

# 2013 Transportation Technology Deployment Report:

State of West Virginia Clean Cities

March 2014

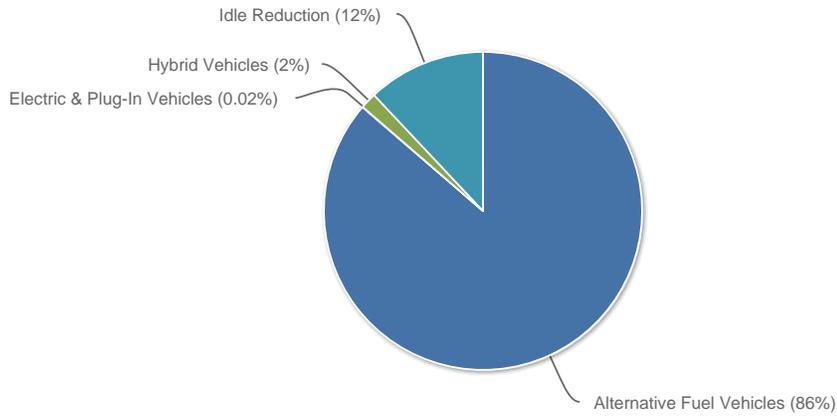
The U.S. Department of Energy's (DOE) Clean Cities program advances the nation's economic, environmental, and energy security by supporting local actions to reduce petroleum use in transportation. A national network of nearly 100 Clean Cities coalitions brings together stakeholders in the public and 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 State of West Virginia Clean Cities.

To view aggregated data for all local coalitions that participate in the Clean Cities program, visit [www.eere.energy.gov/cleancities/accomplishments.html](http://www.eere.energy.gov/cleancities/accomplishments.html).

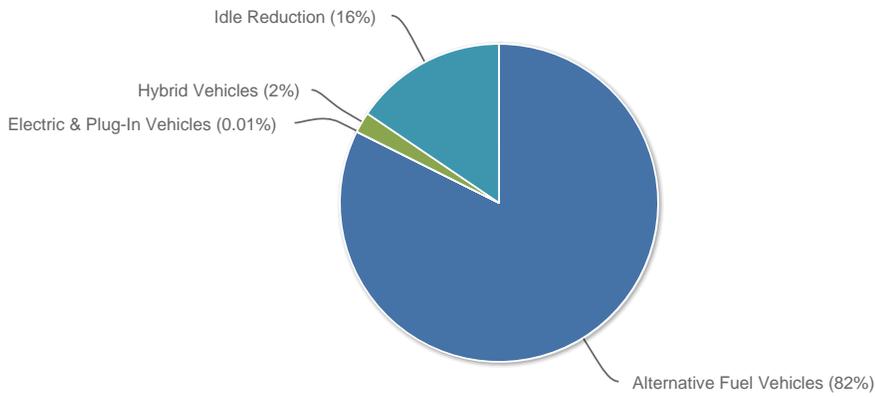
### 2013 Gallons of Gasoline Equivalent Reduced

