The background of the slide features a dense pattern of vibrant green leaves, likely from a tree or shrub, with visible veins and serrated edges. At the bottom of the image, there are soft, circular ripples in a light blue-green water, suggesting a natural, outdoor setting. The overall color palette is dominated by various shades of green, from bright lime to deep forest green.

Hybrids

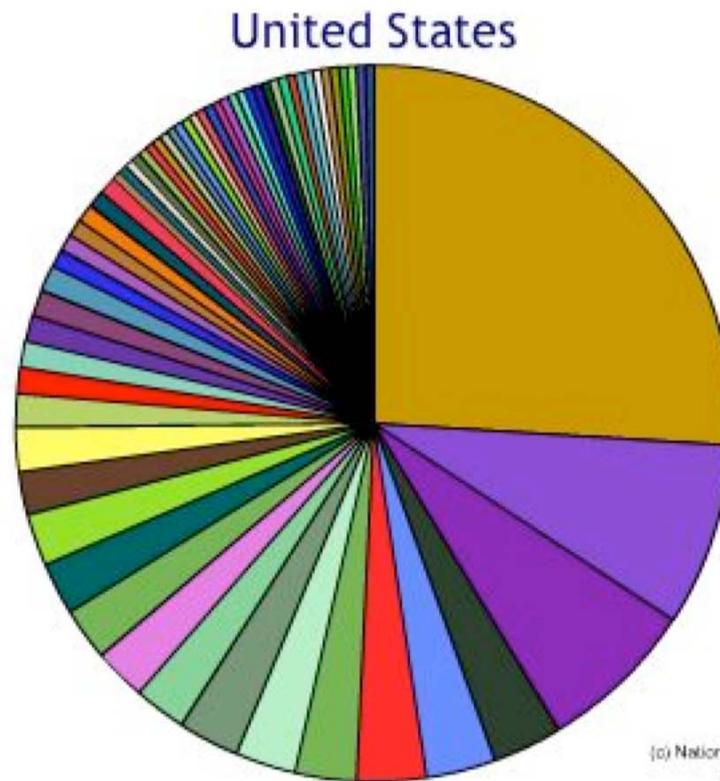
Dollars and Sense

Presented by
Tony Han
May 13, 2008

Top 20 Oil Consuming Nations

SOURCE: Nationmaster.com

Showing latest available data.



United States	25.2%
China	7.9%
Japan	6.8%
Germany	3.2%
Russia	3%
India	3%
Canada	2.8%
Korea, South	2.6%
Mexico	2.4%
France	2.4%
Italy	2.3%
Saudi Arabia	2.2%
United Kingdom	2.2%
Spain	1.9%
Iran	1.8%
Indonesia	1.4%
Taiwan	1.2%
Netherlands	1.2%
Thailand	1.1%
Australia	1.1%

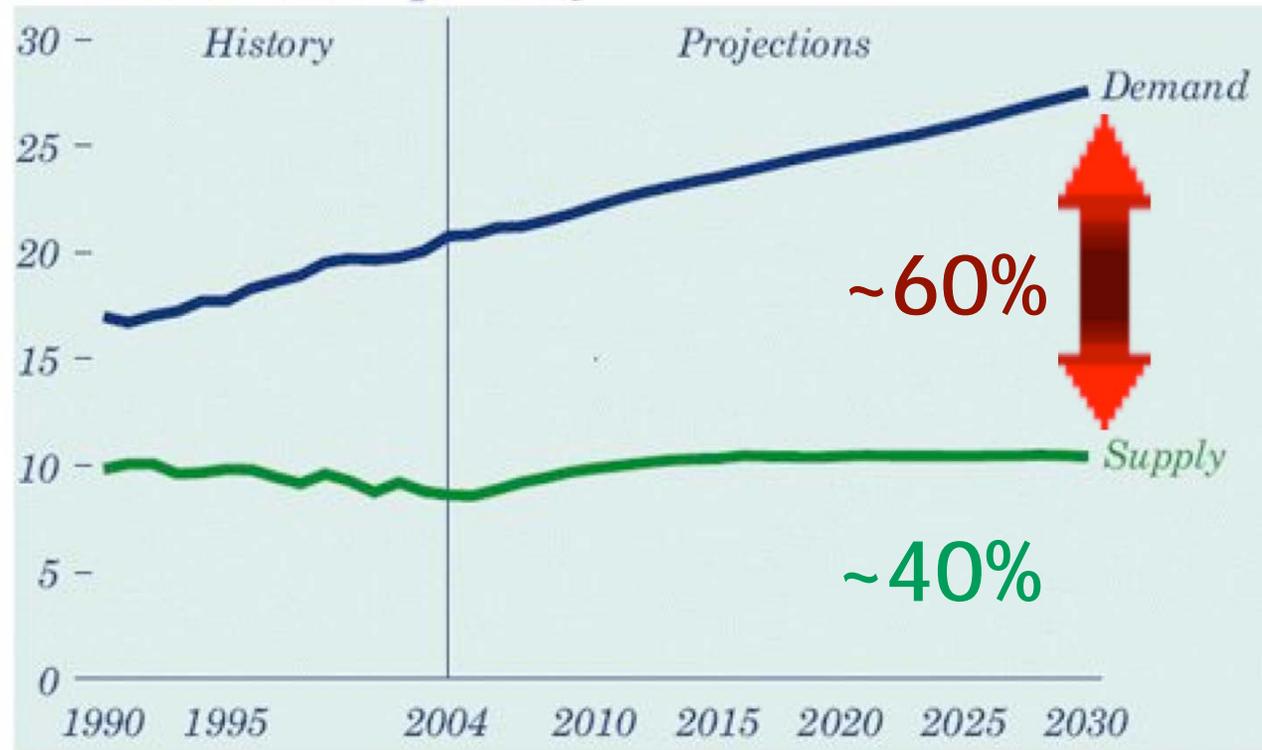
#1 United States:	20,730,000 bbl/day
#2 China:	6,534,000 bbl/day
#3 Japan:	5,578,000 bbl/day
#4 Germany:	2,650,000 bbl/day
#5 Russia:	2,500,000 bbl/day

