Statement by Harold Hamm
Chairman and Chief Executive Officer
Continental Resources, Inc.
U.S. House of Representatives, Committee on Energy and Commerce
Subcommittee on Energy
"The Shifting Geopolitics of Oil and Gas"
June 26, 2018

Summary:

- As Chairman of the Domestic Energy Producers Alliance and as CEO of the company that co-developed the first oil field ever drilled exclusively with horizontal drilling, I have been able to pioneer and participate in the American Energy Renaissance first-hand. The American Energy Renaissance is the single-most defining aspect on this planet today that will shape the next 50 years.
- Our country has rapidly gone from fears of energy scarcity to understanding that U.S. energy independence is within our reach and during a Trump administration, the United States of America will become energy dominant.
- The U.S. oil industry is poised to continue its production gains, thanks to regulatory rollbacks under President Trump that have removed artificial barriers to growth.
- The commitment of the Trump administration to repealing unnecessary and in many cases, archaic and onerous regulations is the right move for America. For too long those regulations have had a stranglehold on the American economy. Many regulations were implemented with an oil and gas scarcity mentality and have since become inapplicable and obsolete.
- I applaud the Trump administration and their willingness to roll back regulations that defy logic and to implement common sense regulations that allow America to prosper.

Written Statement:

Chairman Upton, Ranking Member Rush and Members of the Committee, my name is Harold Hamm. I serve as Chairman and Chief Executive Officer of Continental Resources, an Oklahoma City-based independent oil and gas exploration and production company. It's an honor to address you today on the miracle of American oil and gas and its global impact.

As Chairman of the Domestic Energy Producers Alliance and as CEO of the company that co-developed the first oil field ever drilled exclusively with horizontal drilling, and the company that is the largest leaseholder and most active driller and largest producer both in the Bakken Play in North Dakota and the SCOOP/STACK and Springer plays of Oklahoma, I have been able to pioneer and participate in the American Energy Renaissance first-hand. I testified to the House Agriculture Committee on July 8, 2015 about The American Energy Renaissance. I said it then and will say it again – The American Energy Renaissance is the single-most defining aspect on this planet today that will shape the next 50 years.

In the past 10 years, the United States has undergone an unprecedented transformation. Thanks to the ingenuity of America's independent oil and natural gas producers, we are transitioning from a consuming short-supply nation to an energy-long supplier, dominating the world oil market. Our country has rapidly gone from fears of energy scarcity to understanding that U.S. energy independence is within our reach and during a Trump administration, the United States of America will become energy dominant.

For too long, the United States had to rely on other countries to fuel its energy needs, particularly crude oil from the Middle East, whose instability and shifting alliances wreaked havoc on American foreign policy for decades. Russia's rise as an energy producer complicated our country's global affairs. But the American energy renaissance is rapidly shifting those complicated dynamics, allowing the U.S. to produce all of the energy it needs.

Our energy imports have dropped from over 30 percent of energy consumed in 2007 to less than 8 percent currently. Because of our production gains, the U.S. no longer has to put American lives at risk to protect our energy sources. Nations fronted by dictators or hostile regimes can no longer threaten us with reduced oil supplies, giving these rogue states less influence on global affairs. U.S. foreign policy has been transformed now that the need for continued oil supplies is taken out of the equation when dealing with other countries.

The ban on exports of crude oil was lifted in 2015 and we are now on pace to become a net energy exporter by 2020, allowing the U.S. to provide its allies with a reliable, affordable supply of vital commodities like oil, LNG and other petroleum products.

Rising U.S. oil production has proven to be vital in meeting global demand, as the spare production capacity touted by OPEC approaches historically low levels. Our gains have prevented a likely world oil shortage, while eliminating dramatic price spikes that have long been the hallmark of global oil markets. Total petroleum exports are now averaging close to 7 million barrels of oil per day – roughly 2 million of which is crude oil - and are becoming the norm from the U.S., offsetting crude oil imports to this country by foreign national oil companies

and countries who bought up 30% of our oil refineries for their own benefit. The increase in exports will continue to create U.S. energy jobs and insulate our economy from commodity price shocks in the future.

Stable prices are a boon to industrialized countries and developing nations around the world, but the U.S. needs to keep increasing its crude oil exports to keep world prices in an acceptable range.

This historic transformation from energy scarcity to energy abundance is already resulting in a stronger balance of trade and unprecedented global energy security for the United States.

And in a boon to our economy, the United States can participate in stronger global energy prices. In two short years, the U.S. will flip the script on crude oil, moving from the world's biggest customer for imported oil to a net oil exporter. That kind of conversion is unprecedented, but it will immeasurably improve the lives of all Americans. However, the U.S. needs to continue with significant new investment from U.S. companies in pipelines and port capacity for export shipments to harness our energy abundance and realize our full potential. As this infrastructure becomes available, we will fully engage in the free global market of oil and natural gas and exert our energy dominance. Our policies should foster this infrastructure expansion and promote the free flow of energy throughout our country.

In the meantime, we can expect record employment in the energy sector, growing exports of crude oil, growth in the production and use of clean natural gas and growing LNG shipments around the globe, with cleaner air becoming the norm abroad as it has in the U.S.

The U.S. oil industry is poised to continue its production gains, thanks to regulatory rollbacks under President Trump that have removed artificial barriers to growth.

The commitment of the Trump administration to repealing unnecessary and in many cases, archaic and onerous regulations is the right move for America. For too long those regulations have had a stranglehold on the American economy. Many regulations were implemented with an oil and gas scarcity mentality and have since become inapplicable and obsolete.

A perfect example is the current extreme CAFE standards for motor vehicles. The Trump administration recently announced they will work to revise the excessive rules set forth during the Obama administration.

CAFE standards for motor vehicles were the product of the Energy Conservation Act, passed by Congress in 1973 in response to the energy shortage created by the Arab oil embargo. The premise was based on declining supplies. The regulation has hampered American auto manufacturers and is actually putting American lives at risk. Vehicle fatality rates had fallen for all vehicles in recent decades, but they have rose again to claim an additional 10,000 Americans per year due to the small size imposed by CAFE standards. The vehicle fatality rate in 2016 was

the highest since 2007. Vehicle size/weight and fatality rates have a direct link. To meet fuel economy standards, automakers must “lightweight” the vehicles, compromising safety.

In addition, the archaic SEC 5-year rule on booking reserves vastly understates oil and gas reserves in America and doesn’t allow companies, or the country, to accurately state its true reserves. The U.S. has enough technically recoverable reserves to continue producing 10 million barrels of oil a day for more than 75 years, and this figure is likely to be revised higher.

I applaud the Trump administration and their willingness to roll back regulations that defy logic and to implement common sense regulations that allow America to prosper.

Our push to become a net energy exporter is important to further reduce our country’s trade deficit, which has been expanding over time. Our deficit stood at $46.2 billion in April, as other countries have taken advantage of the U.S. in past trade deals. The Trump administration’s recently-enacted tariffs on some foreign goods were necessary to protect American businesses in the global market. Countries like China have been artificially subsidizing their industries, but the administration’s new tariffs will level the playing field.

The United States has the lowest gasoline and diesel prices in the developed world today. U.S. consumers are enjoying a low gasoline price environment due to low fuel taxes, growing oil production, substantial refining assets and supportive regulatory policy. The initial impact of new U.S. oil coming into the market drove diesel costs from $4 dollars a gallon, briskly down to $2.25. And U.S. exports are keeping global oil prices (represented primarily by Brent) in check.

