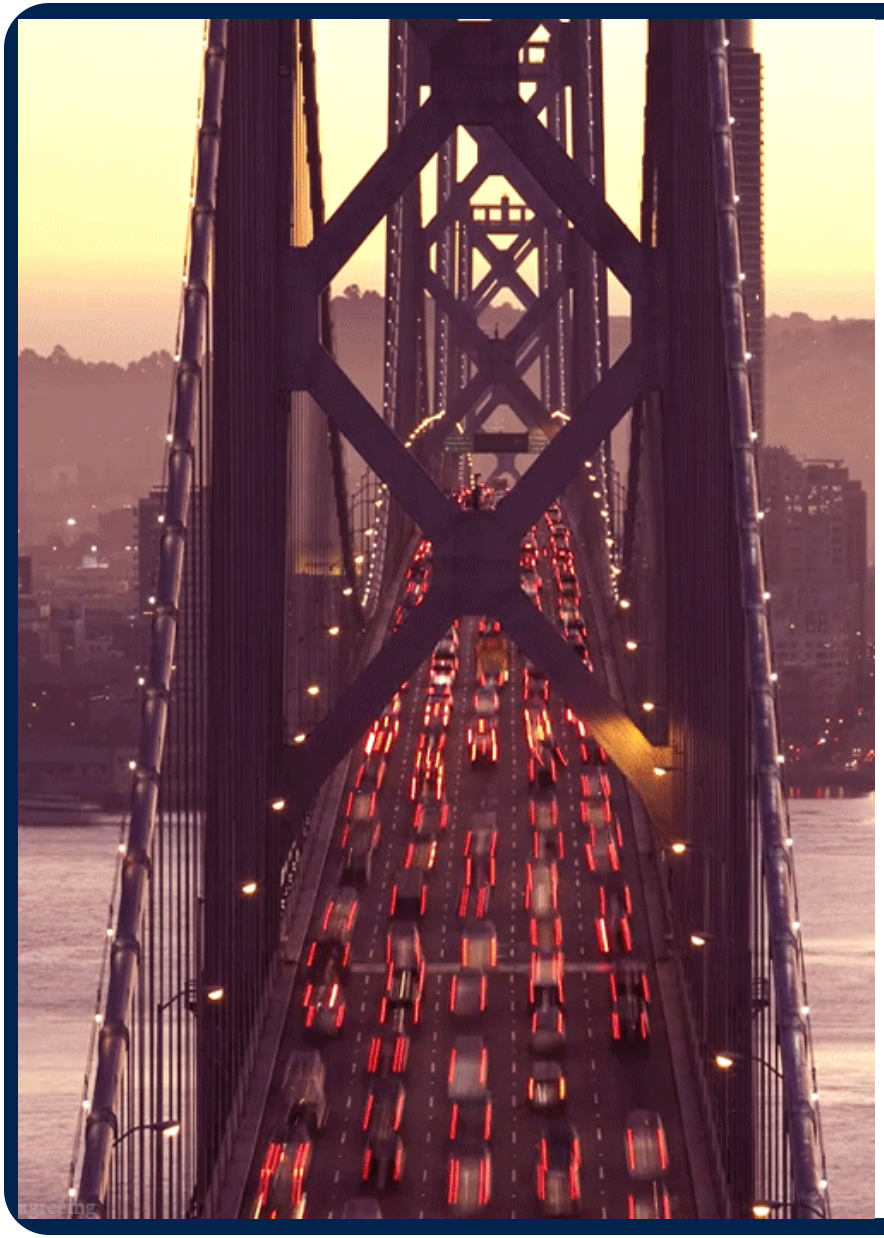

# EPA Fuel Economy Label

Mike Rosen
Managing Principal

PRR

1. Measure unadjusted electrical and gasoline consumption

$$FC_{Cd} = 10 kwhr / 100 miles$$
$$FE_{Cd} = 95 mpg$$

2. Convert electrical consumption to fuel economy in mpg equivalent of gasoline and add harmonically to measured gasoline consumption

$$FE_{MPGe} = \frac{1}{\frac{FC_{Cd}}{33.7 \times 100} + \frac{1}{FE_{Cd}}}$$

3. Apply 5-cycle correction, result is label requirement

$$FE_{5cycle} = 52 mpg_e$$

4. Apply 5-cycle correction ratio to each fuel

$$FC_{Cd} = 10 kwhr / 100 miles \times \frac{74}{52}$$
$$FE_{Cd} = 95 mpg \times \frac{52}{74}$$

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## Monroney Label

CHRYSLER.

2008

300C

For more information visit: www.chrysler.com
or call 1-800-CHRYSLER

THIS VEHICLE IS MANUFACTURED TO MEET SPECIFIC UNITED STATES REQUIREMENTS. THIS VEHICLE IS NOT MANUFACTURED FOR SALE OR REGISTRATION OUTSIDE OF THE UNITED STATES.

MANUFACTURER'S SUGGESTED RETAIL PRICE OF THIS MODEL INCLUDING DEALER PREPARATION

Base Price:

CHRYSLER 300C HEMI RWD
Exterior Color: Light Sandstone Metallic Clear Coat Exterior Paint
Interior Color: Dark Khaki/Light Brgystone Interior Colors
Interior: Luxury Leather-Trimmed Bucket Seats-1st & 2nd Rows
Engine: 5.7-Liter HEMI® Multi Displacement Engine
Transmission: 5-Speed Automatic Transmission

STANDARD EQUIPMENT (UNLESS REPLACED BY OPTIONAL EQUIPMENT)
FUNCTIONAL/SAFETY FEATURES
Advanced Multistage Front Air Bags
Performance Anti-Lock 4-Wheel Disc Brakes
Brake Assist
Electronic Stability Program
Remote Start System
4-Wheel Independent Touring Suspension
All-Speed Traction Control
Power Adjustable Pedals with Memory
Rain-Sensitive Windshield Wipers
19-Gallon Fuel Tank
Rear Window Defroster
INTERIOR FEATURES
Air Conditioning with Dual Zone Auto Temp Control
SIRIUS Satellite Radio
1-Year Service Provided by SIRIUS
For More Information, Call 1-888-539-3434
6 Boston Acoustics Speakers
276-Watt Digital Amplifier
Power Windows w/Front One-Touch Up and Down Feature
Steering Wheel-Mounted Audio Controls
Power Tilt/Telescope Steering Column with Memory
Radio/Drivers Seat/Steering Column/Mirrors Memory
Speed-Sensitive Power Locks
Sentry Key® Engine Immobilizer Theft-Deterrent
Speed Control
Security Alarm
Remote Keyless Entry
Universal Garage Door Opener
Tortoise Shell Interior Accents
Automatically-Dimming Rear View Mirror
AM/FM Radio with CD and MP3 Players
Illuminated Entry
Illuminated Front and Rear Map Pockets
Sun Visors with Illuminated Vanity Mirrors
Illuminated Front Cupholders
Power Front Seats
Heated Front Seats
Front Reading/Map Lamps
Rear Reading/Courtesy Lamps
Premium Front and Rear Floor Mats
EXTERIOR FEATURES
18" x 7.5" Chrome Clad Aluminum Wheels
P225/60R18 AST Self-Sealing Tires
Dual Rear Exhaust

Fog Lamps
Automatic Headlamps
Halogen Projector Headlamps with Delay Feature
Smart Beam(TM) Headlamps

OPTIONAL EQUIPMENT
Light Sandstone Metallic Clear Coat Exterior Paint — $150

Customer Preferred Package 29F

Protection Group II — $1,080
Supplemental Front Seat Mounted Side Air Bags
ParkSense(R) Rear Park Assist System
Supplemental Side Curtain Front and Rear Air Bags
Cabin Air Filtering System
UConnect(R) Hands-Free Communication
Automatically-Dimming Rear View Mirror w/Microphone

Navigation and Sound Group II — $1,335
MyGig® Multimedia System with GPS Navigation
SIRIUS Traffic(TM) with 1-Year Service
DVD-Based Navigation System with GPS
7 Boston Acoustics Speakers w/Subwoofer
368 Watt Amplifier DSP

Luxury Group II — $945
California Walnut Interior Accents
Heated Second-Row Seats
Wood/Leather-Wrapped Steering Wheel
Multi-Function Fold Away Power Mirrors
Exterior Mirrors with Supplemental Signals
Exterior Mirrors with Courtesy Lamps

Power Sunroof — $650
High-Intensity Discharge Headlamps — $695
New Jersey Cost Surcharge

DESTINATION CHARGE — $700

TOTAL PRICE: *

WARRANTY COVERAGE
Lifetime Powertrain Limited Warranty.
3-year or 36,000-mile Basic Limited Warranty.
3-year or 36,000-mile 24-hour towing assistance.
Certain restrictions apply. Ask Dealer for a copy of the limited warranties or see your owner's manual for details.

LIFETIME POWERTRAIN WARRANTY

Assembly Point/Port of Entry: BRAMPTON, ONTARIO, CANADA

SHIPTO: MODEL 28
FULLERTON CHRYSLER JEEP DODGE CORP
1400 ROUTE 22
SOMERVILLE NJ 08876-0750

SHIPFROM: 37 ERROR
FULLERTON CHRYSLER JEEP DODGE CORP
1400 ROUTE 22
SOMERVILLE NJ 08876-0750

THIS LABEL IS ADDED TO THIS VEHICLE TO COMPLY WITH FEDERAL LAW. THE LABEL CANNOT BE REMOVED OR ALTERED PRIOR TO DELIVERY TO THE ULTIMATE PURCHASER.

* SUMS FOR MECHANICAL PARTS OF ANY LICENSE AND TITLE FEES AND DEALER SUPPLIED AND INSTALLED EQUIPMENT AND MODIFICATIONS WERE NOT INCLUDED IN THIS PRICE. DISCLOSURE OF ANY.

(1) DEALER OBJECTS TO OPTIONS OF PURCHASED LOCALLY.

### EPA Fuel Economy Estimates

These estimates reflect new EPA methods beginning with 2008 models.

CITY MPG
**15**
Expected range for most drivers 12 to 18 MPG

Estimated Annual Fuel Cost
**$2,335**
based on 15,000 miles at $2.80 per gallon

HIGHWAY MPG
**23**
Expected range for most drivers 19 to 27 MPG

Combined Fuel Economy
This vehicle
**18**
11 — 25
All Large Cars

Your actual mileage will vary depending on how you drive and maintain your vehicle.

See the FREE Fuel Economy Guide at dealers or www.fueleconomy.gov

### GOVERNMENT SAFETY RATINGS

| | | |
|---|---|---|
| Frontal Crash | Driver | ★★★★★ |
| | Passenger | ★★★★★ |

Star ratings based on the risk of injury in a frontal crash. Frontal ratings should ONLY be compared to other vehicles of similar size and weight.

| | | |
|---|---|---|
| Side Crash | Front Seat | Not Rated |
| | Rear Seat | Not Rated |

Star ratings on the risk of injury in a side impact.

Rollover ★★★★

Star ratings based on the risk of rollover in a single vehicle crash.

