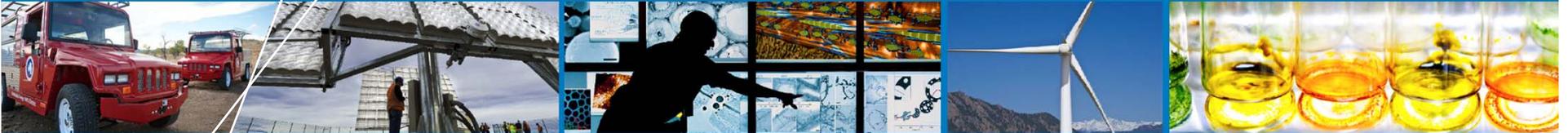


Measurements with Meaning

Developing an analytics strategy



Trish Cozart
November 1, 2012

“Not everything that can be counted counts, and not everything that counts can be counted.”

– Einstein

Department of Energy - Clean Cities

www.cleancities.energy.gov

The screenshot shows the Clean Cities website homepage. At the top, it features the U.S. Department of Energy logo and navigation links for Home, About, Coalitions, Financial Opportunities, Information Resources, Coordinator Toolbox, News, and Events. The main content area includes a featured article titled "Building Partnerships to Reduce Petroleum Use in Transportation" with a sub-headline "Evaluate Your Options" and a map of the United States. Below this, there are sections for "About Clean Cities", "Resources" (including the Alternative Fuels Data Center and FuelEconomy.gov), and "Coalitions". A sidebar on the right contains "News" (with articles like "United States' Clean Energy Patents Soar"), "Events" (Clean Fleet Technologies Conference), and "Featured Publications" (Clean Cities Overview and Newsletter).

www.afdc.energy.gov

The screenshot shows the Alternative Fuels Data Center (AFDC) website homepage. It features a navigation bar with categories like Fuels & Vehicles, Conserve Fuel, Locate Stations, and Laws & Incentives. The main content area is divided into several sections: "Fuels & Vehicles" with images of different fuel types (Biodiesel, Electricity, Ethanol, Hydrogen, Natural Gas, Propane); "Maps & Data" with a "Fuel Prices" graph and "Station Locator" tool; "Tools" including "Laws & Incentives", "Petroleum Reduction Planning Tool", and "Vehicle Cost Calculator"; and a "Poll" section. A central banner asks "Take a guess: How many public alternative fueling stations operate in the United States?" with a "GO" button. The footer identifies the AFDC as a resource of the U.S. Department of Energy's Clean Cities program.

