

Environmental Protection Agency Fuel Economy Label

Expert Panel Report

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Office of Transportation and Air Quality
U.S. Environmental Protection Agency

and

National Highway Traffic Safety Administration
United States Department of Transportation

Prepared for EPA by
PRR, Inc.

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Introduction

Background

In 2006, The Environmental Protection Agency (EPA) updated how the city and highway fuel economy values are calculated to better reflect typical real-world driving patterns and provide more realistic fuel economy estimates. In addition, EPA redesigned the fuel economy label to make it more informative for consumers. The redesigned label more prominently featured annual fuel cost information, provided contemporary and easy-to-use graphics for comparing the fuel economy of different vehicles, used clearer text, and included a website reference to www.fueleconomy.gov, which provided additional information.

EPA and the National Highway Traffic Safety Administration (NHTSA) are now initiating a new rulemaking to ensure that American consumers continue to have the most accurate, meaningful and useful information, as well as an understanding of how the labeled vehicle's emissions impacts the environment. With the introduction of advanced technology vehicles on the market, the agencies must provide metrics that are relevant and useful for vehicles such as Electric Vehicles, Extended Range Electric Vehicles and Plug-in Hybrid Electric Vehicles.

To help inform the creation of the new label, EPA engaged PRR, Inc. to work with them in the design and implementation of several information gathering protocols including:

- Literature review
- Focus groups (in three phases, including pre-group online surveys)
- Expert panel
- Online survey of new vehicle buyers and prospective buyers

Each of the above methodologies has its strengths and weaknesses. It is for this reason that a combination of information gathering tools was used. This report provides an overview of the Expert Panel discussion which built on the information gathered from the literature review and the focus groups. The panel was composed of hand-picked, third party thought leaders. The leaders were selected because of their unique history of creating dramatic shifts in social change and influencing consumers' product preferences over short periods of time.



Methodology

Experts panels are groups of exceptional individuals brought together to explore a given question. They are intentionally independent from special interest influence and have no direct authority. Their expertise is used to provide recommendations to those with the authority to act. The intent behind selecting and convening an expert panel is to assemble the “best and brightest” individuals who can provide the objective viewpoint of those outside the usual process.

Many federal agencies have a history of using expert panels to support a variety of initiatives. Some examples include:

- **EPA:** To monitor the situation for workers and residents impacted by the collapse of the World Trade Center
- **NHTSA:** To study the issue of trunk entrapments
- **Federal Highway Administration (FHWA):**
To review previous research results for inclusion in the Interactive Highway Safety Design Model (IHSDM)
- **U.S. Government Accountability Office (GAO):**
To discuss how to conceptualize, measure, improve, and use information about the benefits and costs of highway and transit investments
- **Department of Health and Human Services (HHS):**
To evaluate H1N1 PSA submissions
- **Centers for Disease Control and Prevention (CDC):**
To address concerns about barriers for older adults to understand and use health information
- **Federal Emergency Management Agency (FEMA):**
To establish a methodology, consistent with industry practices, for estimating the cost of large projects
- **Department of Energy (DOE):**
To forecast future demand for medical isotopes

PRR recommended the strategy of using an expert panel following the success of an expert panel they convened on behalf of the Centers for Disease Control and Prevention (CDC). CDC wanted to identify best practices for delivering health messages to adolescents. Following one of the most extensive literature searches on the subject, the expert panel was assembled to help validate the findings while also bringing a non-academic and, in some cases, a commercial approach to changing behavior.

In order to recruit individuals who could provide a diverse perspective to EPA and NHTSA as they redesigned the fuel economy label, desirable sectors including products, campaigns, organizations, and services were identified. A prospect list of organizations within each sector was generated using the criteria that the product/service or educational campaign needed to:

- Impact a significant percentage of the population
- Demonstrate staying power
- Bring about change quickly

Individuals who were key to the success of these initiatives were then identified. The decision was made to omit individuals with direct experience with the auto industry. The intent was to explore best practices from other industries and understand how they might apply to this challenge. This list was then prioritized for recruitment.

Rather than recruit individuals based on their current employment position, it was critical to recruit those individuals who were in roles that were critical to the success of these respective efforts at the time they were being planned and implemented. PRR did extensive research to identify and then corroborate these individuals. Once the individuals were identified, they were located without regard to any current association with the activity that had been used to identify them. Individuals were contacted by using several methods including third party advocates, phone calls, e-mail and social media.

The panel was limited to no more than 10 participants in order to ensure full participation. Nine expert panelists were recruited to participate in the six hour discussion. The group was convened on Wednesday, June 9, 2010, at EPA headquarters in Washington, DC.

In advance of the discussion, participants were provided a draft agenda, a brief overview of the project, and initial research and focus group findings. Panelists were asked to come prepared to discuss how they would recommend that the EPA increase the value of, and preference for, more efficient vehicles.

Following opening comments from Margo Oge, Director of EPA's Office of Transportation and Air Quality, the group was reminded of the two primary goals for the day:

1. Identify opportunities to increase the priority of energy efficiency in the vehicle purchase process
2. Provide feedback on working fuel economy label designs

Participants received a very brief project background that included statistics related to petroleum consumption, transportation's impact on air quality, and top-level findings from the previous research activities.



Key Findings

Strategic Insights

The group was asked to provide general observations and thoughts that could help inform and guide the development of a national outreach strategy and the next steps in the label design process. Paraphrased comments offered by panel members are also provided.