Star ratings range from 1 to 5 stars (★★★★★) with 5 being the highest.
Source: National Highway Traffic Safety Administration (NHTSA).

www.safercar.gov or 1-888-327-4236

The safety ratings above are based on Federal Government tests of particular vehicles equipped with certain features and options. The performance of this vehicle may differ.

**Bumper Performance**
This vehicle is equipped with bumper systems that can withstand a frontal barrier impact speed of 2.5 miles per hour and a rear barrier impact speed of 2.5 miles per hour with no more damage than allowed by the Federal bumper standard. The Federal bumper standard allows damage to the bumpers and attaching hardware and specifies barrier tests to be conducted at 2.5 miles per hour.

### PARTS CONTENT INFORMATION

FOR VEHICLES IN THIS CARLINE:
U.S./CANADIAN PARTS CONTENT: 74 %
NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY, DISTRIBUTION, OR OTHER NON-PARTS COSTS

FOR THIS VEHICLE:
FINAL ASSEMBLY POINT:
BRAMPTON, ONTARIO, CANADA

COUNTRY OF ORIGIN:
ENGINE: MEXICO
TRANSMISSION: GERMANY

Smog Index:
The Smog Index of this vehicle is 0.99.
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0-3.0
CLEANER — MORE POLLUTING
The Smog Index of the average new vehicle is 0.98
The Smog Index (SI) indicates the relative level of smog-forming pollutants emitted by the vehicle. The lower the SI, the lower the vehicle's emissions.

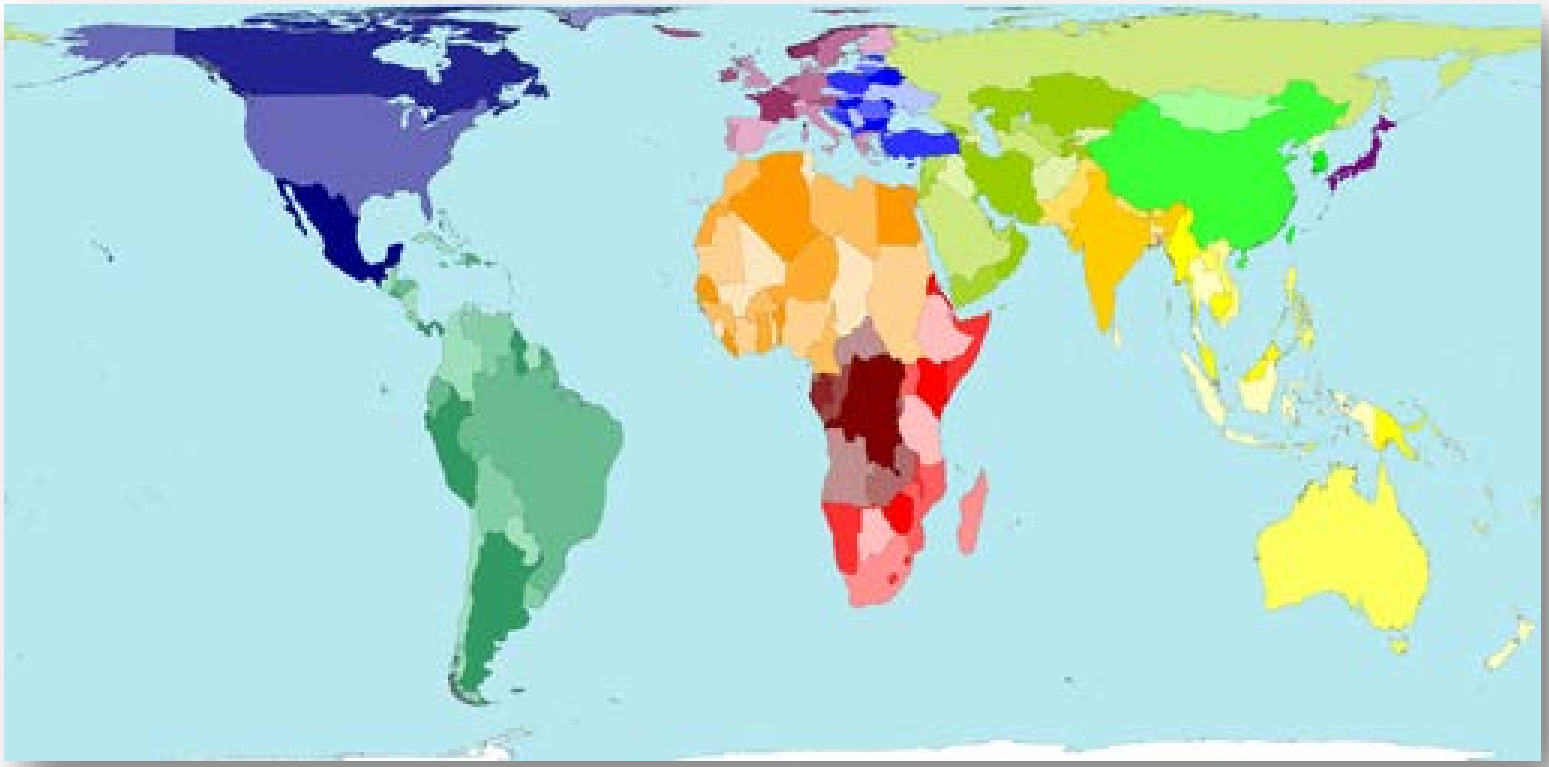
PRR

# Why fuel economy is important…

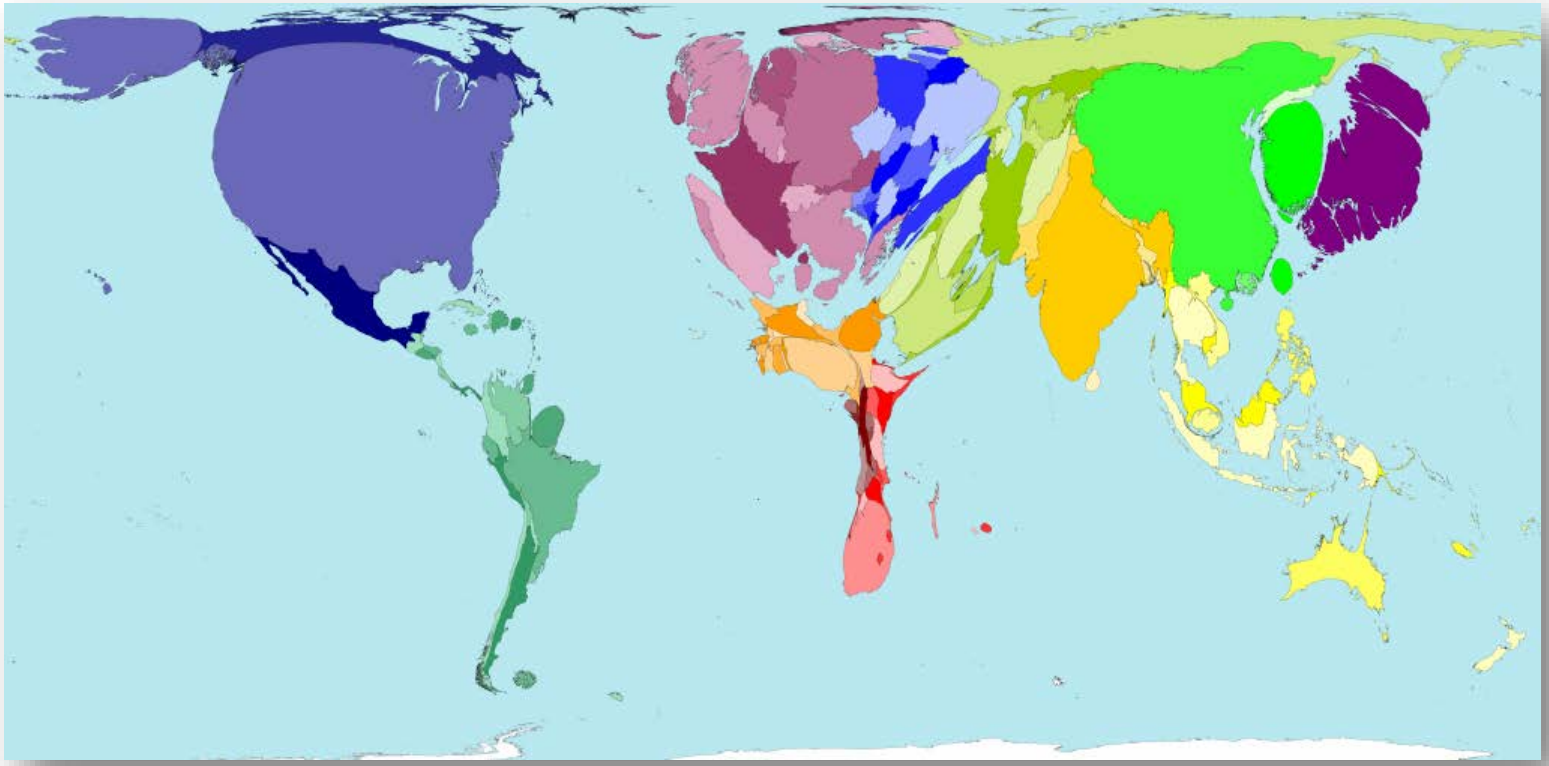
Each year, the United States:

Produces **10%** of the world's petroleum

Consumes **26%** of the world's production



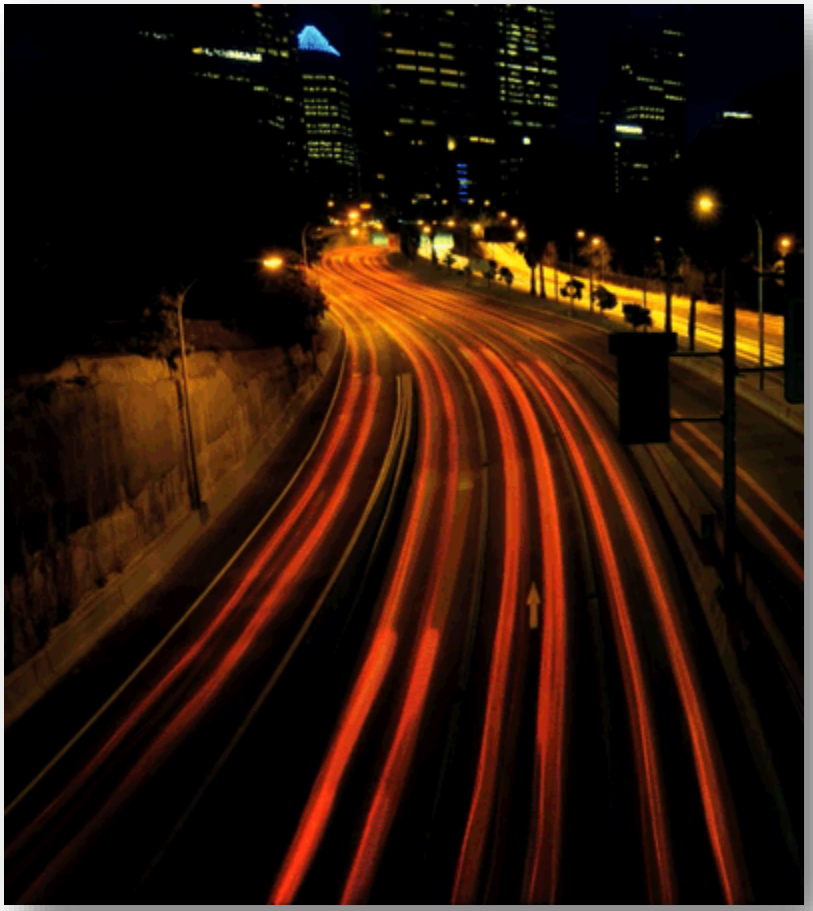
Land Mass



**Fuel Use**

# Transportation is **97%** dependant on Petroleum

And uses **67%**
of all US petroleum



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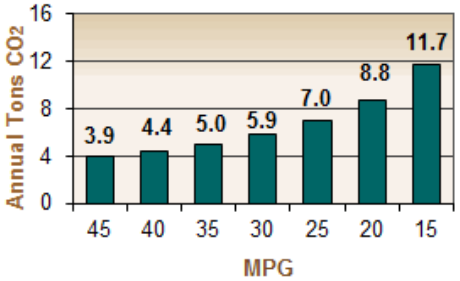
Every gallon your vehicle burns puts about **20 pounds** of carbon dioxide into the atmosphere.