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Why import so much foreign oil?

Report #:DOE/EIA-0383(2006)
Release date full report: February 2006
Next release date full report: February 2007

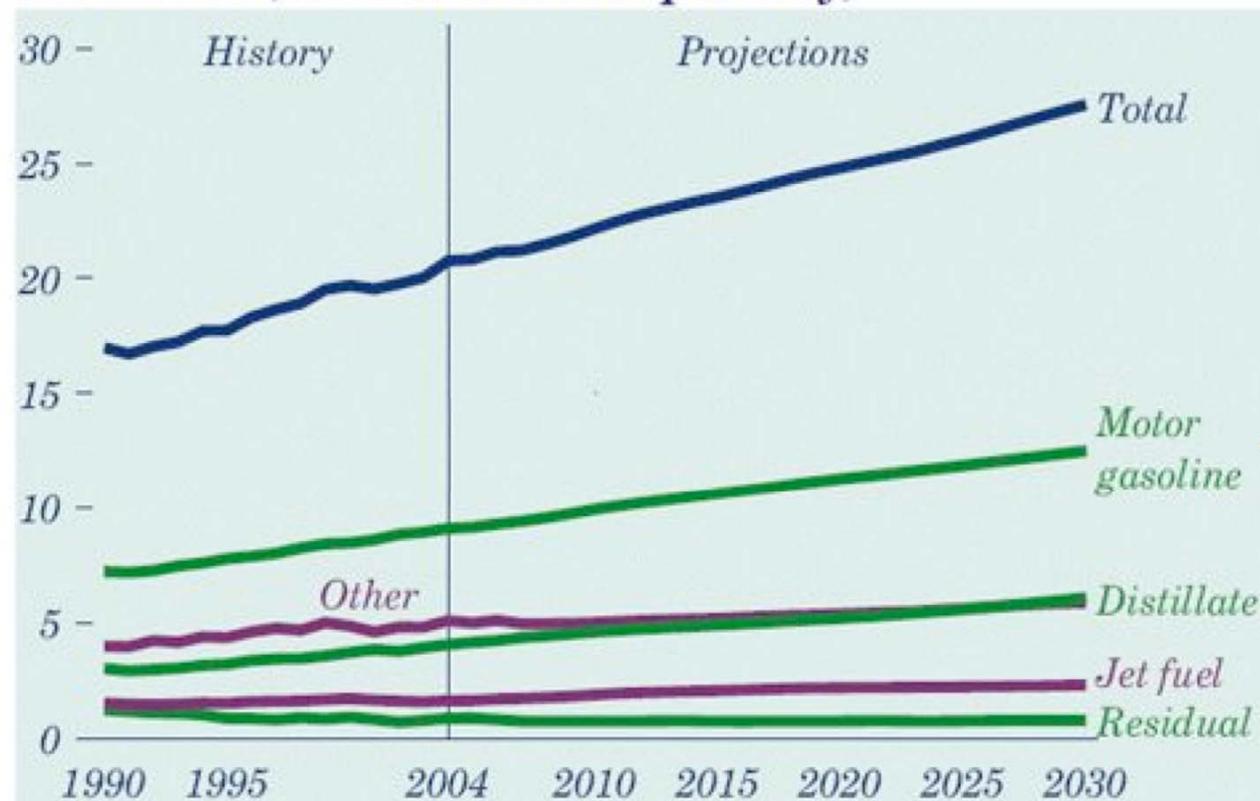
*Figure 93. U.S. petroleum product demand and domestic petroleum supply, 1990-2030
(million barrels per day)*