One can only imagine the price of oil and gasoline without the influence of U.S. crude into the market.

The unprecedented gains in our economy and the miracle of American oil and gas is shifting the geopolitical balance of power back to the United States of America.

ABUNDANT U.S. OIL RESERVES MAKE CAFE STANDARDS OBSELETE

FATALITIES ARE ON THE RISE

- The 2016 fatality count (37,461) is the highest since 2007, and the fatality rate of 1.18 is the highest since 2008.
- Vehicles are safer overall due to new technology and safety standards, but policy has limited the benefit.
- Newer vehicles in particular show up as much safer given improvements in technology and standards.
- Fatality rates have fallen for all vehicles in recent decades, but improvements have started to slow and fatalities are on the rise again.

FATALITIES VS VEHICLE SIZE AND WEIGHT

- There is a direct link between vehicle size/weight and fatality rates.
- The smaller the vehicle, the higher the fatality rate.
- Average vehicle weight is not rising as much as before, despite a continued shift towards SUVs, which is partly due to lightweighting, which is likely limiting safety gains.
- Even adjusted for number of registered vehicles or miles driven, passenger cars are less safe for the occupants than light trucks, which are less safe than large trucks.
- These trends hold even for cars 1-3 years old.
- To meet future fuel economy standards, automakers must "lightweight" the vehicles, compromising safety.

CAFÉ STANDARDS ARE UNREASONABLE AND UNECESSARY

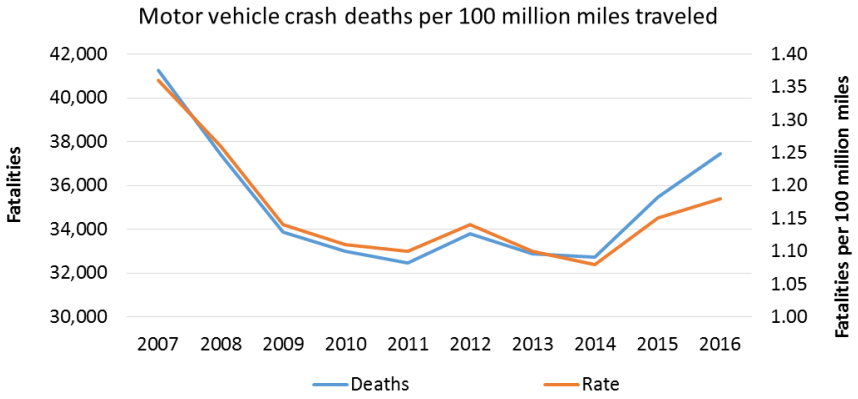
- America is not short oil anymore. The US has 275.8 billion barrels of technically recoverable reserves of crude oil. At production of 10mbbl/d, that is 75 years of production.
- The current market has a plethora of models and options that offer high fuel economy and exceed 2020 standards already.
- Upcoming standards are unreasonable. Over ¼ of current models meet 2020 standards, but this quickly falls off to <10% by 2022. Even some hybrids may struggle to meet future standards.
- New standards may not be achievable without compromising safety via lighter weight.
- The standards have minimal environmental benefit. Global transportation only accounts for 20% of global CO_2 emissions. Light Duty Vehicles account for less than 10%.

ECONOMICS

- Trucks and SUVs are taking market share among consumers, partly due to safety concerns
- Margins for automakers are much higher on trucks and SUVs than on cars
- Auto analysts have pegged the variable margin on each truck at $8,000-$10,000. Compare that to $2,500 on average for all vehicles sold, and it is easy to see that the trucks/SUVs contribute an outsized share of profitability.
- North American automakers are shifting away from making cars due to profitability, customer preference and technical issues of meeting CAFE standards.
- Foreign automakers are doubling down on smaller cars and taking market share, as US manufacturers pull back, therefore putting America last.
- This policy puts American jobs and manufacturing at risk.

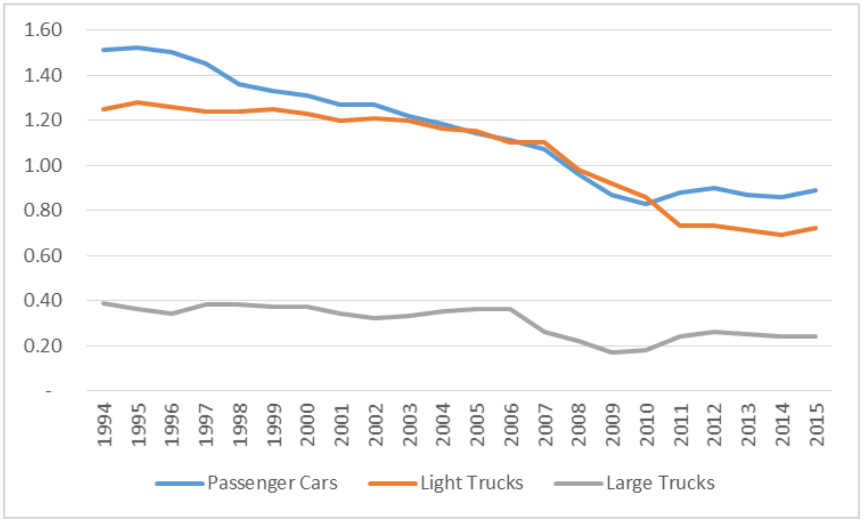
FATALITIES

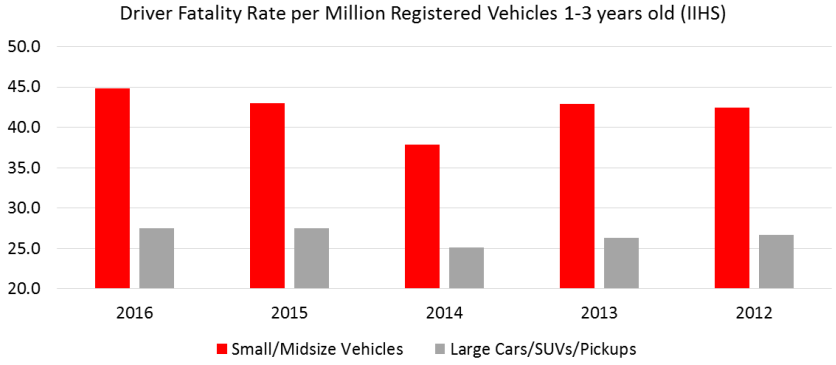
Overall fatalities and the rate per mil are on the rise.



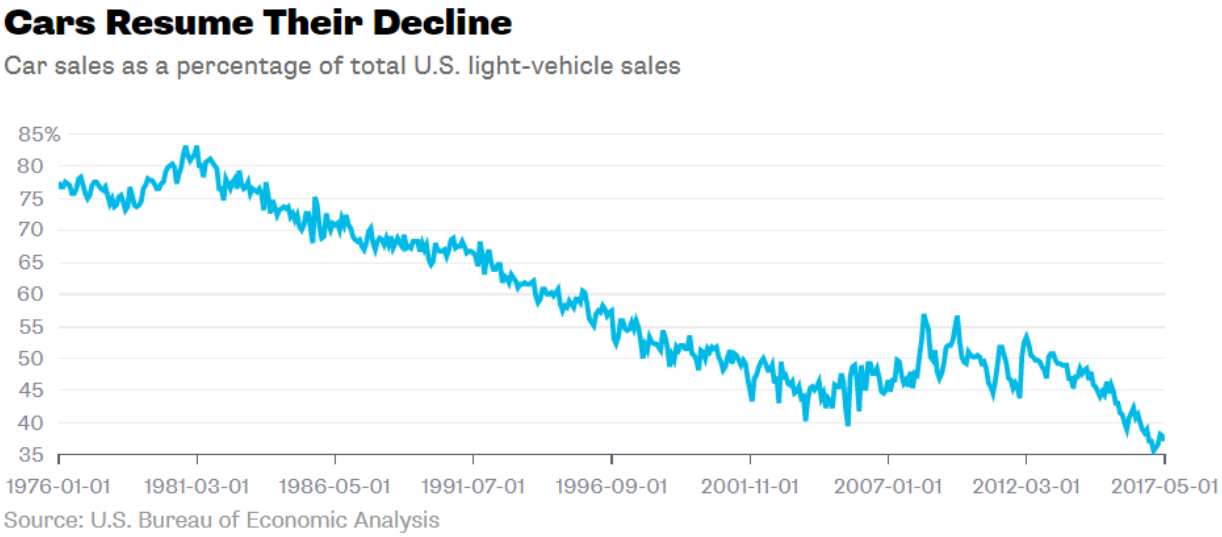
Light Trucks are much safer than passenger cars and have seen fatality rates fall more in recent years.