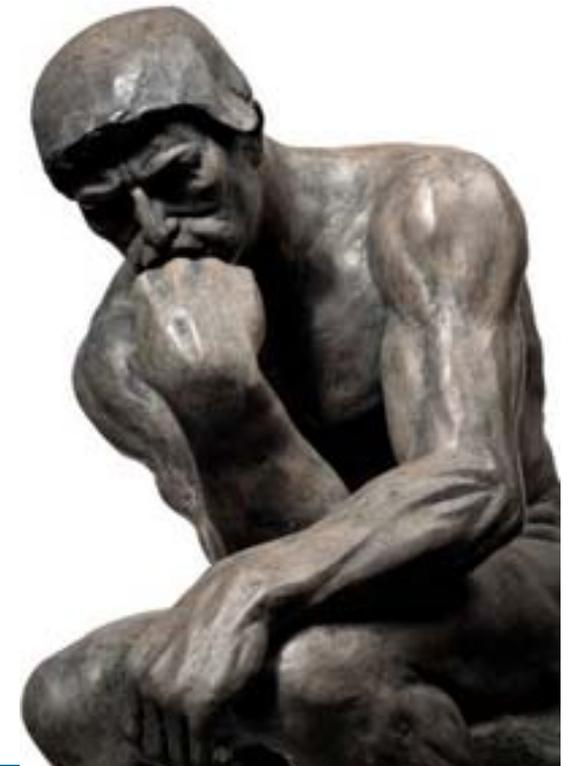
Developing Impact Metrics

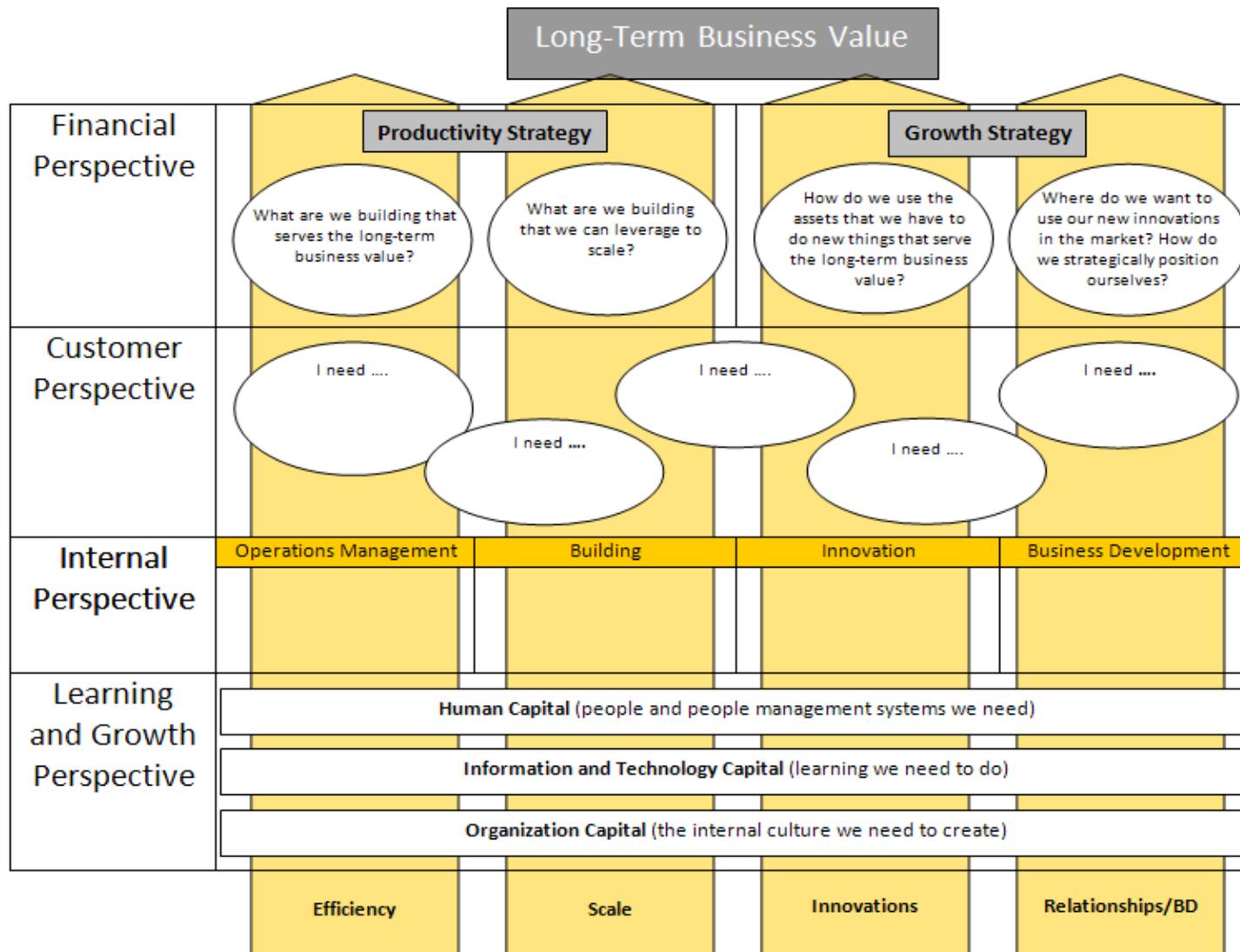
- Step 1** Understand your agency/business long-term value.
- Step 2** Know the strategies used to accomplish the desired outcomes.
- Step 3** Determine if the Web can contribute to the outcomes.
- Step 4** Design a Web strategy and build a website.
- Step 5** Measure your site according to the strategic outcomes.

Understanding Long-Term Business Value

Step 1

- Why do we exist?
- What are the outcomes that are expected of us?





Strategy mapping – Robert Kaplan



Are we doing things right?

Are we doing the right things?

What are we doing that is valuable?

How do we use our system to build new things?

What do our customers value?

How do we do it more efficiently?

How do we do what we are doing for more people?

What are the processes we need to use ?

Know the Strategies

Step 2

- What are the strategies your agency has chosen to accomplish expected outcomes?



Example Outcome-based Strategies

- **Education:** Developing information resources that educate transportation decision makers about the benefits of using alternative fuels, advanced vehicles, and other measures that reduce petroleum consumption.
- **Analysis:** Analyzing data from industry partners and fleets to develop tools and information that help stakeholders reduce petroleum consumption.
- **Addressing Barriers:** Working with industry partners and fleets to identify and address technology barriers to reducing petroleum use.
- **Technical Support:** Providing technical assistance to fleets deploying alternative fuels, advanced vehicles, and idle reduction.
- **Coalitions:** Establishing local coalitions of public- and private-sector stakeholders committed to reducing petroleum use.
- **National Partners:** Reaching out to large fleets that operate in multiple states to help them reduce petroleum use.
- **Funding:** Provide a way for stakeholders to meet and formulate mutually beneficial solutions for petroleum reduction strategies.