U.S. consumption across sectors

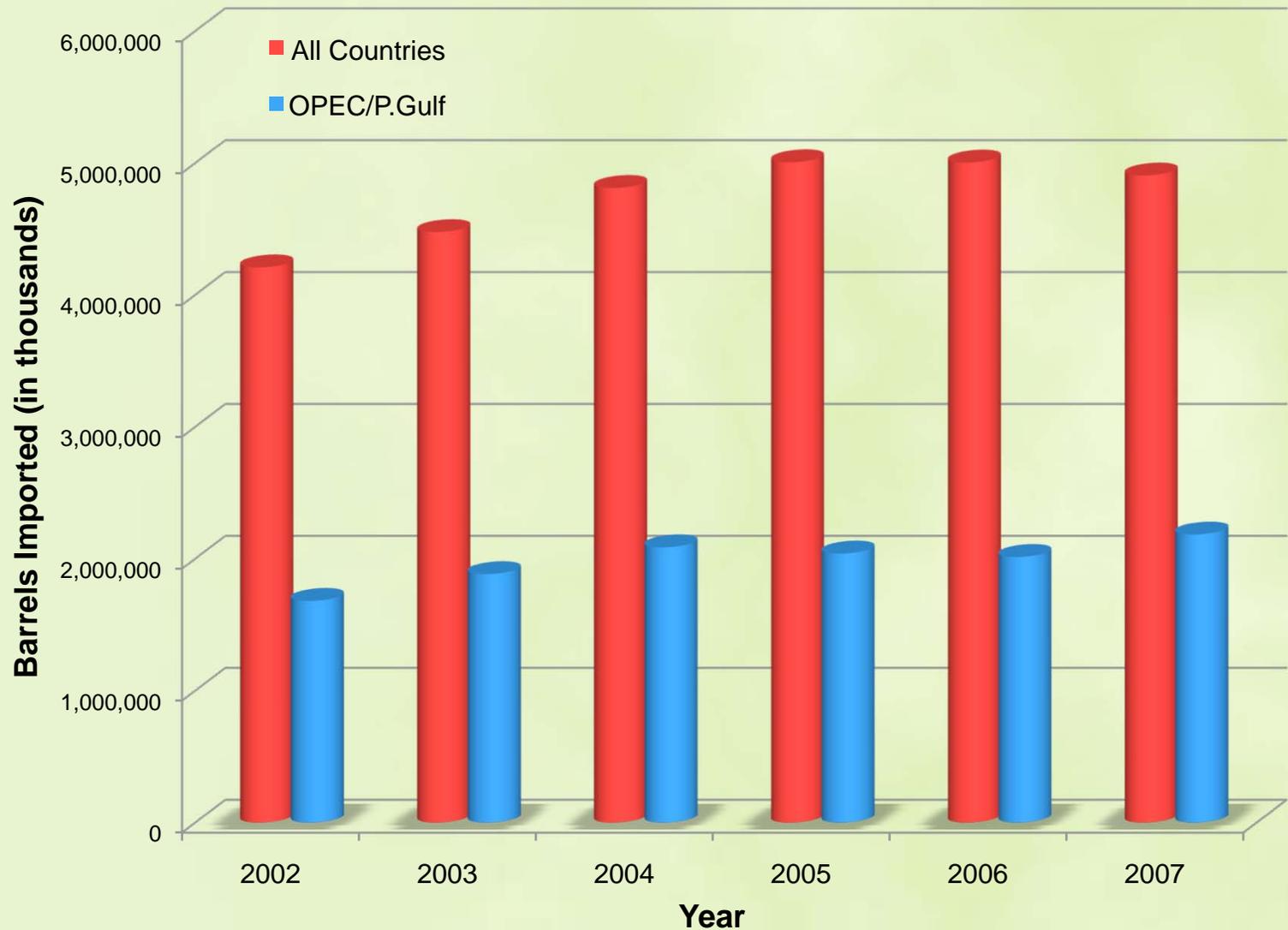
Report #:DOE/EIA-0383(2006)
Release date full report: February 2006
Next release date full report: February 2007

Figure 91. Consumption of petroleum products, 1990-2030 (million barrels per day)