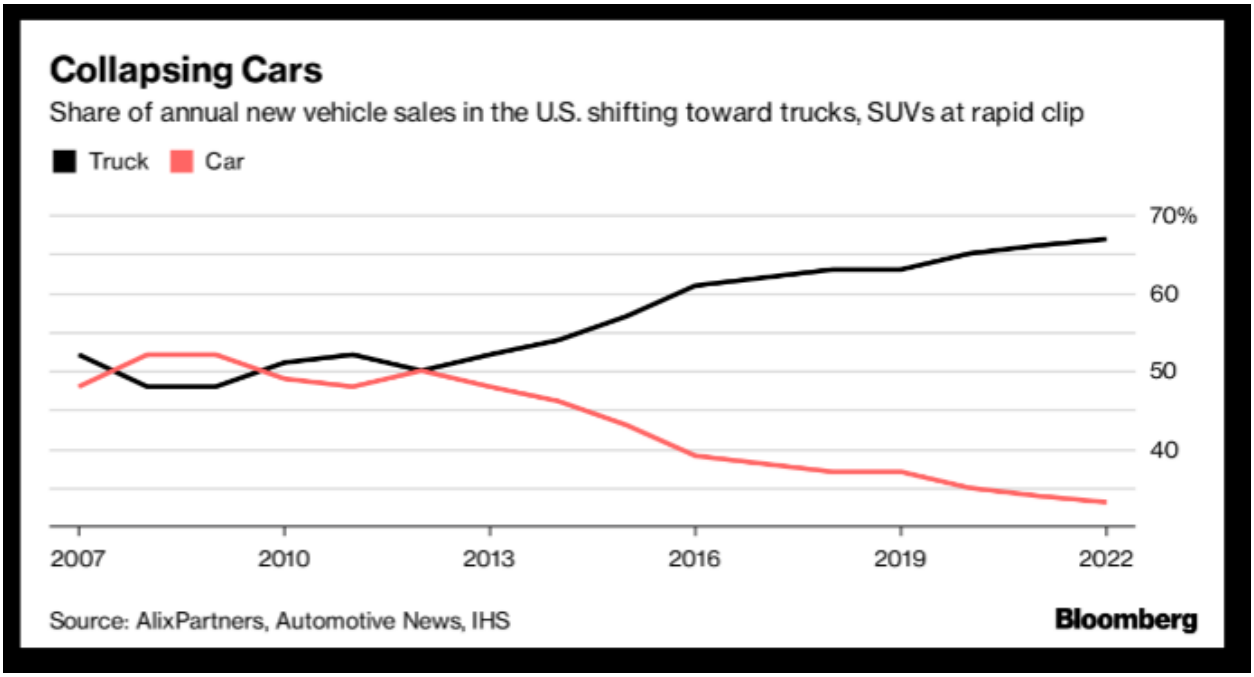
Occupant Fatality Rate per 100 Million VMT