Do We Need a Website?

Step 3

- Can a website be used help support these strategies better than or along with other processes?



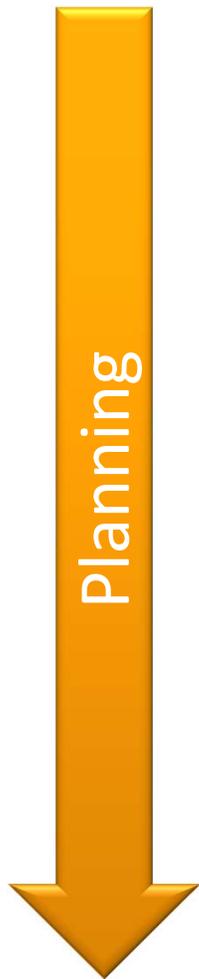
Design a Web Strategy

Step 4

- Design, develop, test and build a site that delivers on the strategic business outcomes.



Example



Long Term Business Value - Outcome

- U.S. petroleum use reduction in transportation sector by 2.5 gallons per year by 2020

Key Outcome-based Strategy

- Coalitions: Establishing local coalitions of public- and private-sector stakeholders committed to reducing petroleum use

Website Strategy

- Help stakeholders find and join a coalition



Old Clean Cities Home

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

Clean Cities

About the Program
Coalitions
Coordinator Toolbox
Financial Opportunities
Information Resources



Clean Cities strives to advance the nation's economic, environmental, and energy security by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption. Clean Cities has a network of approximately 90 volunteer coalitions, which develop public/private partnerships to promote alternative fuels and advanced vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction.

Clean Cities is part of the Office of Energy Efficiency and Renewable Energy's [Vehicle Technologies](#) Program.



Select Coalition-Related Information

- [Starting Coalitions](#)
- [Coalition Locations](#)
- [Program Contacts](#)
- [Coordinator Contacts](#)


What is Clean Cities? Fact Sheet (PDF 2 MB) [▶](#)
Download Adobe Reader [▶](#)



Petroleum Reduction Tools & Information

[Alternative Fuels and Advanced Vehicles Data Center](#): This Web site educates consumers and fleets on alternative fuels and advanced vehicles.

[FuelEconomy.gov](#): This Web site compares gas mileage, emissions, air pollution ratings, and safety data for new and used vehicles.



Clean Cities Now [▶](#)

This biannual newsletter addresses industry news, coalition successes, and program information.



Coordinator Toolbox [▶](#)

This subsite helps coordinators develop strong coalitions, promote partnerships, and facilitate activities.

Search

[Search Help](#) [▶](#) [More Search Options](#) [▶](#)

EERE Information Center Programs and Offices

NEWS

UL Creates EV Charging Equipment Installation Training Programs [▶](#)
 August 13, 2010

[More News](#) [▶](#)

Subscribe to RSS News Feed

[Subscribe to EERE News Updates](#) [▶](#)

EVENTS

A Clean Idea: The Facts About Biodiesel [▶](#)
 September 16, 2010

[More Events](#) [▶](#)

FEATURES



Plug-in Vehicle and Infrastructure Workshop

Advancing deployment of electric plug-in vehicles [▶](#)



Spanish Resources

Publications and Web tools available in Spanish [▶](#)



Clean Cities

New Clean Cities Home & Profile Pages

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

EERE Home

Clean Cities

HOME ABOUT COALITIONS FINANCIAL OPPORTUNITIES INFORMATION RESOURCES COORDINATOR TOOLBOX NEWS

EERE » Clean Cities

Building Partnerships to Reduce Petroleum Use in Transportation

Clean Cities advances the nation's economic, environmental, and energy security by supporting local actions to reduce petroleum consumption 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 emerging transportation technologies.



FIND MY LOCAL COALITION
Enter ZIP Code or City, State



Coalition Contacts ▶
Program Contacts ▶

Meet the Clean Cities Hall of Fame inductees

1 2 3 4

ABOUT CLEAN CITIES
[Goals & Accomplishments](#)
[Partnerships](#)

RESOURCES
Alternative Fuels & Advanced Vehicles Data Center ▶
The AFDC website provides information, [tools](#), and [data](#) to help you make decisions about alternative fuels and advanced vehicle options.

FuelEconomy.gov ▶
This website compares gas mileage, emissions, air pollution ratings, and safety data for new and used vehicles.

COALITIONS
[Benefits of Joining](#)
[Starting Coalitions](#)
[Success Stories](#)

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

EERE Home | Programs & Offices | Consumer Information

Clean Cities

HOME ABOUT COALITIONS FINANCIAL OPPORTUNITIES INFORMATION RESOURCES COORDINATOR TOOLBOX NEWS EVENTS

EERE » Clean Cities » Coalitions

Printable Version SHARE

Clean Fuels Ohio Coalition
The Clean Fuels Ohio coalition works with vehicle fleets, fuel providers, community leaders, and other stakeholders to reduce petroleum use in transportation.