U.S. Foreign Oil Dependency

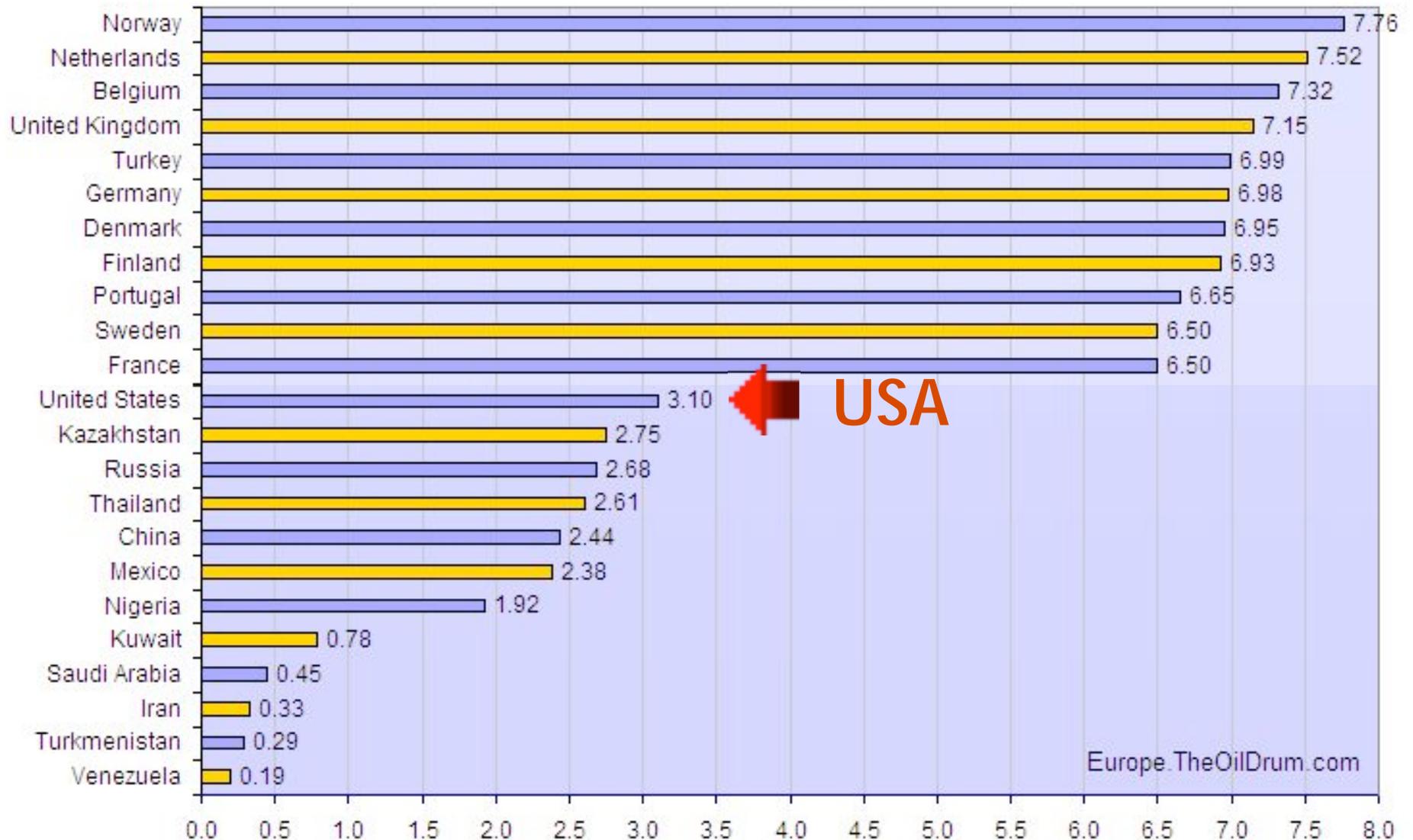
Source: Energy Information Administration (<http://tonto.eia.doe.gov>)



Global Gas Prices

Source: USA Today, March 2008

Gasoline Prices (\$/gal)



Europe.TheOilDrum.com

Why is gasoline price a factor?

2004	2004	
Jeep Grand Cherokee V6	Toyota Prius	
100,000	100,000	Life Time Miles
16*	42	MPG city/highway
6,250.0	2,380	Gallons burned
\$3.10	\$3.10	Price per Gallon
		Total Fuel Expenditure
\$19,375	\$7,378	
	\$11,997	Total Fuel Savings

* 08 EPA Combined ratings

Metro areas with worst air pollution in 2007:

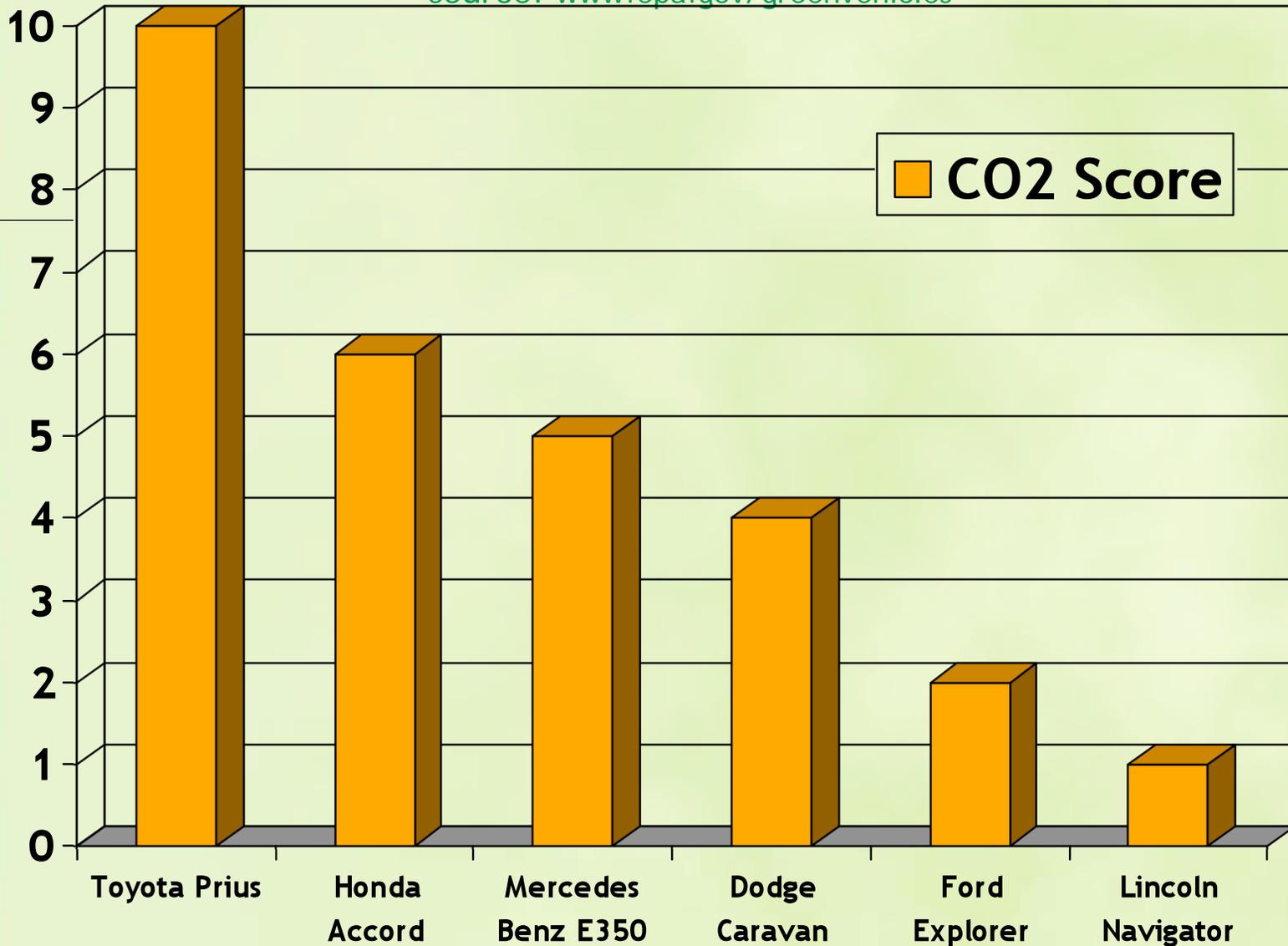
 **AMERICAN LUNG ASSOCIATION**
State of the Air: 2007

