



## **Lessons Learned during Creation of the I-65 Biofuels Corridor**

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Imagine driving 886 miles of highway and not once having to fill up your vehicle with gasoline. That's now a reality on Interstate 65 (Figure 1). The new road trip destination for drivers of flexible fuel vehicles (FFVs), I-65 features 18 dispensers (with three more under construction) that allow drivers to fuel with E85 (85% ethanol, 15% gasoline). From the Great Lakes to the Gulf Coast, an I-65 driver is now never more than a quarter tank of fuel away from an E85 pump. For diesel vehicle drivers, I-65 also includes five pumps dispensing B20 (20% biodiesel, 80% petroleum diesel). Completed in October 2008, the I-65 biofuels corridor is projected to displace more than 2 million gallons of petroleum-based fuels per year.

The I-65 project began in 2006 when a group of Clean Cities coalitions and state agencies teamed up to apply for some of the \$8.6 million in grants distributed by the U.S. Department of Energy (DOE). The group consisted of the following participants:

- Indiana Office of Energy Development (OED)
- Alabama Department of Economic and Community Affairs
- Central Indiana Clean Cities Alliance
- South Shore Clean Cities (Indiana)
- Commonwealth Clean Cities Partnership (part of the Kentucky Clean Fuels Coalition)
- Middle Tennessee Clean Fuels
- Alabama Clean Fuels Coalition

Although this team received \$1.33 million to carry out its project, this amount was less than half the necessary investment. In fact, most of the project's \$2.87 million budget came from the coalitions' retail fuel partners. Because of the large amount of money and many funding sources, it was essential for the partners to build great relationships with their stakeholders and each other. The team learned this and several other important lessons while creating the I-65 Biofuels Corridor.

## Lesson One: Strong Partners Lead to Great Projects

Having committed partners was essential to the project's success, and the partnership naturally evolved from strong existing relationships. It all began with a simple technical problem. Kellie Walsh, the Central Indiana Clean Cities coordinator, lives in rural Indiana without easy access to high-speed Internet. Yet, because of her vision of building a southern Indiana E85 corridor, she was eager to respond to DOE's grant solicitation. Unfortunately, the application was only available through the Grants.gov Web site, which requires high-speed Internet. Having built a strong relationship with the Indiana OED, and knowing it shared her vision, Walsh asked the office to make the official application and lead the project.

The Indiana OED was pleased to champion the effort and took responsibility for budgeting, reporting, and regulatory requirements. The OED's grants finance manager, Julie Howe, and its coordinator of public outreach and education, Cris Dorman, together managed the large-scale administration and communication for the project. This freed coalition coordinators of these responsibilities, which was invaluable because it gave them more time to focus on their specific regions.

While Walsh was talking to the Indiana OED, she also was talking to her colleague in Kentucky, Commonwealth Clean Cities Partnership Coordinator Melissa Howell. They had discussed partnering on a project for some time and agreed that I-65 was the perfect place to start because the Interstate connects Southern Indiana and Kentucky. The Indiana OED agreed, and Howell joined the group.

The project quickly gained momentum. South Shore Clean Cities Coordinators Carl and Lorrie Lisek joined as did Middle Tennessee Clean Fuels Coordinator Dave Pelton. Realizing their project could run across the entire country, they invited the Alabama Clean Fuels Coalition and the Alabama Department of Economic and Community Affairs to join. "It really took on a life of its own," says Walsh.



Figure 1. Map of the I-65 Biofuels Corridor with slogan and logo.

Already well-versed in biofuels infrastructure, the Central Indiana and South Shore Clean Cities coalitions stepped into leadership positions. The year before, they ran five successful half-day fuel retailer workshops for the Indiana OED, which was awarding its own infrastructure grants. These sessions gave retailers an overview of biofuels infrastructure and sales, including E85 handling, distribution, and marketing. The speakers included representatives from the Indiana Corn Growers, Indiana Biodiesel, Indiana OED, Indiana Environmental Protection Agency, National Ethanol Vehicle Coalition, and equipment providers. The coalitions attracted more than 250 retailers through cooperation with the Indiana OED, the Indiana Petroleum Contractors' Association, Countrymark Co-Op (a Clean Cities stakeholder and local convenience store), and local radio stations. Although the retailers attended the workshops before the I-65 project started, the coalitions drew on the connections made during these workshops for the project. They also worked with retailers who were reliable, longstanding coalition members.

