biodiesel	-	-
CNG - Compressed Natural Gas	2	-
E85 - 85% Ethanol	-	-
Electric Charging Outlets	102	820
Hydrogen	-	0
LNG - Liquefied Natural Gas	-	-
Propane	-	-
Total:	**104**	**820**

OUTREACH ACTIVITIES

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
Transportation Climate Initiative	01/01/2017, 12/29/2017	Meeting - Other	75%	25
Technology: Electric vehicles, Vehicle miles traveled reduction **Audience:** Government *Meet monthly with the steering committee regarding the Georgetown Climate Centers work with the 14 state Transportation initiative*				
State Inter-agency meetings	01/01/2017, 12/29/2017	Meeting - Other	75%	10
Technology: Electric vehicles **Audience:** Government *The Massachusetts coalition participates in an inter-agency meeting monthly. The meeting includes Staff from the Department of Transportation the Department of Environmental Protection, Department of Energy Resources, the Department of Public utilities, the Office of Vehicle management. and the Executive Office of Energy and Environmental Affairs with the goal is to break down the silos of State government.*				
MOR-EV consumer rebate program	01/02/2017, 12/29/2017	Advertisement	100%	2,721
Technology: Electric vehicles **Audience:** General Public *Massachusetts Clean Cities manages the Electric vehicle rebate program MOR-EV.org for the state of Massachusetts and in 2017 we provided 2721 incentive's for both battery electric and Plug in Hybrid vehicles. The state has committed 12 M to the program. Rebates range from 2,500 down to 1,000 depending on the type of vehicle.*				
Low Income EV rebate program	01/04/2017	Meeting - Other	75%	10
Technology: Electric vehicles **Audience:** General Public *2017 saw the kick off of a Low income EV rebate pilot. This pilot is being run by two Community Action program that serve low income folks in Greenfield MA and Worcester MA. The program will provide rebates towards both new and used battery electric vehicles.* *The consumers must be income eligible.*				
Fuel efficiency standard for Massachusetts state fleet.	01/05/2017	Meeting - Other	75%	6
Technology: Biodiesel, E85, Electric vehicles, Fuel economy improvements, Hybrid electric vehicles, Idle reduction, Natural gas vehicles, Propane **Audience:** Government *Meet with The office of vehicle Management to support statewide fuel efficiency standard for the state fleet. This standard was approved and adopted in 2016. It continues to be the benchmark for Sate fleet vehicles The Fuel Efficiency Standard (FES) committee made up of staff from various departments in the state.*				
Alternative fuel presentation	01/10/2017	Meeting - Other	100%	45
Technology: Electric vehicles, Hybrid electric vehicles **Audience:** General Public, Government *Did a presentation on EVs for the State leading by example fleet managers*				
Electric School bus V2 G pilot	01/11/2017, 01/25/2017, 02/08/2017, 02/22/2017	Meeting - Other	100%	75
Technology: Electric vehicles **Audience:** Government *This year the Massachusetts clean cities coalition continued to support the Electric vehicle School bus pilot. The coalition continues to monitor and evaluate this program. Three communities are part of this Pilot to not only test EV school buses but also check out Vehicle to grid technology. we have calls every 2 weeks throughout the year with the school staff.*				

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
Booth at the New England Auto show Boston	01/12/2017, 01/13/2017, 01/14/2017, 01/15/2017, 01/16/2017	Media Event	75%	500

Technology: Electric vehicles
Audience: General Public

The Clean cities coalition sponsored a booth at the auto show to talk about the Electric vehicle rebate program that had begun in 2014. This year we invited EVSE companies and it added to booth.

Meeting with Massachusetts State Auto Dealers Association (MSADA)	01/13/2017	Meeting - Other	100%	125

Technology: Electric vehicles
Audience: Private Fleets

The commissioner of the department of Energy Resources gave a presentation at the Massachusetts Auto dealers Associations annual meeting. She spoke about the states EV rebate as well as dealer training for EVs.

Dealer training Ford dealers	01/23/2017, 02/01/2017, 02/02/2017	Meeting - Other	75%	30

Technology: Electric vehicles, Hybrid electric vehicles
Audience: Other

The Mass Clean Cities Coalition was invited to Ford Motor companies Electric vehicle training program to talk about the EV rebate the state offers . Located at each of three dealers and approximately 30 sales staff. It was great that the coalition was invited.

Resource to state of Massachusetts Purchasing department developing state contract for ALT Fuel Technologies	02/15/2017	Meeting - Other	100%	10

Technology: Fuel economy improvements, Hybrid electric vehicles, Idle reduction, Natural gas vehicles
Audience: Government

the coalition continues to work with the State Purchasing (OSD) Department as a resource for continue alternative technology and fuel Contract for State agencies, cities and towns to purchase these technologies without going out to bid. It includes conversion technologies EVSEs and Idle reduction vendors. It is a nationwide contract.

