



# **The U.S. Automobile Industry Outlook**

**FTA Conference  
Providence, Rhode Island  
October 22, 2012**

**Kim Hill  
Group Director  
Associate Director, Research  
Center for Automotive Research**

# It's All About Product!



# The Automotive Industry Is Changing Rapidly

## In the past ten years, we have had:

- Record-high sales
- Record declines in sales and employment
- Structural industry changes
- Government involvement
- Regulatory changes
- Materials uncertainty
- Massive technological advances
- Fuel price volatility
- Continued international competition
- Natural Disasters
- Mergers, acquisitions, and bankruptcies
- New investments and old plant retirements
- Agglomeration of domestic industry in the upper-Midwest
- Location decision of internationals
- Reconfiguring supply chains
  - Risks—tsunami, etc.
  - Transportation costs
- Record number of plant closings



# Changing Consumer Trends

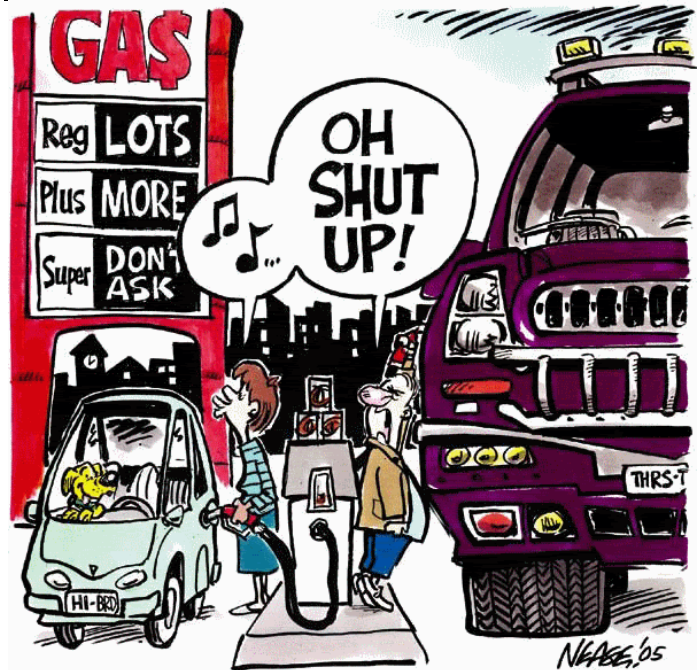
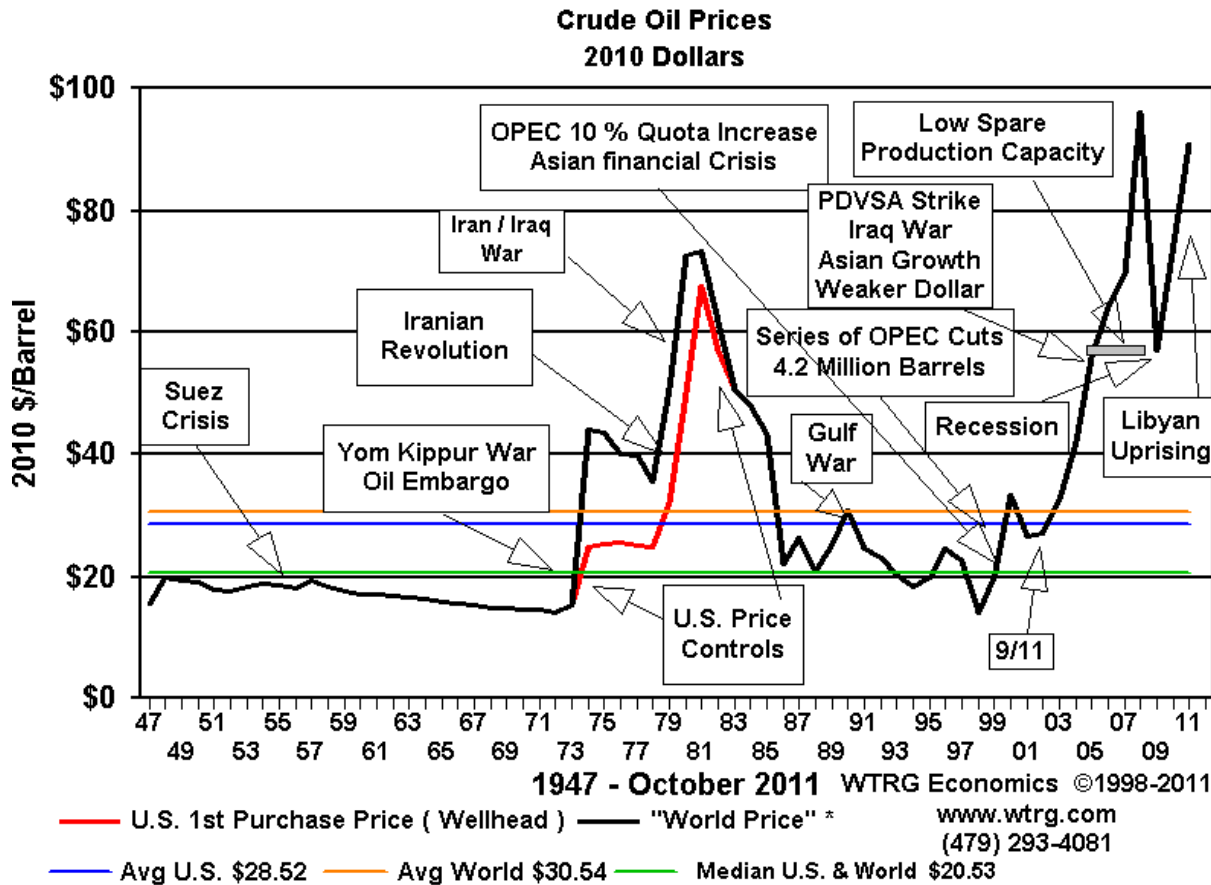




# Infrastructure Challenges



# Fuel Price Volatility





# Material Uncertainty

## HYBRID electric motor and generator

- Neodymium
- Praseodymium
- Dysprosium
- Terbium

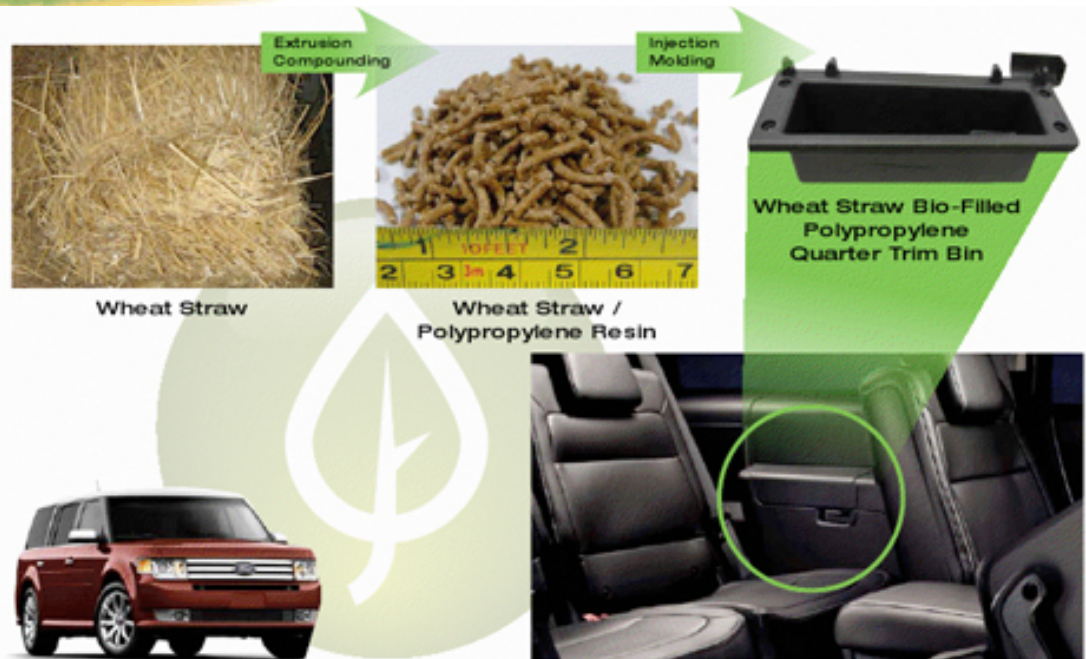
## HYBRID NiMH battery

- Lanthanum
- Neodymium
- Cerium



## Rare Earth Metals

## Bio-Based Materials





# Regulatory Uncertainty

OBAMA ADMINISTRATION Fuel Economy Standards **In the year 2025**

The fleet-wide average will be **54.5** MPG

Consumers will have saved **\$1.7 TRILLION** at the pump over the life of the program.

A family that purchases a new vehicle in 2025 will save **\$8,200** in fuel costs when compared with a similar vehicle in 2010.

Over the life of the program, the standards will:

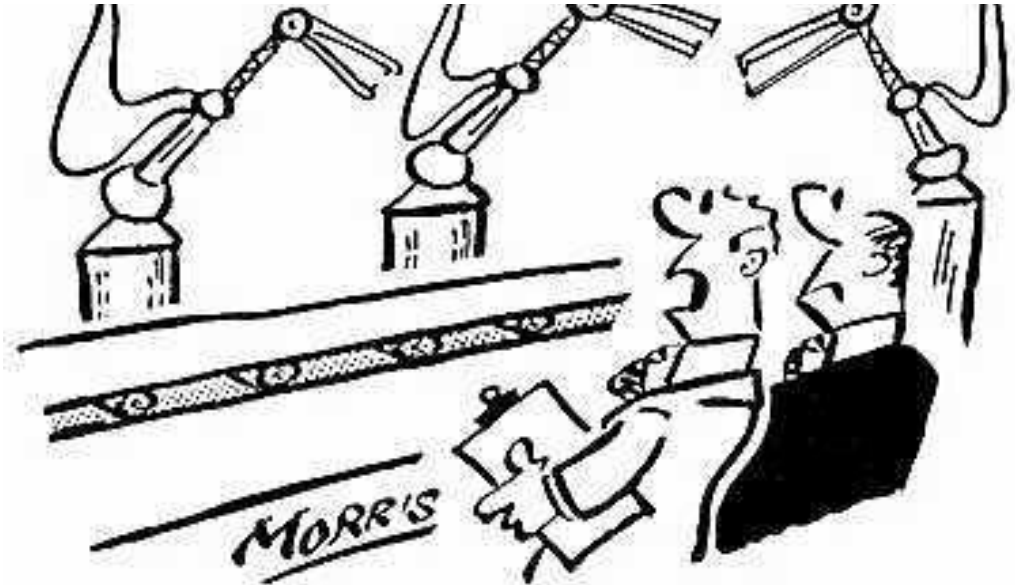
- Save **12** billion barrels of oil.
- Eliminate **6** billion metric tons of carbon dioxide pollution.

This program, together with standards already put into place by this administration for Model Years 2011-2016, will result in significant cost savings for consumers at the pump, dramatically reduce oil consumption, cut pollution and create jobs.