299,964 gallons

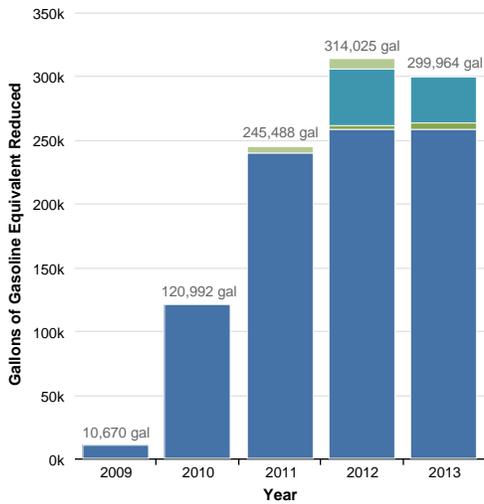


### 2013 Greenhouse Gas Emissions Reduced

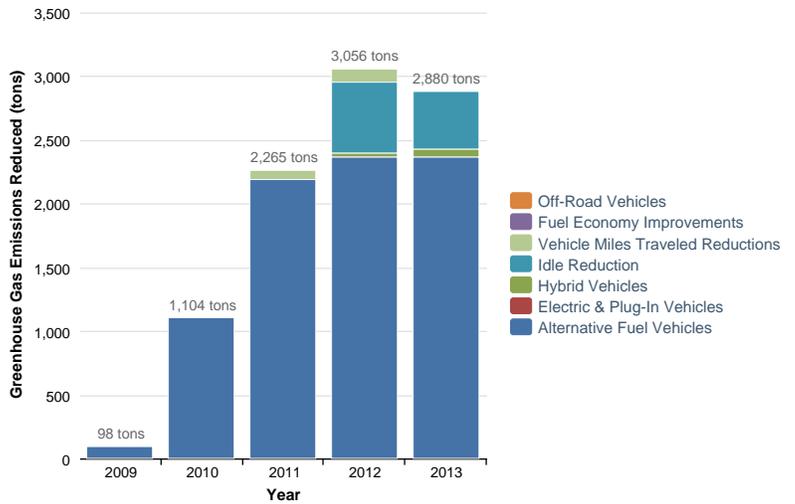
2,880 tons



### Historical Gallons of Gasoline Equivalent Reduced



### Historical Greenhouse Gas Emissions Reduced



- Off-Road Vehicles
- Fuel Economy Improvements
- Vehicle Miles Traveled Reductions
- Idle Reduction
- Hybrid Vehicles
- Electric & Plug-In Vehicles
- Alternative Fuel Vehicles

# COALITION

## State of West Virginia Clean Cities - WV

<http://www.energywv.org/CleanStateProgram>

**Designated:** 10/18/1994

**Boundaries:** Entire state of West Virginia

## COORDINATORS

	<b>Address</b>	<b>Telephone</b>	<b>Fax</b>
<b>Kelly Bragg</b>	1900 Kanawha Blvd E Bldg 6, Rm 620 Charleston, WV 25305	800-982-3386 x2004 or 304-558-2234 x2004	
<b>Casey Randolph</b>	1900 Kanawha Blvd E Bldg 6, Rm. 620 Charleston, WV 25305	800-982-3386	

<b>Number of coordinators</b>	2
<b>Coordinator(s) hours per week on Clean Cities</b>	10 hours
<b>Other staff hours per week on Clean Cities</b>	0 hours
<b>How long have you been the coordinator?</b>	8 years

## OPERATING INFORMATION

**Host organization** Government - State

### Stakeholders

<b>Number of stakeholders</b>	61
<b>Number of private stakeholders</b>	38
<b>Does the State Energy Office provide any financial support to the coalition or stakeholders?</b>	Yes

#### Explain State Energy Office's support

The W.Va. Clean State Program co-coordinators are employees of the W.Va. Division of Energy, the state energy office. Program activities are directed by WVDOE's director. The co-coordinators' office space, computers, phones, etc. are provided by WVDOE.

**How would you rate the quality of the data on your survey?** Good

**How do you obtain most of your data for the survey?** Coalition records, Estimates, Paper, e-mail, or spreadsheet questionnaire to stakeholders

**Has your coalition registered with [www.grants.gov](http://www.grants.gov)?** Yes

### 2013 Outside Funding

<b>Stakeholder dues collected</b>	\$0
<b>How much funding is obtained from other sources to cover coalition operating expenses?</b>	\$0
<b>Non-DOE or ARRA grant and matching funds spent in 2013</b>	\$0
<b>Total non-DOE or ARRA funding in 2013</b>	\$0

# VEHICLE & FUEL INVENTORY

## Alternative Fuel & Vehicles

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	Fuel Used	GGE Reduced	GHG Reduced
Kanawha County Commission	Light-Duty	CNG	3	80 GGE	76 gal	0.1 tons
Market: Government - Local Vehicle type: Pickup/SUV/Van Percentage from coalition: 100% National Clean Fleets Partnership: No						
WV county school bus fleets	Heavy-Duty	Biodiesel (5%)	3,181	5,100,935 gal	258,872 gal	2,372.2 tons
Market: Government - Local Vehicle type: Bus: School Percentage from coalition: 100% National Clean Fleets Partnership: No						
<b>Total:</b>			<b>3,184</b>		<b>258,948 gal</b>	<b>2,372 tons</b>