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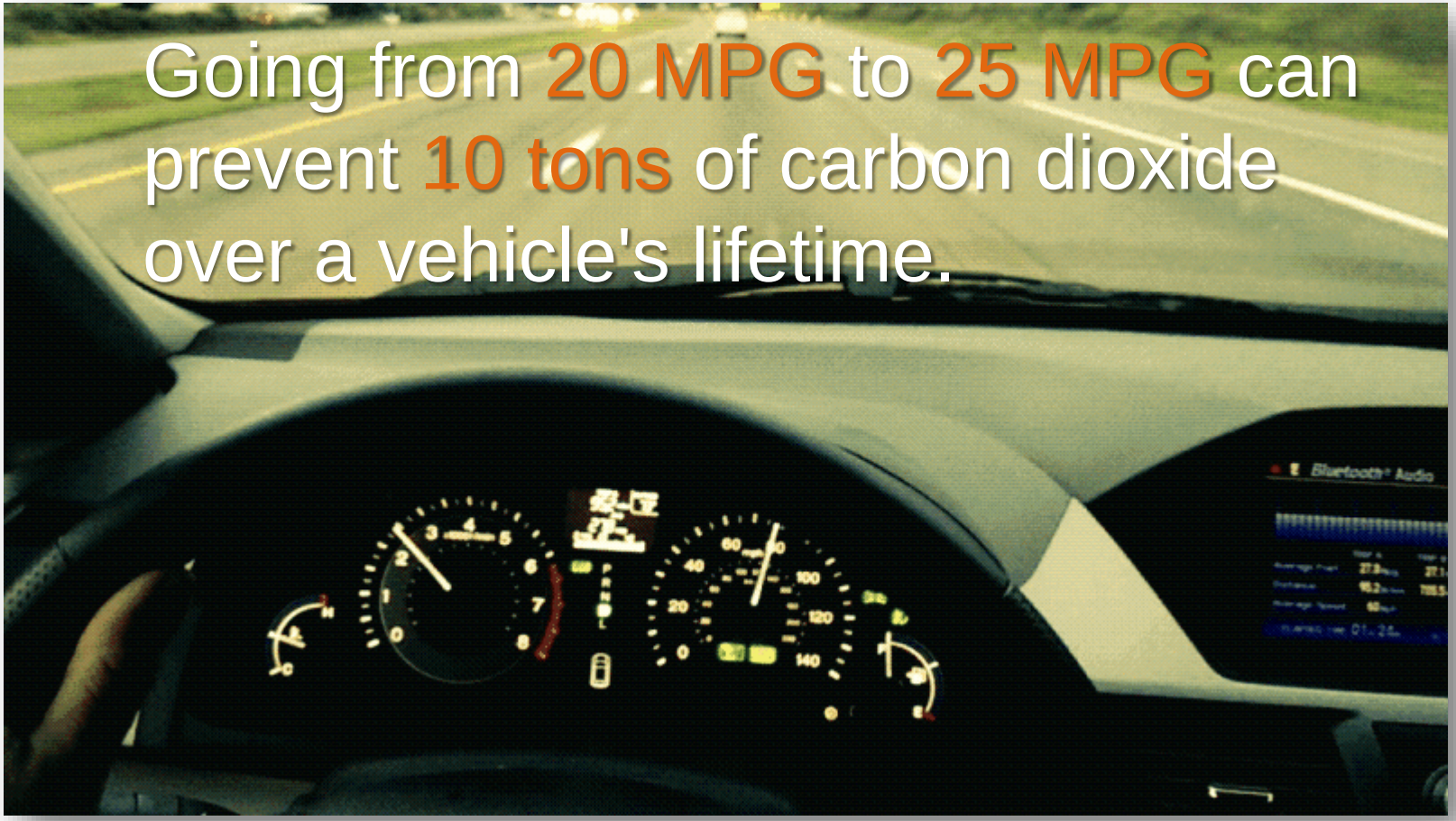
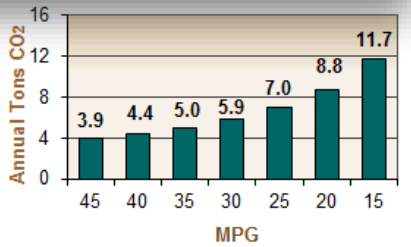
Going from 20 MPG to 25 MPG can prevent 10 tons of carbon dioxide over a vehicle's lifetime.



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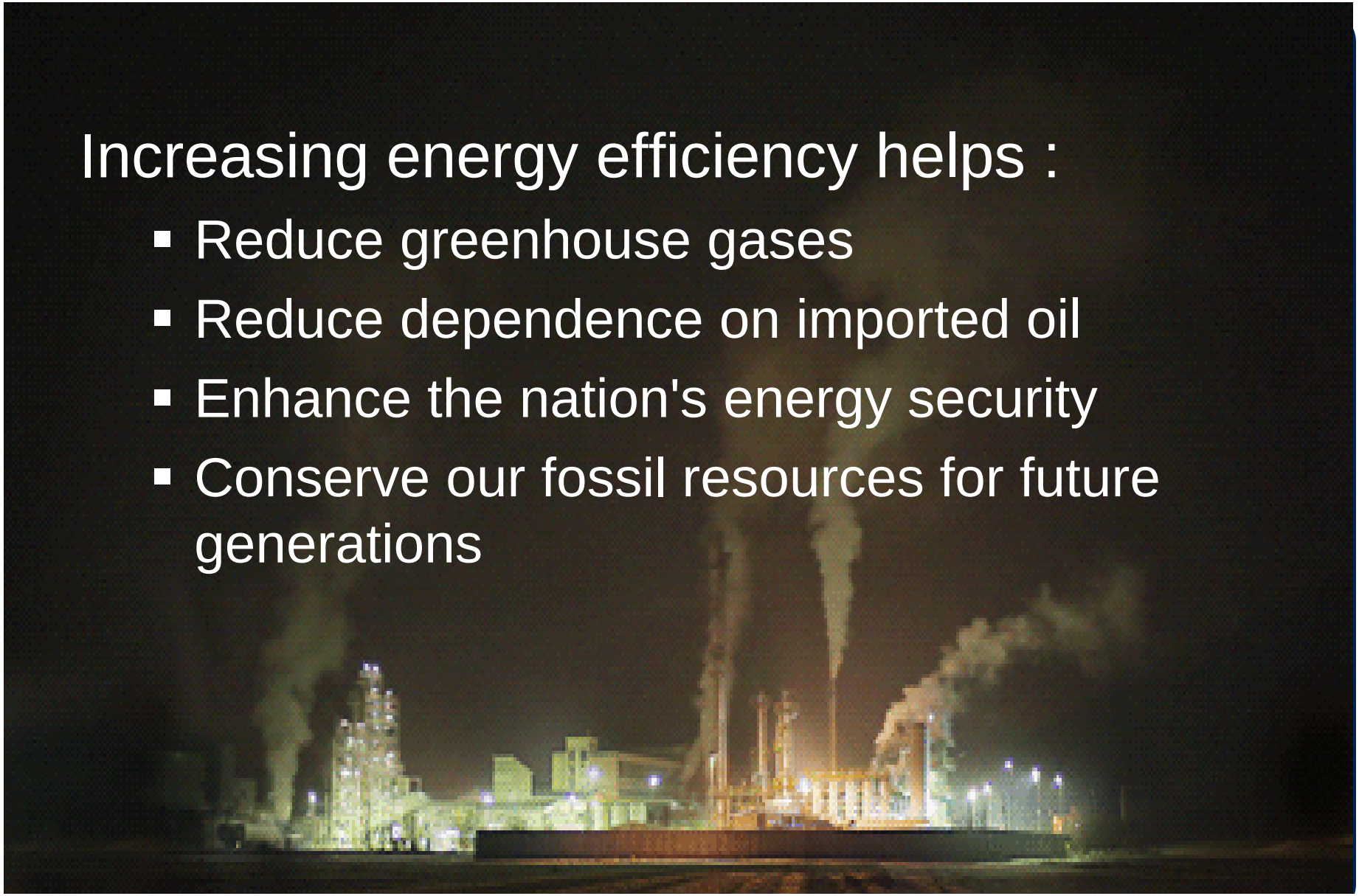
PRR

PRR

# Vision

Increasing energy efficiency helps :