EV ride and drive	03/01/2017, 11/30/2017	Media Event	75%	1,159

Technology: Electric vehicles
Audience: General Public, Private Fleets

In 2017 Massachusetts Clean cities and the department of energy resources sponsored 20 ride and drives at major corporations and a couple of major events. 1,159 folks took advantage of the ride and drive and drove a pure electric car. They took place all year.

Buildings in the age of Electric vehicles	03/08/2017	Conference participation	100%	40

Technology: Electric vehicles
Audience: General Public, Government, Utility

The coalition coordinator did a presentation on electric vehicles and how buildings will have to adapt for charging at home and the workplace. It was at the NESEA conference in Boston

Fleet Manager Visits	03/15/2017	Meeting - Other	100%	23

Technology: Biodiesel, Electric vehicles, Fuel economy improvements, Hybrid electric vehicles, Hydrogen, Idle reduction, Natural gas vehicles, Propane
Audience: Government, Private Fleets, Utility

Met with 5 fleet managers across the state to discuss alternative fuels and fuel efficiency.
ML transportation, Knessling transportation, City of Framingham, City of Worcester. Mass DOT, Mt Wachusett Community college, Town of Belchertown in Western Massachusetts.
Various dates. The colalition constantly gets calls from fleet managers on how they can move to alternative fuels.

Massachusetts Hydrogen coalition meeting	03/16/2017	Meeting - Stakeholder	50%	10

Technology: Hydrogen
Audience:

This meeting was to bring the Hydrogen fuel cell stakeholders in Massachusetts up to date on progress by the Manufacturers to bring their vehicles to market in MA as well as review progress on infrastructure. It was presented by folks from California and CT

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
Biodiesel working group	04/12/2017	Meeting - Other	75%	32
Technology: Biodiesel **Audience:** Other *Coalitions from VT, RI,ME,MA and NH all met with the principals from the regions small biodiesel producers. It was a follow up from a previously grant funded project. It was an opportunity to see how the producers are doing. It was an effective meeting.*				
Clean cities Coalition Stakeholder meetings	04/13/2017, 07/20/2017, 11/30/2017	Meeting - Stakeholder	75%	66
Technology: Hybrid electric vehicles **Audience:** Airport, Delivery, General Public, Government, Private Fleets, Transit, Utility *The April meeting covered an update on XL hybrid technology with a tour of the facility* *The July meeting was in Amherst MA at U mass feature Environmentally friendly Fluids for fleets, ICOM fleet Propane conversions. 23 attendees* *The November meeting was held in Worcester MA and featured the new all electric Transit E350 vans from Ford. 15 attendees*				
Earth day event	04/22/2017	Media Event	100%	75
Technology: E85, Electric vehicles, Fuel economy improvements, Hybrid electric vehicles, Idle reduction, Natural gas vehicles, Propane **Audience:** General Public *The coalition participated in an earth day event at the Franklin Park Zoo called "party for the planet" We provided a activity on Fuel reduction a Word search for the Kids.*				
Electric vehicle consumer event	05/07/2017	Conference participation	50%	30
Technology: Electric vehicles **Audience:** General Public *The coalition coordinator participated in an public event held in Worcester MA showcasing electric vehicles. The CC coordinator spoke and presented information about EVSEs in MA along with details about the consumer rebate.*				
Nafa fleet managers meeting	05/17/2017, 06/21/2017, 06/21/2017, 09/20/2017, 10/02/2017	Meeting - Other	50%	200
Technology: Electric vehicles, Fuel economy improvements, Idle reduction **Audience:** Delivery, Government, Private Fleets, Utility, Waste *Monthly meeting of fleet managers is an opportunity to Connect with corporate and Muni fleet mangers and talk Alt fuels.*				
Northeast Gas association Vehicle meeting	06/09/2017	Meeting - Other	75%	20
Technology: Natural gas vehicles **Audience:** Utility *This group is a regional group of Utilities that dicuss progress in the Vehicle sector using CNG.*				
Hydrogen Infrastructure planning meeting with CARB	06/16/2017	Meeting - Other	50%	30
Technology: Hydrogen **Audience:** Government, Private Fleets, Utility *the California air resources board came to MA and provided an update in Hydrogen fuel cell s and wanted to get an understanding of what MA was up to regarding hydrogen stations for the region, Toyota and KIA was also present and was interested in our progress.*				
EV presentation Green night in Northampton MA	07/12/2017	Meeting - Other	75%	50
Technology: Electric vehicles **Audience:** General Public *Western Massachusetts has a program once a month called "green night" it is an opportunity to speak to a group of environmentally friendly Consumers. My talk centered on Electric vehicles and upcoming ride and drives coming up in the summer.*				
Display and Northeast Propane association Expo	08/08/2017, 08/09/2017	Conference participation	50%	100
Technology: Propane **Audience:** Airport, Delivery, General Public, Government, Private Fleets, Utility, Waste *Massachusetts Clean Cities along with NH, Maine, and CT Clean cities all participated in the Northeast Propane Association conference and expo in Boxboro MA. The Clean cities table answered question about Auto gas (LPG) in the transportation sector. It was a 2 day event.*				