The group offered the following eleven key observations and suggestions:

1. Keep it simple.
 - *We all have complicated stuff going on in our heads and we yearn for simplicity.*
 - *We need someone to make it easy for us. No matter how smart we are.*
 - *We think of simple in this way: Fewer, bigger, better. Do fewer things better.*
2. Consumers don't act on details.
 - *Consumers don't act on details. No matter what our background, we act on simple impulsive things vs. long term analysis.*
3. Purchasing a car is an emotional decision—appeal to emotions.
 - *Purchasing a car is an emotional decision.*
 - *People want a relationship with their car.*
 - *Young people want to change the world and feel empowered to do so.*

4. Focus on the low-hanging fruit first.
 - *It's tempting to develop something for the 'hardest converts.' I think you should hit up the low hanging fruit – the already engaged.*
 - *Focus on the low-hanging fruit, those who are mostly there. Build on that to make them your ambassadors. People are influenced by peer pressure.*
5. It's about owning the change – be a change leader.
 - *When MTV moved away from speaking directly to terror and spoke more about action and the benefits of what change can actually do – we saw a shift.*
 - *People want to change. It's about owning the change – be a change leader.*
6. You can have a great product that will fail if it's not sexy.
 - *Apple can motivate people to spend more money on a product.*
 - *You could have a product that is very strong and amazing, but if it is not sexy it will fail.*
7. Target younger individuals.
 - *Focus on younger people and build on that base.*
 - *Young people are purchasers and will influence older family members.*
8. Campaigns must have a human face.
 - *You need a real human as the face of the campaign.*
 - *Apple uses Steve Jobs, Craigslist has Craig. It needs to be people we can relate to, don't use people like Ed Begley, Jr.*
9. If your product is not good enough to inspire people to work for you then it will never work.
 - *With the Dove campaign...we let people come to their own conclusion.*

- *People are more influenced by peer pressure.*
 - *You can dramatize their (car buyers) impacts. They can be the champions.*
10. Be sensitive to your audience.
- *People will not invest a lot of time reading.*
 - *Remember the label is seen through a potential tinted window while standing several feet from the window.*
 - *Many individuals do not speak English or have literacy challenges.*
11. Use the opportunities of relevant news events to demonstrate how personal choices can contribute to larger impacts (i.e., gulf oil disaster).
- *When I was at MTV, we were trying to do an environmental campaign. Hurricane Katrina occurred and young people took this as the result from climate change. When MTV moved from speaking to terror/ climate/horrific change and showed benefits of what individual actions can actual do – we saw a shift.*
 - *At MTV the motto was ‘Never waste a good crisis.’ Oil is a direct link to cars and driving. There is a great opportunity to use this to shift thinking.*

Throughout the discussion, the Expert Panel encouraged the agencies to find ways to “make it personal,” “make it emotional,” “create opportunities for ongoing dialogue and engagement.” Panelists indicated that images and words must be compelling to the intended audience and that the way to achieve this is through personal, emotional, and sustained engagement. A specific suggestion was to encourage the auto industry to further advance vehicle technology by providing the driver real-time/interactive information measuring their consumption, vehicle range, and efficiency. It was suggested that this information be expanded (into a game-like interaction) to encourage drivers to benchmark or track their own performance(s) and compare against their past driving, set personal goals, and even compete against other drivers. This approach would provide ongoing opportunities to engage drivers, remain relevant, and motivate them to incorporate better driving habits.

Messaging

Participants were asked to respond to the question: “What messages will overcome current barriers/shift priorities and increase perceived value and preference for fuel efficiency?”

The responses remained very consistent with the strategic guidance provided earlier and the Expert Panel reached a general consensus.

1. Address how the consumer will benefit from making this decision, or in other words “what’s in it for me?” The message should speak directly to how making this decision could improve their lives.
2. Talk about savings (over five years). Be explicit. We talk about the cost of buying and operating vehicles. Help individuals understand what they will save by buying a more efficient vehicle.
3. Do not use technical jargon. Using words that reflect consumer-friendly vernacular can be less intimidating.
4. Use relevant events (i.e., gulf oil disaster), include strong images to help individuals recognize the potential impacts of their decisions. Use the events to leverage the message.
5. Explain how they can make things better. If the difference is intangible, it’s too hard for the consumer to sway from routine. Provide fewer clear messages/images to empower individuals to feel that their choices will in fact make a difference.
6. Make it relevant to them. Some people see hybrids as elite status symbols of a “group” they are not interested in belonging to. They think “Ed Begley Jr.” when they think of a hybrid.

Panelists offered suggestions of specific types of messages that could be used including:

- Go Green. Get Green.
- Do it for your kids.
- It’s Simple - We simply have to do this (why we need to do this). It’s simple to do.

A portion of the panelists also recommended engaging audiences through the use of shame. This segment of the panelists believed shame to be a strong motivator in evoking a behavior shift. Such methods would include showing emotional images (i.e., BP oil spill results in birds covered in oil). Messages that reflected a shame approach included:


- Don't fail.
- Don't be a jerk, save the environment and save money at the same time.

Outreach Strategies

After receiving the above guidance regarding overall strategic approaches and recommended types of messaging, the group was asked to provide thoughts on what types of outreach strategies would best deliver these messages.