Smartphone QR Code



# Structural Industry Changes

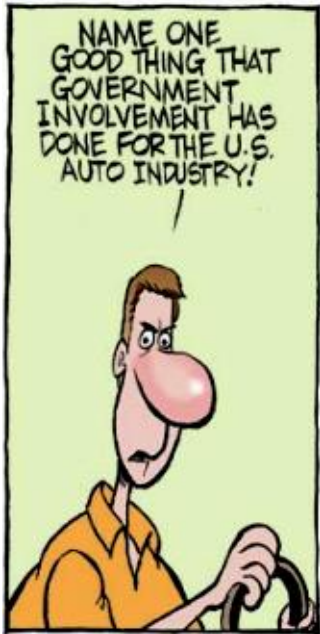


Visteon





# Government Involvement





# International Competition

PSA PEUGEOT CITROËN

DAIMLER

HYUNDAI



SUZUKI



MAZDA

CHRYSLER



mitsubishi  
MOTORS



NISSAN



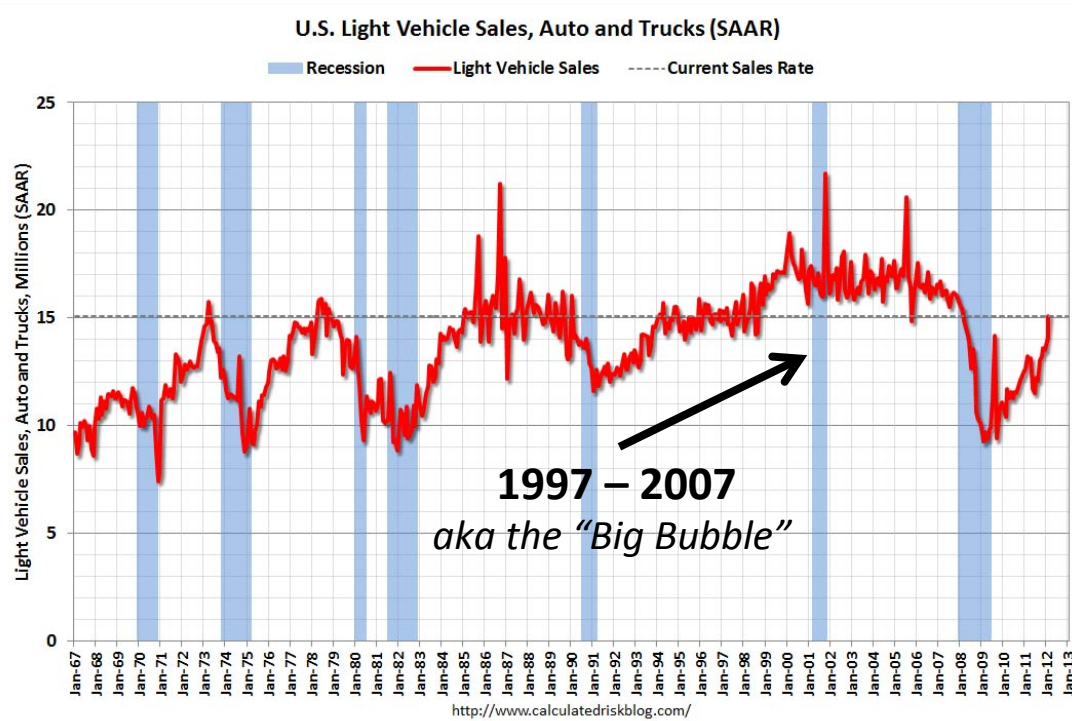
TOYOTA



CAR  
CENTER FOR AUTOMOTIVE RESEARCH

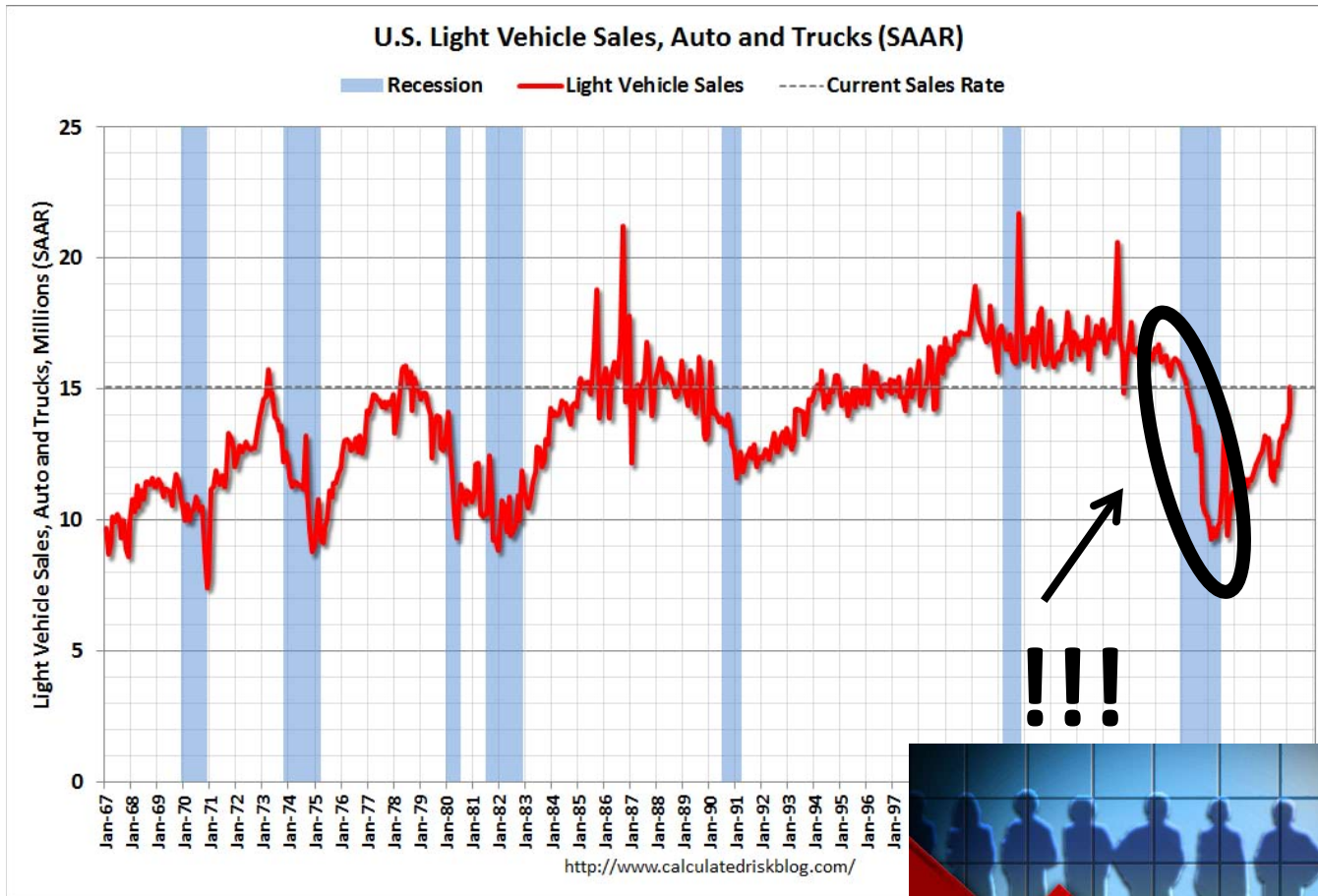
HONDA

# Record High Sales





# Low Sales and Employment





# Technological Advances

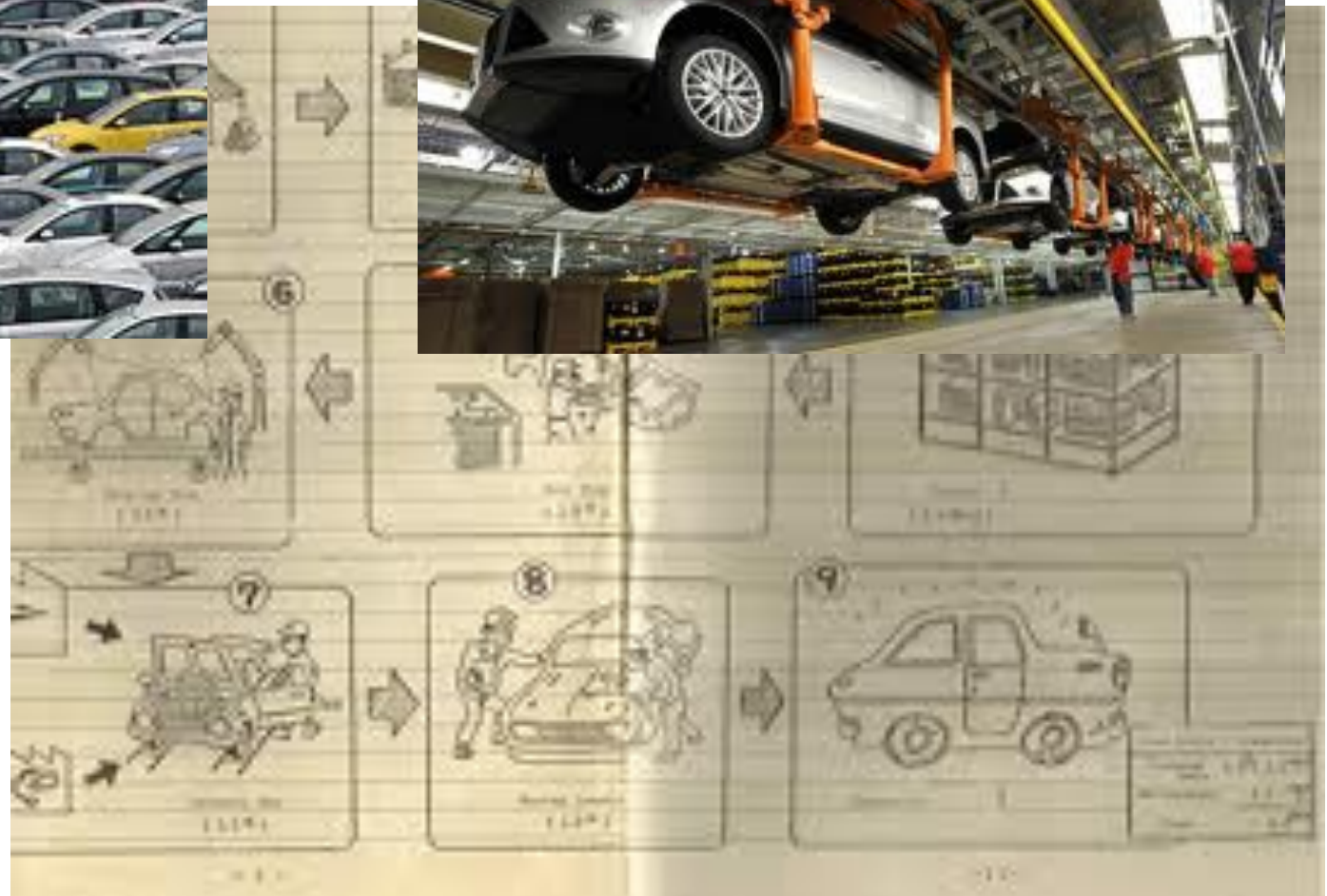


# Economy Growing at Stall Speed





# Capacity: Flexible, Profitable and Constrained





# Global Financial Crises







# Consumer Confidence, Household Wealth and Getting Consumers to the Showroom



# Assessment of Tax Revenue Generated by the Automotive Sector





# Study Findings

- Auto industry generated over **\$130 billion** in government tax revenue in 2010, including **\$91.5 billion** for state governments and **\$43 billion** for the federal government.
- The sources of these revenues include:
  - Sales taxes (\$30 billion)
  - Income taxes (\$15 billion)
  - Taxes and fees on use (\$89 billion)
  - Business taxes and fees (\$750 million)

# State Government Revenue Overview

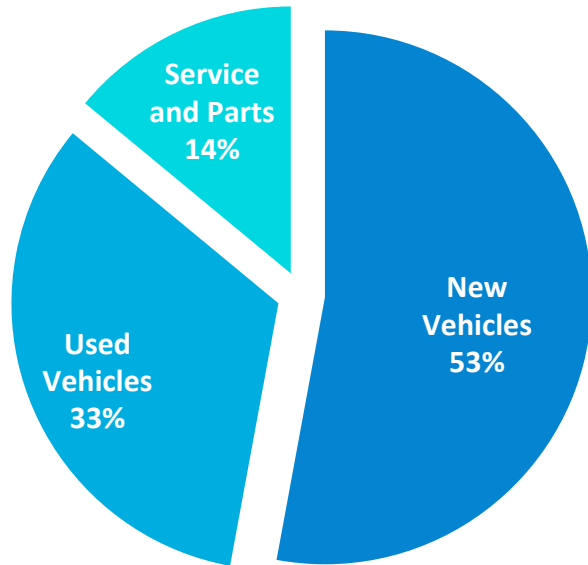
- Auto industry generated at least **\$91.5 billion** in state government tax revenue in 2010, which is **13 percent** of state government tax revenues.
  - **\$30 billion** from taxes on vehicle **sales and service**
  - **\$860 million** from taxes on **direct employment**
  - **\$60 billion** from taxes and fees on **use** of vehicles
  - **\$750 million** from taxes on **businesses**