Contact Information
Sam Spofforth
614-884-7336
sam@cleanfuelsohio.org
Andrew Conley
614-884-7336
andrew@cleanfuelsohio.org
[Coalition Website](#)



Clean Cities Coordinators
Sam Spofforth Andrew Conley



Sam Spofforth has served as Executive Director of Clean Fuels Ohio since the organization's founding in 2002. Under Spofforth's leadership, Clean Fuels Ohio has become the "go-to" resource in Ohio for cleaner fuels, vehicles and energy-saving transportation technologies that reduce climate change, increase American energy security and strengthen Ohio's economy. He plays a leadership role in Ohio and nationally in the field of transportation energy deployment. Spofforth was appointed to Columbus Mayor Coleman's Green Team and chairs the Mayor's Green Transportation Committee. In 2007, Spofforth was named the U.S. Department of Energy's national Clean Cities Coordinator of the Year. The DOE selected him as Midwest Clean Cities Coordinator of the Year in 2004. In 2008 General Motors selected Clean Fuels Ohio as top coalition for their Clean Cities Rewards program. Spofforth holds a Bachelor's degree from Hiram College and a Masters in Public Administration from the University of Pennsylvania.

Clean Fuels Ohio
3400 N. High Street, Suite 430
Columbus, OH 43202

Clean Fuels Ohio Success Stories
Watch videos about Clean Fuels Ohio. View [more videos](#) on the Alternative Fuels and Advance Vehicles Data Center.

Columbus Yellow Cab



Coalition Stats

Population: 6,548,412
Area: 37,599 sq. mi.
Boundaries: Entire state except for Astabula, Cuyahoga, Chagoga, Lake, Lorain, Medina, Portage, and Summit counties
Designated: April 12, 2002
Alternative Fueling Stations:
Biodiesel (E20 and above): 18
Natural Gas: 12
Ethanol (E85): 68
Electric: 6
Hydrogen: 1
Propane: 54
Annual Greenhouse Gas Emissions Avoided: 189,480 lb of CO₂
Annual Petroleum Savings:^{*} 21,156,501 gasoline gallon equivalents



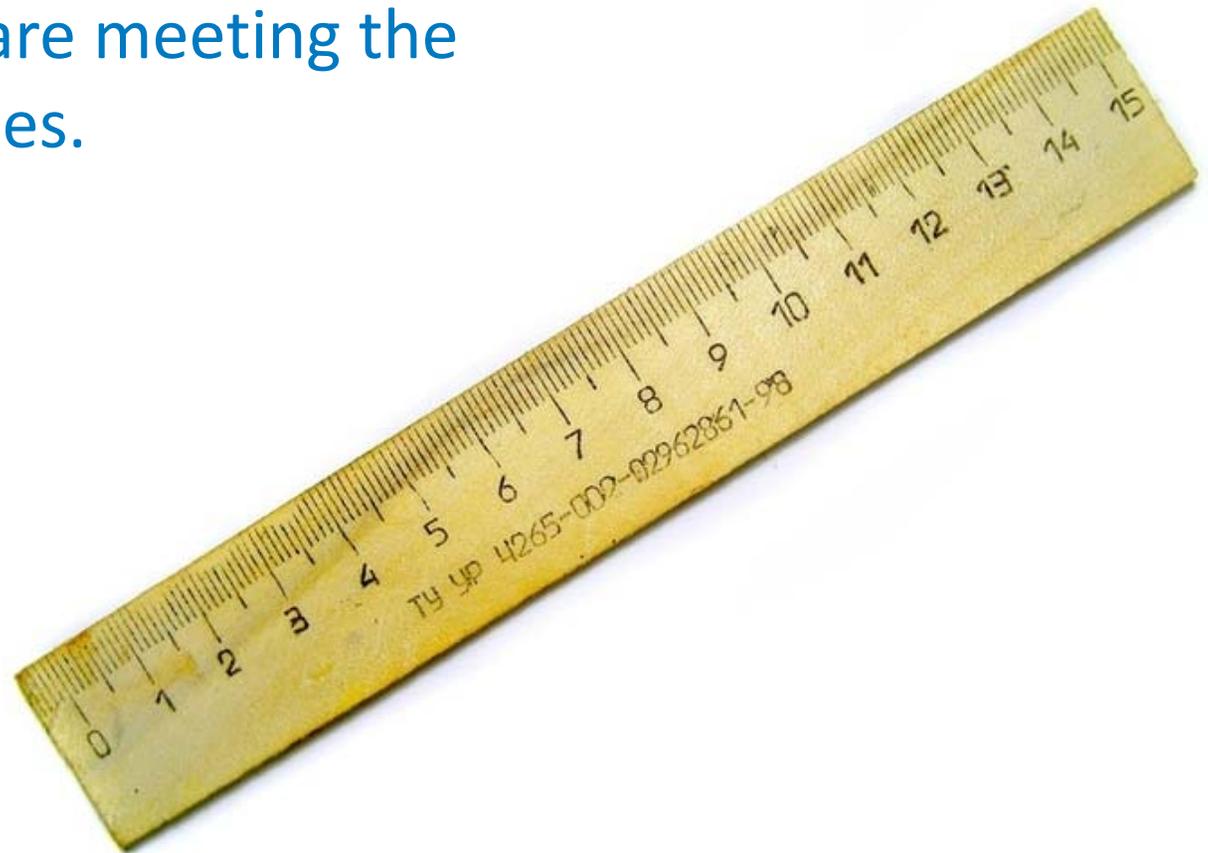
Fuel Blends (89%)
Alternative Fuel Vehicles (6%)
Fuel Economy Improvements (5%)
Onboard idle Reductions (1%)
^{*}2009 metric