Without exception, the panelists endorsed the following suggested tactical approaches:

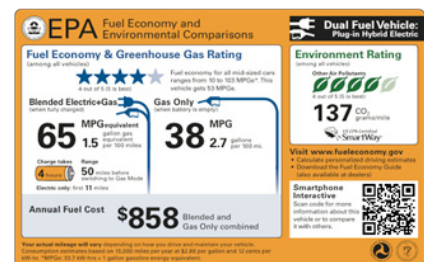
1. Utilize “crowdsourcing.” Crowdsourcing is the act of outsourcing to a large group of people or community through an open call. Tapping into the collective intelligence of the public will innately provide a deeper insight into what consumers really want.
 - Each participant shared their experience(s) with the success of this approach. From Dove launching the most successful viral campaign on “real beauty” and Zappos having demonstrated sales in excess of \$1 billion with no marketing department, to the Verb campaign that had young people inspiring each other to exercise. Pandora has 50 million users while spending approximately \$350,000 on marketing when the site was launched. As one panelist commented, “There are tens of thousands of people who will do communication for you. Your job is to harness them.”
 - Many of the panelists volunteered to crowdsource initial drafts and ideas within their channels.

2. Launch an “apps” competition. Apps is an abbreviation for applications used by smartphones and can directly link users to specific programs or websites.
 - Without knowledge that the agencies have already planned to introduce QR codes on the Fuel Economy label, the group suggested that these codes be added. 
 - They further suggested that the power of entrepreneurship and social marketing be unleashed by introducing an “apps” competition to encourage the development of a usable consumer tool, while also generating increased awareness.
3. Use EPA’s limited budget to buy an easy to remember URL. This is crucial.
 - Participants suggested that the EPA acquire a URL such as “simple.com” or “itsimple.com.” They suggested that not only would such a URL be easy to remember, it would also provide a consistent message platform for messages such as; “Getting information is simple,” “Doing the right thing is simple,” “Picking the most efficient vehicle is simple.” They felt that the combination of the “simple” URL, the utilization of the QR code, and crowdsourcing (definition noted above) outreach would effectively drive people to the website.
4. Bring together the top 10 foundations and ask them to do it/fund it for you.
 - Recognizing that the agencies have an exceptionally small budget for this effort (made even more dramatic when compared to the budgets that the private sector has to promote their products) provoked the panel to suggest contacting foundations with compatible missions and asking them to join together to help fund an outreach effort.

5. Have a checklist, not a brochure, for dealers (10 musts you need to communicate).
 - When panelists received a copy of the current Fuel Economy Guide they expressed concerns that the public probably didn't know it was available, didn't access it if they did know it was available, and would not respond well to it in the current format. Instead, they recommended that dealers distribute a one-page checklist, which would allow the agencies to deliver the top 10 points that could not (and should not) be included on the label. It also would ensure that even if individuals did not utilize the website, they would receive this information. It was also suggested that, if possible, distribution of this document be mandatory.
6. Utilize us (panelists) to put it on our blogs and get public input, then leverage that for the release.
 - Panelists repeatedly offered to utilize their networks to help the agencies either receive public comment or to help launch any of the initiatives discussed by them. They also felt that providing the public an opportunity to share their comments would have significant value. It would provide insight into the acceptability of these concepts, engage consumers in a meaningful dialogue, and allow for ongoing dialogue and social networking.

Label Design and Content

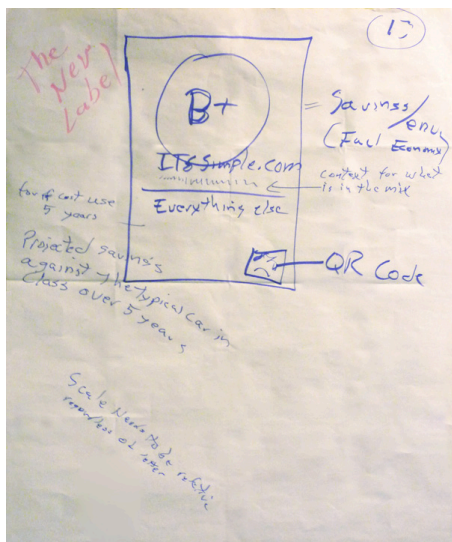
A significant amount of time was allocated to discussing the fuel economy label design. At the time of the Expert Panel meeting, label designs were going through daily revisions as dictated by market research results and internal agency reviews. The most current EPA/NHTSA drafts as seen in Appendix C were presented to the group. To help understand the current design options and the challenges faced by new and emerging technologies, the group reviewed several fuel economy label design options that were guided by the focus group process. The first demonstrated the three design approaches being considered for gasoline vehicles. The second graphic contained two design approaches for Plug-in Hybrid Electric Vehicles (PHEV). This was done to help illustrate the complexity of information that might be required and had been requested by focus group participants.



Comments from the group fell into the following five categories. In each of these categories the panelists reached a consensus.

1. Create a single metric and give it significant prominence on the label.

This was the highest priority recommendation provided by the group. Consensus was strong regarding the recommendation of using a single, bold alphabet-based “grade” that would dominate the label with any other legally required information being provided at the bottom of the label and in such a way as not to compete with the grade.



The group discussed whether a metric should be developed to compare all vehicles or vehicles in a particular class. There was some concern that if one metric is used to cover all vehicles, a specific class of vehicle might always get a low grade. When the group was informed that there are currently four SUVs that made the top 10 fuel economy list, they felt this concern might not be true. They also said that many individuals have specific needs that more fuel-efficient vehicles might not meet (e.g., the need to haul large quantities of people or goods) and that these individuals (as demonstrated in the focus groups) would still purchase the vehicle that matched their needs. The group did feel that the grading system could still be a motivator, as a person may look presently or in the future for the vehicle in their desired class with the best grade.

Another suggestion was to use a single metric like New York City and Los Angeles restaurant labels. They require all restaurants to place a label in the window that has an A, B, or C rating that reflects how they were graded for kitchen cleanliness. This letter/grade approach will be intuitive for most consumers.

2. Reactions to current label designs were not favorable. Comments included:
 - These were not ‘designed’ they were ‘negotiated.’
 - We reject the presentation of the design. Be clear, we are not rejecting the information.