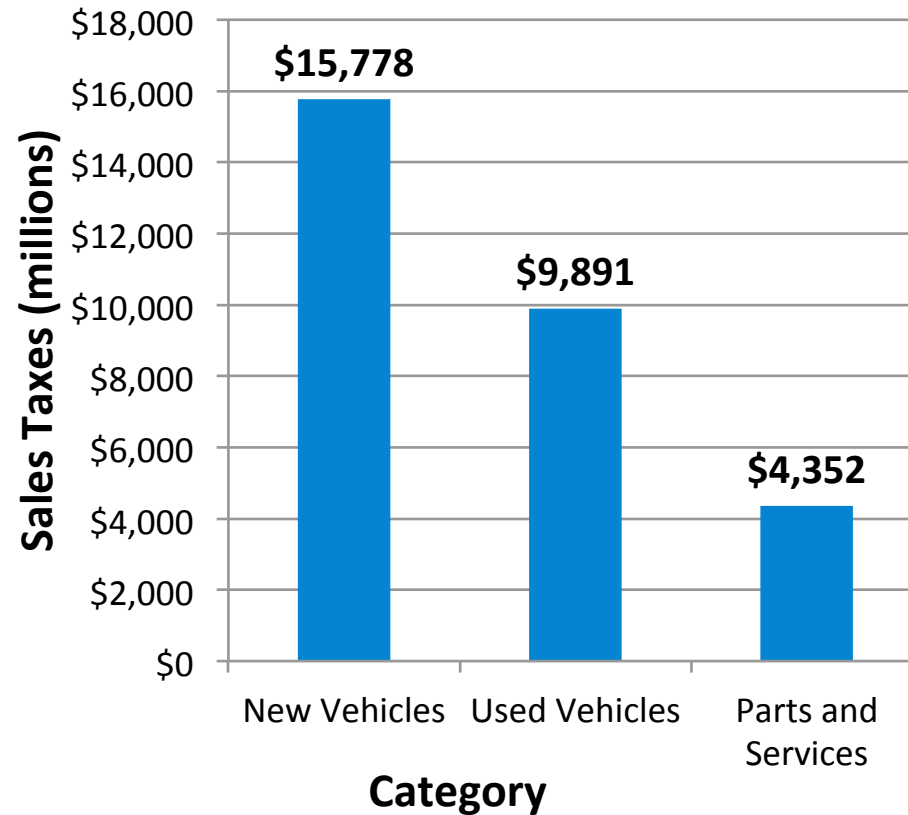
# Federal Government Revenue Overview

- Auto industry generated at least **\$43 billion** in federal government tax revenue in 2010.
  - **\$14 billion** from taxes on **direct employment**
  - **\$29 billion** from taxes on **motor vehicle fuels**

# Sales Tax from Motor Vehicle Purchases



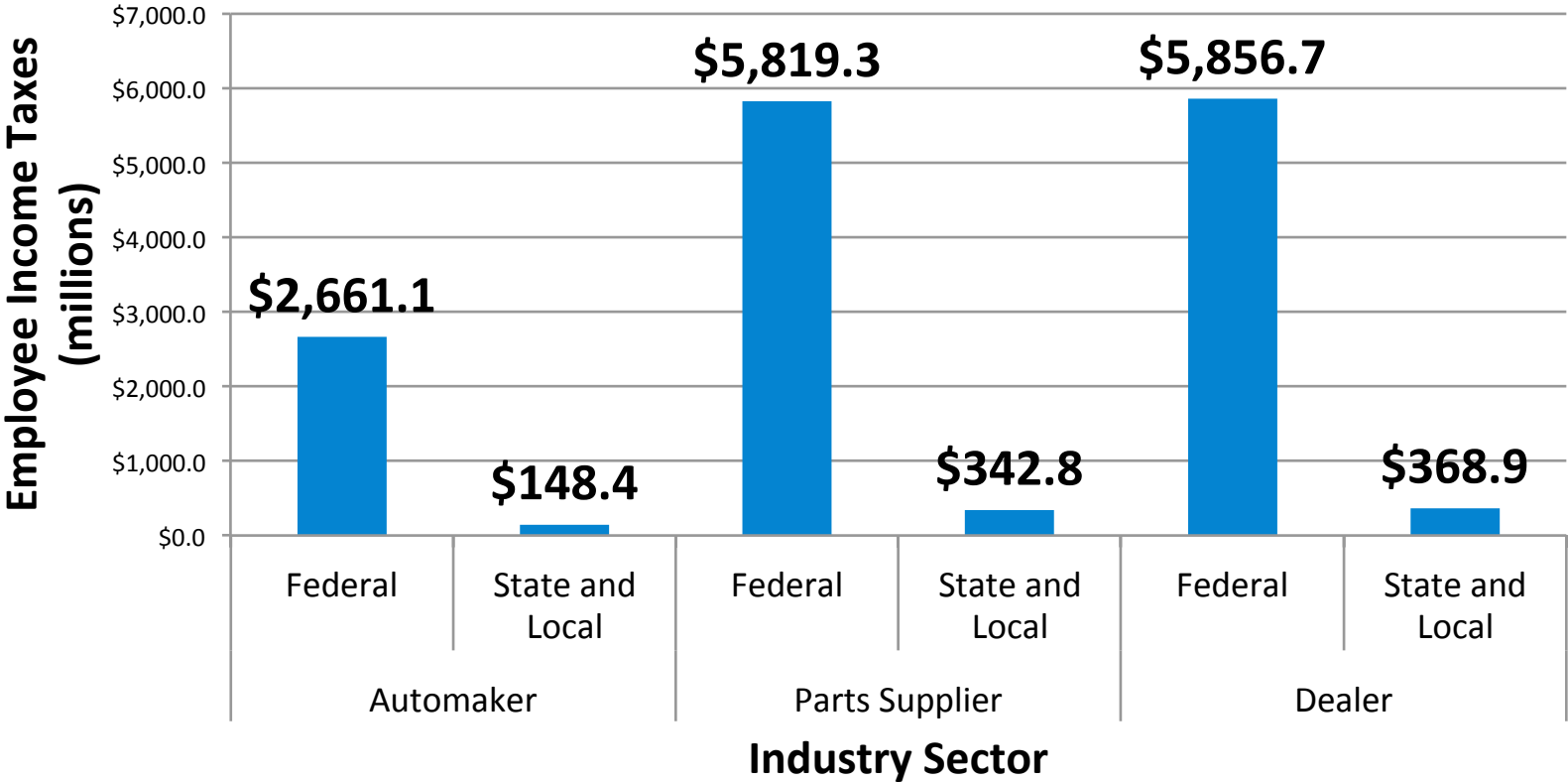
Share of Total Dealership Sales Dollars, 2010



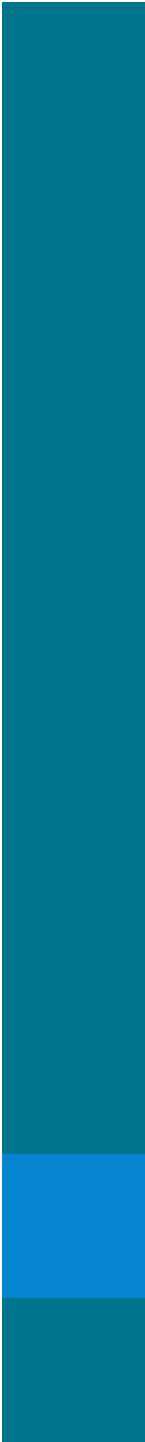
Total Sales Taxes Collected by States on Motor Vehicles, Parts, and Service, 2010



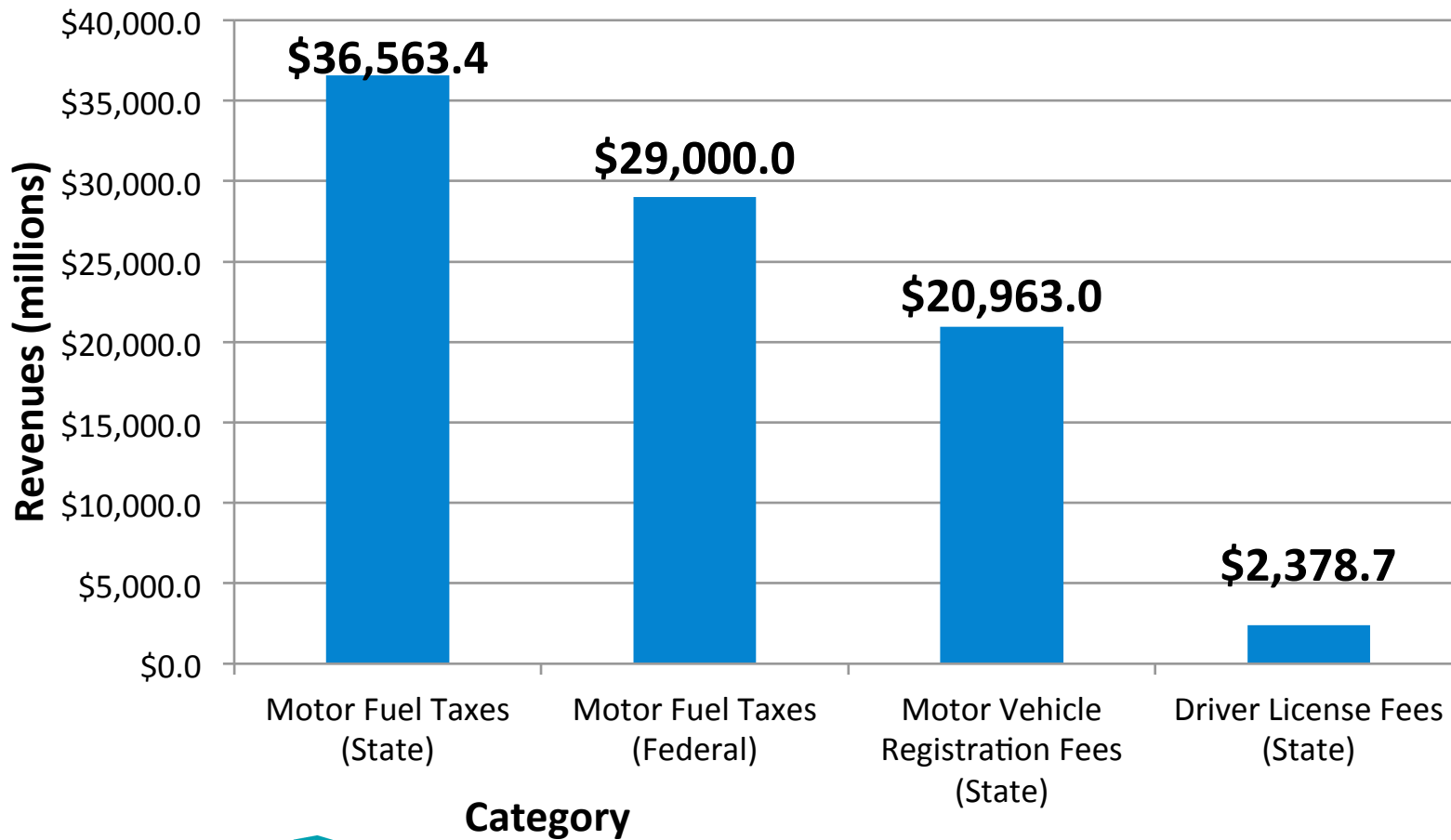
# Personal Income Tax of Automotive Employees