07/09/11 06/11/11 01/28/10 12/11/09

Measure Based on Outcomes

Step 5

- Plan a Web metrics strategy that shows how you are meeting the strategic outcomes.



Define the Measurements

Website Strategy

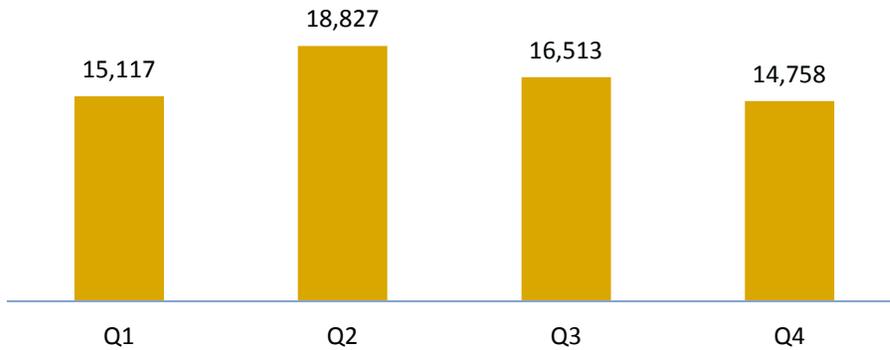
- **Help stakeholders find and join a coalition**

Measurements with Meaning

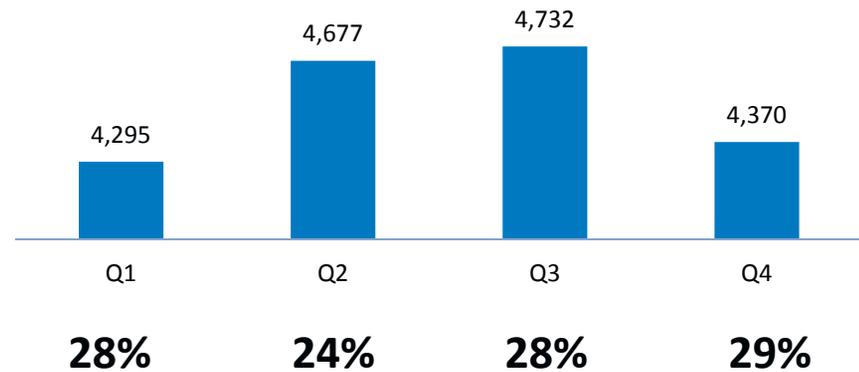
- **Leading Indicators - Measures Efficiency/Process**
 - Views of new visitors to the coalition profile pages
 - Conversion rate of new visitors that visit coalition profiles
- **Lagging Indicators – Measures Effectiveness/Impact**
 - # of stakeholders in coalitions year to year
 - Rate of membership increase
 - # of stakeholder inquires coalitions received as a result of a website referral