## Electric, Hybrid & Plug-in Vehicles

Fleet/Station Name	Vehicle Class	Fuel	Number of Vehicles	GGE Reduced	GHG Reduced
C&H Taxi	Light-Duty	HEV	2	4,701 gal	57.9 tons
Average vehicle fuel economy: 45 MPG Miles traveled per vehicle per year: 52,887 mi Market: Taxis Vehicle type: Car Percentage from coalition: 100% National Clean Fleets Partnership: No <i>The miles traveled per vehicle is an average of two vehicles in C&amp;H's fleet. Prius 1 traveled 55,943 miles in 2013; Prius 2 traveled 49,830 miles.</i>					
W.Va. Department of Environmental Protection	Light-Duty	HEV	1	151 gal	1.9 tons
Average vehicle fuel economy: 50 MPG Miles traveled per vehicle per year: 8,618 mi Market: Government - State Vehicle type: Car Percentage from coalition: 75% National Clean Fleets Partnership: No					
W.Va. Department of Environmental Protection	Light-Duty	PHEV	1	73 gal	0.4 tons
Average vehicle fuel economy: 40 MPG Miles traveled per vehicle per year: 5,311 mi Market: Government - State Vehicle type: Car Percentage from coalition: 75% National Clean Fleets Partnership: No					
W.Va. Division of Energy	Light-Duty	HEV	1	91 gal	1.1 tons
Average vehicle fuel economy: 32 MPG Miles traveled per vehicle per year: 9,986 mi Market: Government - State Vehicle type: Car Percentage from coalition: 75% National Clean Fleets Partnership: No					
<b>Total:</b>			<b>5</b>	<b>5,015 gal</b>	<b>61 tons</b>

## IDLE REDUCTION

### Other Idle Reduction

Project Name	Number of Vehicles	Idling Reduced per Vehicle	Fuel Saved per Vehicle	GGE Reduced	GHG Reduced
WV county school bus fleets	3,000	10 mins/day 180 days/year	0 gal/hr	36,000 gal	446.4 tons
<p><b>Type of project:</b> Policies  <b>Type of vehicle:</b> School Bus  <b>Percentage from coalition:</b> 80%  <b>National Clean Fleets Partnership:</b> No</p> <p><i>From Policy 4336, West Virginia School Bus Transportation Policy and Procedures Manual: School bus operators are prohibited from idling the buses for more than 10 minutes unless defrosting of windows is needed; in this case idling shall be limited to thirty minutes. Estimates for this annual report are based on information from the WV Department of Environmental Protection - Division of Air Quality. Using a baseline that idling a bus for 1 hour wastes 1/2 gallon of diesel fuel, the division calculates that idling 1/2 hour less saves 45 gallons of fuel per bus annually. Conservatively, the program reduces idling by 10 minutes per day, which would be 15 gallons of fuel per bus annually. With 3,000 buses in the fleet, the fuel savings are estimated at 45,000 gallons.</i></p>					
<b>Total:</b>	<b>3,000</b>			<b>36,000 gal</b>	<b>446 tons</b>

## FUEL STATIONS

### New Stations

Fuel	Public Stations	Private Stations
Biodiesel	-	-
CNG - Compressed Natural Gas	3	-
E85 - 85% Ethanol	-	-
Electric Chargers	-	1
Hydrogen	-	-
LNG - Liquefied Natural Gas	-	-
LPG - Liquefied Petroleum Gas	1	1
<b>Total:</b>	<b>4</b>	<b>2</b>

## OUTREACH ACTIVITIES

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
I-79 CNG Corridor	01/17/2013	Media Event	100%	1,800,000
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> Airport, Delivery, General Public, Government, Private Fleets, Transit, Utility, Waste  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>On Jan. 17, 2013, West Virginia's I-79 CNG Corridor was announced by stakeholder IGS Energy/CNG Services. At 10 a.m., principals gathered in Charleston, WV, at the Spring Street location for the announcement. The group traveled to Bridgeport, WV, for a similar event, marking the beginning and the end points of the corridor in WV. The events were publicized statewide, in print, broadcast and online outlets.</i></p>				
Kanawha Converts	01/18/2013, 04/12/2013, 07/03/2013	Meeting - Other	100%	25
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> Airport, General Public, Government, Private Fleets, Transit, Utility, Waste  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>The Kanawha Converts effort has brought together fleets from the entire Kanawha Valley and beyond to pool proposed GGEs of natural gas. In 2013, three CNG stations along the I-79 corridor in WV were opened and operating in Charleston, Jane Lew and Bridgeport. By July, the Kanawha County Commission, one of the original members of Kanawha Converts, unveiled three natural gas vehicles, two fueled with CNG and one with propane.</i></p>				