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

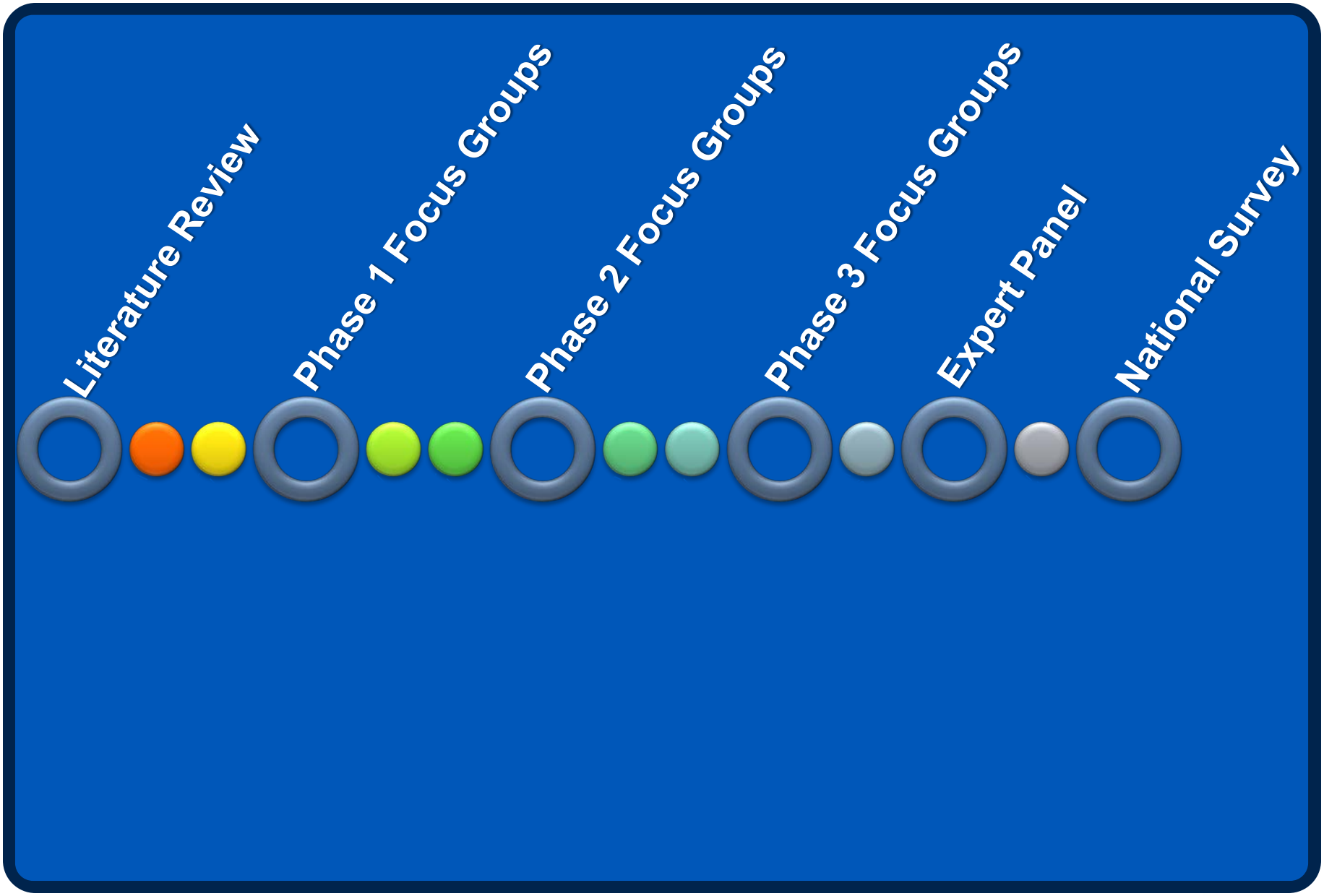


- The first major overhaul since being introduced 35 years ago.
- New generation of cars
  - Gas powered
  - Hybrid
  - Electric (EV)
  - Extended Range Electric Vehicle (EREV)
  - Plug In Hybrid Electric Vehicle (PHEV)

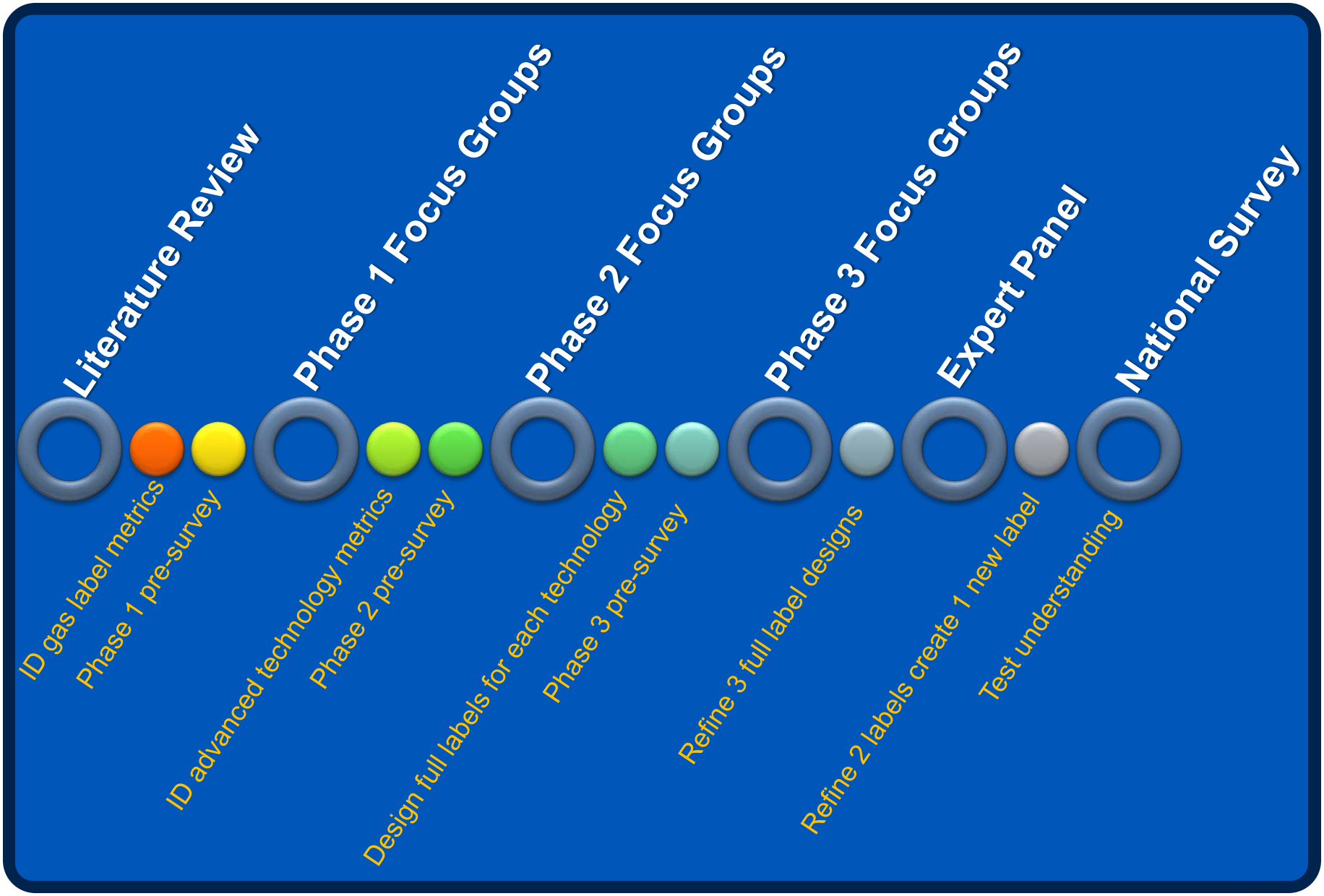
PRR

# New testing methods

# Information Gathering Process


Literature Review
Phase 1 Focus Groups
Phase 2 Focus Groups
Phase 3 Focus Groups
Expert Panel
National Survey

PRR


Literature Review
ID gas label metrics
Phase 1 pre-survey
Phase 1 Focus Groups
ID advanced technology metrics
Phase 2 pre-survey
Phase 2 Focus Groups
Design full labels for each technology
Phase 3 pre-survey
Phase 3 Focus Groups
Refine 3 full label designs
Expert Panel
Refine 2 labels create 1 new label
National Survey
Test understanding

PRR

# Literature Review

Wanted to learn:

- Buying process
- Information sources used
- Important factors
  (price, fuel economy, safety)
- Who is making the decision
  (Demographic /psychographics)

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Eighty studies/articles reviewed

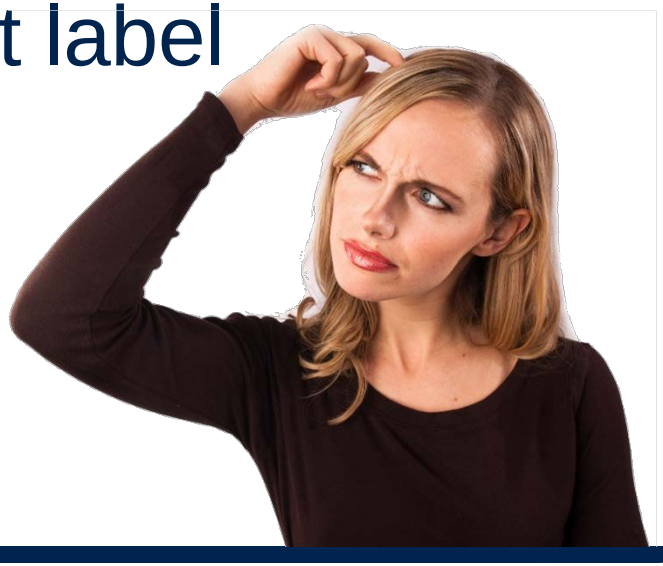
Books, articles, papers, and secondary research reports representing business, marketing, and academic journals and magazines; websites; newspapers; conference proceedings; and published government guidelines, standards, and documents.

# Phase 1 Focus Groups

Wanted to learn:

Pre-survey(s)

- Validate the literature
- Explore further the decision process
- How they use the current label
- Motivations and barriers



# Explore Metrics

1. Fuel Consumption
2. Fuel Cost
3. Environment

(Legislated content)

# But that's not as easy as it sounds

- **Annual cost of operation**

- **Fuel/energy/power consumption**
  - Miles per gallon
  - Gallons per 100 miles
  - Kilowatt hours per 100 miles

- **Fuel cost**
  - Cost to operate per month/year/5 years/lifetime (gas)
  - Cost to operate per month/year/5 years/lifetime (electric)
  - Cost to operate per month/year/5 years/lifetime (combined)
  - Cost to operate per mile/100 miles (gas)
  - Cost to operate per mile/100 miles (electric)
  - Cost to operate per mile/100 miles (combined)

- **Environmental impact**
  - CO2 emissions (grams per mile)
  - A weighted 'green' rating (like green vehicle guide)
  - Symbol showing inferior/average/superior performance

- **Potential info specifically for EV's & PHEV's**
  - Range (in distance) for electric only operation / combo operation
  - Electric/gas utility/percentage of operation
  - Battery capacity / charge time
  - Lifetime battery / cost to replace

Etc… etc… etc

PRR

# EPA Fuel Economy Estimates

These estimates reflect new EPA methods beginning with 2008 models.