- I would be afraid of this label because it is just not friendly looking.
- No idea what the two environmental areas on the draft labels mean and don't care.

3. It needs to be simple.

- Remember the reality that people will view the labels in a very short time.
- There is a point where people cannot process that amount of information.

The group also pointed out that change of this significance is usually met with criticism – as was true with every Apple product released, that eventually was held up as the gold standard for usefulness and innovation.

- If the label does not elicit controversy you have missed the mark and won't foster social change. Embrace the controversy this will cause.

4. Demonstrate benefits that are relevant and motivating.

- The current label designs demonstrate costs. It would be better if they could demonstrate savings which is a very strong motivator.

5. Provide other information in other ways.

- The consensus was to keep the label as clean and simple as possible and make other more detailed information available to individuals through resources such as the website and dealership materials.
- The group also suggested placing specific, required information in a less prominent position on the label, perhaps in the lower half or on the back, using smaller fonts.
- Secure a URL such as “simple.com” or “Itssimple.com.” Include a QR code (smartphone code).

- Create a 10-point checklist for dealer distribution.
- Have an “App” contest to create additional opportunities for individuals to seek and obtain information.
- Create opportunities for individuals to engage with each other to share experiences.



Appendices

Appendix A: Participants & Attendees

Erikka Arone	Advisor, MyArtspace.com Previously iPod Product Marketing Manager
Stacie Bright	Senior Communications Marketing Manager, Unilever Responsible for the Dove Campaign for Real Beauty
Matt Burchard	Director of Online Marketing, Zappos Major role in growing company from six employees to one with 1,300 employees and annual sales over \$1.2 billion
Tom Conrad	Leads the Pandora product organization Responsible for product management, user interface design and software development and network operations
Dr. Cheryl Healton	President and Chief Executive Officer, Legacy Guides the national youth tobacco prevention counter-marketing campaign, truth®
Craig Newmark	Founder, craigslist.org Also works with a wide range of groups including Wikipedia, and the Sunlight Foundation
Ian Rowe	Bill and Melinda Gates Foundation, Former Deputy Director and former Senior Vice President of Strategic Partnerships and Public Affairs for MTV
Fred Seibert	President & Executive Producer, Frederator Studios Helped create MTV, Nickelodeon and VH-1. Branded MTV with the iconic logo and “I Want My MTV” theme
Faye L. Wong, MPH	Chief of the Program Services Branch in the CDC’s Division of Cancer Prevention and Control Manages the National Breast and Cervical Cancer Early Detection Program. Former Director of the VERB campaign
Mike Rosen	Managing Principal, PRR (Facilitator)

Subject Matter Experts, Observers and Consultants

Lucie Audette	Environmental Protection Agency (EPA), Office of Transportation & Air Quality (OTAQ)
Susan Burke	American Association for the Advancement of Science (AAAS) Science & Technology Policy Fellow, EPA, OTAQ
David Cohen	EPA, Office of Public Affairs
Justin Cohen	EPA, OTAQ
Kil-Jae Hong	Department of Transportation (DOT), National Highway Traffic Safety Administration (NHTSA)
Janet Hopson	Oak Ridge National Laboratory, National Transportation Research Center
Kristin Kenausis	EPA, OTAQ
Susan McMeen	DOT, NHTSA
Rachel Nathan	PRR, Inc.
Denise Walz	PRR, Inc.



Appendix B: Agenda

Agenda

Objectives:

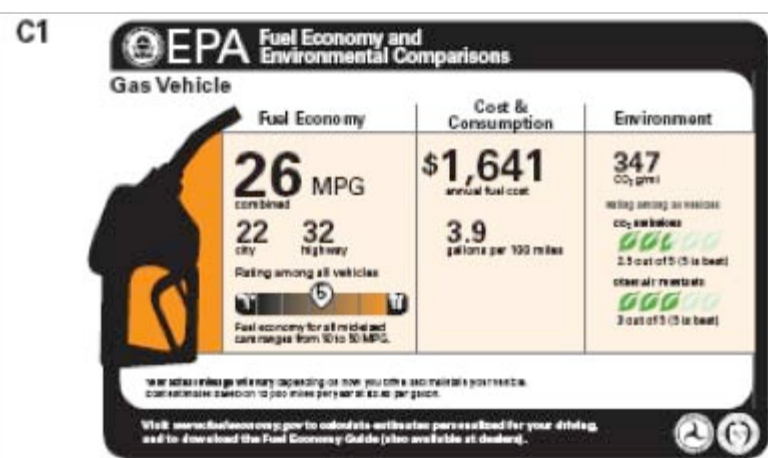
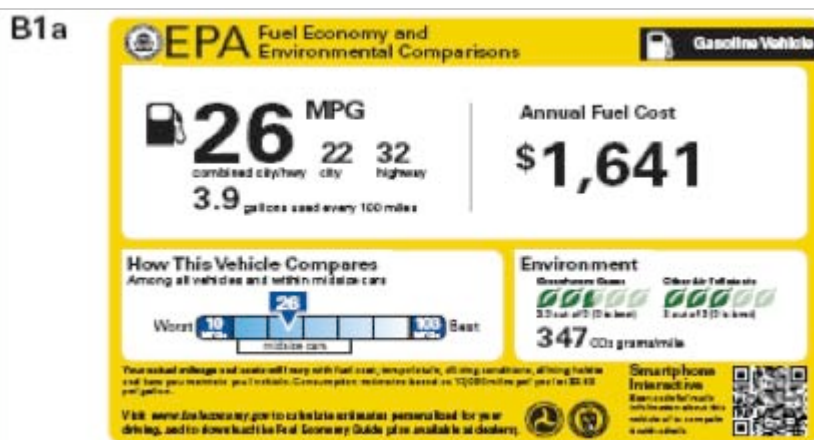
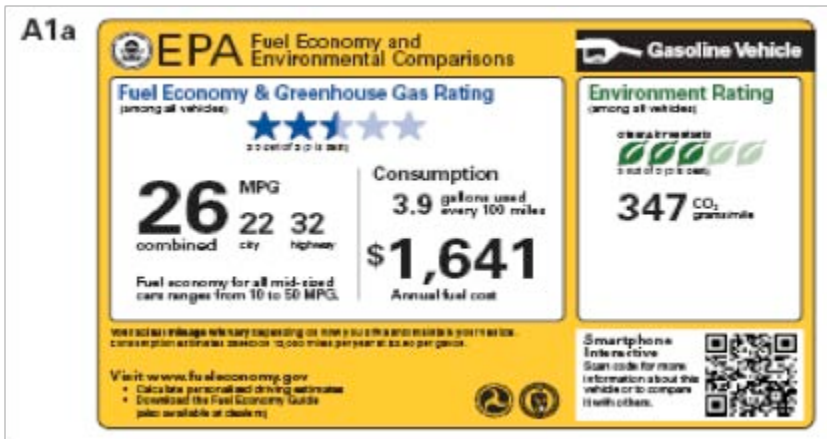
- I. Identify opportunities to increase the priority of energy efficiency in the vehicle purchase process
- II. Obtain feedback on working label designs