For Mark Bentley, coordinator of the Alabama coalition, attracting retail partners was an entirely different matter. He had grant money—\$20,000 per location to install an E85 or B20 dispenser or \$50,000 to install both—but lacked relationships with knowledgeable retailers. To educate his audience, Bentley used a modified version of the Indiana retailer workshops. Bentley wanted to generate a high level of interest, so he worked to remove any possible barriers; he mailed 500 postcards, worked with the Convenience Marketing Association to advertise, provided retailers with a map, and sent a reminder e-mail the day before. Workshop speakers included vehicle manufacturing representatives, local and state officials, equipment suppliers, and other industry stakeholders. The workshops attracted 140 retailers, 10 of which applied for the grant. The coalition awarded grants to six retailers in the first round and to two more when more funding became available.

In contrast, the Kentucky and Middle Tennessee coalitions used their relationship with local petroleum retailers to identify potential partners. Although experienced Kentucky coordinator Howell had relationships with a number of fuel retailers, she approached one specific chain first because it had several stations strategically located on I-65. Also, she had previously worked with the chain's parent company on a successful Congestion Mitigation and Air Quality (CMAQ)<sup>1</sup> grant project for a biodiesel distribution terminal. The chain's corporate office accepted the offer and chose locations along I-65 best suited for the project. In addition to three Kentucky stations, the chain agreed to install dispensers at nine Indiana stations.

Middle Tennessee coordinator Pelton approached stations near I-65 that he knew were planning to renovate in the future. By integrating the dispensers into planned construction, the coalition avoided costly excavation and concrete work, which reduced the overall installation cost by about one-third.

## **Lesson Two: Communicate Early and Often**

Communication among coalitions and retail partners was key to the project's success. From the beginning, the project team made keeping in touch a priority. It held conference calls regularly and used scheduled Clean Cities events to meet in person. This approach improved coordination and retailer recruitment. When Howell's retailer removed itself from the project, she asked other coordinators about their retail partners. Through her work, Thorntons Convenience Stores, which was installing two E85 dispensers in Indiana, agreed to install a dispenser at a Kentucky station as well.

Keeping retailers in the loop also reduced confusion over regulations and requirements. Knowing that his retailers knew little about biofuels, Alabama coordinator Bentley invited experts to all of his workshops to describe the relevant regulations. A state weights-and-measures representative spoke about fuel-quality standards, and the local fire marshal described how to obtain a waiver for an E85 dispenser. Communication about expectations also improved the consistency of retailers' quarterly reports. Although the federal government required reports, many retailers originally did not understand how or why they needed to report. However, the accuracy of reports improved considerably after coordinators walked through the forms with station managers in person.

## **Lesson Three: If You Advertise, They Will Come**

For the I-65 project, two main variables influenced retailer success: the price differential between E85 and gasoline and retail marketing. Naturally, FFV drivers want to buy E85 if it is cheaper than gasoline on a per-mile basis. When many of the I-65 pumps opened, gasoline prices were at an all-time high with the average price nationwide climbing above \$4 per gallon

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<sup>1</sup> The U.S. Department of Transportation's CMAQ Improvement Program offers grants for projects that reduce emissions to state departments of transportation, metropolitan planning authorities, and transit agencies in cities that do not or once did not meet National Ambient Air Quality Standards. For more information, see [www.fhwa.dot.gov/environment/cmaqpgs](http://www.fhwa.dot.gov/environment/cmaqpgs).

in June and July. In comparison, E85, selling for \$3.20 per gallon in the Midwest and \$3.39 per gallon on the Gulf Coast, seemed like a bargain to consumers (although a gallon of E85 contains about 25% less energy than a gallon of gasoline, which can reduce or eliminate the actual price advantage). Differences in E85 prices from station to station did not seem to influence sales. The most successful Indiana station sold E85 for 35 cents more on average than the least successful one.

Because of their lack of control over prices, successful retailers focused on marketing. Even if E85 was cheaper than gasoline, customers had to know it was available. The most basic marketing was often the most effective: signage. Coordinators reported that having E85 listed on the price marquee or on the retailer’s highway sign caught drivers' attention and made the fuel seem more “mainstream.” Similarly, locating the E85 dispenser with the other fuel pumps—rather than in a separate island—helped customers feel more comfortable with the fuel.