Estimated Direct Worker Income Taxes Paid in the United States, 2010



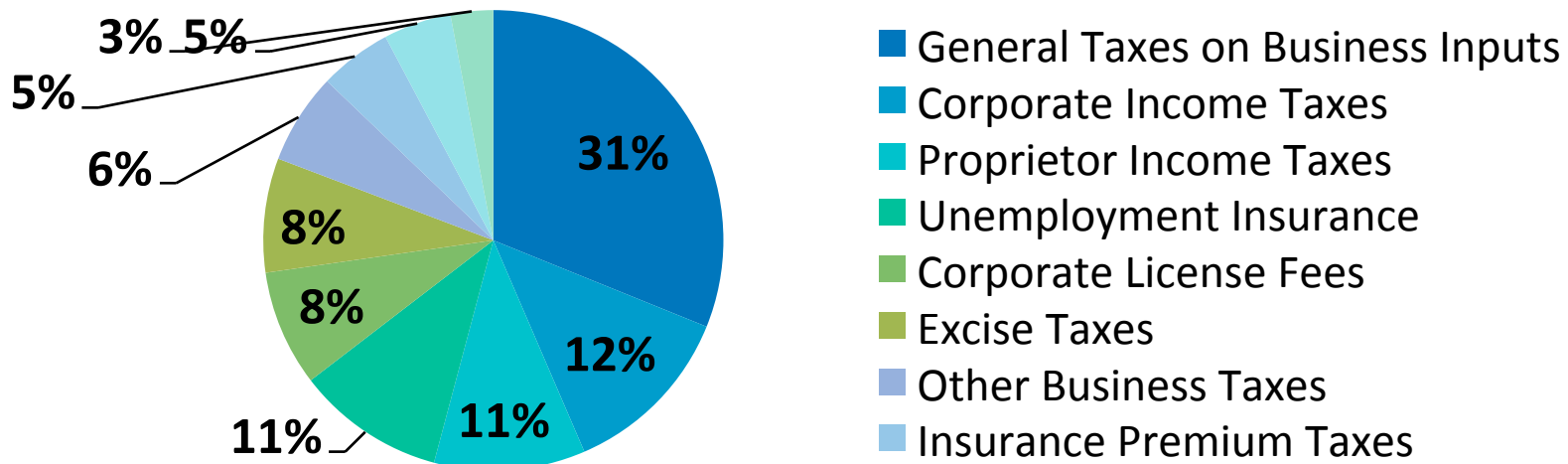
# Vehicle Use Taxes, Licenses, and Fees



# Corporate Income Tax

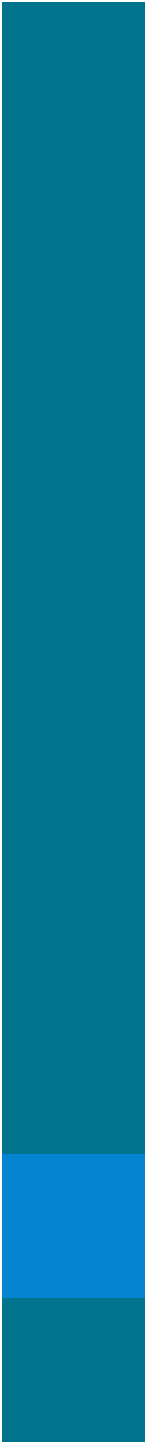
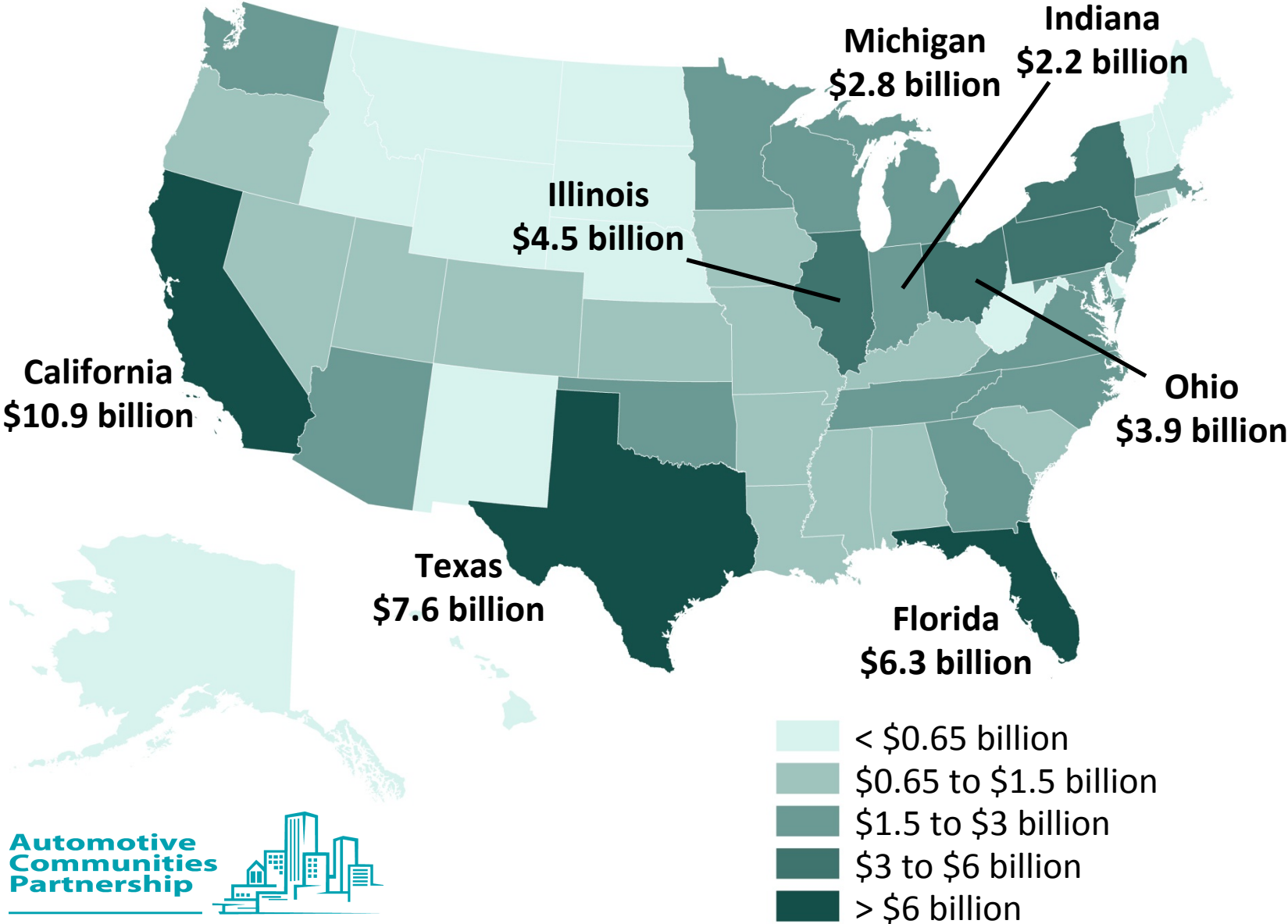
## Estimated State Corporate Income Tax and License Fees Paid by Automakers, Parts Suppliers, and Automotive Dealerships, 2010

| Industry Sector          | Corporate Income Taxes and License Fees |
|--------------------------|---|
| Automakers and Suppliers | \$295,506,347                           |
| Dealerships              | \$458,059,000                           |
| <b>Total</b>             | <b>\$753,565,347</b>                    |