CITY MPG

**18**

Expected range for most drivers **15** to **21** MPG

**Estimated Annual Fuel Cost**

**$2,039**

based on 15,000 miles at $2.80 per gallon

**Combined Fuel Economy**

**This Vehicle**

**21**

10 — 31

All **SUVs**

HIGHWAY MPG

**25**

Expected range for most drivers **21** to **29** MPG

**Your actual mileage will vary** depending on how you drive and maintain your vehicle.

**See the FREE Fuel Economy Guide at dealers or www.fueleconomy.gov**

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# Bar graphic options

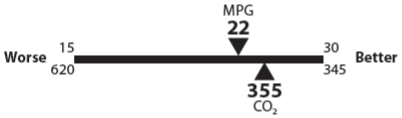


A:

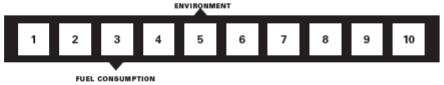
B:

C:

D:




E:




F:

G:

H:

## Fuel Consumption

**City**
4.5 gallons per 100 miles
(equal to 22 mpg)

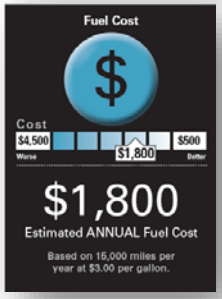
**Highway**
3.3 gallons per 100 miles
(equal to 30 mpg)

**Rating**
4 out of 5 stars (5 being best)

## Fuel Cost

**Annual**
$1,800 Estimated fuel cost based on 15,000 miles per year at $3.00 per gallon.

**Rating**
3 out of 5 stars (5 being best)

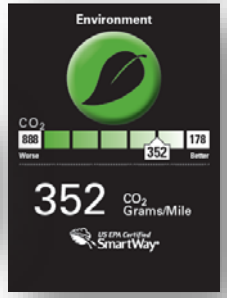


## Environment

352 $CO_2$ grams/mile

**Rating**
4 out of 5 stars (5 being best)

US EPA Certified SmartWay



PRR

MPG

Or

GPM

PRR

# Vehicle purchase process

- Specific vehicle or vehicle class in mind
- 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

Notes:

- Do not want to give up MPG
- Will NOT purchase a vehicle that does not meet their aesthetic standards
- Environmental Impact is not a factor (except for hybrid owners)

PRR

# Phase 2

# Objective

Explore understandability of metrics for advanced technology vehicles

## EREV Label: Gasoline Categories & Metrics

### Fuel Consumption Gasoline:

| City | Highway | Combined |
|---|---|---|
| 36 MPG | 40 MPG | 38 MPG |
| 2.8 gallons per 100 miles | 2.5 gallons per 100 miles | 2.7 gallons per 100 miles |
| .028 gallons per mile | .025 gallons per mile | .027 gallons per mile |
| 417 gallons per year | 375 gallons per year | 398 gallons per year |

### Fuel Consumption Electric + Gasoline:

| Combined | |
|---|---|
| 18 kW-hrs + 1.2 gallons per 100 miles | |
| 18 kW-hrs per 100 miles + 80 MPG | 56 MPGe of gas + electric |

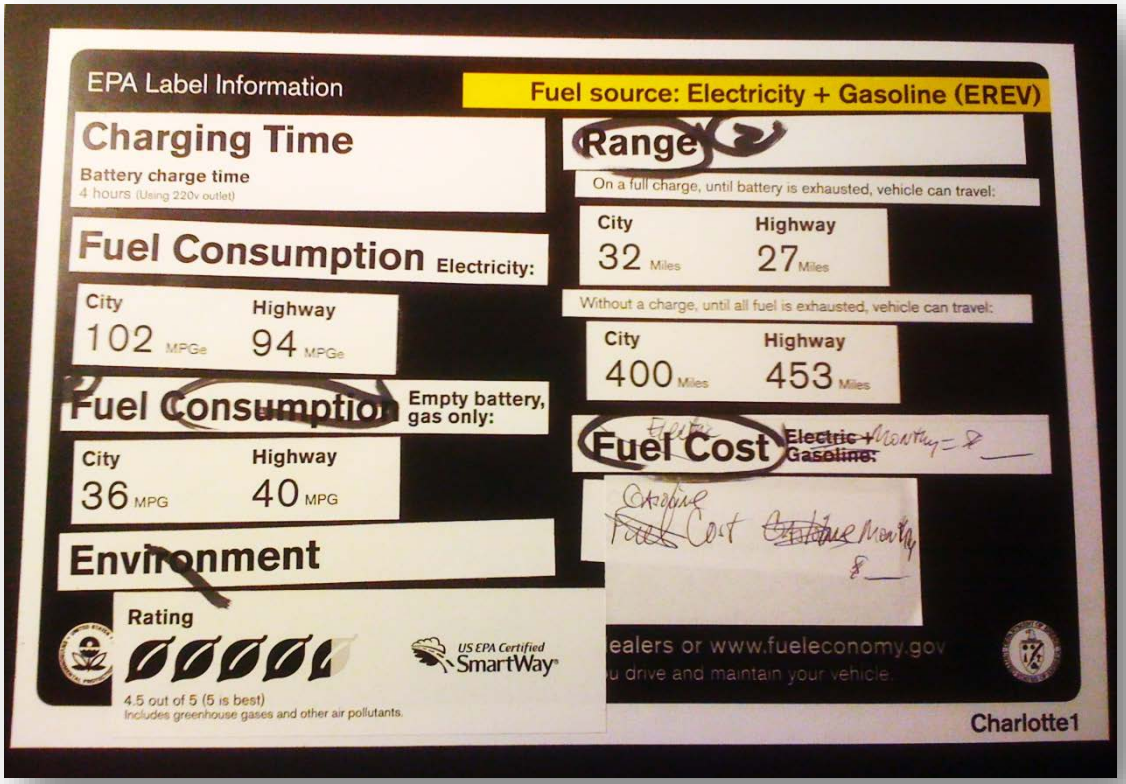
### Fuel Cost Gasoline:

| City | Highway | Combined |
|---|---|---|
| $1,250 Annual | $1,125 Annual | $1,194 Annual |
| $.08 per Mile | $.08 per Mile | $.08 per Mile |
| $104 per Month | $94 per Month | $99 per Month |

### Fuel Cost Electric + Gasoline:

| Combined |
|---|
| $889 Annual gas + electric |

PRR


EPA Label Information
Fuel source: Electricity + Gasoline (EREV)
Charging Time
Battery charge time
4 hours (Using 220v outlet)
Fuel Consumption Electricity:
City 102 MPGe
Highway 94 MPGe
Fuel Consumption Empty battery, gas only:
City 36 MPG
Highway 40 MPG
Environment
Rating
4.5 out of 5 (5 is best)
Includes greenhouse gases and other air pollutants.
US EPA Certified SmartWay
Range
On a full charge, until battery is exhausted, vehicle can travel:
City 32 Miles
Highway 27 Miles
Without a charge, until all fuel is exhausted, vehicle can travel:
City 400 Miles
Highway 453 Miles
Fuel Cost
Electric + Gasoline:
ealers or www.fueleconomy.gov
u drive and maintain your vehicle.
Charlotte1

# Multiple Deign Approaches

# EPA Fuel Economy & Environmental Info

**Gasoline Vehicle**

## Fuel Economy

rank among all vehicles (combined MPG)

103 mpg Best

26

10 mpg Worst

MPG

| city | highway |
|---|---|
| 22 | 30 |

Combined fuel economy for this class ranges from XX to XX.

## Fuel Cost

rank among all vehicles (monthly cost)

$42 Best

$150

$375 Worst

annual consumption

400 gallons per year

Figures based on 15,000 miles per year at $2.80 per gallon

## Environment

rank among all vehicles ($CO_2$ grams/mile)

178 g/mi Best

352

888 g/mi Worst

US EPA Certified SmartWay

other air pollutants

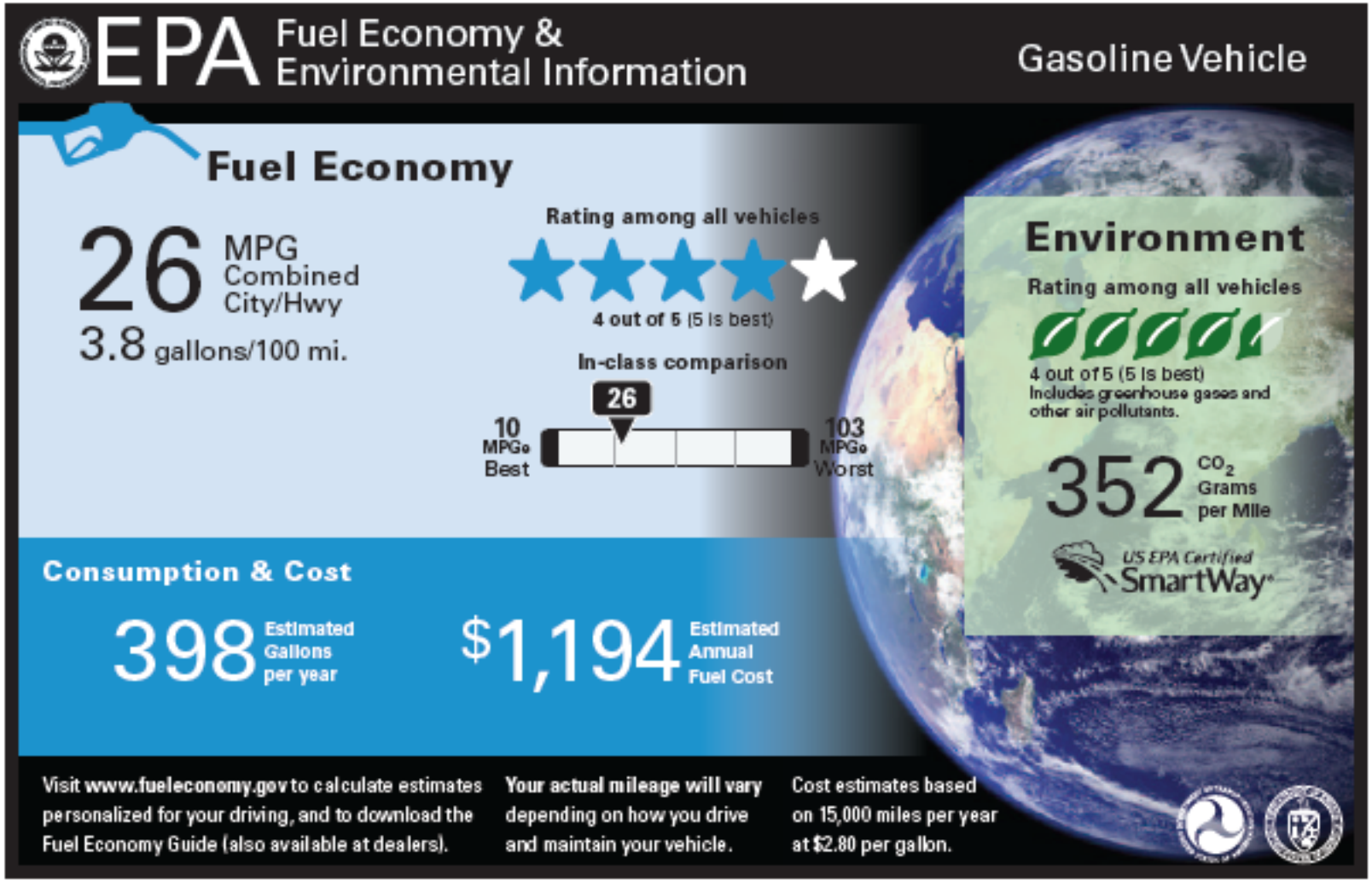
4.5 out of 5 (5 is best)

**Your actual mileage and costs will vary** with fuel cost, driving conditions, driving habits, vehicle options and how you maintain your vehicle.