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
2013 West Virginia International Auto Show	01/27/2013	Conference participation	10%	50
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> General Public  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>On January 27, 2013, the W. Va. Clean State Program exhibited at the 2013 West Virginia International Auto Show. Stakeholders participated in the event as exhibitors and vehicle demonstrators.</i></p>				
Marshall University Earth Day event	04/16/2013	Literature Distribution	10%	20
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> General Public  <b>Clean Cities 20th Anniversary Event:</b> No</p>				
W.Va. Clean State Program stakeholder meeting	04/23/2013	Meeting - Stakeholder	100%	8
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> General Public, Government  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>On April 23, stakeholders toured the W. Va. Department of Environmental Protection from its rooftop solar array (25.38 KW) to a Schneider Electric EVLink 7.2 kW One Plug charging station located at the headquarters building at 601 57th Street SE in Charleston. WVDEP's Chevrolet Volt to be charged at the headquarters building is the state fleet's first plug-in hybrid.</i></p>				
2013 Appalachian Basin NGV Expo & Conference	05/13/2013	Conference participation	100%	300
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> Delivery, General Public, Government, Private Fleets, Transit, Utility, Waste  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>The 2013 Appalachian Basin NGV Expo &amp; Conference drew nearly 300 attendees to Charleston, W. Va., May 13-15, 2013. The event featured nationally known speakers; an exhibit hall packed with vehicles, fueling equipment and information, and a ride-and-drive, with natural gas vehicles fueled at the Kanawha County Courthouse.</i></p>				
Fleet contacts	06/12/2013, 06/14/2013, 06/25/2013, 07/17/2013, 07/24/2013, 08/09/2013, 09/20/2013, 09/24/2013, 10/08/2013, 10/09/2013, 10/18/2013, 11/12/2013, 11/20/2013, 11/27/2013, 12/03/2013	Meeting - Other	100%	9
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> Delivery, Government, Private Fleets, Other  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>2013 fleet contacts ranged from WV municipalities to large national fleets. Many were interested in new CNG network in WV; some had interest in propane.</i></p>				
Governor's NG Transition Team	06/25/2013	Meeting - Other	100%	7
<p><b>Technology:</b> Alternative fuel vehicles  <b>Audience:</b> Government  <b>Clean Cities 20th Anniversary Event:</b> No</p> <p><i>Co-coordinator participated in Governor's Natural Gas Transition Team meeting representing the W. Va. Department of Commerce. Team reviewed recommendations made by the Governor's Natural Gas Vehicle Task Force, assessing progress and plans for each.</i></p>				

Activity Name	Dates	Activity Type	Percentage from Coalition	Persons Reached
W.Va. Clean State Program stakeholder meeting <b>Technology:</b> Alternative fuel vehicles <b>Audience:</b> Government, Private Fleets <b>Clean Cities 20th Anniversary Event:</b> No <i>On July 10, stakeholders traveled to the National Alternative Fuels Training Consortium at West Virginia University in Morgantown. "Making it Happen in West Virginia" brought together a panel of experts who have had natural gas or propane success in the state to share experiences with attendees who may be thinking about using the fuels in their fleets or municipalities.</i>	07/10/2013	Meeting - Stakeholder	100%	30
W.Va. Propane Gas Association <b>Technology:</b> Alternative fuel vehicles <b>Audience:</b> Private Fleets <b>Clean Cities 20th Anniversary Event:</b> Yes <i>The W.Va. Clean State Program participated in the fall meeting of the W.Va. Propane Gas Association in Morgantown, W.Va., at the request of its executive director, who is also a stakeholder. Propane marketers are exploring the use of the fuel for transportation; one of WVPGA's members is now a stakeholder.</i>	09/18/2013	Meeting - Other	10%	20
Grand opening of first station in W.Va. I-79 CNG corridor <b>Technology:</b> Alternative fuel vehicles <b>Audience:</b> Delivery, General Public, Government, Private Fleets, Utility <b>Clean Cities 20th Anniversary Event:</b> No <i>On Sept. 24, the state's newest public-access CNG fueling station opened at Bridgeport, the first of three CNG operations announced by IGS Energy/CNG Services. The station officially opened in September 2013. Stations in Charleston and Jane Lew are set to be operational by the end of 2013.</i>	09/24/2013	Media Event	10%	100
W.Va. Clean State Program stakeholders meeting <b>Technology:</b> Alternative fuel vehicles <b>Audience:</b> Delivery, Government, Private Fleets, Transit, Utility <b>Clean Cities 20th Anniversary Event:</b> No <i>On Oct. 21, stakeholders traveled to Bridgeport, W.Va., to receive a guided tour of the state's newest CNG fueling station.</i>	10/21/2013	Meeting - Stakeholder	100%	20
West Virginia University-Parkersburg Environmental Action Group <b>Technology:</b> Alternative fuel vehicles, Fuel blends, Fuel economy improvements, Hybrid electric vehicles, Idle reduction, Vehicle miles traveled reduction <b>Audience:</b> Other <b>Clean Cities 20th Anniversary Event:</b> No <i>WVU-Parkersburg's Environmental Action Group requested a presentation on a full range of alternative fuels and vehicles topics. About 25 students participated.</i>	11/06/2013	Meeting - Other	100%	25
<b>Total:</b>				<b>1,800,614</b>