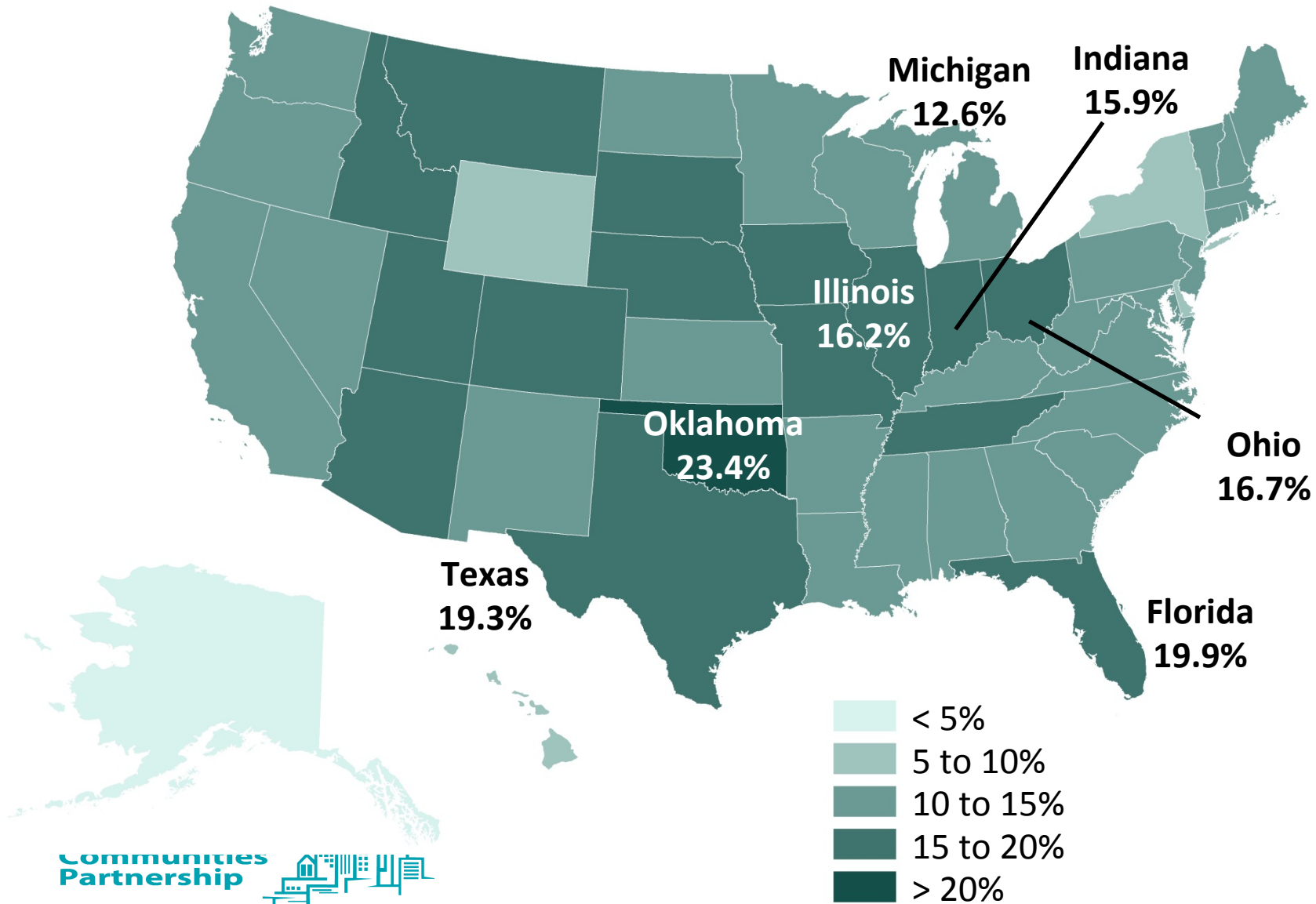




# Total Automotive Tax Revenues By State

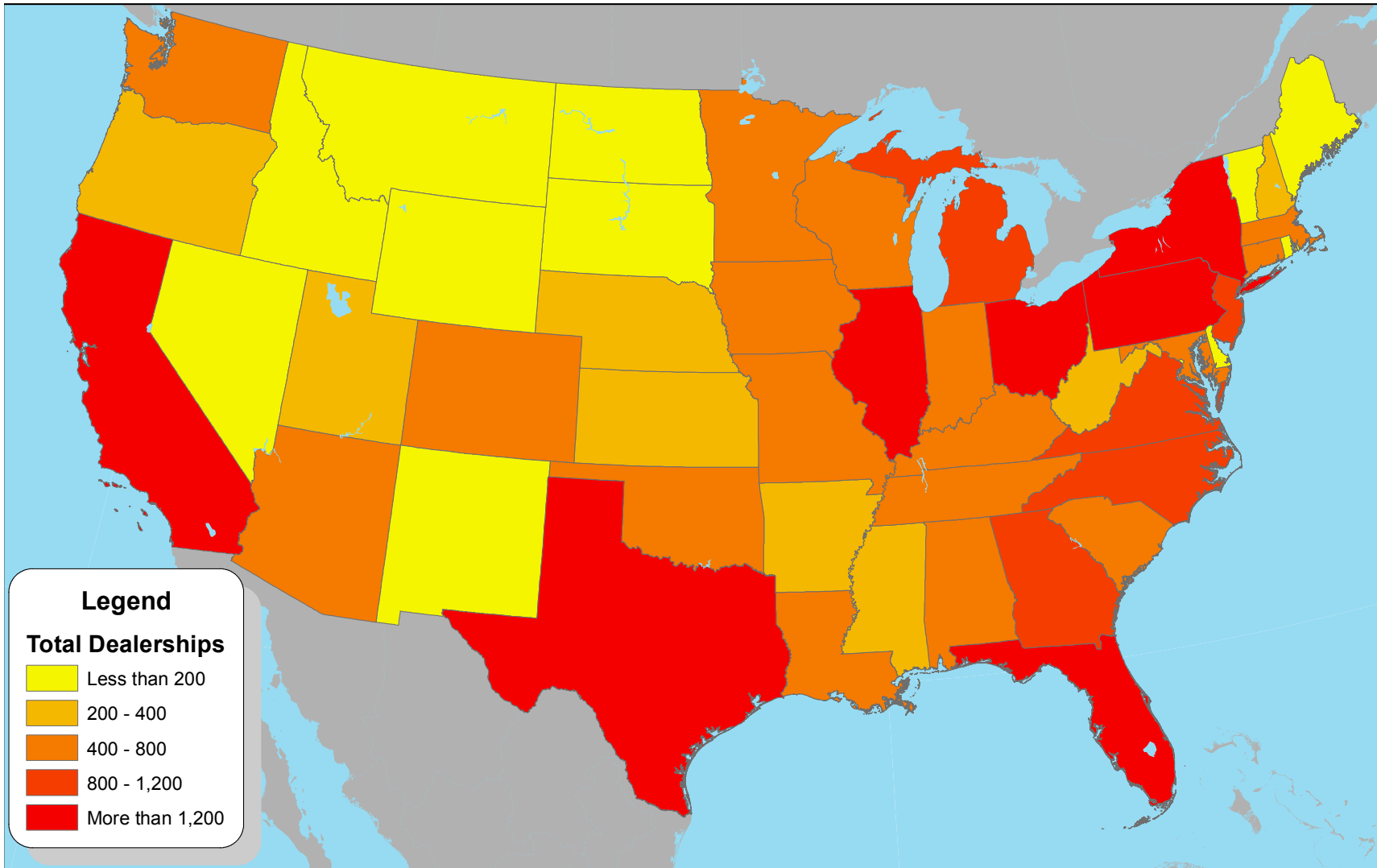


# Tax Revenues as a Percentage of Total Taxes Paid to State Governments





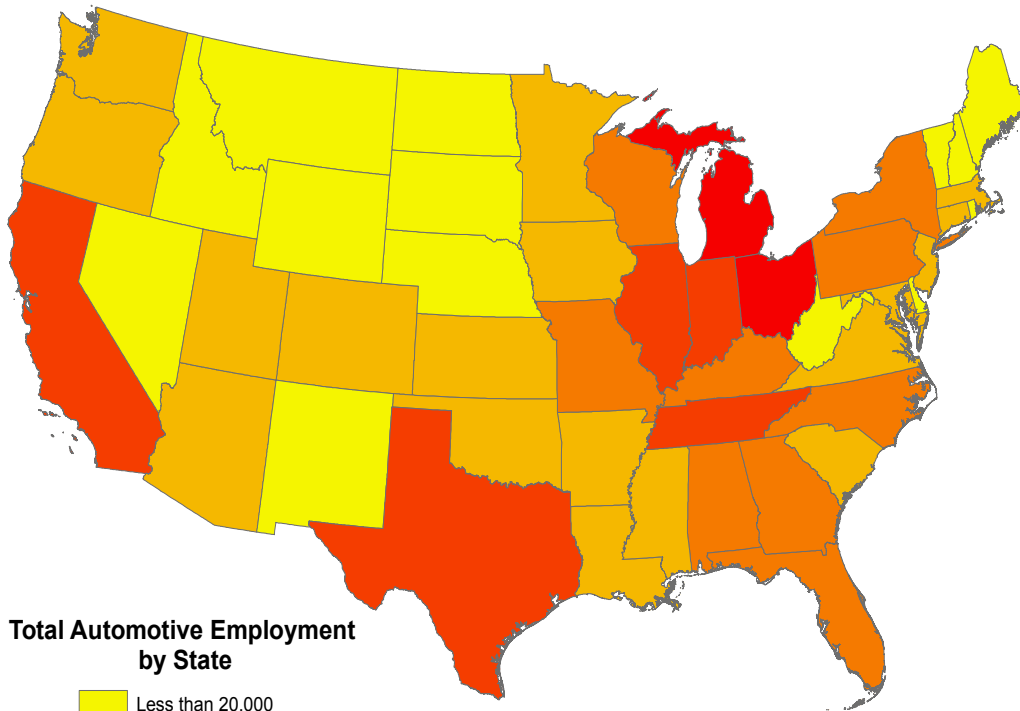
# Total Dealerships by State



# Economic Contribution Study Findings

- An estimated:
  - **8 million private sector jobs**,
  - more than **\$500 billion** in annual compensation, and
  - nearly **\$70 billion** in personal tax revenues
  - are generated by the automotive industry's **total U.S. automotive operations**, including new vehicle development and production, parts manufacturing, along with the contribution from the sales and service of new vehicles.

# Automotive Industry Total Employment



Total Automotive Employment by State

- Less than 20,000
- 20,000 to 70,000
- 70,000 to 150,000
- 150,000 to 300,000
- More than 300,000

Note: Includes only direct and estimated intermediate jobs; does not include spin-off jobs