Leading Indicators

Unique New Visitors



Coalition Profile Pageviews by New Visitors



% = Conversions of Unique New Visitors to Coalition Profiles

Lagging Indicators

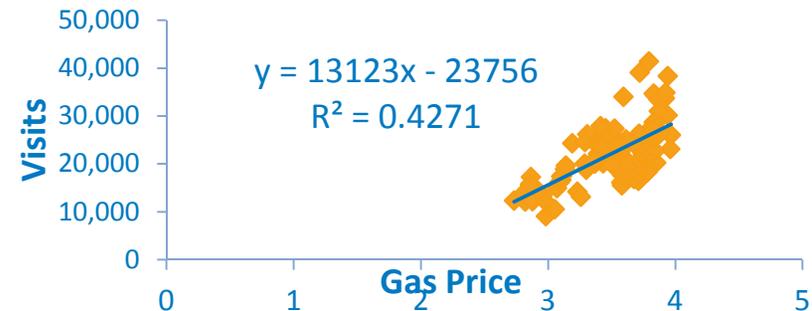
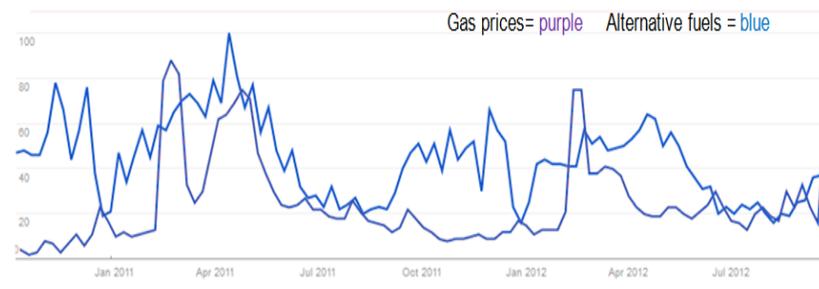
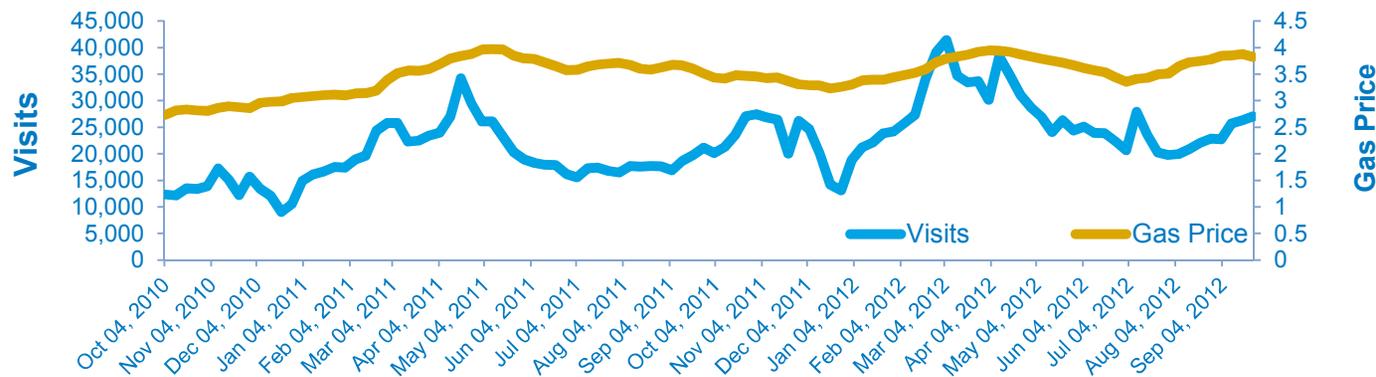
Coalition Stakeholder Numbers



*preliminary numbers

Looking at Trends and Variables

- Establish a baseline for key statistics
- Analyze possible correlations
- Look at keywords and trends – Google Trends



Another Example

Long Term Business Value - Outcome

- U.S. petroleum use reduction in transportation sector by 2.5 gallons per year by 2020

Key Outcome-Based Strategy

- **Education:** Develop information resources that educate transportation decision makers about the benefits of using alternative fuels, advanced vehicles, and other measures that reduce petroleum consumption.

Website Strategy

- Provide web-based data, case studies, tools, and fuel/vehicle information that will help fleets make decisions

Alternative Fuels Data Center

Alternative Fuels Data Center

SEARCH

Search Help ▶

FUELS & VEHICLES

CONSERVE FUEL

LOCATE STATIONS

LAWS & INCENTIVES

Maps & Data

Case Studies

Publications

Tools

About

Home

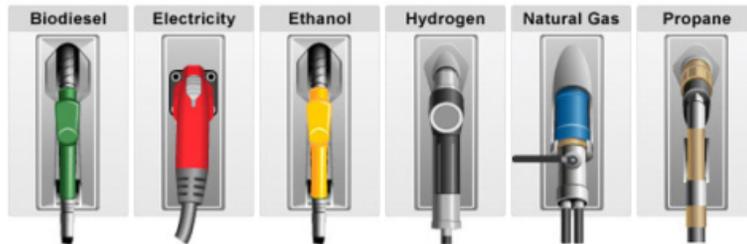
EERE » AFDC

Printable Version

Share

Fuels & Vehicles

More Fuels & Vehicles ▶



Take a guess: How many public alternative fueling stations operate in the United States? The answer may surprise you.