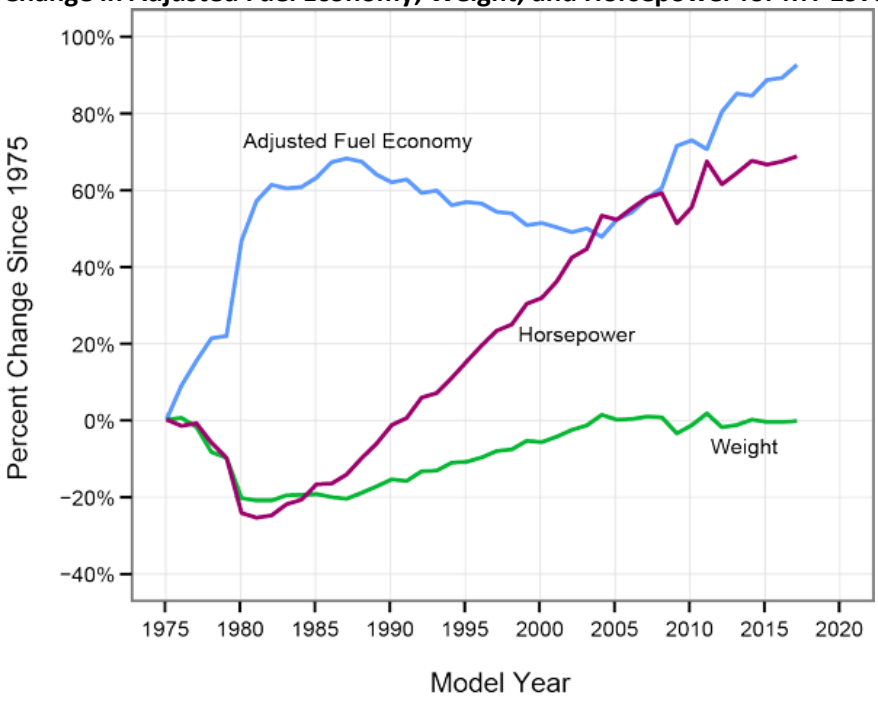
CARS CONTINUE TO LOSE MARKET SHARE TO SUVS AND TRUCKS



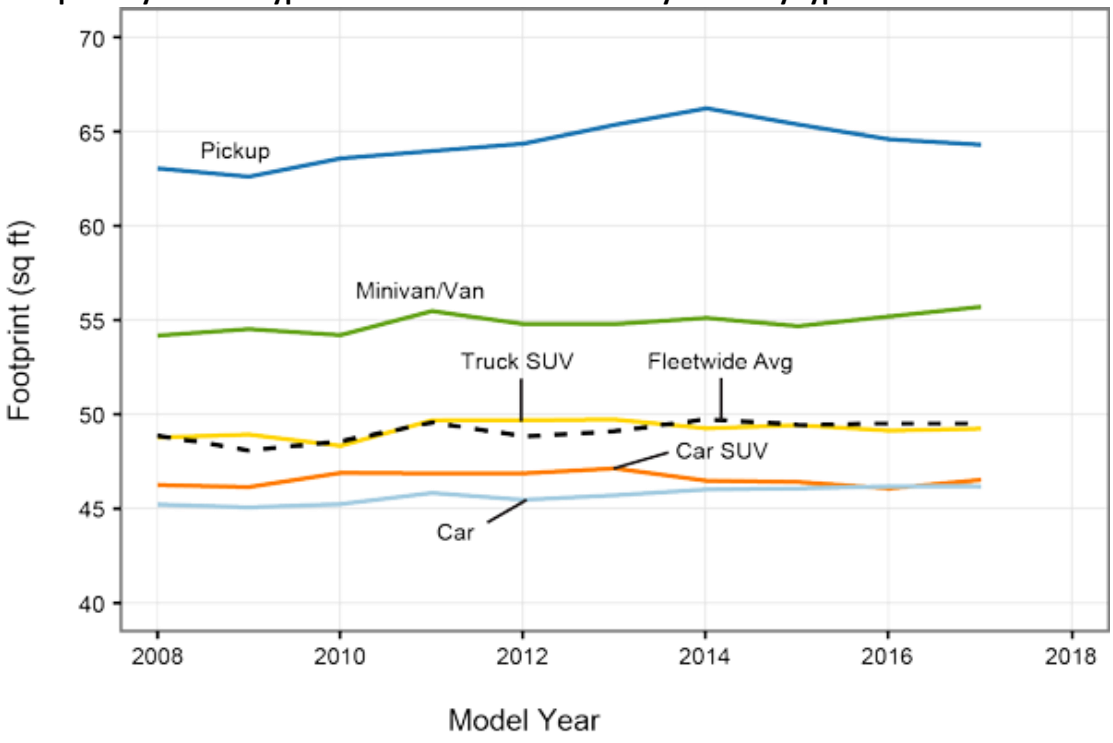


GAINS IN VEHICLE WEIGHT HAVE SLOWED DESPITE A SHIFT TOWARDS SUVS. VEHICLES ARE NOT GETTING LARGER WITHIN THEIR CLASS EITHER

Change in Adjusted Fuel Economy, Weight, and Horsepower for MY 1975-2017

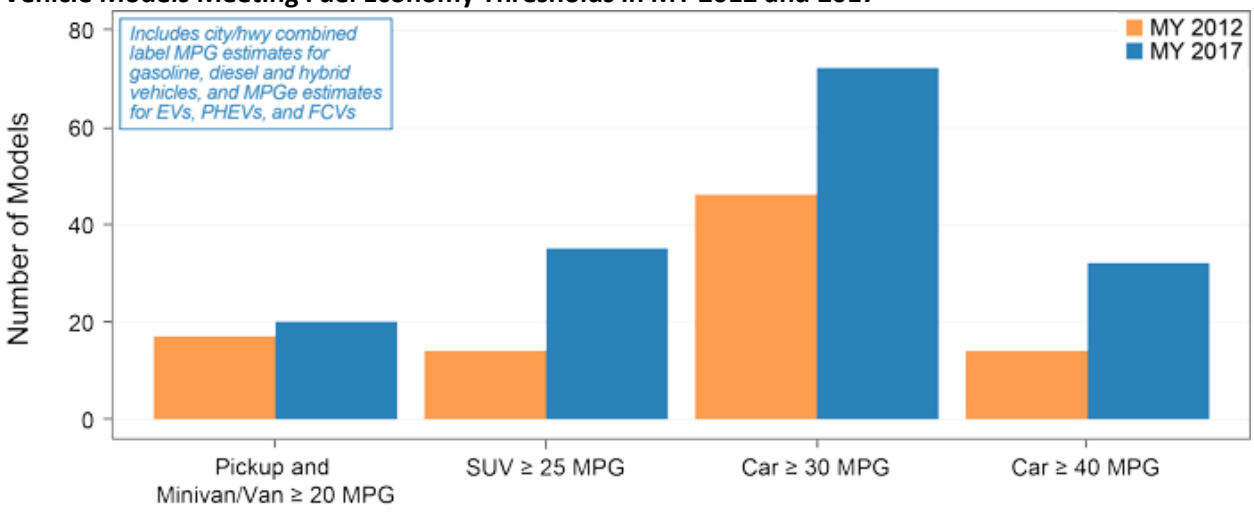


Footprint by Vehicle Type for MY 2008-2017: Relatively stable by type



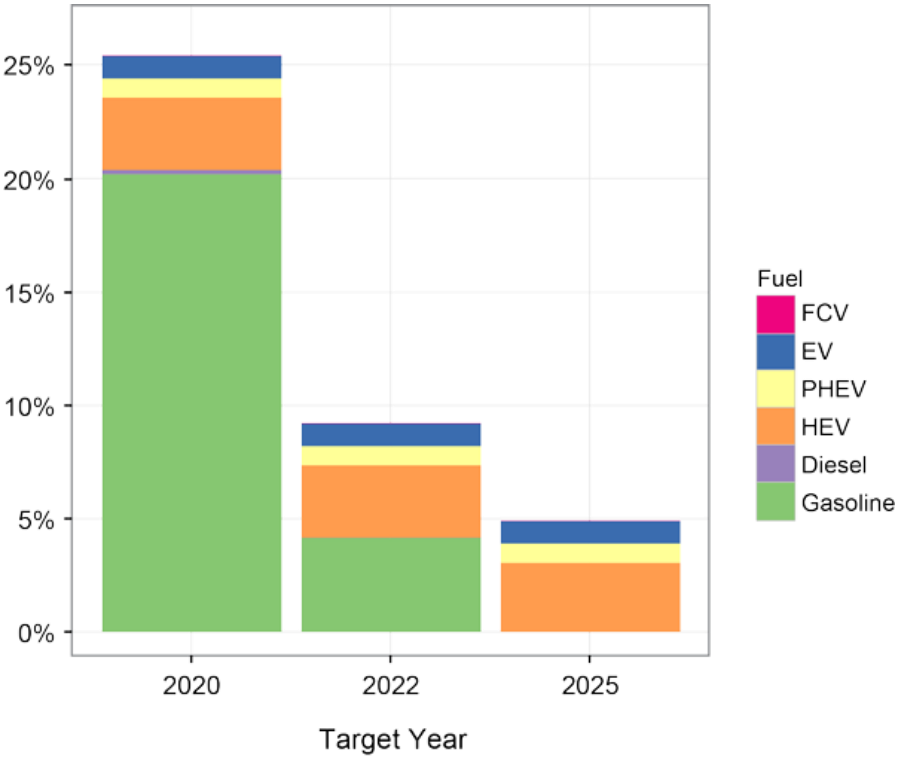
Consumers already have an increasing number of high fuel economy/low CO_2 vehicle choices