47 STATES  
have more than  
**10,000**  
auto-related jobs



20 STATES  
have more than  
**100,000**  
auto-related jobs

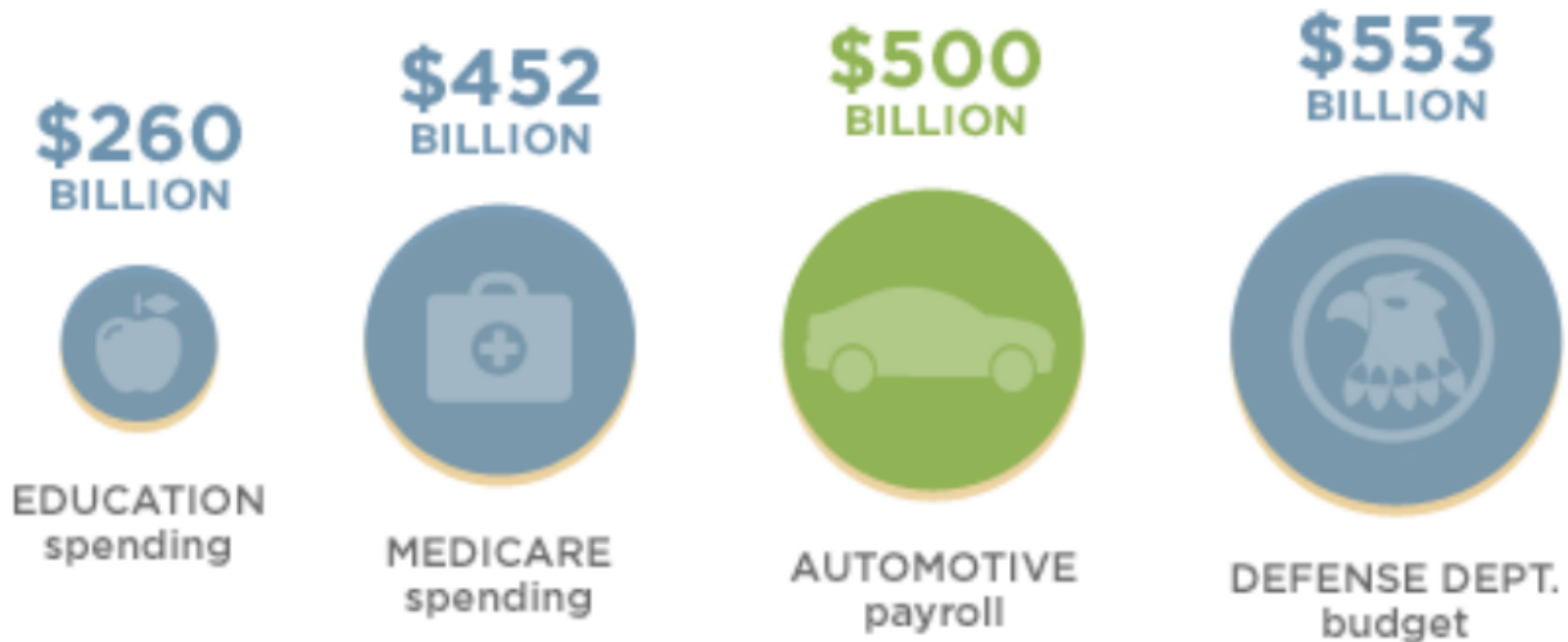


Communities working together

Source: CAR, Alliance of Automobile Manufacturers Website

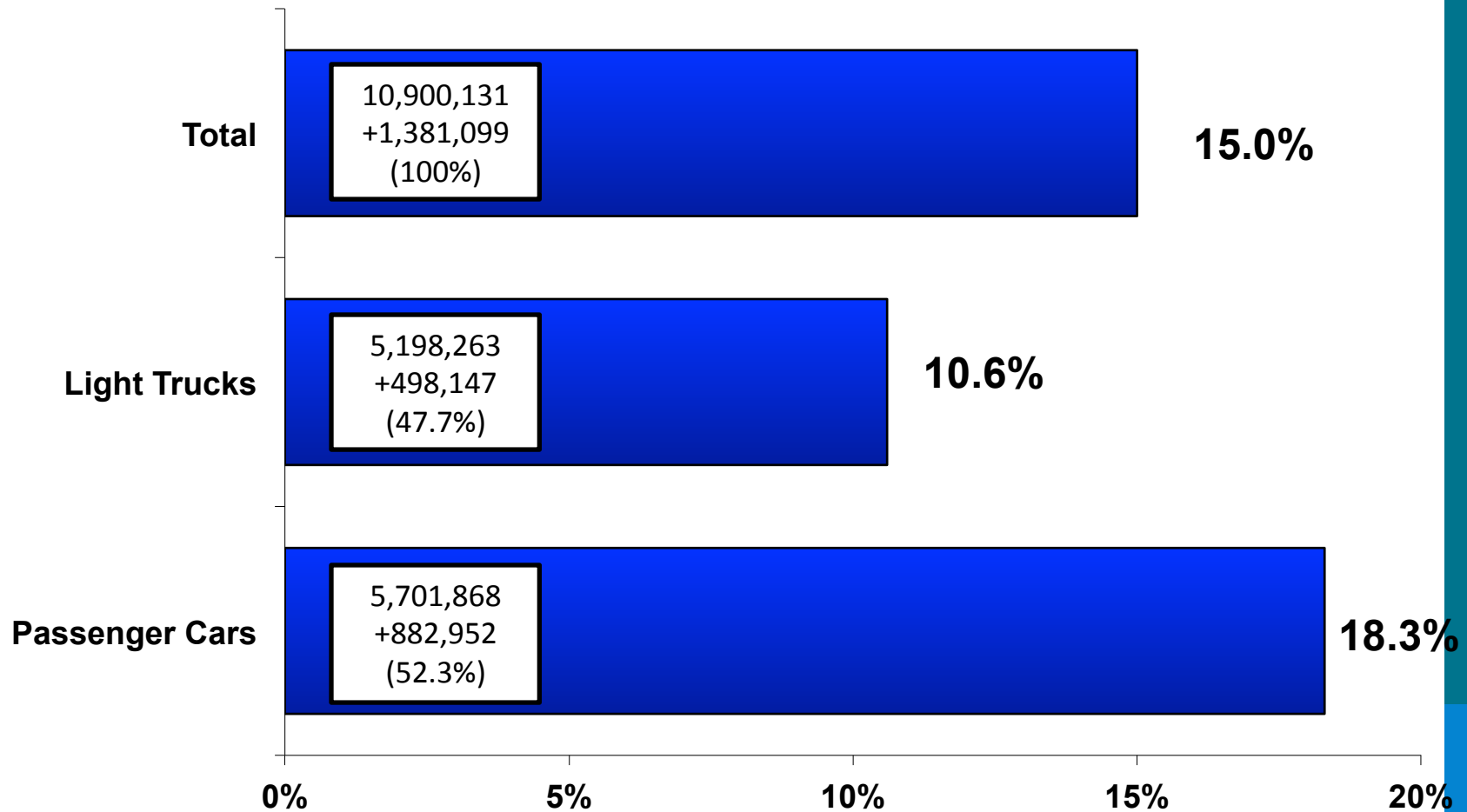


# Automotive Industry Payroll Compared to Major Federal Budget Expenditures

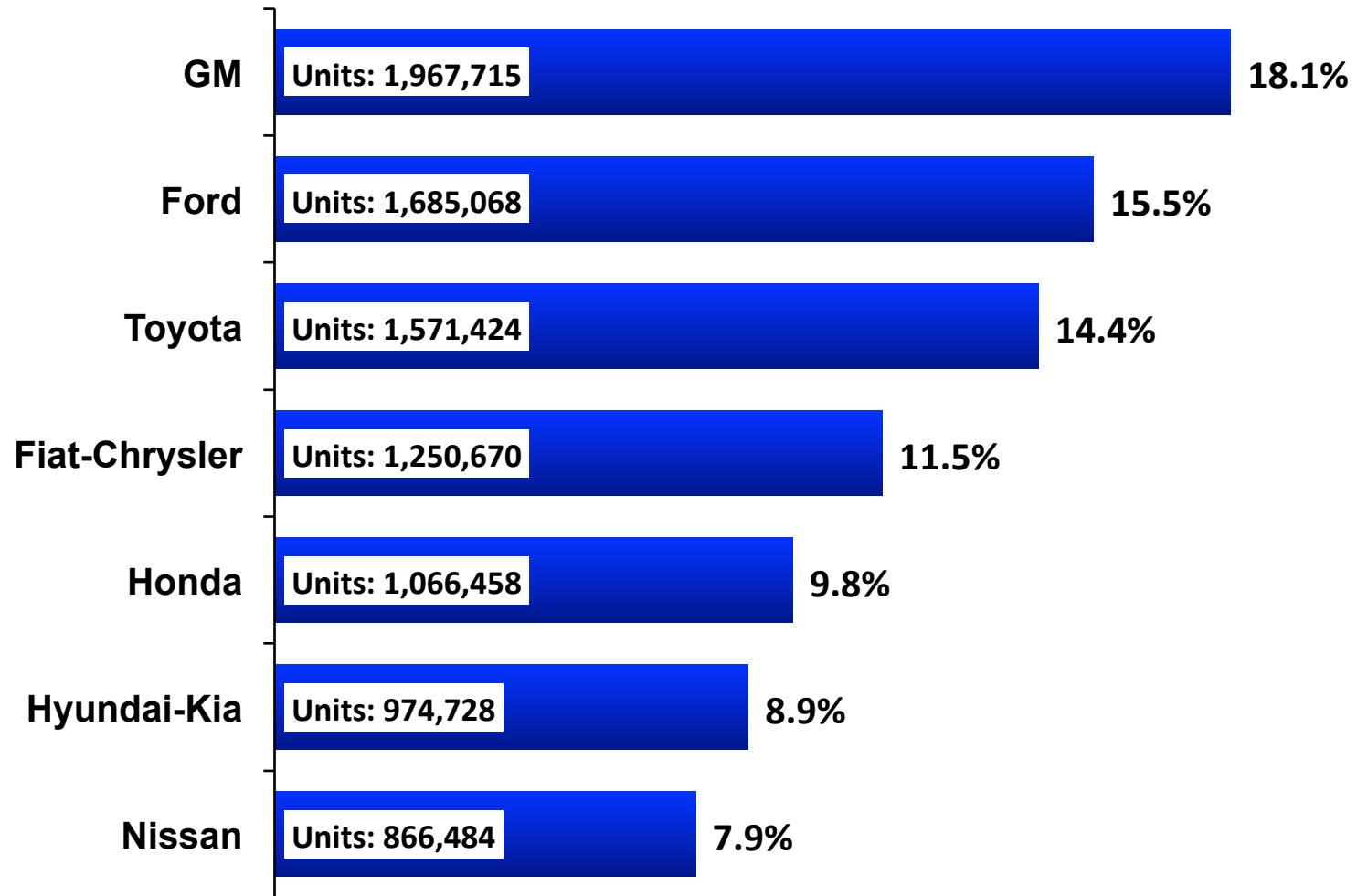


# U.S. Light Vehicle Sales

## Percent Change YTD Through September: 2012 vs. 2011



# U.S. Market Share: YTD September 2012

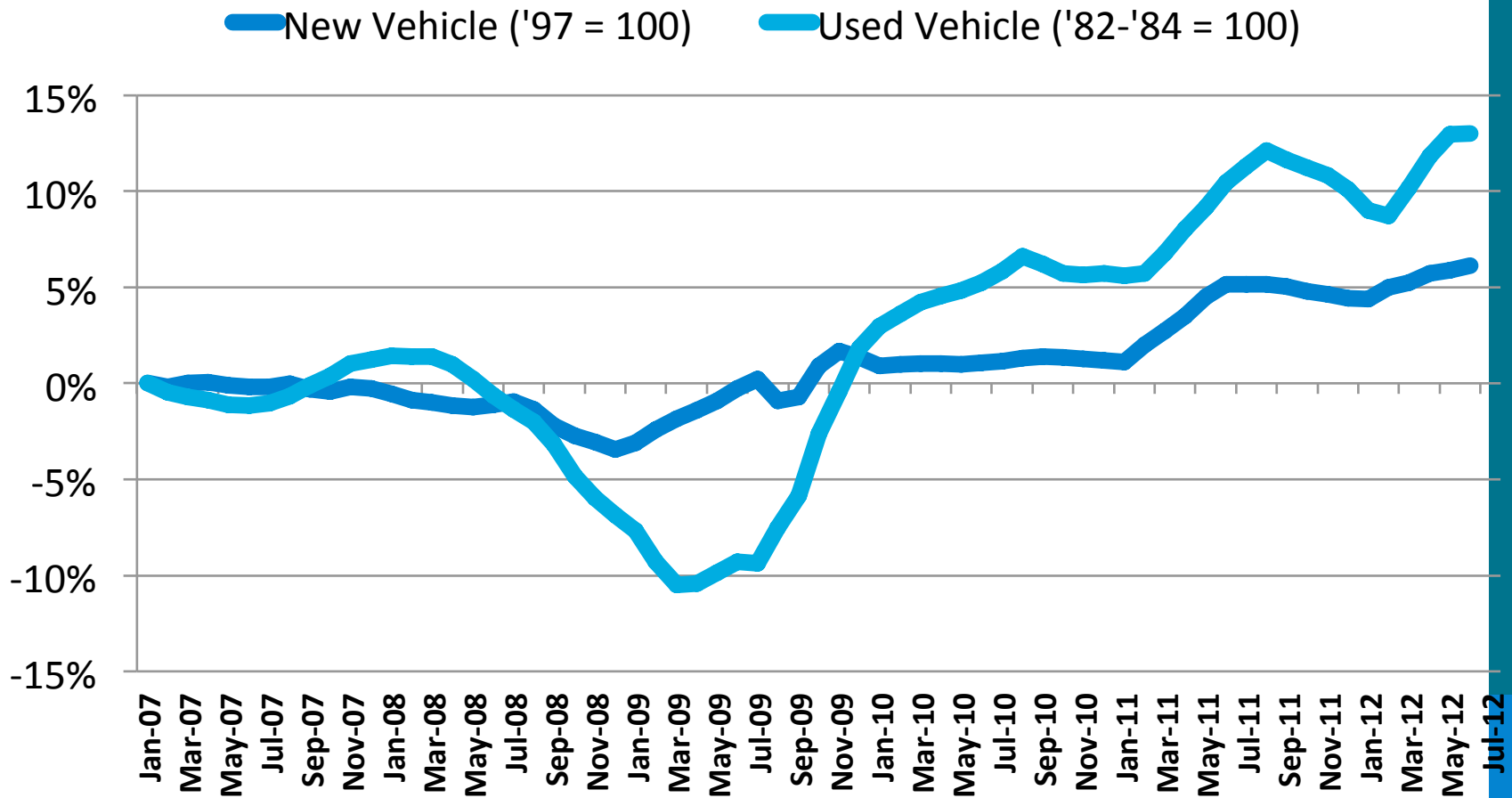


Source: Automotive News; CAR Research

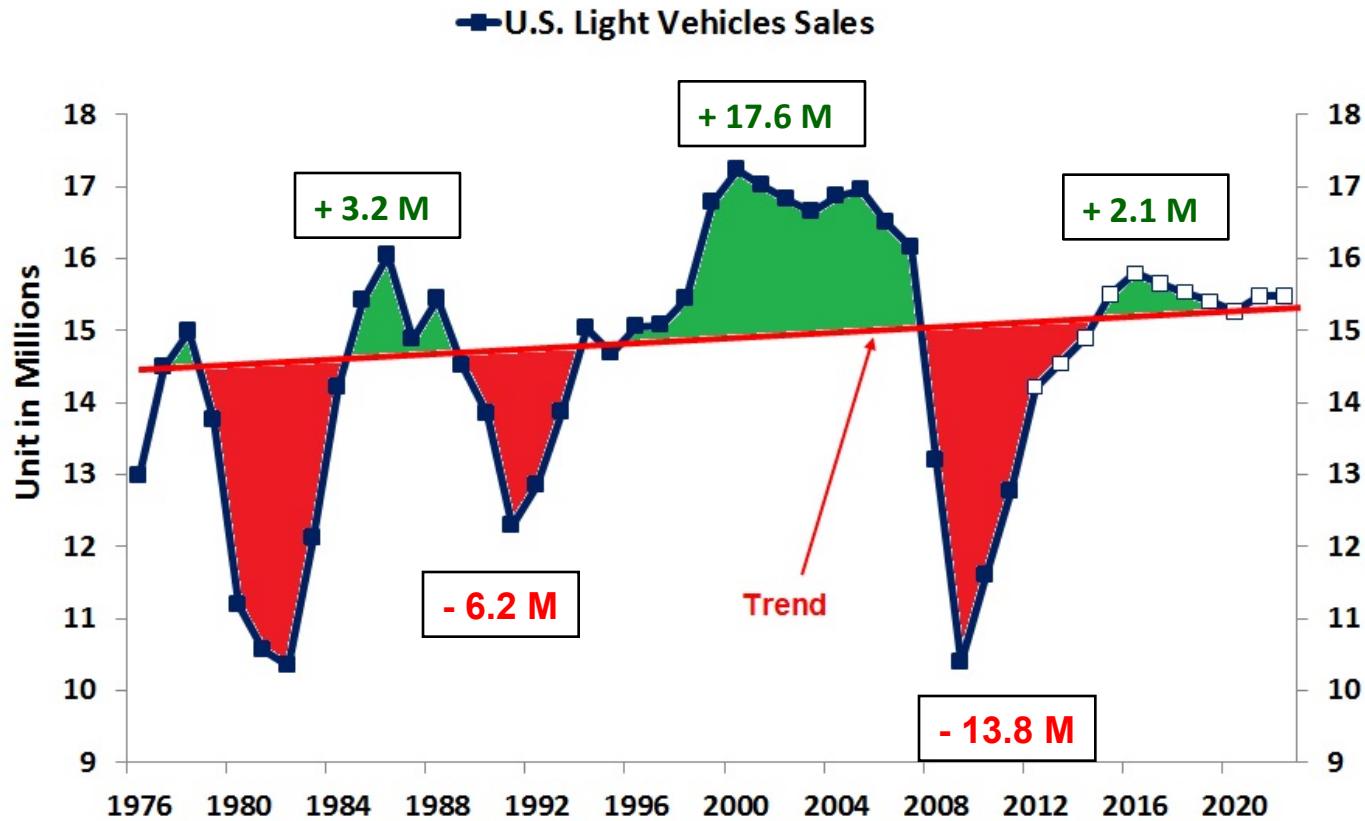


# Used Cars Are More Expensive Than Ever!

Vehicles Prices Indexes Changes from Jan 2007



# What Role Pent-up Demand?



| U.S. Sales Forecast (Millions) |      |      |      |      |      |      |      |      |      |      |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|
| 2012                           | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| 14.2                           | 14.6 | 14.9 | 15.5 | 15.8 | 15.7 | 15.5 | 15.4 | 15.3 | 15.5 | 15.5 |