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
National Drive Electric week	09/09/2017, 09/17/2017	Media Event	50%	150

Technology: Electric vehicles
Audience: General Public, Government, Private Fleets, Transit

Massachusetts Clean cities participated in 19 events across the state during the Plug in America/ Sierra club drive electric week events.Boston, Springfield, Worcester and Plymouth, Braintree, Quincy, Cambridge and Shrewsbury all had events. Massachusetts had one of the larges amount of events in the country.

AltWheels Fleet day	10/02/2017	Workshop held by coalition	100%	290

Technology: Biodiesel, Electric vehicles, Fuel economy improvements, Hybrid electric vehicles, Hydrogen, Idle reduction, Natural gas vehicles, Propane
Audience: Airport, Delivery, Government, Private Fleets, Transit, Utility, Waste

This annual event provides not only speakers and panels on various fuels but also a very large EXPO with many alternative fueled vehicles on display.In addition many clean cities coordinators assist in the event as moderators and panelists. This year we had an electric vehicle Ride and drive.

EV school bus Filming	10/26/2017	Advertisement	100%	200

Technology: Electric vehicles
Audience: Government

The consultants working on the EV school bus pilot produce a film reaturing our EV school bus pilot.

Massachusetts EV listening sessions	10/31/2017	Meeting - Other	50%	200

Technology: Electric vehicles, Hybrid electric vehicles
Audience: Airport, Delivery, General Public, Government, Private Fleets, Transit, Utility, Waste

Massachusetts DOT began a series of listening sessions to gather information about how the state can clean up the transportation sector - Reduce VMTs and move to cleaner ZEVs
The coalition coordinator assisted with the listening sessions. there were 6 sessions throughout the state.

Meeting with Upper Austria Delegation	11/09/2017	Conference participation	50%	26

Technology: Electric vehicles
Audience: Government

Met with a delegation from upper Austria group that was in Boston and gave them an update on Massachusetts EV work.

Total:	**6,258**

GRANTS

Grantor	Total Grant Amount	Total Matching Funds	Total Project Funding	Grant Amount Spent in 2017	Matching Funds Spent in 2017	Total Project Funding Spent in 2017
CMAQ	$11,700,000	$0	$11,700,000	$1,800,000	-	$1,800,000

Additional matching funds added since start $0
Length of grant: 6
Year grant began: 2014
Sources of the grant: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Department of Energy
Partners: DOT
Technologies: CNG - Compressed Natural Gas, Electricity, Fuel Economy Improvements, H2 - Hydrogen, Idle Reduction, Propane, Other
Purpose: 11,700,000.00 to provide differential cost for adding Alternative fuel technology to LD,MD,and HD vehicles

This clean vehicle CMAQ grant opportunity is open to all public and private fleet operations. The grants will support Gaseous alternative fuels,Hybrid Electric vehicles and infrastructure projects.

Department of Energy Resources	$250,000	$0	$250,000	$0	-	$0

Additional grant money added since start $0
Additional matching funds added since start $0
Length of grant: 3
Year grant began: 2016
Sources of the grant: State Government
Technologies: Electricity
Purpose: Provide low income folks assistance to purchase Electric vehicles

Working with CAP agencies on a low income EV rebate program

Grantor	Total Grant Amount	Total Matching Funds	Total Project Funding	Grant Amount Spent in 2017	Matching Funds Spent in 2017	Total Project Funding Spent in 2017
Department of Energy Resources	$1,800,000	$0	$1,800,000	$1,200,000	-	$1,200,000
Additional grant money added since start $0 **Additional matching funds added since start** $0 **Length of grant:** 3 **Year grant began:** 2015 **Sources of the grant:** State Government **Partners:** Regional Greenhouse Gas Initiative **Technologies:** Electricity **Purpose:** This is a pilot to do 4 electric buses in 4 communities in the state *This is to pilot vehicle to grid technology with Electric schoolbuses*						
Electric vehicle education and dealer training	$46,000	$23,000	$69,000	$40,000	$3,000	$43,000
Additional grant money added since start $0 **Additional matching funds added since start** $0 **Length of grant:** 2 **Year grant began:** 2016 **Sources of the grant:** Department of Energy **Technologies:** Electricity **Purpose:** Expose fleets and consumers about electric vehicles *Massachusetts will hold 6 ride and drives over 2 years and provide dealers training on EVs*						
Total:	**$13,796,000**	**$23,000**	**$13,819,000**	**$3,040,000**	**$3,000**	**$3,043,000**