Schedule

8:45 – 9:00	Coffee and refreshments available
9:00 – 9:15	Introductions
9:15 – 9:30	Welcome
9:30 – 9:45	Background and meeting goals
9:45 – 10:15	Research review and feedback Purpose: Identify any potential concerns raised by the research. Identify insights and lessons learned from research and implementation experiences of participants.
10:15 – 10:30	Break
10:30 – 11:15	Messages Purpose: Identify messages that will help increase perceived value and preference for fuel efficiency.
11:15 – 12:00	Outreach strategies Purpose: Identify outreach strategies to deliver key messages to vehicle purchasers and influencers.
12:00 – 1:00	Working lunch: Open discussion between observers (staff from US Environmental Protection Agency, National Highway Traffic Safety Administration, Department of Energy) and panelists Purpose: Probe specific issues and comments that were raised during morning facilitated discussion.

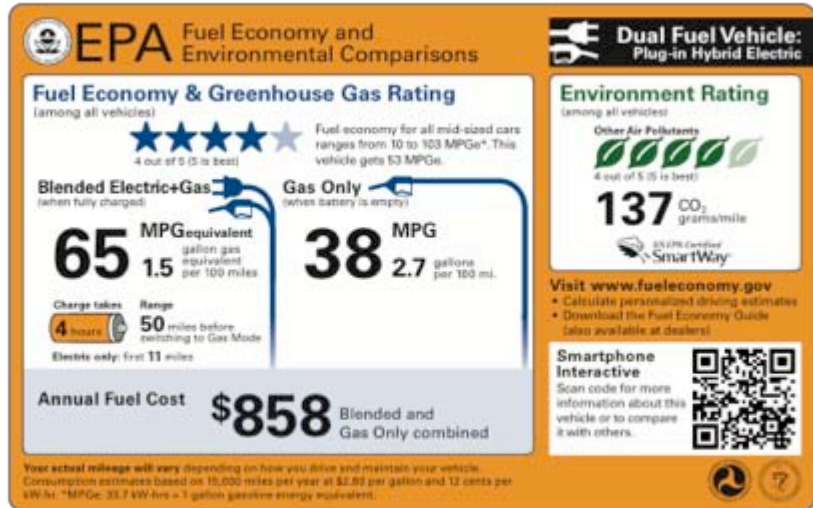
- 1:00 – 1:45 Label design feedback
Purpose: Provide specific feedback on working label designs- including design, wording, prominence, and positioning.
- 1:45 – 2:00 Break
- 2:00 – 2:55 Open discussion between observers (staff from US Environmental Protection Agency, National Highway Traffic Safety Administration, Department of Energy) and panelists
Purpose: Probe specific issues and comments that were raised during the afternoon facilitated discussion.
- 2:55 - 3:00 Final comments and adjourn

Appendix C: Label Design Concepts Shared with Panel

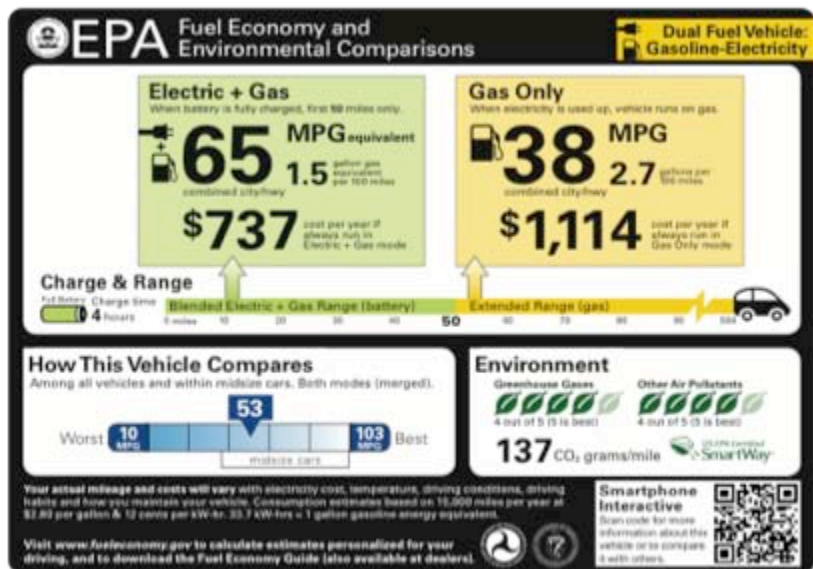


Appendix D: Examples of Technology Impacts on Label Design

A4b – PHEV – gallon gas equivalent/100 miles



B4 – PHEV



Appendix E: PowerPoint Information Used During The Meeting




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Expert Panel Meeting

Welcome:
E i

Matt Burchard	Ian Rowe
Tom Conrad	Fred Seibert
	Faye

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Introductions

Welcome

Margo Oge

Director, U.S. Environmental Protection Agency Office
of Transportation and Air Quality