2007 Rank ¹	Metropolitan Statistical Areas
1	Los Angeles-Long Beach-Riverside, CA
2	Bakersfield, CA
3	Visalia-Porterville, CA
4	Fresno-Madera, CA
5	Houston-Baytown-Huntsville, TX
6	Merced, CA
7	Dallas-Fort Worth, TX 
8	Sacramento--Arden-Arcade--Truckee, CA-NV
9	Baton Rouge-Pierre Part, LA
10	New York-Newark-Bridgeport, NY-NJ-CT-PA

County	Total Pop	Under 18	65 & Over	Pediatric Asthma	Adult Asthma	Chronic Bronchitis	Emphysema	Cardiovascular Disease	Diabetes
<u>BEXAR</u>	1,518,370	423,511	156,233	37,692	74,270	43,988	17,549	317,563	76,094
<u>BOWIE</u>	90,643	21,736	11,970	1,935	4,734	2,840	1,248	22,069	5,226
<u>BRAZORIA</u>	278,484	76,508	24,776	6,809	13,689	8,104	3,089	56,969	13,800
<u>BREWSTER</u>	9,079	1,953	1,313	174	489	293	131	2,299	541
<u>CALDWELL</u>	36,523	9,751	4,159	868	1,823	1,083	448	8,025	1,912
<u>CAMERON</u>	378,311	128,363	40,064	11,424	16,954	10,037	4,150	73,921	17,546
<u>COLLIN</u>	659,457	181,775	39,999	16,178	31,965	18,683	6,190	119,191	29,488
<u>DALLAS</u>	2,305,454	656,796	191,724	58,455	110,979	65,235	23,942	444,178	107,812
<u>DENTON</u>	554,642	149,313	29,438	13,289	26,950	15,647	4,893	95,683	23,831

Vehicle Emissions (Score of 10 is cleanest)

source: www.epa.gov/greenvehicles



Hybrid Myths



- Hybrids need to be charged overnight.
- Hybrid batteries are not reliable.
- Hybrids are a threat to first responders.
- Hybrids have a higher maintenance cost.
- Hybrids are too expensive.
- Hybrids will solve our energy crisis.

What are my Hybrid choices?

Fuel Economy numbers are City & Highway combined

Source: fuelconomy.gov



Chevy Malibu (27mpg)



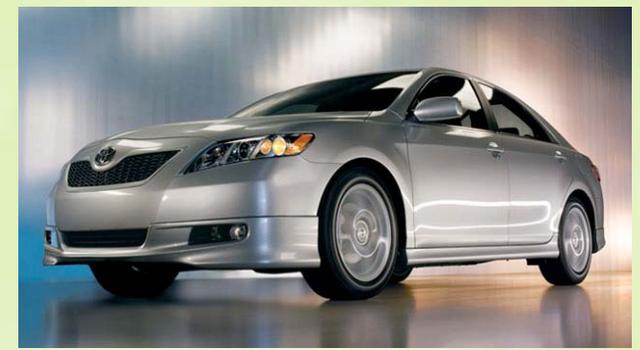
Saturn Aura (27mpg)



Honda Civic (42mpg)



Lexus LS 600h (21mpg)



Toyota Camry (34mpg)



Toyota Prius (46mpg)



Lexus GS 450h (23mpg)



Nissan Altima (34mpg)

SUV choices...