Some retailers, with the assistance of Clean Cities coordinators, went beyond the call of duty. Many displayed a variety of E85 materials from Growth Energy (formerly known as the Ethanol Promotion and Information Council), including stickers, banners, displays, and pump toppers. Also, many Indiana stations’ customer service representatives took advantage of one-on-one marketing sessions offered by coordinator Walsh. One particularly successful Indiana retailer even bought his own advertisement “wrapped” vehicle—essentially a rolling billboard for biofuels (Figure 2).

Several retailers worked with their coalitions to celebrate the opening of their new dispensers. Before one opening, the Alabama Clean Fuels Coalition coordinated with General Motors to send postcards to customers who had bought the automaker's FFVs. Marking down the price of E85 to 85 cents or \$1.85 per gallon for a few hours on opening day was a big draw. Excited about the price of E85 listed on the card, people arrived at the station more than two hours early, with postcards in hand. In addition, media outreach encouraged press coverage. Alabama coordinator Bentley's attendance at a local newspaper's editorial meeting resulted in a story on the latest dispenser opening.

Low prices combined with savvy marketing resulted in amazing sales for most stations. Sales were several times as high as the goals at some stations. At two South Shore stations, E85 was the second-best-selling fuel, even outselling diesel.



Figure 2. South Shore Clean Cities Coordinator Carl Lisek and Family Express Vice President Tom Navarre with a "wrapped" FFV owned by Family Express.

**Table 1. I-65 Corridor Biofuels Sales, July 2008 through September 2008**

State	Number of Dispensers	Fuel	Sales Goal (gal/ month/dispenser)	Average Sales (gal/ month/dispenser)	Most Successful Dispenser (gal/month)
Indiana	11	E85	5,000	12,039	33,447
Kentucky	1	E85	5,000	8,179	8,179
Tennessee	2	E85	10,000	4,450	5,439
Tennessee	2	B20	Not Available	3,247	3,318
Alabama	2*	E85	2,000	11,349	13,000
Alabama	3	B20	2,000	17,564	46,000

\*Two additional E85 dispensers under construction in Alabama during this period are not included in this table.

## Lesson Four: Be Prepared and Be Flexible

Despite the project's success, coordinators and state staff spent far more time and money on it than anyone expected. In fact, DOE Project Manager Mike Scarpino says that coordinators should have scheduled twice as much time as they had originally planned. He says that up to half of a project's plans can change before completion, as was the case in this project. If even one partner underestimates the amount of time required, it can affect the whole group.

However, being flexible saved the coordinators' time. Understanding the scope of the project, the team realized that a one-size-fits-all approach simply would not work, so it allowed coordinators to decide what methods would work best in their regions. For example, although Indiana provided the workshop model, no coalition was required to follow it. Similarly, the team budgeted enough money to make the projects economical for retailers everywhere, even in the southern states. In this region, E85 is less available and more expensive than in the Midwest, and fewer state incentives encourage its use.

This flexibility allowed coordinators to adjust to unexpected roadblocks. Because of unforeseen circumstances, coordinators Walsh and Howell had several retailers drop out of the project. Although Howell found one replacement, substantial money was still available. Fortunately, Alabama coordinator Bentley was prepared for such a situation. He had maintained a list of retailers that were interested and eligible but had not been chosen initially for grant funding. He asked them to resubmit new applications then chose the most promising applicants. As a result, the coalition was able to help fund two additional fuel dispensers. The remaining funds are now being used for additional marketing efforts in Indiana, including maps and pamphlets at highway rest areas.

## Lesson Five: Big Events Attract Big Media Coverage

The team finished its project with a grand finale—an FFV drive across the United States. Over three days, 15 team participants drove the corridor in FFVs with vehicles starting from each end of I-65 and meeting in the middle.

The team adopted the slogan "America's First Biofuels Corridor." Although other corridors exist, the team wanted to emphasize this one's length and significance. They even compared the drive to nailing the final spike in the Transcontinental Railroad. To present a consistent message, Indiana OED's Dorman created a common press kit for all coordinators to use along the corridor. The kit included magnets, "flash" computer storage drives, gift cards, and other branded materials.

And the media listened. Giving the media the "big picture" perspective of the drive—along with the sheer number of events—attracted attention from print, television, radio, and Internet outlets. There were 134 separate stories published about the drive or corridor. The coverage was not limited to one sector; major publications including the Associated Press, Reuters Newswire, MSNBC, and Automotive World reached a wide variety of audiences.