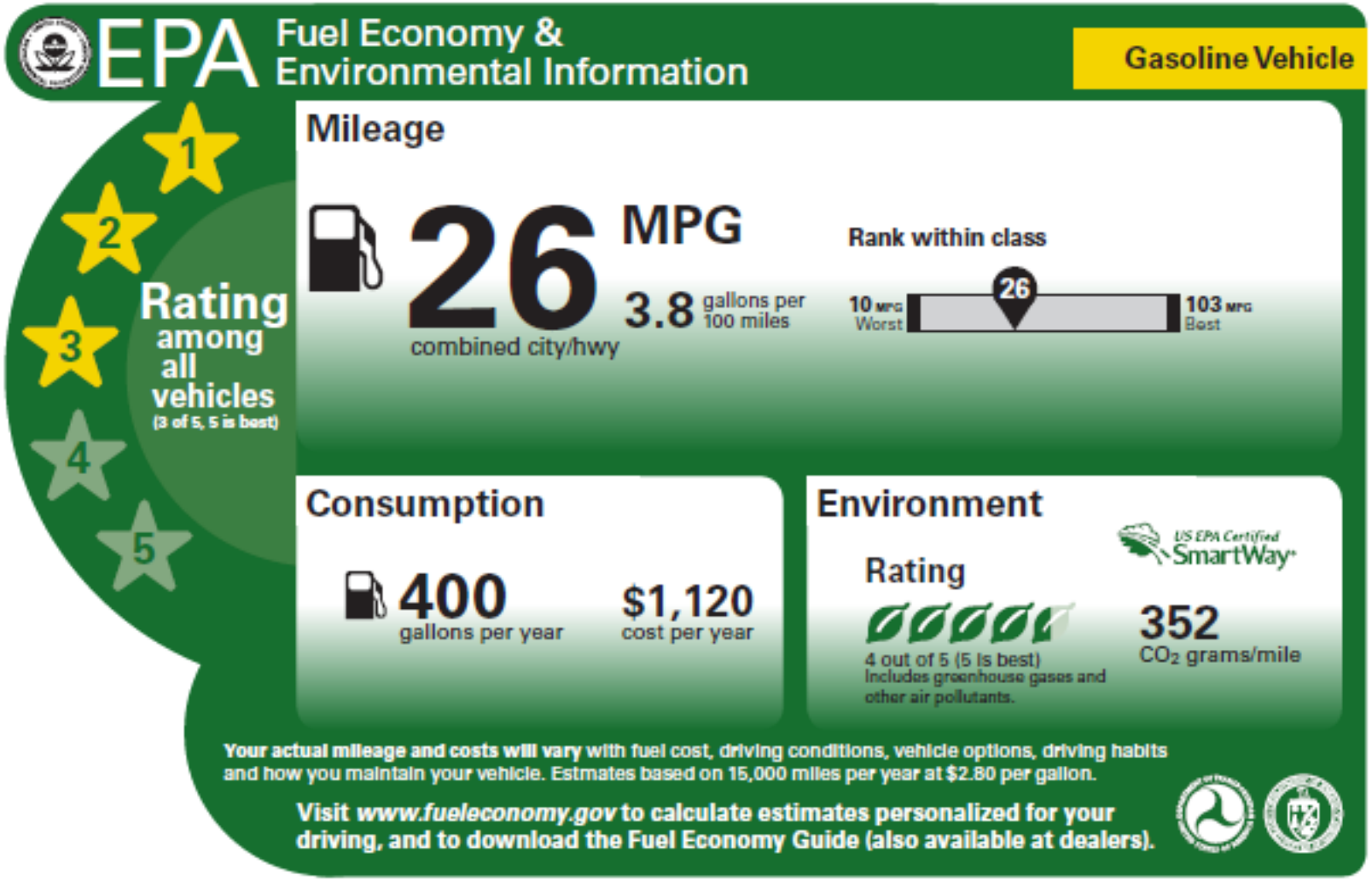
EPA

**Visit *www.fueleconomy.gov* to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).**

PRR


EPA Fuel Economy & Environmental Information
Gasoline Vehicle
Fuel Economy
26 MPG Combined City/Hwy
3.8 gallons/100 mi.
Rating among all vehicles
4 out of 5 (5 is best)
In-class comparison
26
10 MPGe Best
103 MPGe Worst
Consumption & Cost
398 Estimated Gallons per year
$1,194 Estimated Annual Fuel Cost
Environment
Rating among all vehicles
4 out of 5 (5 is best)
Includes greenhouse gases and other air pollutants.
352 CO2 Grams per Mile
US EPA Certified SmartWay
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).
Your actual mileage will vary depending on how you drive and maintain your vehicle.
Cost estimates based on 15,000 miles per year at $2.80 per gallon.

PRR


EPA
Fuel Economy &
Environmental Information
Gasoline Vehicle
1
2
3
4
5
Rating among all vehicles
(3 of 5, 5 is best)
Mileage
26 MPG
combined city/hwy
3.8 gallons per 100 miles
Rank within class
10 MPG Worst
26
103 MPG Best
Consumption
400
gallons per year
$1,120
cost per year
Environment
Rating
4 out of 5 (5 is best)
Includes greenhouse gases and other air pollutants.
US EPA Certified SmartWay
352
CO2 grams/mile
Your actual mileage and costs will vary with fuel cost, driving conditions, vehicle options, driving habits and how you maintain your vehicle. Estmates based on 15,000 miles per year at $2.80 per gallon.
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

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EPA Fuel Economy & Environmental Information
Gasoline Vehicle
Fuel Economy
Best in Class!
MPG
26
combined
All Vehicles
Best
103
MPG
Class
Best
28
MPG
26
MPG
18
Worst
10
Worst
MPG
Annual Consumption
400
gallons per year
$1,120
Annual cost based on 15,000 miles per year at $2.80 per gallon
Your actual mileage and costs will vary with fuel cost, driving conditions, driving habits, vehicle options and how you maintain your vehicle.
Environment
Comparison
CO2
Other Air Pollutants
Best
178
Best
10
352
7
888
Worst
1
Worst
US EPA Certified SmartWay
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).
Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

PRR

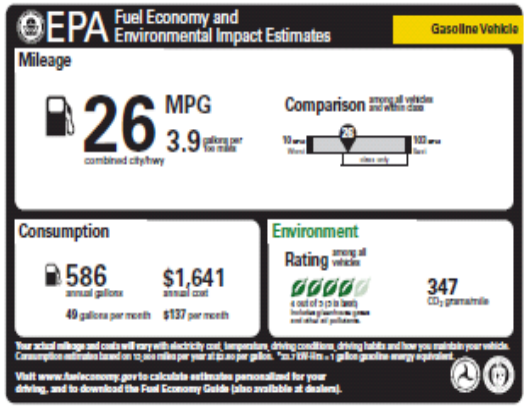
# Phase 3

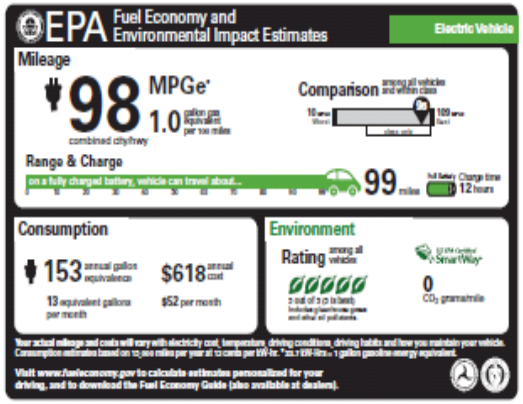
# Objective

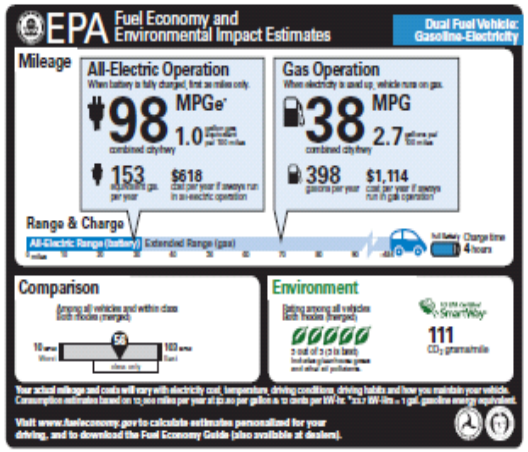
Assessment of full label designs in regard to understandability, content and look

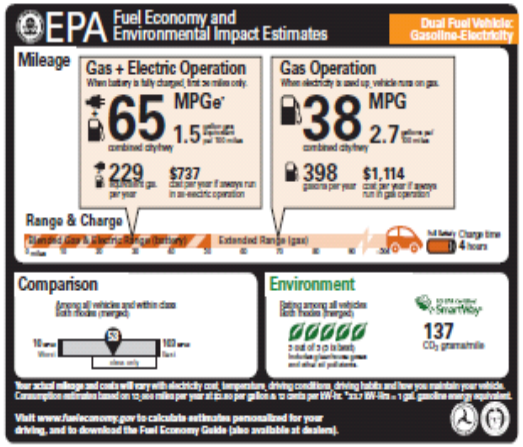
PRR

# Compare across technologies




PRR

# Expert Panel

# Objective

Seek guidance from those who had created dramatic shifts in social norms and influencing product preferences.

PRR

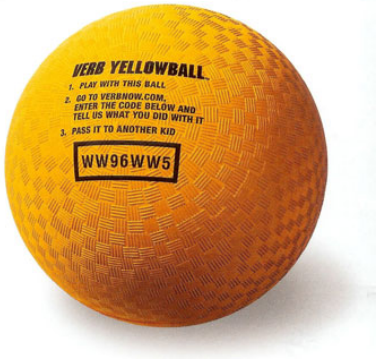
PANDORA®
internet radio

truth

real beauty.