Fuel Economy numbers are City & Highway combined

Source: fuelconomy.gov



Lexus RX 400h (25mpg)



Ford Escape (28mpg)



Chevy Tahoe (21mpg)



Mazda Tribute (28mpg)



Toyota Highlander (26mpg)



Saturn Vue (28 mpg)



GMC Yukon (21mpg)



Mercury Mariner (28mpg)

U.S. Hybrid Sales

Source: Hybridcars.com & Greencarcongress.com



How do Hybrids work?

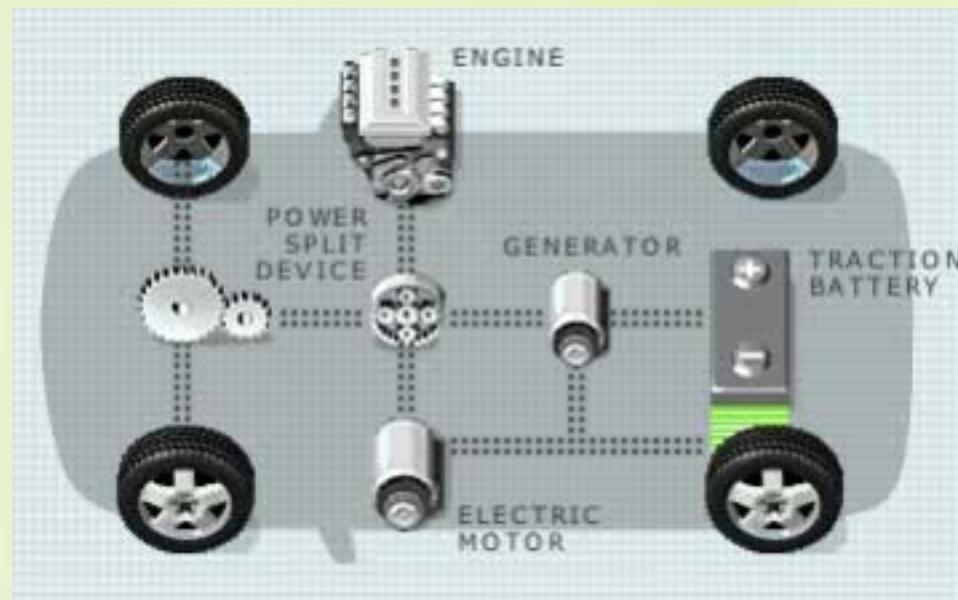


www.familycar.com

A look inside...