Vehicle Models Meeting Fuel Economy Thresholds in MY 2012 and 2017



Emission Targets Are Too Steep and Unrealistic

MY 2017 Vehicle Production That Meets or Exceeds Future CO_2 Emissions Targets



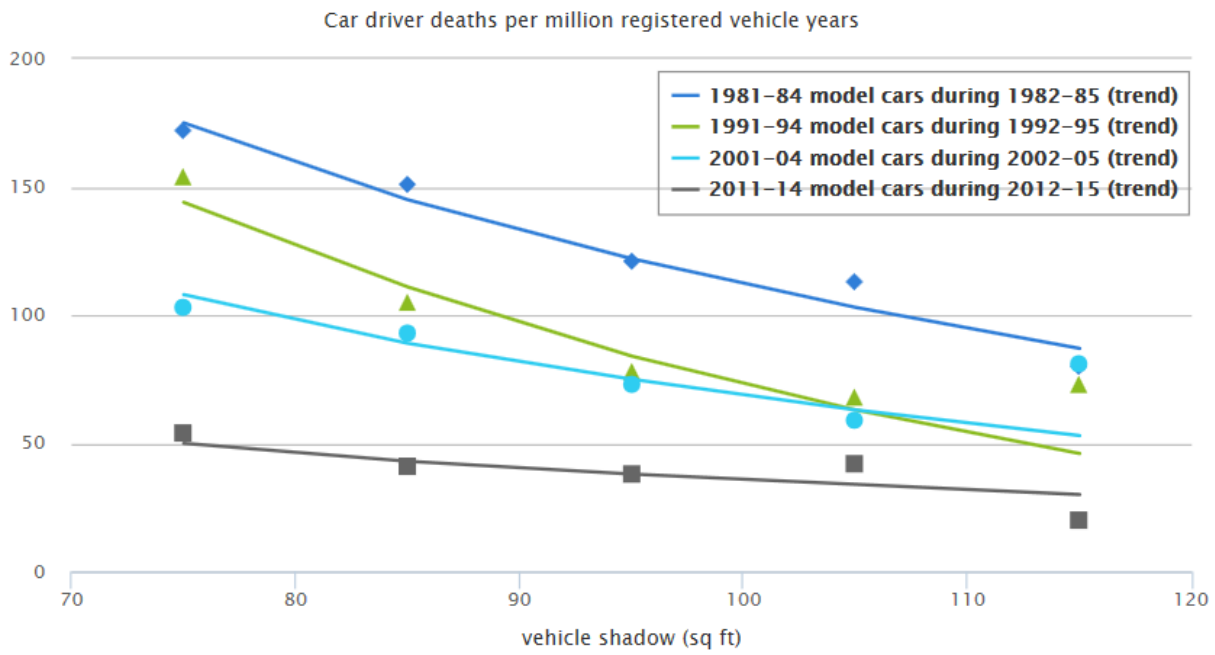


Table 9.1. Technically recoverable U.S. crude oil resources as of January 1, 2015

billion barrels

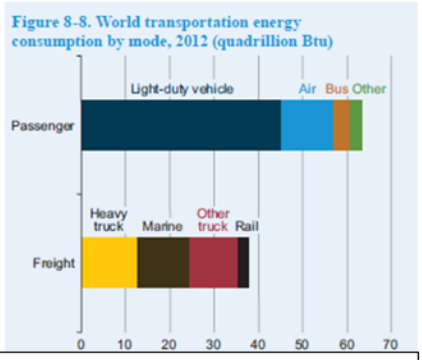
	Proved Reserves	Unproved Resources	Total Technically Recoverable Resources
Lower 48 Onshore	**31.8**	**152.1**	**183.9**
East	0.6	4.8	5.4
Gulf Coast	7.1	34.0	41.1
Midcontinent	2.6	14.4	17.0
Southwest	9.0	54.1	63.1
Rocky Mountain/Dakotas	9.8	40.4	50.2
West Coast	2.7	4.5	7.1
Lower 48 Offshore	**5.3**	**49.6**	**55.0**
Gulf (currently available)	4.8	36.6	41.4
Eastern/Central Gulf (unavailable until 2022)	0.0	3.7	3.7
Pacific	0.5	6.0	6.6
Atlantic	0.0	3.3	3.3
Alaska (Onshore and Offshore)	**2.9**	**34.0**	**36.9**
Total U.S.	**39.9**	**235.8**	**275.8**

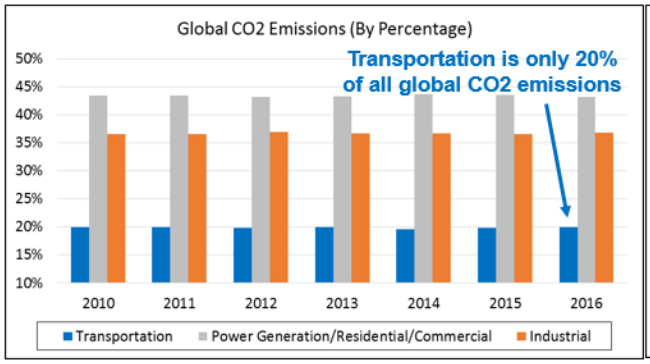
Note: Crude oil resources include lease condensates but do not include natural gas plant liquids or kerogen (oil shale). Resources in areas where drilling is officially prohibited are not included in this table. The estimate of 7.3 billion barrels of crude oil resources in the Northern Atlantic, Northern and Central Pacific, and within a 50-mile buffer off the Mid and Southern Atlantic Outer Continental Shelf (OCS) is also excluded from the technically recoverable volumes because leasing is not expected in these areas by 2040.

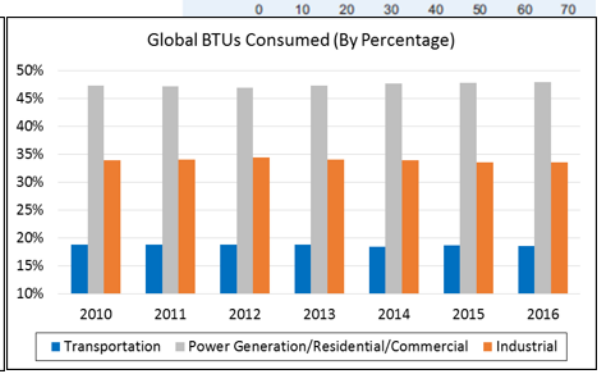
Source: Onshore and State Offshore - U.S. Energy Information Administration; Alaska - U.S. Geological Survey (USGS); Federal (Outer Continental Shelf) Offshore - Bureau of Ocean Energy Management (formerly the Minerals Management Service); Proved Reserves - U.S. Energy Information Administration. Table values reflect removal of intervening reserve additions between the date the latest available assessment and January 1, 2015.

Passenger Vehicles Account for a Small Portion of Global CO_2 Emissions

- Transportation only comprises 20% of all CO_2 emissions
- Light duty vehicles account for less than 10% of global CO_2 emissions