Agenda

- ✓ 9:00 – 9:15 Introductions
- ✓ 9:15 – 9:30 Welcome
- 9:30 – 9:45 Background and meeting goals
- 9:45 – 10:15 Research review and feedback
- 10:15 – 10:30 Break
- 10:30 – 11:15 Messages
- 11:15 – 12:00 Outreach strategies
- 12:00 – 1:00 Working lunch: Discussion between observers and panelists
- 1:00 – 1:45 Label design feedback
- 1:45 – 2:00 Break
- 2:00 – 2:55 Discussion between observers and panelists
- 2:55 – 3:00 Final comments and adjourn



Meeting Goals

1. Identify opportunities to increase the priority of energy efficiency in the vehicle purchase process
2. Provide feedback on working fuel economy label designs



Background

Highway Vehicle Miles Traveled are projected to grow 60% by 2030, in step with the growing U.S. population.

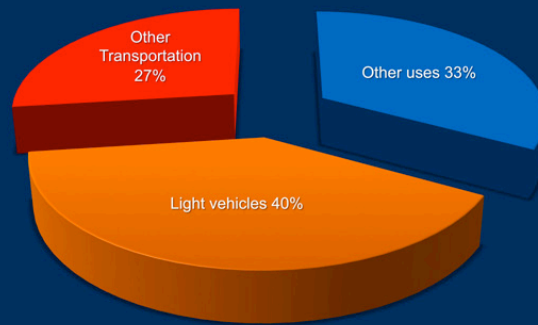


Sources: U.S. Department of Energy/Energy Information Administration



Background

Transportation is 97% dependant on Petroleum
(And uses 67% of all US petroleum)



Background

Each year, the United States:

- Produces **10%** of the world's petroleum
- Consumes **26%** of the world's production



Background

Every gallon of gasoline your vehicle burns puts about **20 pounds** of carbon dioxide into the atmosphere.



Background

Going from **20 MPG** to **25 MPG** can prevent **10 tons** of carbon dioxide over a vehicle's lifetime.



Background

Increasing energy efficiency helps :

- Reduce greenhouse gasses
- Reduce dependence on imported oil
- Enhance the nation's energy security
- Conserve our fossil resources for future generations



Background

The mission of EPA is to protect human health and to safeguard the natural environment -- air, water and land -- upon which life depends.



Background

EPA is initiating a new rulemaking and education campaign to:

- Help consumers understand how each vehicle impacts the environment.
- Ensure consumers have accurate, meaningful and useful information.



Background

Information gathering

3 Phases of Focus Groups: **COMPLETED**

- *Buying process / Use of current label / Metrics*
- *Building labels for conventional and advanced technology vehicles*
- *Evaluation of full label designs*

Literature Review **ONGOING**

- *Buying process and influencing factors*

Expert Panel: **June 9th, 2010**

- *Shifting culture*
- *Improving effectiveness of designs*

Internet Survey: **June 28th, 2010**

- *Evaluating labels for understanding and influence*
- *Messaging*



Research review

Traditional Vehicle Purchase Funnel



Research review

Key findings

Most important considerations:

1. Vehicle Type
2. Vehicle Cost
3. Fuel Economy (City and Hwy MPG used to compare)
4. Then: Safety, Reliability, Size, Appearance, Comfort, Brand Name, Performance



Research review

Key findings

Even if very specific buying criteria is met, consumers will not purchase a vehicle if it does not meet their aesthetic standards.



Research review

Key findings

By the time the consumer enters the dealership to test drive a vehicle s/he is closer to a final purchasing decision than was true in the past.



Research review

Key findings

Information is gathered from multiple sources:

- Manufacturers and dealers
- Automotive magazines
- Websites
- Word of mouth
- Family and friends



Research review

Key findings

The Internet is an important source of information and used to acquire information from those with first-hand experience with specific vehicles through reviews and blogs.



Research review

Key findings

Online sales increased at an annual growth rate of 14.6% over the past five years and represent 4% of total car sales in the United States.



Research review

Key findings

Environment is not a deciding factor. However, many buyers consider hybrids ultimately rejecting them due to cost or perception that they are a young technology.



2009 U.S. advertising spending

<u>Company</u>	<u>Spend</u>	<u>Rank</u>
▪ General Motors	\$2,901.1 million	4
▪ Ford	\$1,856.0 million	11
▪ Toyota	\$1,690.4 million	13
▪ Honda	\$1,254.6 million	26
▪ Nissan	\$1,199.3 million	30
▪ Chrysler	\$1,129.6 million	36
▪ Hyundai	\$512.8 million	73
▪ Volkswagen	\$407.2 million	90
▪ Daimler	\$401.3 million	93



Research review

Questions

How does this purchasing process compare to other products?

How should these realities impact a strategy?