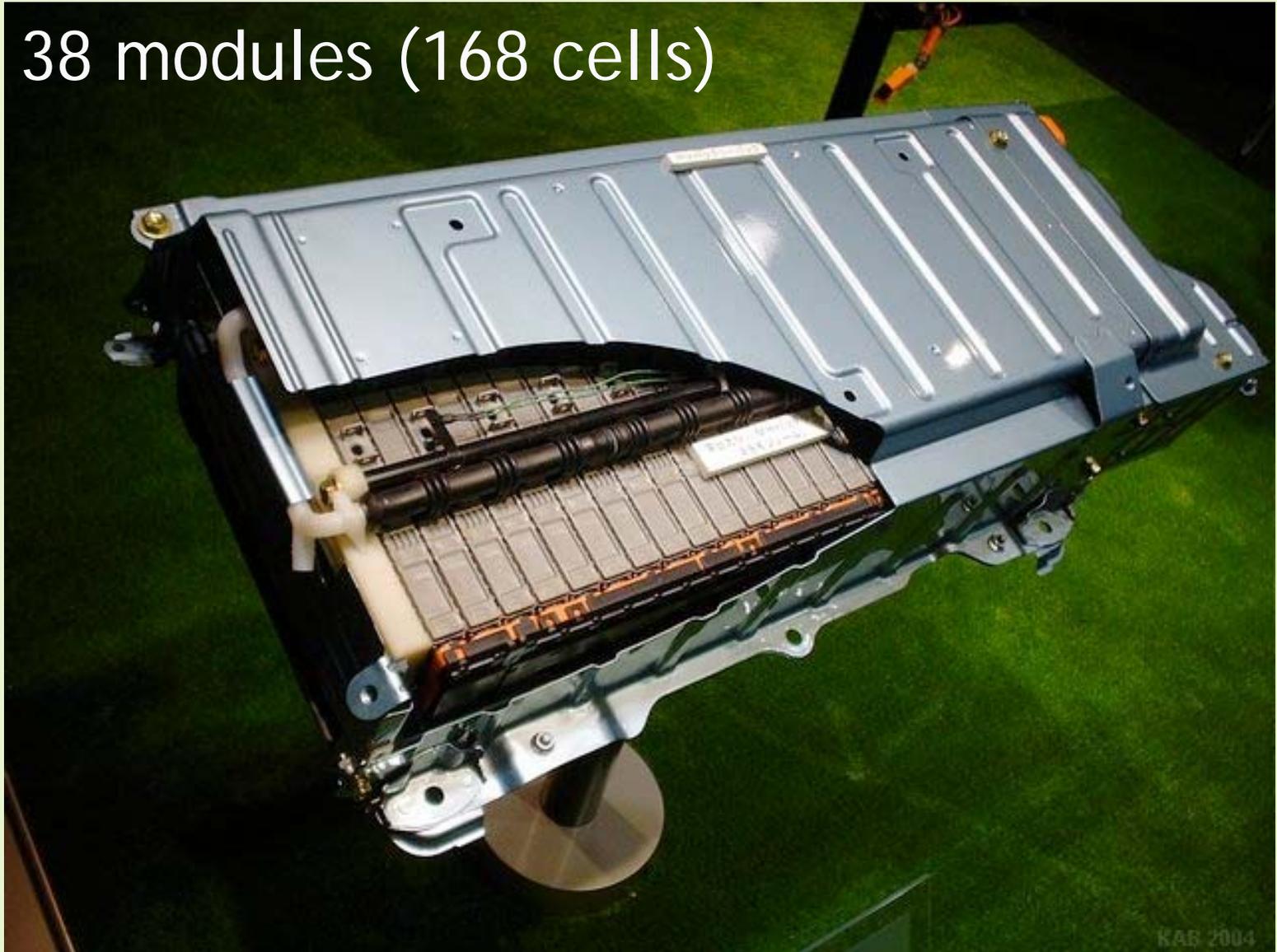
Hybrid Systems



Current Hybrid Battery (NiMh)

8 yrs/100,000 miles (Prius). Estimated replacement cost: ~\$2,688

38 modules (168 cells)



Mid-size Accomodation



So, How durable are hybrids?

Jesse Rudavsky from Hingham, MA.

- **2002 Prius, (349,500 miles)** with no hybrid component failure (battery included).



So, How durable are hybrids?



Andrew Grant, Taxi Driver in Vancouver, Canada:

- **2001 Prius***, 25 months
332,000 km (~200,000 miles)
with no hybrid component,
failure (battery included).
- **2004 Prius**, in service...
310,000 km (~186,000 miles)
with no hybrid components
failure (battery included).

* Toyota asked Andrew to give up his 2001 model after 25 months, in turn, they gave him a 2004 model. Toyota shipped the 2001 model back to Japan and examined every part of the car for wear and tear research.

Top 10 Best Resale Value

Expert • Independent • Nonprofit

ConsumerReports.org

NEWLY LISTED

2004 Toyota Prius

\$18,500

[Save this Car](#)

Photos



\$18,500
Mileage: 43,538

Primary Information about this vehicle:

AT Car ID: AT-E722CE7 ?

Price	\$18,500
Mileage	43,538
Body Style	Sedan
Exterior Color	Tan
Interior Color	Tan
Engine	Hybrid
Transmission	Automatic
Drive Type	2 wheel drive - front
Fuel Type	Hybrid Gas/Electric
Doors	Four Door
VIN	JTDKB22UX40083389

BLUE BOOK® SUGGESTED RETAIL VALUE WHAT'S THIS?



[More Photos](#)

Condition WHAT'S THIS? Value

Excellent \$19,570

Suggested Retail Value Assumes Excellent Condition... [More](#)

NEXT STEP: [SEARCH LOCAL LISTINGS >](#)

Average Consumer Rating (151 Reviews) [Read Reviews](#)

★★★★★ 4.8 out of 5

[Review This Vehicle](#)

2004 Toyota Prius Example

Source: Edmunds.com & Kelly Bluebook

What about the Future?



21st
Century
Hot-
Roddors



Zero Emission Future...Electric Sports Car

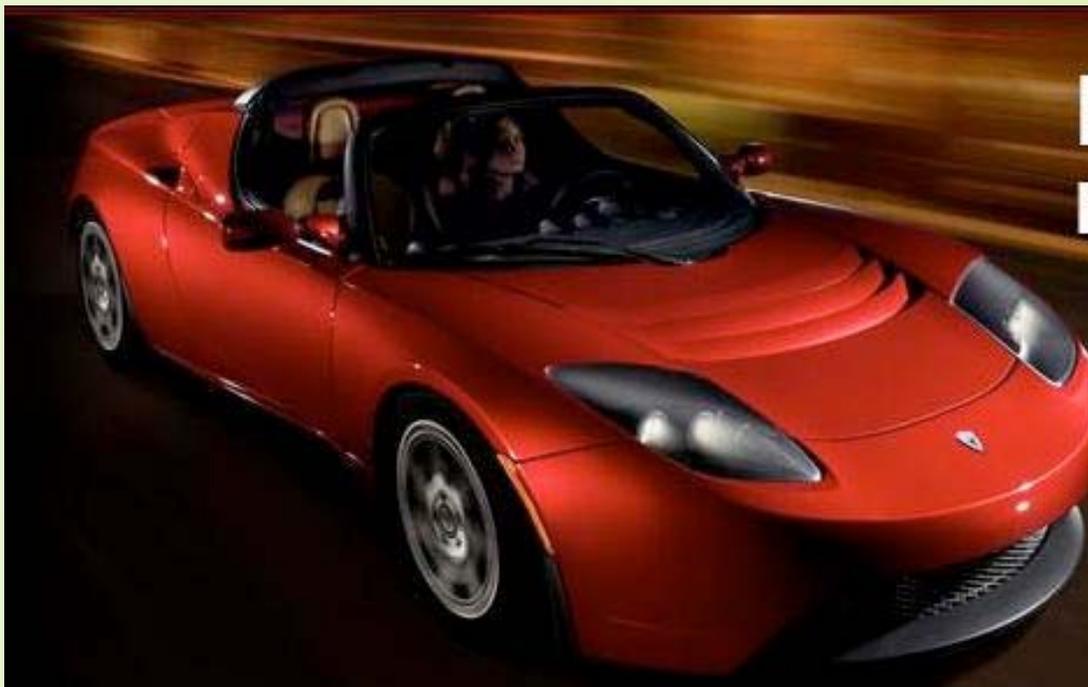
Tesla Motors (assembly by Lotus) 100% electric