BILL & MELINDA GATES foundation

craigslist



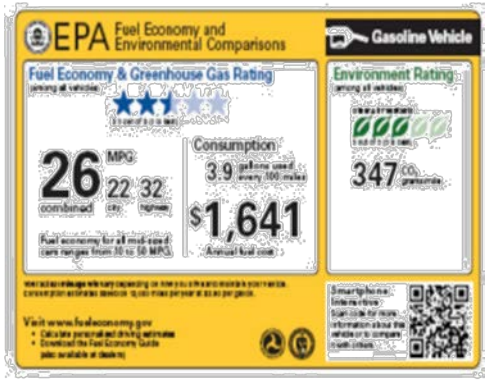

Zappos.com

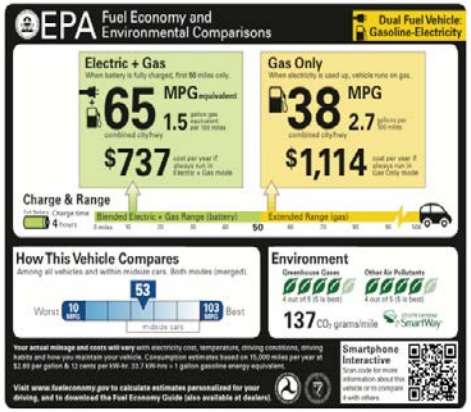
MTV
MUSIC TELEVISION®

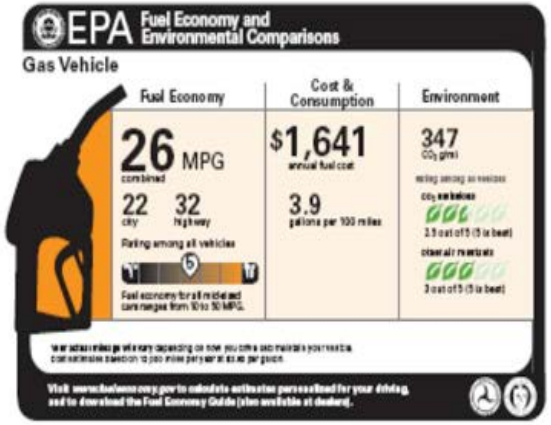
PRR

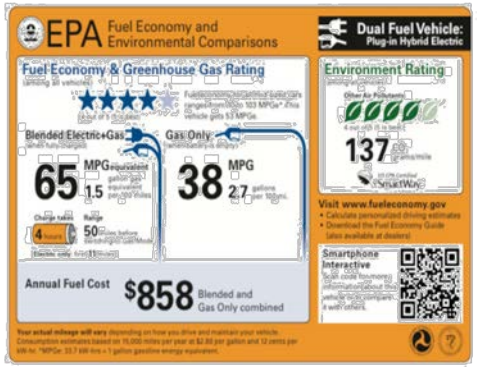
Research review

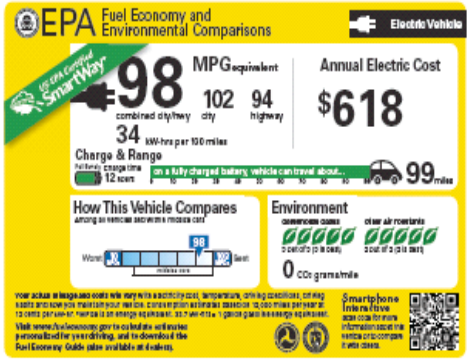
Respond top design options


EPA Fuel Economy and Environmental Comparisons
Gasoline Vehicle
Fuel Economy & Greenhouse Gas Rating
Environment Rating
26 MPG
22 city
32 highway
combined
Consumption
3.9 gallons used every 100 miles
$1,641
Annual fuel cost
347
Fuel economy for all mid-sized cars ranges from 10 to 50 MPG.
Visit www.fueleconomy.gov
Calculate personalized driving estimates
Download the Fuel Economy Guide
Smartphone Interactive


EPA Fuel Economy and Environmental Comparisons
Dual Fuel Vehicle: Gasoline-Electricity
Electric + Gas
65 MPGequivalent
1.5
$737
Gas Only
38 MPG
2.7
$1,114
Charge & Range
Blended Electric + Gas Range (battery)
Extended Range (gas)
How This Vehicle Compares
Among all vehicles and within midsize cars. Both modes (merged).
Worst
10 MPG
53
103 MPG
Best
midsize cars
Environment
Greenhouse Gases
Other Air Pollutants
4 out of 5 (5 is best)
137 CO2 grams/mile
SmartWay
Your actual mileage and costs will vary with electricity cost, temperature, driving conditions, driving habits and how you maintain your vehicle. Consumption estimates based on 15,000 miles per year at $2.80 per gallon & 12 cents per kW-hr. 33.7 kW-hrs = 1 gallon gasoline energy equivalent.
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).
Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.


EPA Fuel Economy and Environmental Comparisons
Gas Vehicle
Fuel Economy
26 MPG
combined
22 city
32 highway
Rating among all vehicles
Fuel economy for all mid-sized cars ranges from 10 to 50 MPG.
Cost & Consumption
$1,641
annual fuel cost
3.9
gallons per 100 miles
Environment
347
CO2 gms
rating among all vehicles
CO2 emissions
3.5 out of 5 (5 is best)
clean air pollutants
3 out of 5 (5 is best)
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).


EPA Fuel Economy and Environmental Comparisons
Dual Fuel Vehicle: Plug-in Hybrid Electric
Fuel Economy & Greenhouse Gas Rating
Blended Electric+Gas
Gas Only
65 MPGequivalent
1.5
50
38 MPG
2.7
Environment Rating
137
SmartWay
Annual Fuel Cost
$858
Blended and Gas Only combined
Visit www.fueleconomy.gov
Calculate personalized driving estimates
Download the Fuel Economy Guide
Smartphone Interactive


EPA Fuel Economy and Environmental Comparisons
Electric Vehicle
US EPA Certified SmartWay
98 MPGequivalent
102 city
94 highway
combined city/hwy
34 kW-hrs per 100 miles
Annual Electric Cost
$618
Charge & Range
12 hours
on a fully charged battery, vehicle can travel about...
99 miles
How This Vehicle Compares
Among all vehicles and within midsize cars
Worst
98
Best
midsize cars
Environment
greenhouse gases
clean air pollutants
0 CO2 grams/mile
Smartphone Interactive

PRR

*These were not ‘designed’ they were ‘negotiated’*

*We reject the presentation of the design. …We are not rejecting the information.*

PRR

The New Label
B+
= Savings/enu
(Fuel Economy)
ITSSimple.com
context for what is in the mix
Everything else
for if cost use 5 years
Projected savings against the typical car in class over 5 years
QR Code
Scale needs to be relative regardless of later

EPA
Fuel Economy and Environmental Comparison
B
Smartphone
The above grade reflects fuel economy, greenhouse gases and other air pollutants. Grading system ranges from D to A+.
itssimple.com
Over five years, this vehicle
saves $5,400 over the average C grade vehicle
Gasoline Vehicle
Gallons/ 100 Miles
MPG City
MPG Highway
CO2 g/mile (tailpipe only)
Annual fuel cost
3.9
22
32
347
$1,641
10 26 50
MPG (combined)
0 347 850
CO2 g/mile
1 Worst 6 10 Best
Other Air Pollutants
• Fuel economy for all midsize cars ranges from 10 to 50 MPG.
• Annual fuel cost based on 15,000 miles per year at $2.80 per gallon.
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

PRR

# Online Survey

# Objective

Test ability of labels to *influence* decisions and respondents' *understanding* of the draft labels

PRR

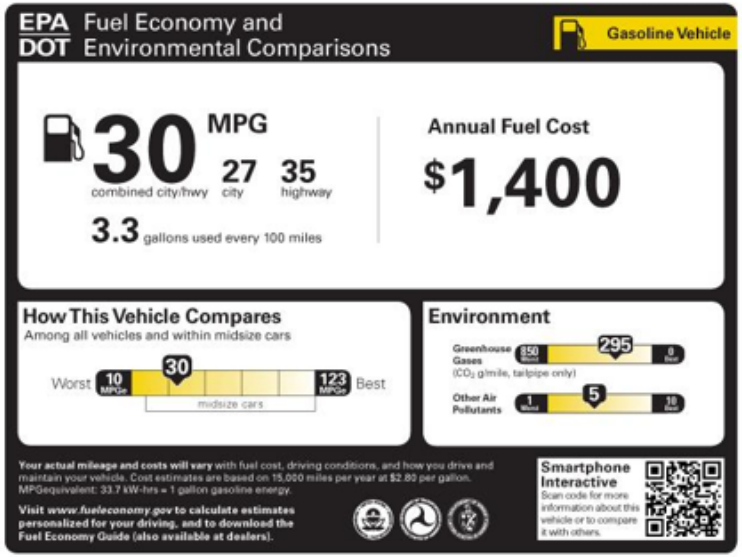
# 3,000 respondents

Six different versions of the survey were used. These six versions differed only in regard to:

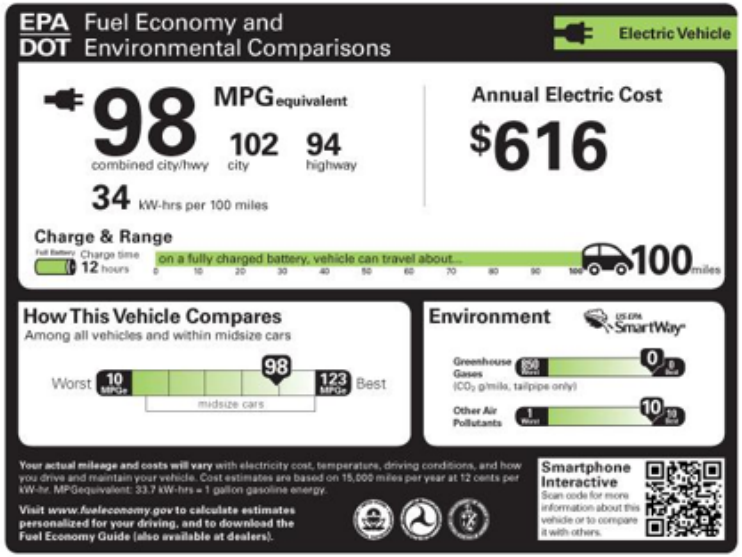
- Which of the three label designs were used in the survey
- The order in which  the labels were presented in the survey questions (to control for stimulus order effects)

Exit this survey

**Vehicle A:**




**Vehicle B:**




**8. Which vehicle is better for a round-trip of 120 miles?**

- Vehicle A
- Vehicle B
- Both are equally good

**9. Which vehicle is better for a round-trip of 30 miles?**

- Vehicle A
- Vehicle B
- Both are equally good

41%

Prev Next

PRR

# Revisions

| | | | | | |
|---|---|---|---|---|---|
| CMYK: 40-0-80-0 | PMS 367 | CMYK: 0-10-100-5 | PMS 7404 | PMS 116 | PMS 122 |
| CMYK: 40-10-0-0 | PMS 283 | CMYK: 0-40-100-0 | PMS 7409 | PMS 142 | PMS 1495 |

**Blue**

Blue is overwhelmingly chosen as people's favorite color. Though associated with males in western society, it also has a broad female appeal.

Culture

Blue is associated with the Virgin Mary and many Hindu gods. In American politics, blue is the color associated with the Democratic party, In China Blue represents immortality while in some nations it represents fascism or conservatism.

Psychology

With strong natural associations such as sky and sea, blue is calming and lowers blood pressure. It is cooling and aids intuition.

Specifications

The blue that's in the PDF is a lighter shade of blue, 40c-10m-0y-0k or PMS 283. PMS 283 is formulated with reflex and process blue, so would have better than average colorfastness. As a base pigment, as blues fade, they will slowly fade, remaining truer to their origins than most colors that are a blend of pigments.