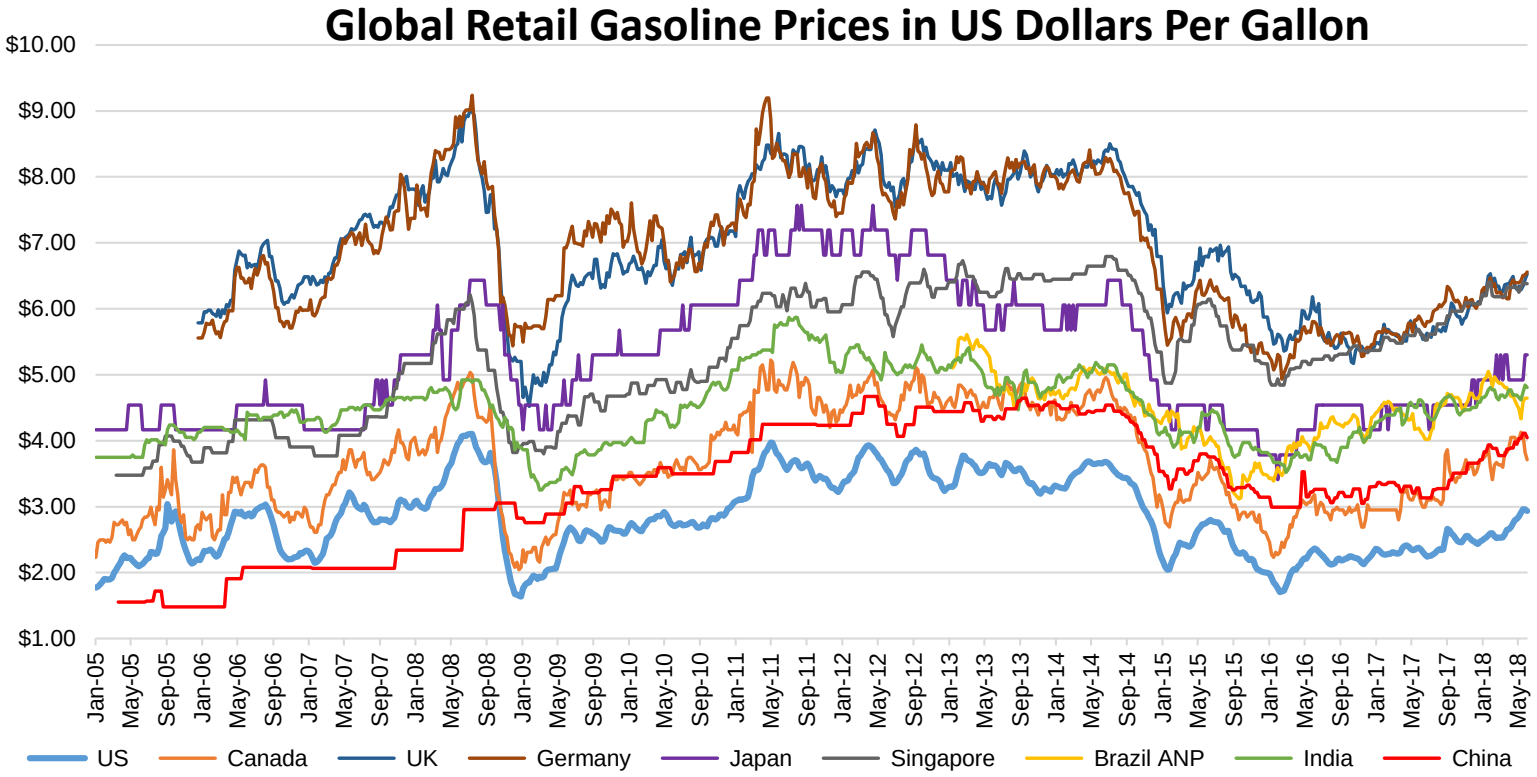






US Gasoline Prices Are Already Some of the Lowest in the World

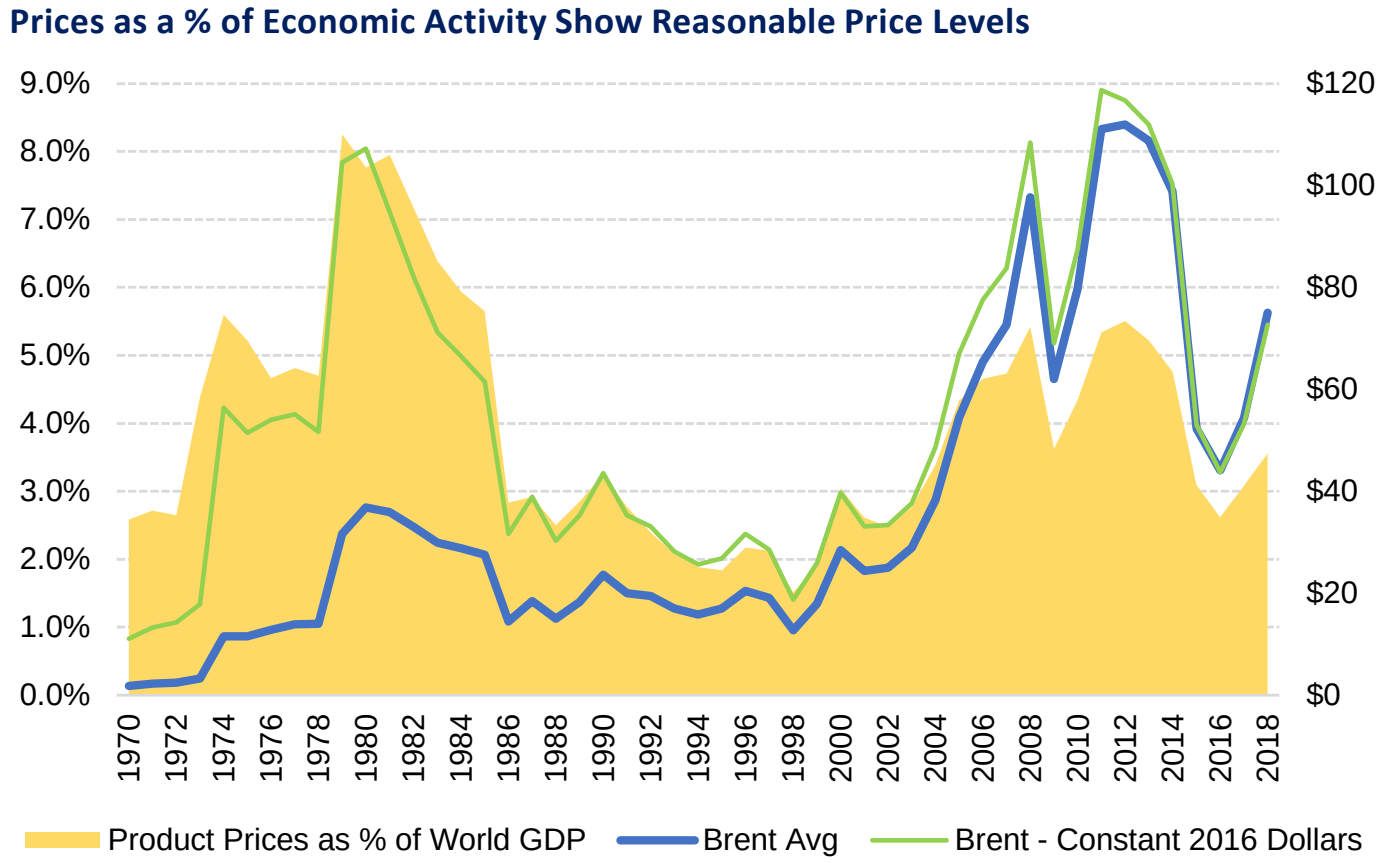
- Low fuel taxes, growing oil production, substantial and sophisticated refining assets and supportive regulatory policy all contribute to a healthy gasoline price environment
- By exporting more, the US can help to keep prices down for all consumers



Sources: Bloomberg

Overall Global Oil Prices Are Not Overly High in a Historical Context

$$\text{Product Burden} = \frac{\text{(Avg Brent Price + 321 Crack + US Retail Spread) X Total Liquids Demand}}{\text{World GDP (in USD)}}$$