The Information Source for Alternative Fuels and Advanced Vehicles

The Alternative Fuels Data Center (AFDC) provides information, data, and tools to help fleets and other transportation decisions makers find ways to reduce petroleum consumption through the use of alternative and renewable fuels, advanced vehicles, and other fuel-saving measures.



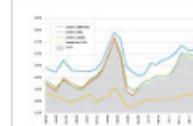
The AFDC is a resource of the U.S. Department of Energy's [Clean Cities](#) program.

Maps & Data

More Maps & Data ▶

- U.S. Alternative Fueling Stations by Fuel Type
- Alternative Fuel Vehicles in Use
- U.S. Hybrid Electric Vehicle Sales by Model

Fuel Prices ▶



Compare alternative fuel prices to gasoline.

Tools

More Tools ▶

- Laws & Incentives
- Petroleum Reduction Planning Tool
- Vehicle Cost Calculator
- Light-Duty Vehicle Search
- Heavy-Duty Vehicle Search

Station Locator ▶



Find alternative fueling station locations.

Find State Information

Select a state ▼

GO

Poll

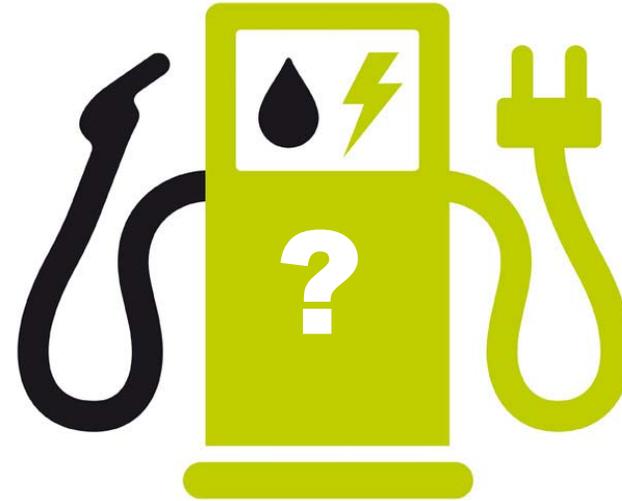
Tell us about yourself. I represent:

- Private-sector fleet
- Federal/state fleet
- Local public-sector fleet
- Fuel dealer/producer
- Alternative fueling/charging station
- Local/state government office

Defining Good Measurements

Leading Indicators

- **Engagement:** Bounce rate by page
- **Recency:** How frequently do return visitors return
- **Interest:** Top pages
- **Reach:** Unique visits
- **Depth of Visit:** # Page Views/Visitor
- **Length of Visit:** Time on the site
- **Loyalty:** New vs. Returning visitors
- **Referral Quality:** Quality of the users coming to the site



Lagging Indicators

- **Task Completion:** Surveys
- **Impact:** User stories
- **Actions:** Conversions