0-60mph: ~4 seconds

Range: 250 miles on full charge

Charge Time: 3 hours

Price: \$100,000 ... available today ...



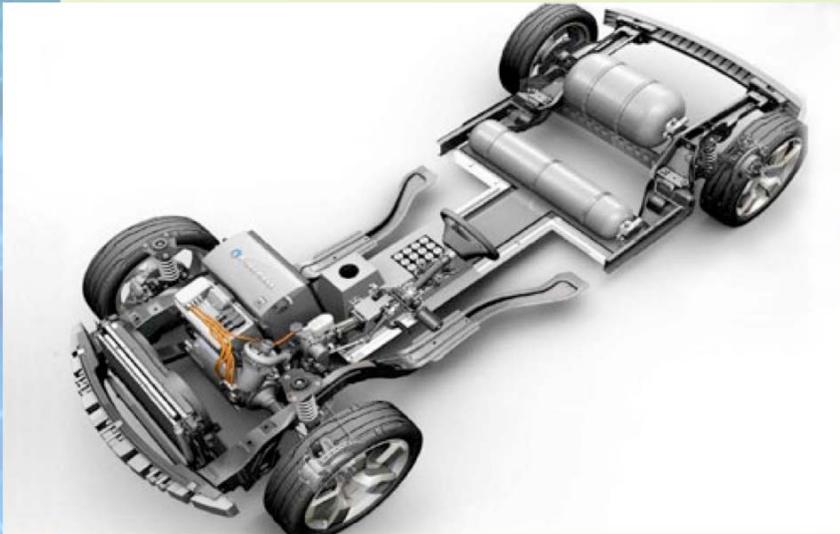
**Burn rubber,
not gasoline.**

Introducing the Tesla Roadster:

- 100% electric
- 0 to 60 in about 4 seconds
- 135 mpg equivalent
- 250 miles per charge
- about 1¢ per mile*

[see more images & colors](#)

Chevy Volt - 2010



CleanMPG.com

An online community
CleanMPG.com
Learn to raise fuel economy and lower emissions in whatever you drive

Fuel saved by CleanMPG members
147,430.40 gallons... and counting!

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First Pics of Fisker's Karma undergoing Road Tests

May 11, 2008 - 11:26 AM - by [atlaw4u](#)

[Fisker's \\$80K Hybrid Hits the Road.](#)



Chuck Squatriglia - Wired - May 9, 2008

Fisker Automotive isn't wasting any time getting its Karma plug-in hybrid on the road. Five months after pulling the wraps off the car at the Detroit auto show, it's flogging a test mule in Southern California.

The pictures offer the best evidence yet that Henrik Fisker is serious about getting the \$80,000 sedan into showrooms by the end of next year, and they're a shot across the bow of Tesla Motors as the two companies race to bring the first high-performance four-door hybrid to market.

Fisker isn't saying anything about what's under the hood of the prototype, but we know... [\[Read](#)

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Small Cars, Bigger Price Tags

May 11, 2008 - 10:51 AM - by [atlaw4u](#)

[Growing Demand Spurs Opportunity For Auto Makers.](#)

Terry Kosdrosky & Jeff Bennett - WSJ - May 9, 2008

The accelerating shift away from pickup trucks and sport-utility vehicles powered by eight-cylinder engines is a painful one for U.S. auto makers, but a trend in consumer demand is helping them earn better pricing on the smaller vehicles they sell.

Small-vehicle buyers, who are opting for gas-sipping four-cylinder engines amid record-high fuel prices, aren't skimping when it comes to creature comforts such as leather seats, sunroofs, navigation systems and other automotive technologies.... [\[Read More\]](#)



Wayne Gerdes can show you how to increase the Fuel Economy potential of your Hybrid and **non-Hybrid** automobile.

Hybrids...It's your Choice...

“The choices you make every moment of your life define how you experience it. You can choose to live by the same old patterns that may or may not serve you in the most positive way. The vehicle you drive is a direct case in point.” Andrew Grant, Taxi Driver.

Thank you for listening!