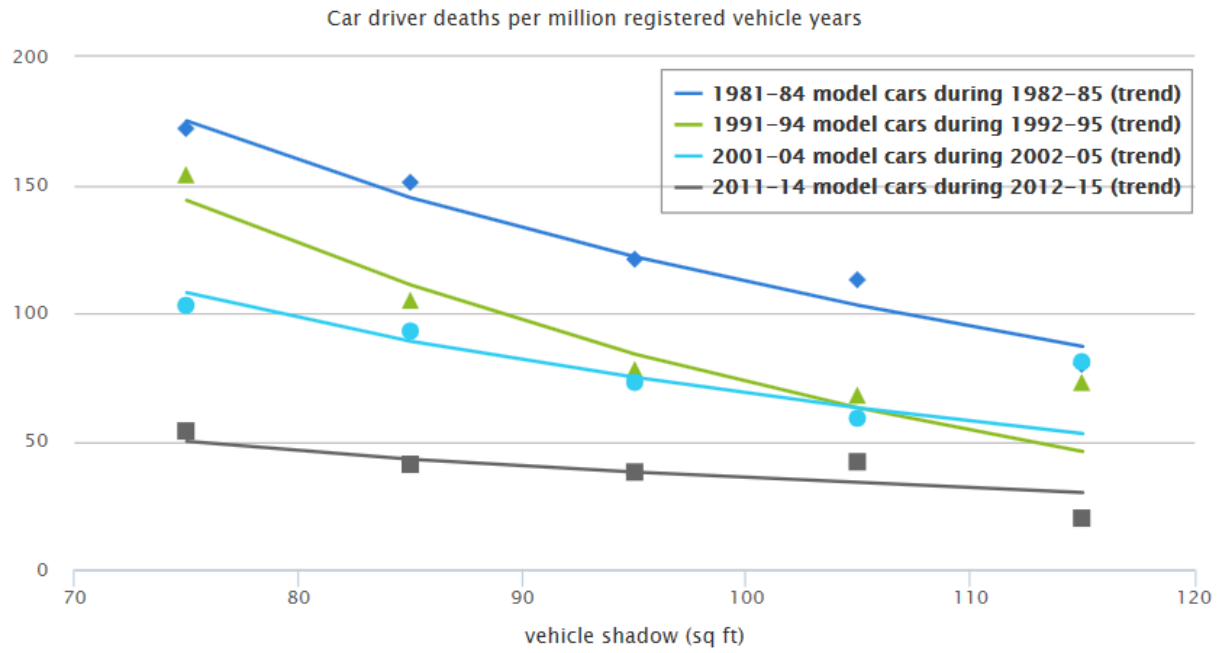
Sources: Bloomberg, IMF, IEA

U.S. VEHICLE SAFETY:

The Insurance Institute for Highway Safety (IIHS) compiles data and statistics on vehicle safety

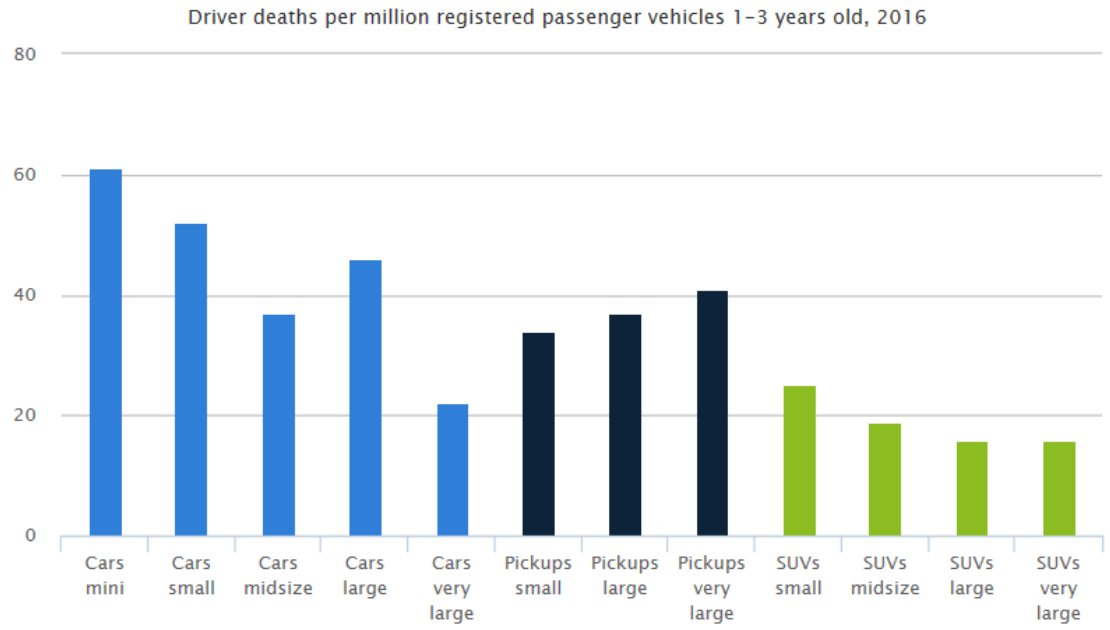
Some interesting data points:

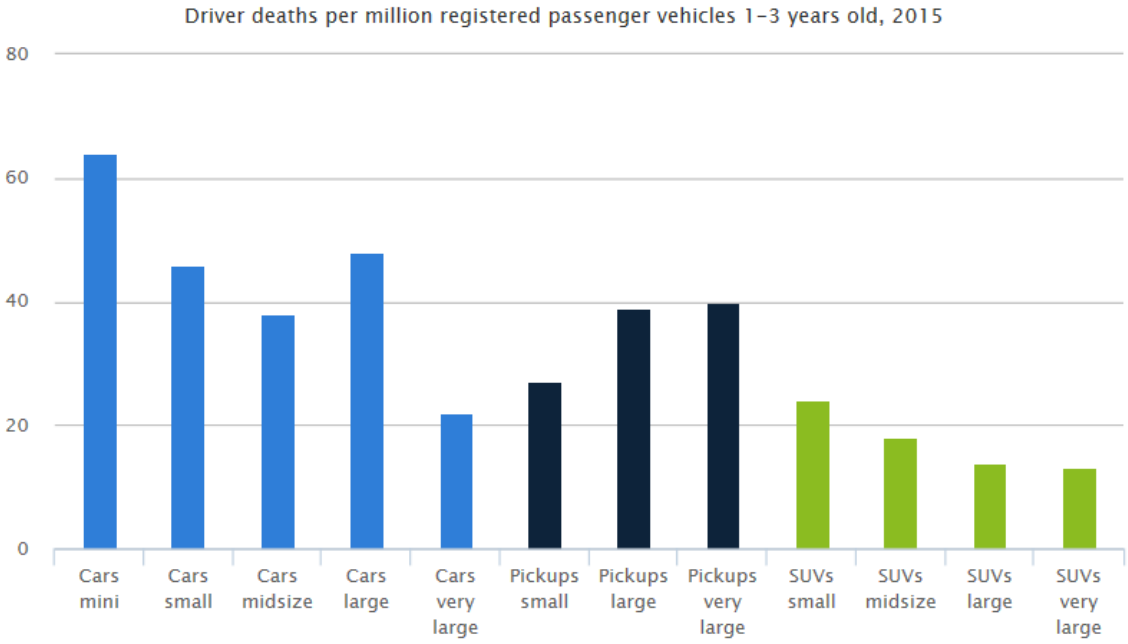
- See chart below. The larger the vehicle, the safer it is…
- Generally, newer cars have become safer for similar sizes. Despite a car being newer, the larger the vehicle is, the safer it is. The vehicle shadow is the area of the vehicle's length times width.