Messages

What messages will overcome current barriers/shift priorities and increase perceived value and preference for fuel efficiency?



Outreach Strategies

What outreach strategies would best deliver those messages to vehicle purchasers and those who influence them?



Background

2006: EPA updated how city and highway fuel economy values are calculated and designed a new fuel economy label.



Background

- City and Hwy MPG most used and used to compare vehicles within same class
- Annual figures (mileage and cost) criticized as being inaccurate



A1a EPA Fuel Economy and Environmental Comparisons Gasoline Vehicle

Fuel Economy & Greenhouse Gas Rating (among all vehicles)

★★★★☆
4 out of 5 (5 is best)

26 MPG combined
22 city 32 highway
3.9 gallons used every 100 miles
Annual fuel cost **\$1,641**

Environment Rating (among all vehicles)

Greenhouse Gas Rating
347 CO₂ grams/mile

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

B1a EPA Fuel Economy and Environmental Comparisons Gasoline Vehicle

26 MPG combined
22 city 32 highway
3.9 gallons used every 100 miles
Annual Fuel Cost **\$1,641**

How This Vehicle Compares
Among all vehicles and other midsize cars

Worse Best

Environment (among all vehicles)


Other Air Pollutants
347 CO₂ grams/mile

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

C1 EPA Fuel Economy and Environmental Comparisons Gas Vehicle

Fuel Economy	Cost & Consumption	Environment
26 MPG combined 22 city 32 highway Rating among all vehicles	\$1,641 annual fuel cost 3.9 gallons per 100 miles	347 CO ₂ per mile Rating among all vehicles Other air pollutants 347 CO ₂ grams/mile 3 out of 5 (5 is best)

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.



A4b – PHEV

EPA Fuel Economy and Environmental Comparisons Dual Fuel Vehicle: Plug-in Hybrid Electric

Fuel Economy & Greenhouse Gas Rating (among all vehicles)

★★★★☆
4 out of 5 (5 is best)

Fuel economy for all mid-sized cars ranges from 10 to 103 MPGe*. This vehicle gets 53 MPGe.

Blended Electric+Gas (when fully charged)
65 MPGe equivalent gallon gas equivalent per 100 miles

Gas Only (when battery is empty)
38 MPG 2.7 gallons per 100 mi.

Charge takes **4** hours
Range **50** miles before switching to Gas Mode
Electric only: first **11** miles


Annual Fuel Cost **\$858** Blended and Gas Only combined

Environment Rating (among all vehicles)

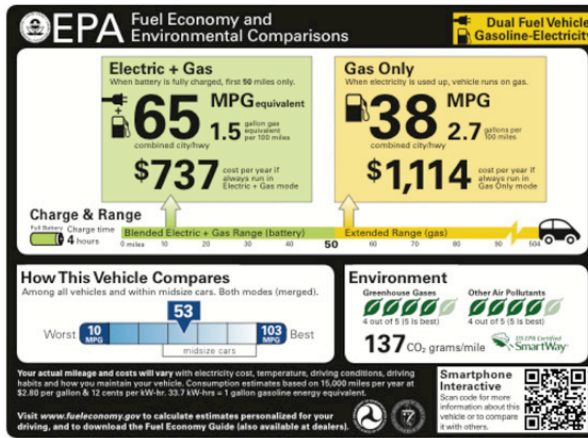
Other Air Pollutants
4 out of 5 (5 is best)
137 CO₂ grams/mile

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

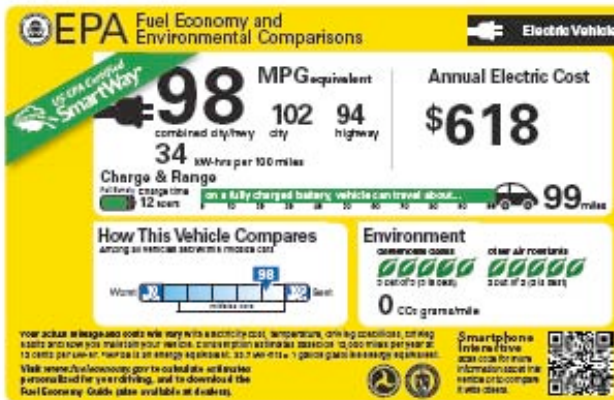
Your actual mileage will vary depending on how you drive and maintain your vehicle. Consumption estimates based on 15,000 miles per year at \$2.89 per gallon and 12 cents per kWh. *MPGe: 33.7 kWh less = 1 gallon gasoline energy equivalent.



B4 – PHEV



B2b



Appendix F: Advance Materials Sent to Participants

Dear Colleague,

Thank you for agreeing to participate in the expert panel discussion for the U.S. Environmental Protection Agency (EPA) Fuel Economy Label Project. This letter contains important information about the meeting, travel arrangements, and reimbursement procedures. This email also contains the following attachments:

- Draft agenda
- Research briefing

Homework

1. Please review the attached materials.
2. After reviewing the materials, it would be helpful if you could come prepared to discuss how you would recommend that the EPA increase the value of, and preference for, more efficient vehicles.

Panel Participants include:

Erikka Arone	MyArtspace.com, Advisor
Stacie Bright	Unilever, Senior communications marketing manager
Matt Burchard	Zappos, Director of Online Marketing
Tom Conrad	Pandora, CTO
Dr. Cheryl Healton	Legacy, President & Chief Executive Officer
Craig Newmark	Craigslist, Founder, Chairman and customer service rep
Ian Rowe	Bill and Melinda Gates Foundation, Former Deputy Director
Fred Seibert	Frederator Studios, President & Executive Producer
Faye L. Wong, MPH	CDC, Chief, Program Services Branch Division of Cancer Prevention and Control



UNITED STATES
ENVIRONMENTAL
PROTECTION AGENCY

The meeting will be facilitated by Mike Rosen of PRR. There will also be a small group of observers from the EPA, the National Highway Traffic Safety Administration and the U.S. Department of Energy.