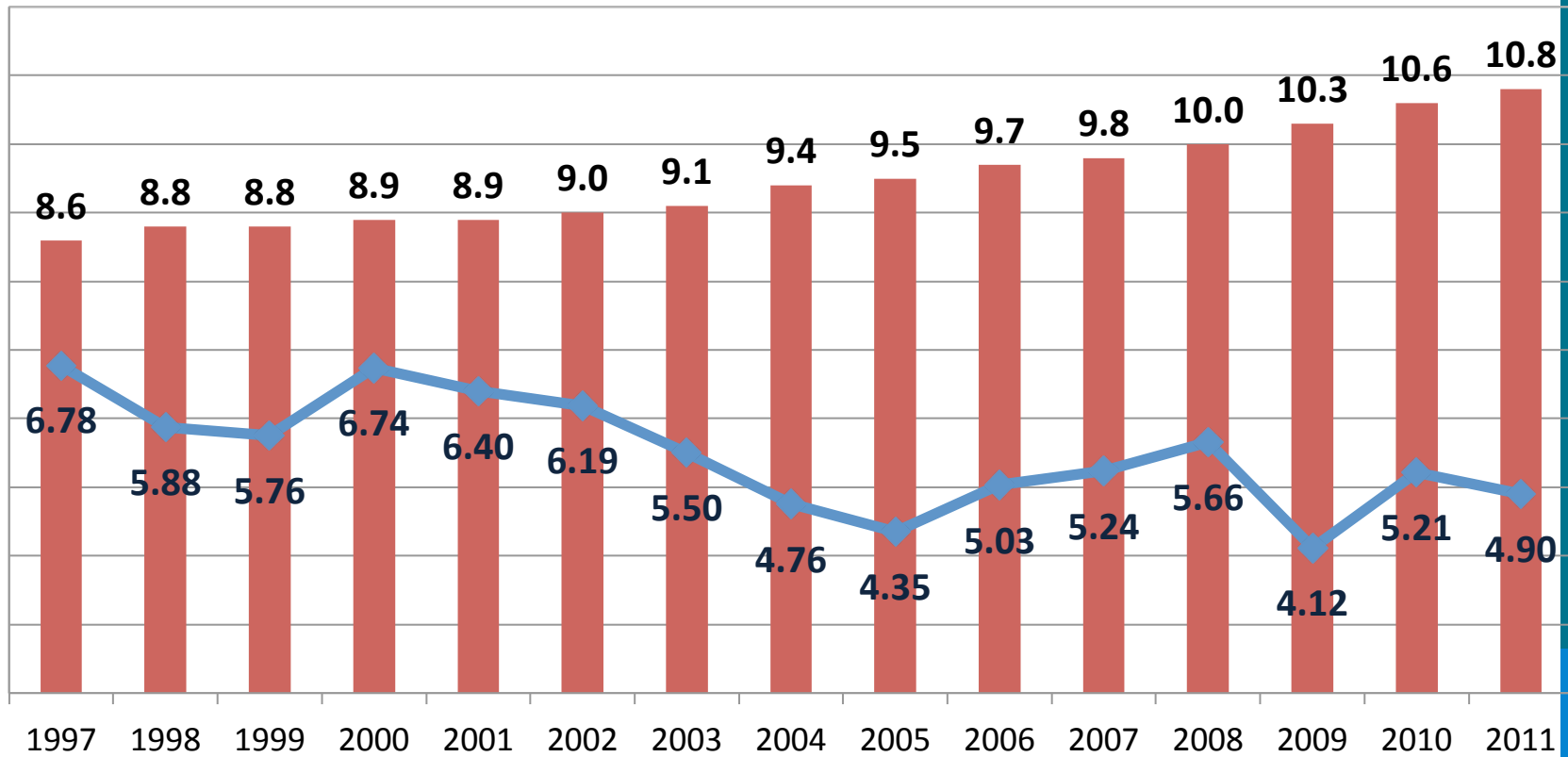
MBS 2012 - Where have all the Sales Gone?



# They are Getting Old ... U.S. Light Vehicle Age and Scrappage Rate



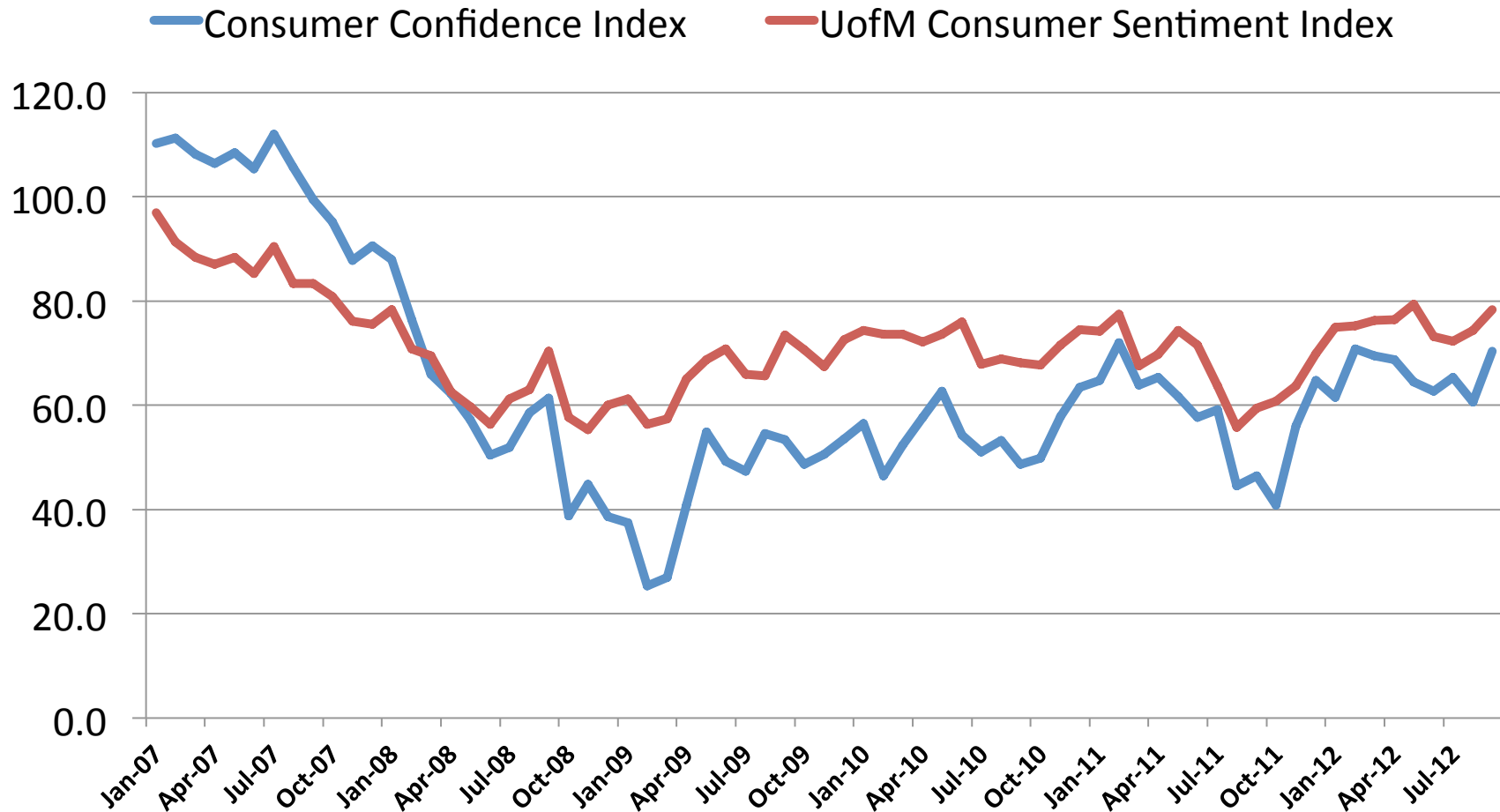
■ Average Age    ◆ Scrappage Rate (%)