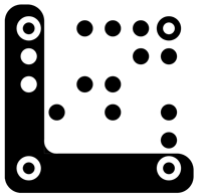
PRR

Barcodes

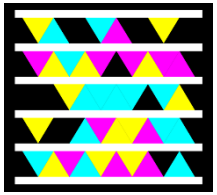
QR Codes

EZ Codes

Jagtag

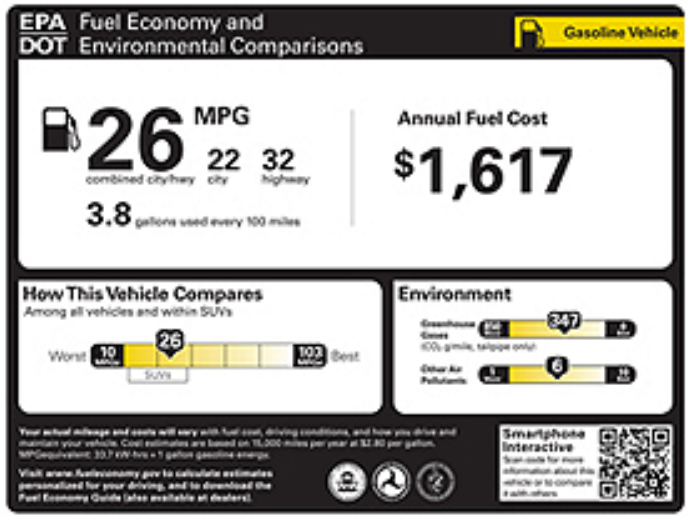


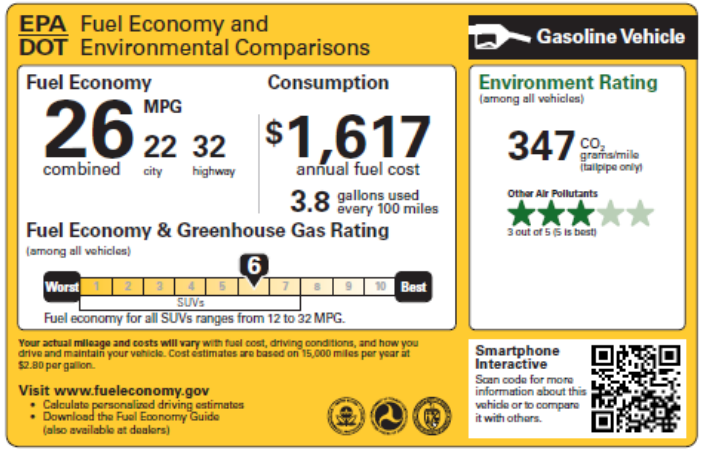
Microsoft Tag



PRR

# Submitted for Public Comment




PRR

EPA DOT | Fuel Economy and Environmental Comparison

Smartphone

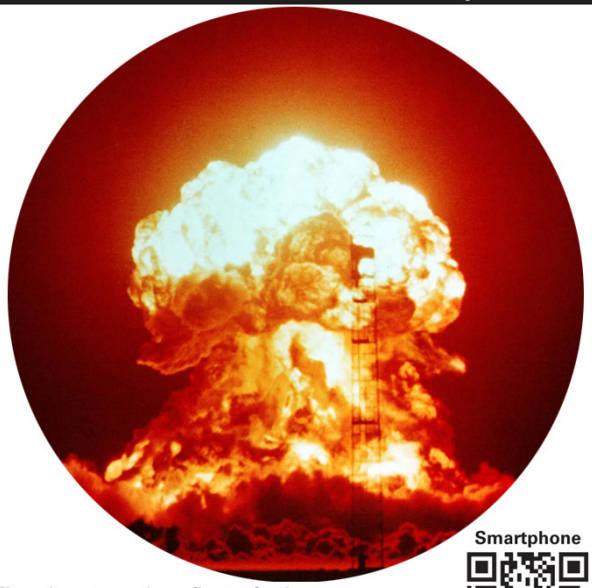
The above grade reflects fuel economy and greenhouse gases. Grading system ranges from cute bunny to apocalypse.

**website.here**

Over five years, this vehicle

**saves $6,900** in fuel costs compared to the average vehicle.

EPA DOT | Fuel Economy and Environmental Comparison



Smartphone

The above grade reflects fuel economy and greenhouse gases. Grading system ranges from cute bunny to apocalypse.

**website.here**

Over five years, this vehicle

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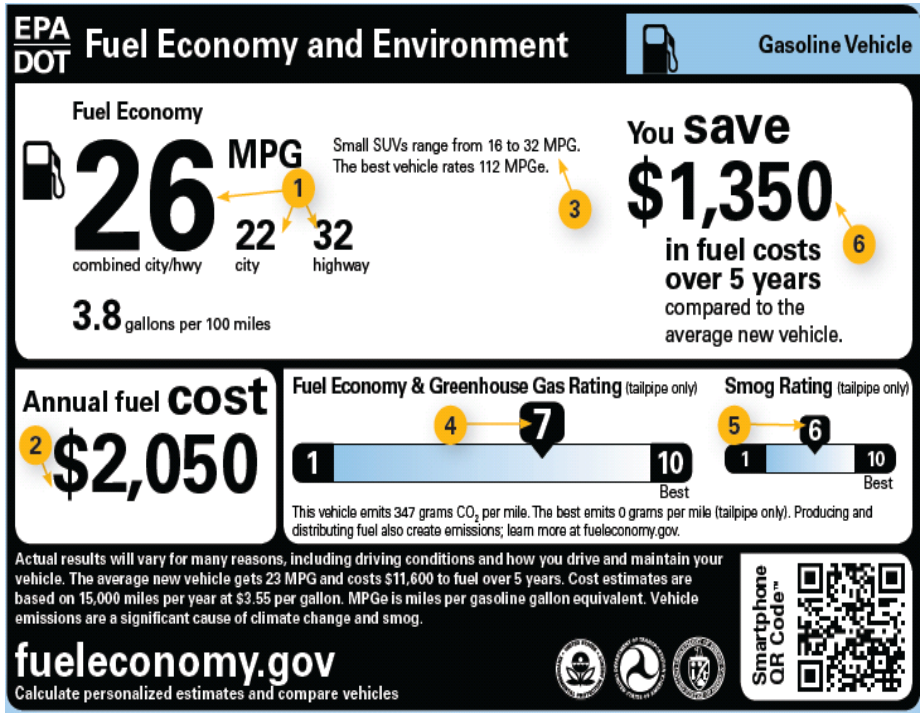
PRR




1. City, highway & combined MPG values
2. Annual fuel cost
3. Within class comparison
4. Fuel economy & greenhouse gas rating
5. Smog rating
6. 5-year fuel cost saving value

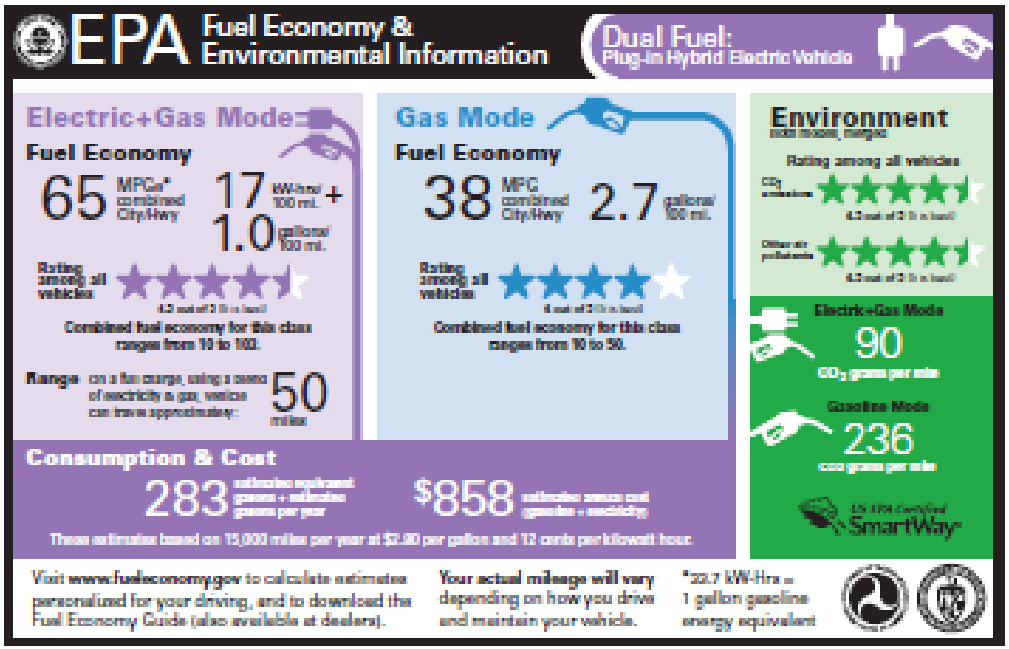
PRR

# Lessons learned

- **Keep it simple (we crave simplicity no matter how smart we are)**
- **Ask for what you want**
- We don’t act on details, we act on emotions
- Create immediate and desirable first impression
- Don’t sell to the hardest to covert
- Must be easy and quick to read and understand
- Order information in the same order they seek information
- Be consistent in content and design across technologies
- Allow for comparison across technologies
- Make it easy to identify the most efficient and environmentally friendly
- Consumers can accept social changes very quickly

PRR

# Keep it simple


EPA
Fuel Economy & Environmental Information
Dual Fuel:
Plug-In Hybrid Electric Vehicle
Electric+Gas Mode
Fuel Economy
65 MPGe* combined City/Hwy
17 kW-hrs/100 mi. +
1.0 gallons/100 mi.
Rating among all vehicles
Combined fuel economy for this class ranges from 10 to 100.
Range: on a full charge, using a combo of electricity & gas, vehicle can travel approximately:
50 miles
Gas Mode
Fuel Economy
38 MPG combined City/Hwy
2.7 gallons/100 mi.
Rating among all vehicles
Combined fuel economy for this class ranges from 10 to 50.
Environment
Rating among all vehicles
Electric+Gas Mode
90
$CO_2$ grams per mile
Gasoline Mode
236
CO2 grams per mile
SmartWay
Consumption & Cost
283
$858
These estimates based on 15,000 miles per year at $2.80 per gallon and 12 cents per kilowatt hour.
Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).
Your actual mileage will vary depending on how you drive and maintain your vehicle.
*22.7 kW-Hrs = 1 gallon gasoline energy equivalent

PRR

PRR

OPEN 9 to 5
The joint is jumpin'.
Established 1916
The San Diego Zoo
Admission
Adults $13.00
Children $6.50
OVER 5000 ANIMALS
Take 163 to Park Blvd. and turn left.

# Circle

$$X^2 + Y^2 = 1$$

or

$$(\cos t(t), \sin(t)) \quad \text{for } 0 \leq t < 2\pi$$

# Circle

A circle is the set or locus of all points in a plane which are equidistant from a fixed point. This fixed point is called the center. The distance from this center to any point on the circle is called the radius.

# Circle

PRR

# Ask for what you want

(Because you might get what you ask for and not what you want)

PRR

# Recycling

# Waste

Thank You
Questions?

# Miles Per Gallon (MPG)
# Gallons Per 100 Miles (GPM)

| Current Vehicle | New Vehicle | Difference | Fuel Saved (10,000 miles) | $ Saved $3.000/gal |
|---|---|---|---|---|
| 15 mpg | 20 mpg | 5 mpg | 167 gallons | $501 |
| 30 mpg | 35 mpg | 5 mpg | 47 gallons | $141 |
| 6.7 gal/100 mi | 5.0 gal/100 mi | 1.7 gal/100 mi | 167 gallons | $501 |
| 3.3 gal/100 mi | 2.9 gal/100mi | 0.4 gal/100 mi | 47 gallons | $141 |

PRR