Meeting Logistics

The expert panel will take place on Wednesday, June 9, 2010, from 9 am – 3 pm.

Location: EPA Headquarters
Ariel Rios North Building, Room 1332A
1200 Pennsylvania Ave, NW
Washington, DC 20004

* **Meeting access - Entrance off of 12th Street, NW, near Federal Triangle metro stop.** Standing at entrance to metro station, Ariel Rios North will be on your left.

All guests must go through security clearance, so please bring a valid driver's license or passport for identification purposes. You will be asked to go through the metal detector. We will have a project representative in the lobby to assist with the security process. However, if you encounter any problems accessing the building, please contact Kristin Kenausis at (202) 306-3061 or Lucie Audette at (734) 717-8062.

Coffee and refreshments will be available starting at 8:45 am, the meeting will start at 9 am and end 3 pm. Lunch will be provided.

Travel Arrangements

We are happy to arrange travel for you, or if you prefer, you may make your own arrangements and then submit receipts for reimbursement. We do not have a preferred hotel and instead are working with each person individually to make reservations. There are a number of hotels near the EPA offices; a list of nearby hotels is attached.

Reimbursement for Travel Expenses

We will reimburse participants for coach airfare, hotel, transportation, **mileage for use of personally owned vehicles**, and meals and incidental expenses (M&IE) *after* the workshop.

Because we are working with the EPA, we are subject to Federal reimbursement procedures.

In keeping with Federal reimbursement procedures, we will reimburse participants for meals and incidental expenses at an established per diem rate of \$71.00 for travel to Washington DC. Please note that the Federal government uses a travel day system for M&IE reimbursement, where the maximum rate for M&IE reimbursement is \$35.50 on days that you are traveling to and from Washington, DC.

Please note that under Federal reimbursement procedures, it is necessary for participants to keep original receipts for airfare, hotel/tax, and ground transportation expenses, regardless of cost. Receipts for meals are not necessary, as participants will be reimbursed per the Federal reimbursement procedures discussed above. Please submit receipts to Kimbra Wellock. A fax or scan or the original receipt is acceptable.

Please do not hesitate to contact me at (206) 462-6351 or kwellock@prrbiz.com if you have any questions or concerns.

Sincerely,

Kimbra Wellock,

PRR, Inc



EPA - Fuel Economy Label Project Expert Panel Advance Information

6/9/10

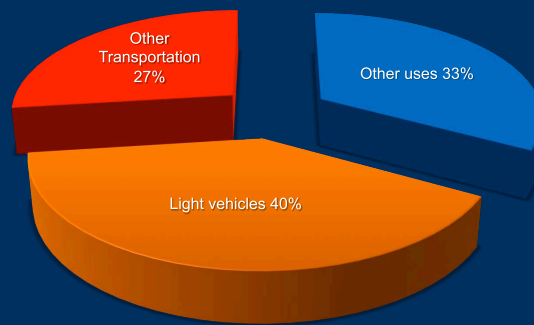
Expert Panel Purpose

1. Identify opportunities to increase the priority of energy efficiency in the vehicle purchase process
2. Provide feedback on working fuel economy label designs



Background

Transportation is 97% dependant on Petroleum
(And uses 67% of all US petroleum)



Our Reality

14,000,000 new light duty vehicles are purchased in the U.S. annually.

Light-duty vehicles account for **60** percent of all mobile source Green House Gasses.



Information Gathering Activities

3 Phases of Focus Groups: *COMPLETED*

Literature Review *ONGOING*

Expert Panel: *June 9th, 2010*

Internet Survey: *June 28th, 2010*



Key Findings:

- Information is gathered from a variety of sources such as manufacturers and dealers, automotive magazines and websites, word of mouth and from family and friends
- The vehicle buying cycle is contracting due to the amount of information that consumers are accessing on the Internet
- The Internet provides consumers the opportunity to purchase vehicles online (annual growth rate of 14.6% over the past five years)



Key Findings:

- Purchasing a vehicle tends to be related to other major life changes
- US consumers will NOT purchase a vehicle that does not meet their aesthetic standards
- Currently environmental Impact is not a factor in vehicle choice
- By the time the consumer enters the dealership s/he is closer to a final purchasing decision than was true in the past



Key Findings:

Factors influencing choice

- Specific vehicle or vehicle class in mind using these considerations:
 1. Vehicle Type
 2. Vehicle Cost
 3. Fuel Economy
 4. Then: Safety, Reliability, Size, Appearance, Comfort, Brand Name, Performance



Key Findings:

Factors influencing choice

- Price is currently even more critical for consumers because of the global economic crisis
- Fuel economy has also become even more critical for consumers because of fluctuating gas prices and is the top reason why people are opting for fuel-efficient or alternate-fuel vehicles



Key Findings:

Factors influencing choice

- Barriers to purchasing vehicles that utilize electricity include: concerns about insufficient driving range, the need for specialized infrastructure (such as charging stations), battery performance, and doubts concerning the ecological value of vehicles that use electricity.

(Electric Vehicles / Extended Range Electric Vehicles / Plug-in Hybrid Electric Vehicles)



Key Findings:

The role of the current fuel economy label

- The fuel economy label is a highly recognized tool
- Used after a specific vehicle type has been selected
- Used towards the end of the buying process
- Primary use is to compare city and highway mileage