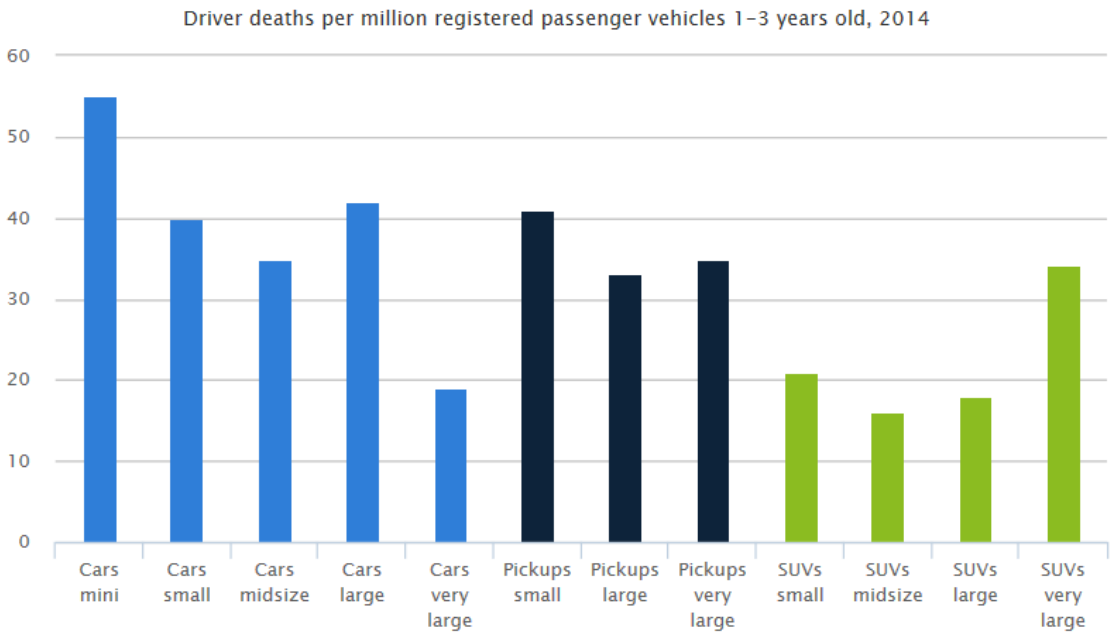


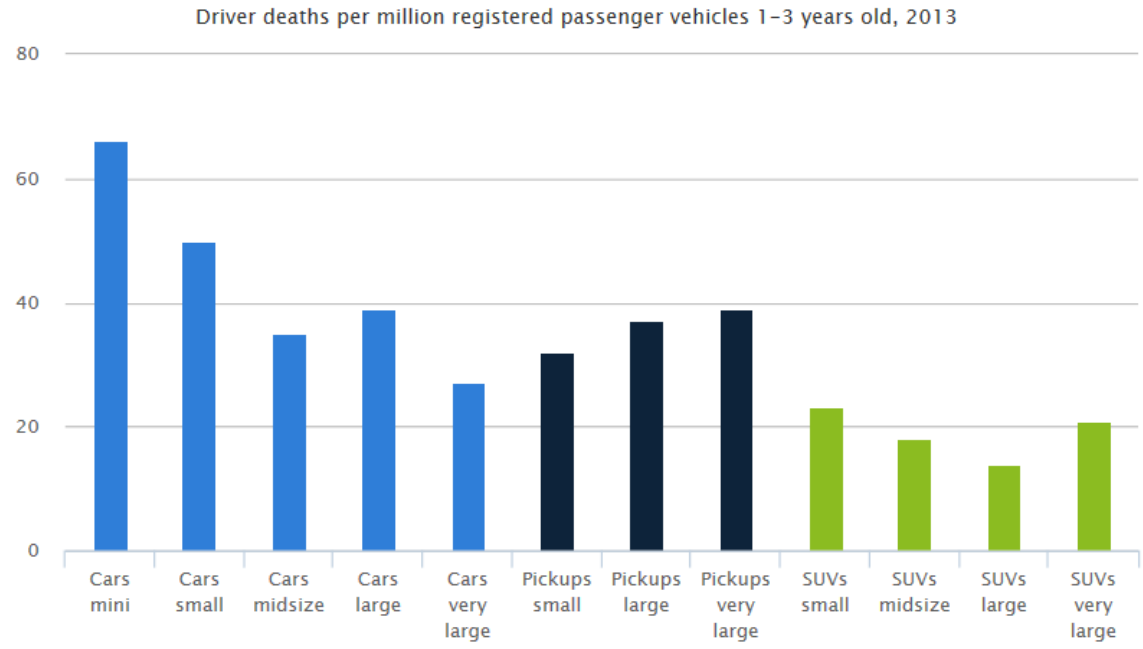
- IIHS also did a study of insurance claims for a vehicle that was conventional and the same model that was a hybrid that was 10% heavier. The study found that people in the heavier vehicle were 25% less likely to be injured than in the lighter version of the same vehicle. All things being equal, a heavier vehicle is safer.

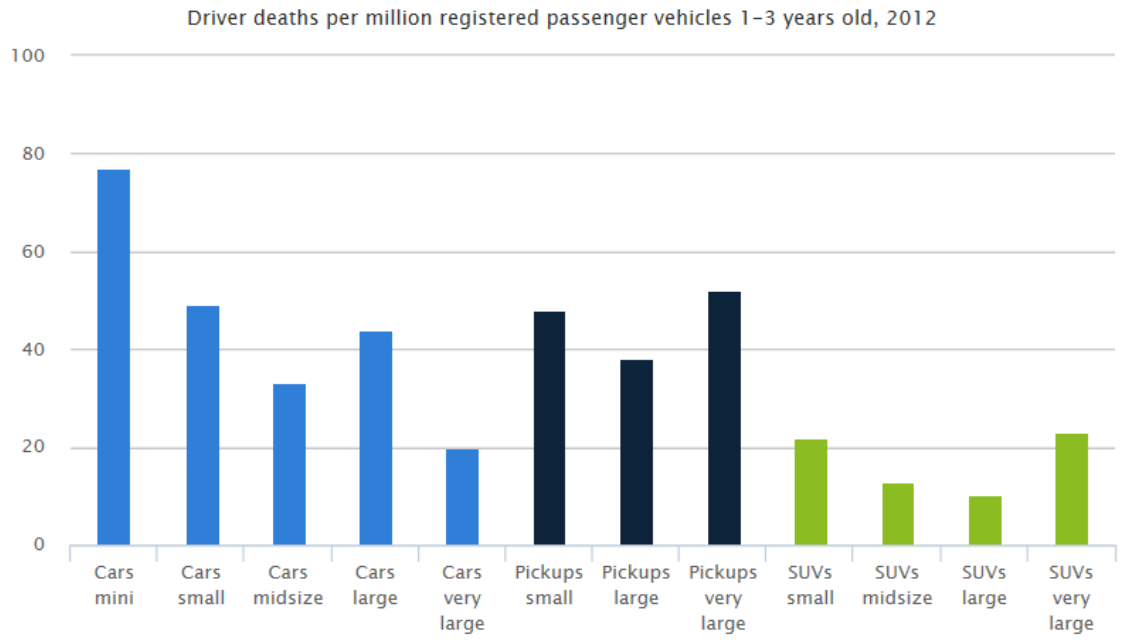
- IIHS also classifies driver fatality rates by car type (see charts below)
    - Mini and Small Cars typically have the highest fatality rates
    - SUVs are clearly the lowest
    - Pickups seem to have variance, but are higher than some of the larger car models






Driver deaths per million registered passenger vehicles 1-3 years old, 2014
60
50
40
30
20
10
0
Cars mini
Cars small
Cars midsize
Cars large
Cars very large
Pickups small
Pickups large
Pickups very large
SUVs small
SUVs midsize
SUVs large
SUVs very large


Driver deaths per million registered passenger vehicles 1-3 years old, 2013
80
60
40
20
0
Cars mini
Cars small
Cars midsize
Cars large
Cars very large
Pickups small
Pickups large
Pickups very large
SUVs small
SUVs midsize
SUVs large
SUVs very large



Links to IIHS information:

http://www.iihs.org/iihs/topics/t/vehicle-size-and-weight/qanda#cite-text-0-1

http://www.iihs.org/iihs/topics/t/vehicle-size-and-weight/fatalityfacts/passenger-vehicles/2016