Leading Indicators

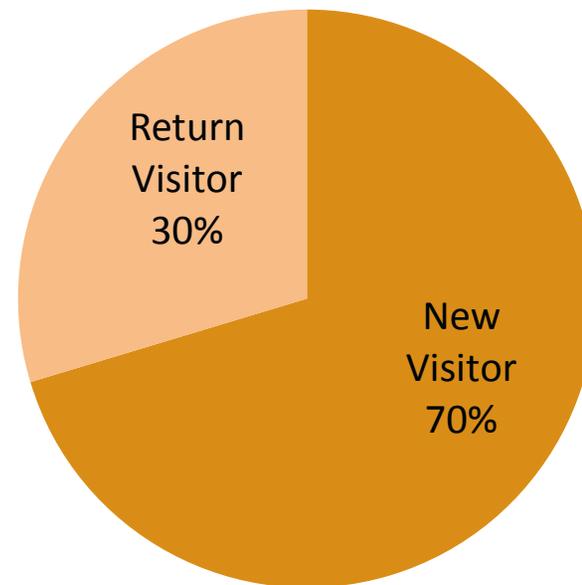
Depth of Visit

4.28 pages

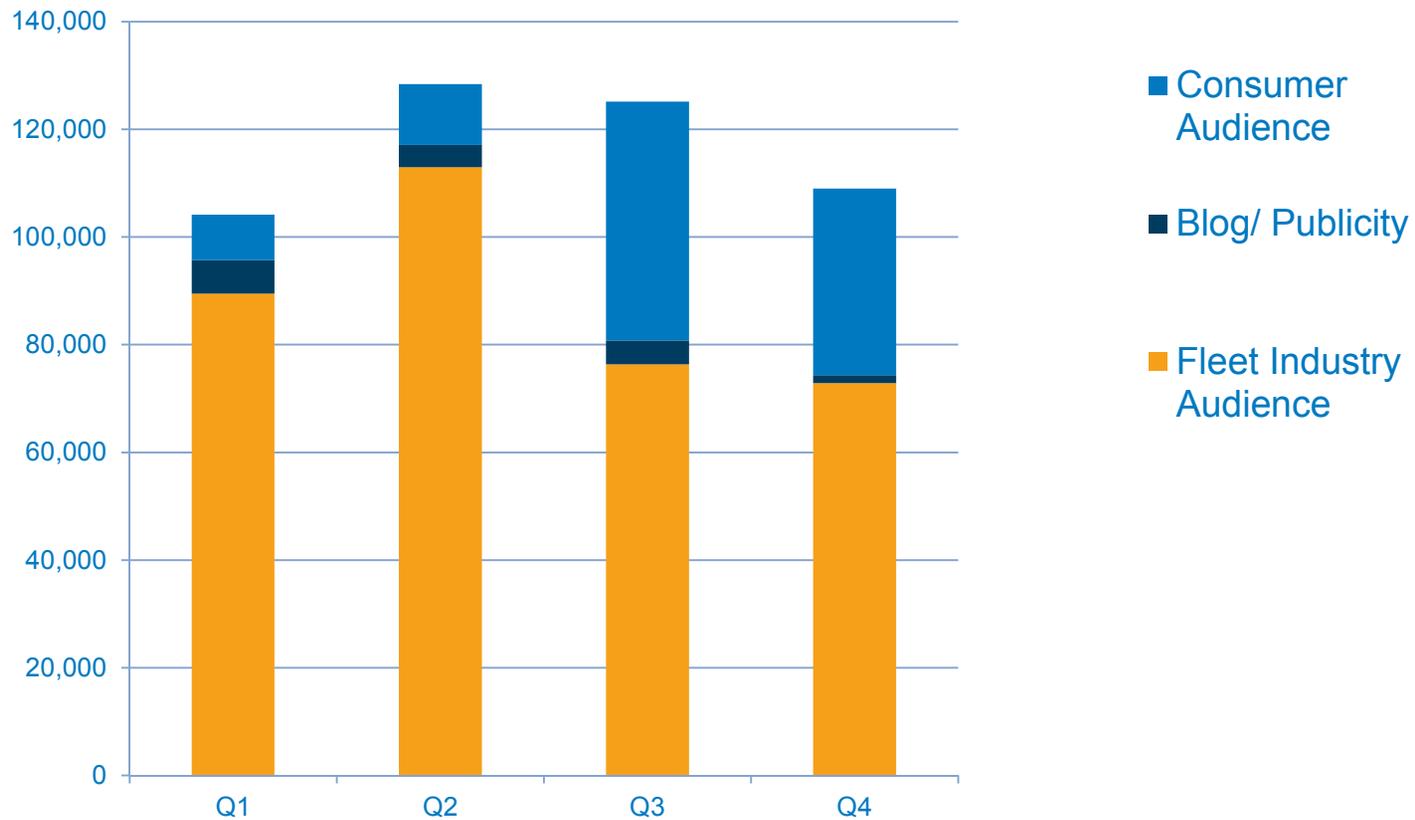
Length of Visit

3:55 minutes

Loyalty

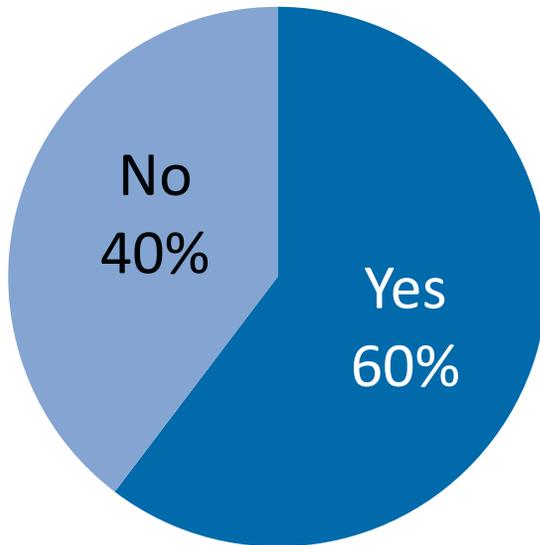


Leading Indicator – Referral Quality



Lagging Indicator - Task Success

Did you find what you were looking for?



Did you find what you were looking for?

Yes No

Comments:

Lagging Indicator - What's Next?

- **Collecting user stories of impact**
- **Most Significant Change Technique**



Key Points to Remember

1. Know your business.

Know what you are trying to accomplish with the website on a strategic level and measure the impact on strategic business outcomes.

2. Don't stop short.

Don't stop at measuring the efficiency of the website. Measure leading and lagging indicators that reflect the business outcomes.

3. Measure smart.

You don't need to measure everything...just what really counts.



Questions?

Trish Cozart

trish.cozart@nrel.gov