Source: R.L. Polk

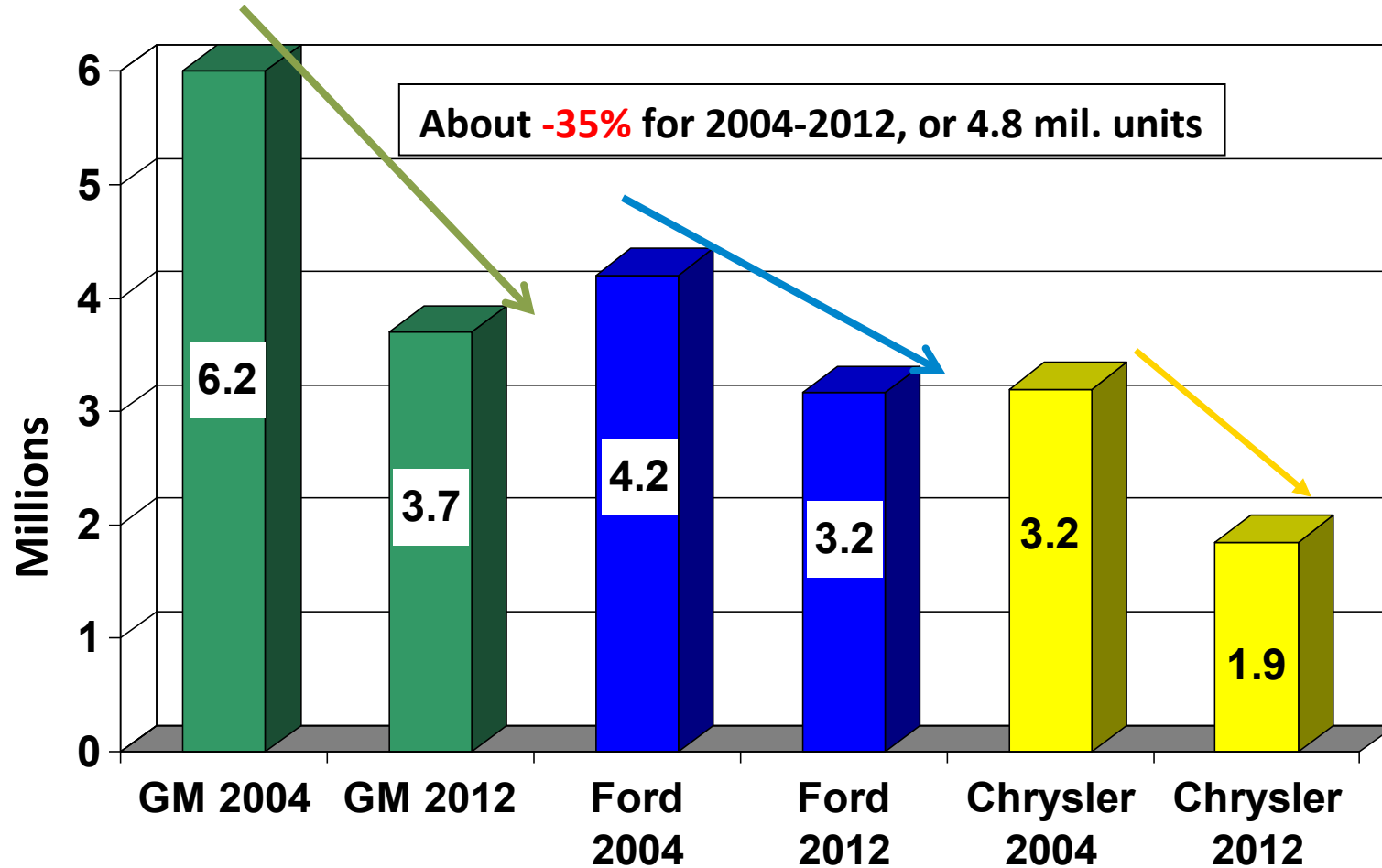


# Consumer Confidence & Sentiment January 2007—September 2012



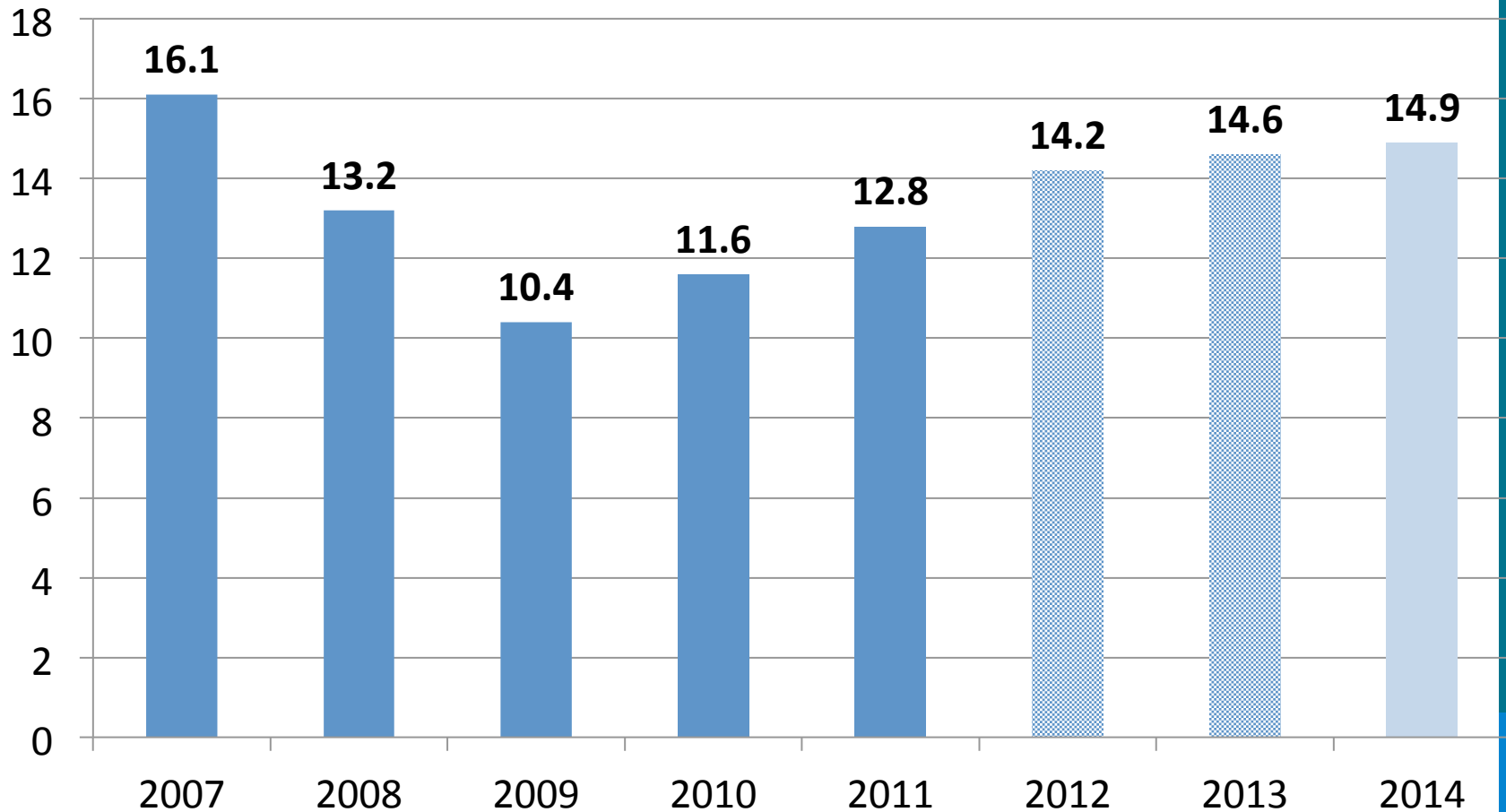
Source: The Consumer Confidence Survey, conducted for the Conference Board; Federal Reserve Economic Data

# And Capacity Was Reduced . . . 2004-2012 Change in North American Vehicle Production Capacity



Source: Company Restructuring Plans and CAR Research

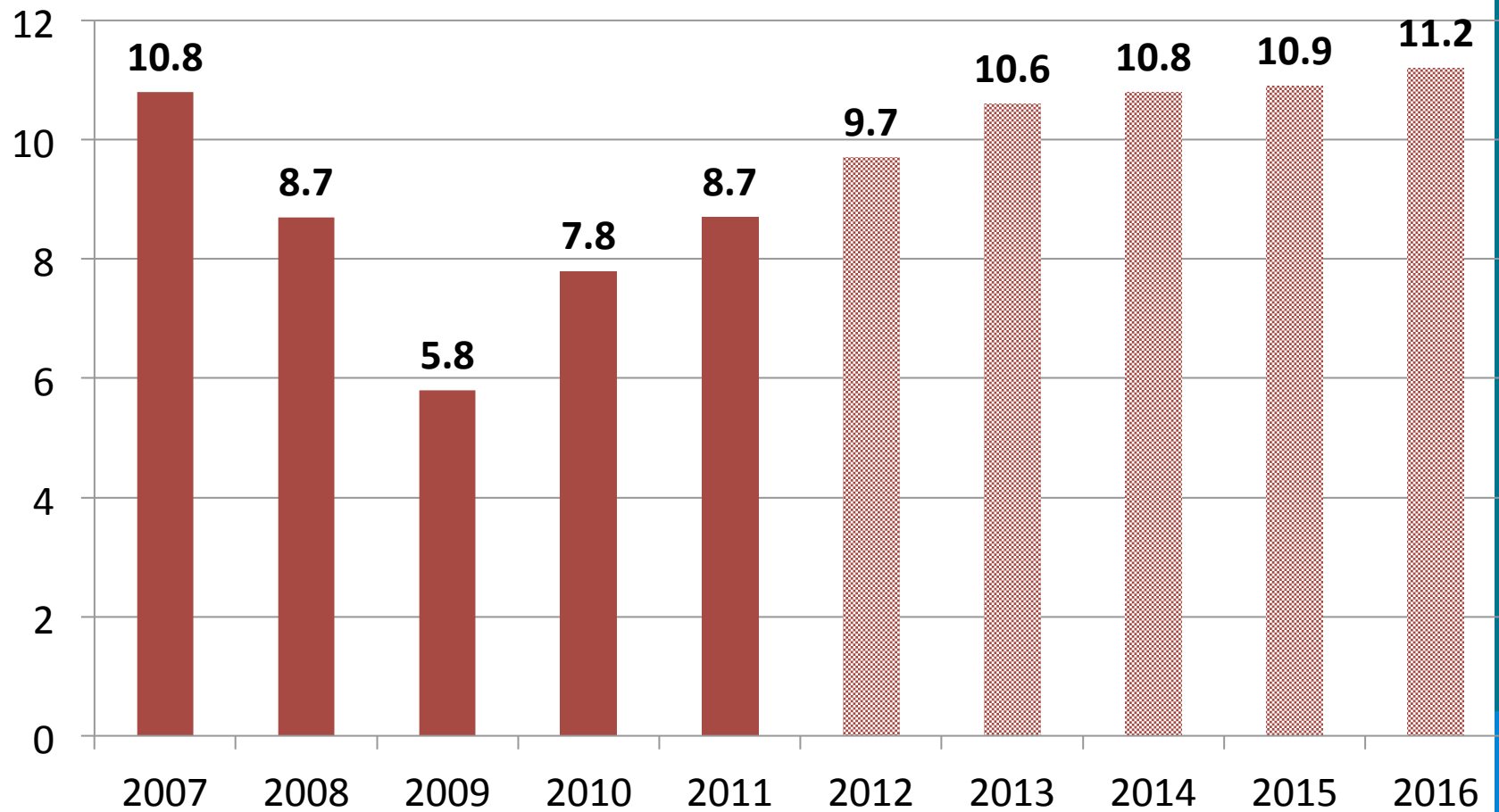
# U.S. Light Vehicle CAR Sales Forecast: 2012-2014



Source: CAR Research, IHS Global Insight

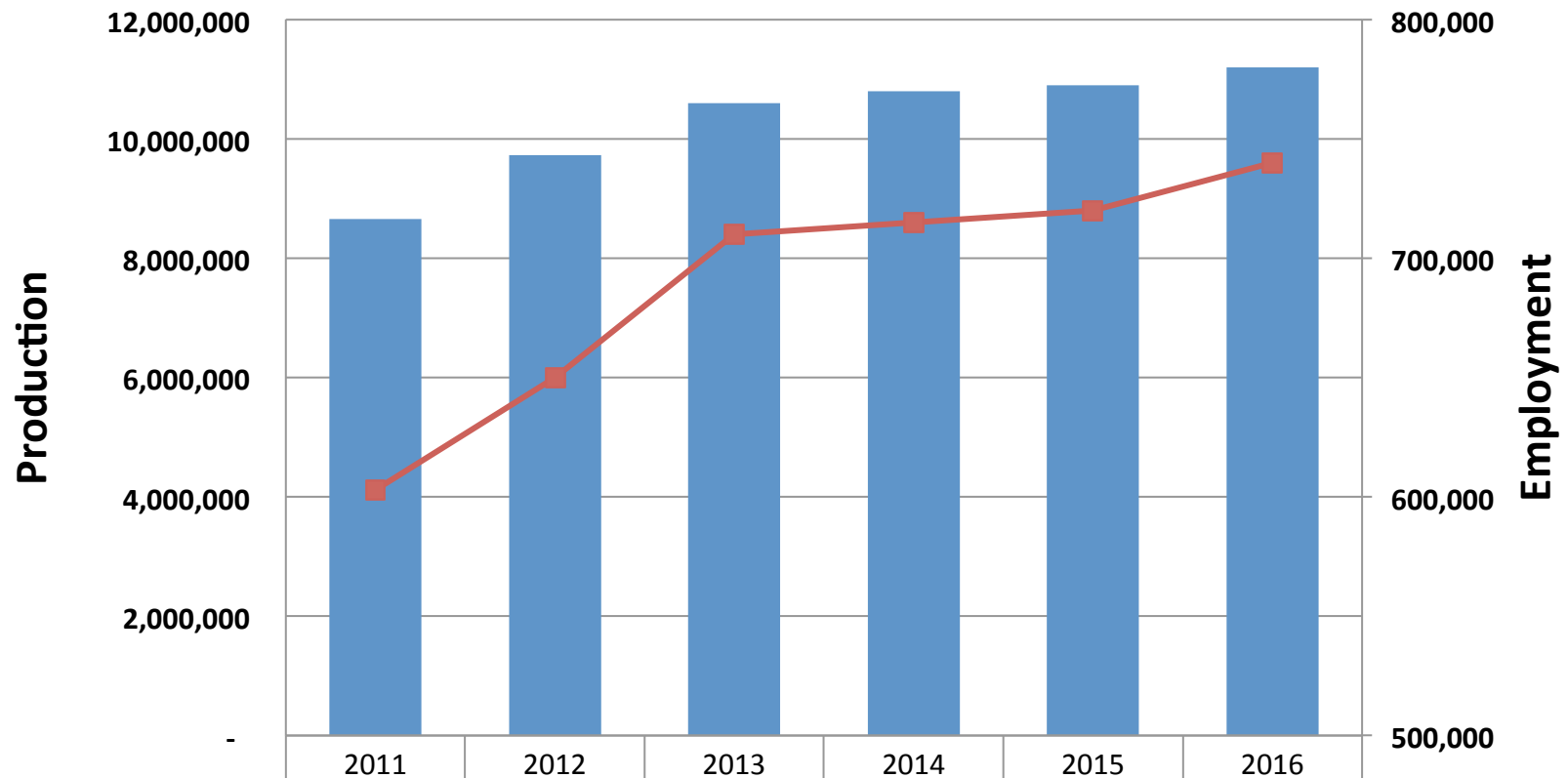


# U.S. Vehicle CAR Production Forecast: 2007-2014



Source: CAR Research, Oct. 2012

# U.S. Vehicle Production & Automotive Employment Forecasts



|                         |           |           |            |            |            |            |
|-------------------------|-----------|-----------|------------|------------|------------|------------|
| ■ Vehicle Production    | 8,655,003 | 9,721,054 | 10,600,000 | 10,800,000 | 10,900,000 | 11,200,000 |
| ■ Automotive Employment | 602,900   | 650,000   | 710,000    | 715,000    | 720,000    | 740,000    |

Source: CAR Research; BLS, Oct. 2012



# Other Stuff Now Done Right . . .

- Dealer Re-Structuring (It's Working!)
- Fewer Brands (People buy products not divisions)
- Manufacturing productivity at world-class levels
- Finances about at investment grade (plenty of cash)
- Quality results so close/need new benchmarks
- Pension shortfalls actively being worked on
- European technology now being sold in U.S.
- Global growth in China for GM



# Still Needs Work . . .

- Europe . . .
- Supplier relationships/contracting
- Insularity – “We know it all”
- Planning needed innovation
- Effective partnering
- Reducing influence of governments
- Increasing coverage of the auto value chain
- Overall level of profitability





# U.S. Auto Sales are Stagnating with the Economy

## Good:

- Used Vehicle prices and age of fleet are high
- Credit is more available/interest rates low
- Dollar is low against Yen and against Euro

But . . .

## Bad:

- Economy growing at “stall speed”
- Unemployment rate and length is terrible
- House prices . . .
- Stock market is volatile—wealth effect
- States/Cities cutting spending and employment
- Consumer confidence. . .
- Gas prices spiking with food prices
- Higher commodity prices = higher auto prices
- Employers are hesitant to hire or invest . . . Until?**

# Conclusions

- Slow Growth in New Auto Sales Due to Slow Economic Growth/High Unemployment
- Vehicles on Road Will Get Older: More Repairs
- 14.2 mil. U.S. sales this year ---- Maybe 14.3 mil.
- Intermediate cars selling BIG – with 4 cylinders
- Japanese are catching back up
- D3 much more competitive – but no more share
- FE Technology will be expensive/proprietary
- Big worry about government budget cuts/taxes next year
- Administration change???(see slide number 3!)

# Thank You

[khill@cargroup.org](mailto:khill@cargroup.org)

734-929-0488