The I-65 Biofuels Corridor demonstrates how coalitions can collaborate on projects that decrease petroleum use. As Kellie Walsh says, "It really shows what Clean Cities coalitions, when they work together, can accomplish for the country."

### I-65 Drive

To celebrate the corridor's success, the team held the I-65 Corridor Drive from Oct. 7-9, 2008.

**Oct. 7.** The drive began with team members driving north from Mobile, Alabama, and south from Demotte, Indiana. In Alabama, coalition members conducted radio and television interviews and held events with industry and government speakers, including the Governor. Indiana held two opening events, featuring speakers from retail stations, the local metropolitan planning organization, and the American Lung Association. Each station also gave away food, car washes, and E85 fuel cards.

**Oct. 8.** All four states held events, with the Central Indiana and Kentucky coalitions hosting live radio broadcasts at fueling stations. Indiana coordinator Walsh chose a radio station because it targeted a key demographic: "soccer moms." These consumers often drive FFVs but lack awareness about E85.

**Oct. 9.** The drive ended with two major events in Indiana. The first, a luncheon and panel discussion on biofuels, was only open to the media. A public event at one of the retailers followed, featuring a speech by the Lieutenant Governor of Indiana and a display of the FFVs used during the drive.

## Additional Resources

A collection of resources related to the I-65 Biofuels Corridor—including press kits, workshop materials, presentations, press releases, advertising materials, and more—is available on the Clean Cities Web site at [www.eere.energy.gov/cleancities/toolbox/project\\_development.html](http://www.eere.energy.gov/cleancities/toolbox/project_development.html). Also, the National Renewable Energy Laboratory’s E85 Business Case report is available at [www.afdc.energy.gov/afdc/ethanol/station\\_business.html](http://www.afdc.energy.gov/afdc/ethanol/station_business.html). For more information, contact the following project participants.

### Indiana

#### Retailers

- GasAmerica, [www.gasamerica.com](http://www.gasamerica.com)
- Thorntons Convenience Stores, [www.thorntonsinc.com](http://www.thorntonsinc.com)
- Family Express, [www.familyexpress.com](http://www.familyexpress.com)
- Gas City Ltd., [www.gascity.net](http://www.gascity.net)

#### Other

- South Shore Clean Cities, [www.southshorecleancities.org](http://www.southshorecleancities.org)  
Carl and Lorrie Lisek  
219-365-4289  
[southscc@comcast.net](mailto:southscc@comcast.net)
- Central Indiana Clean Cities, [www.cicca.org](http://www.cicca.org)  
Kellie L. Walsh  
317-985-4380  
[klwcicca@aol.com](mailto:klwcicca@aol.com)
- Indiana Office of Energy Development, [www.in.gov/oed](http://www.in.gov/oed)  
Julie Howe  
317-232-8978  
[jhowe@oed.in.gov](mailto:jhowe@oed.in.gov)
- Indiana Office of Energy and Defense I-65 Corridor Page  
[www.in.gov/oed/2396.htm](http://www.in.gov/oed/2396.htm)

### Kentucky

#### Retailer

- Thorntons Convenience Stores, [www.thorntonsinc.com](http://www.thorntonsinc.com)

#### Other

- Commonwealth Clean Cities Partnership/Kentucky Clean Fuels Coalition, [www.kentuckycleanfuels.org](http://www.kentuckycleanfuels.org)  
Melissa Howell  
502-452-9152  
[kycleanfuels@insightbb.com](mailto:kycleanfuels@insightbb.com)

### Alabama

#### Retailers

- Ford’s Fuel, [www.icecreammuseum.com/fordsfuel.php](http://www.icecreammuseum.com/fordsfuel.php)
- McPherson Co., [www.mcphersonoil.com](http://www.mcphersonoil.com)
- Merritt Oil, [www.merrittoil.com](http://www.merrittoil.com)

#### Other

- Alabama Clean Fuels Coalition, [www.alabamacleanfuels.org](http://www.alabamacleanfuels.org)  
Mark Bentley  
205-402-2755  
[mark@alabamacleanfuels.org](mailto:mark@alabamacleanfuels.org)
- Alabama Clean Corridors Workshop Presentations  
[www.alabamacleancorridors.com/moreinfo.html](http://www.alabamacleancorridors.com/moreinfo.html)
- Alabama Clean Corridors Guidelines  
[www.alabamacleancorridors.com/guidelines.html](http://www.alabamacleancorridors.com/guidelines.html)

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