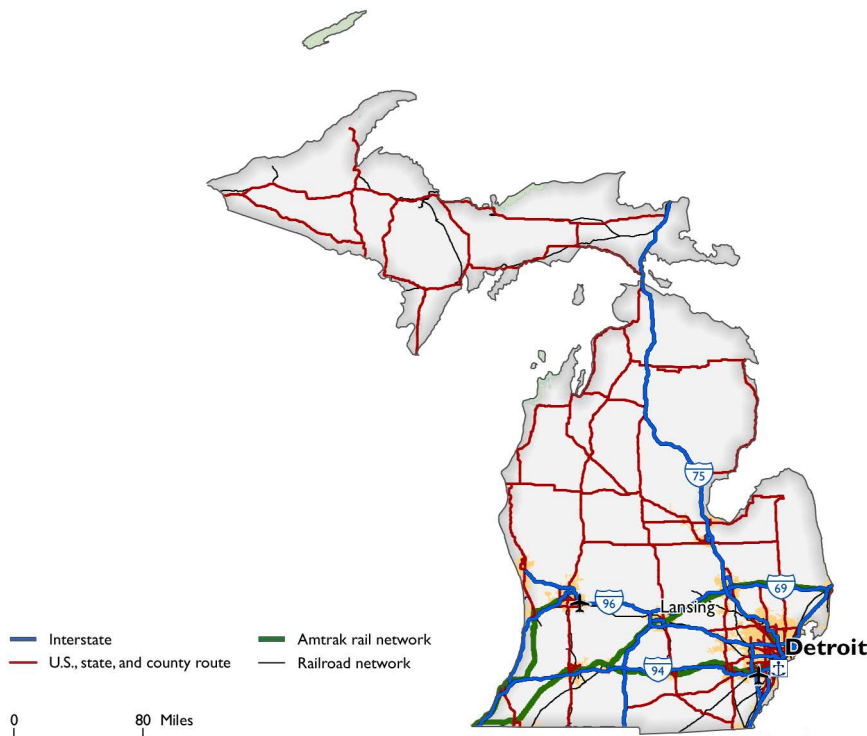


# MICHIGAN

## TRANSPORTATION BY THE NUMBERS

### TRANSPORTATION INFRASTRUCTURE



### MAJOR AIRPORTS

# 20

Includes Federal Aviation Administration Part-139 public use airports.

### MAJOR WATER PORTS

# 13

- Alpena
- Calcite
- Detroit
- Drummond Island
- Escanaba
- Marquette
- Monroe
- Muskegon
- Port Dolomite
- Port Inland
- Presque Isle
- St. Clair
- Stoneport

### MILES OF PUBLIC ROAD

# 122,141

Roads with acceptable pavement ride quality based on International Roughness Index, 2013:

Michigan	88.9%
United States	80.4%

### BRIDGES

# 11,064

Bridges classified as functionally obsolete, 2013:

Michigan	15.9%
United States	13.7%

Bridges classified as structurally deficient, 2013:

Michigan	11.7%
United States	10.1%

### MILES OF FREIGHT RAILROAD

# 3,542

### NUMBER OF MPOs

# 13

### BORDER PORTS OF ENTRY

# 3

- Detroit
- Port Huron
- Sault Ste. Marie

Includes ports ranked in the top 150 ports by tonnage in 2013.



## POPULATION

**9.9m** ▼ -1.4%  
2013 2003-2013

## EMPLOYMENT

**3.5m** ▼ -9.0%  
2013 2003-2013

## LICENSED DRIVERS

**7.0m** ▼ -1.1%  
2013 2003-2013

## REGISTERED VEHICLES

**8.2m** ▼ -4.1%  
2013 2003-2013

## TRANSIT RIDERSHIP

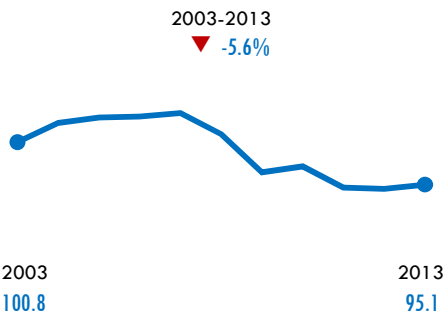
**98.7m** ▲ 19.6%  
2013 2003-2013

## AIR CARRIER ENPLANEMENTS

**18.0m** ▼ -1.7%  
2013 2003-2013

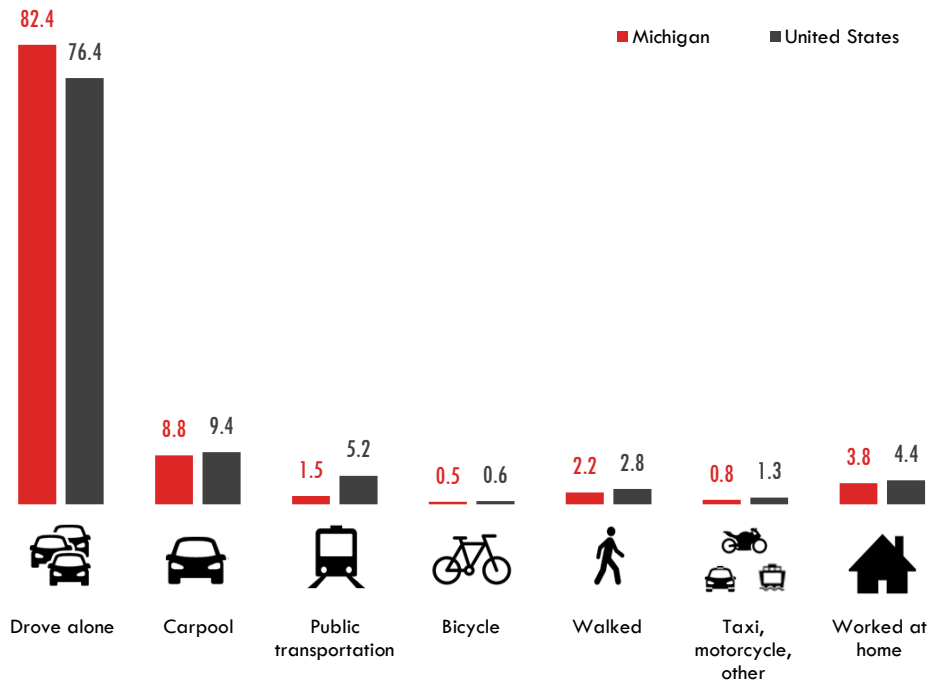
## HIGHWAY TRAVEL

Billions of vehicle miles traveled, 2003-2013



## HOW RESIDENTS GET TO WORK

Percentage of workers over age 16, 2013



## AVERAGE DAILY PERSON MILES

Miles per person per day, 2009



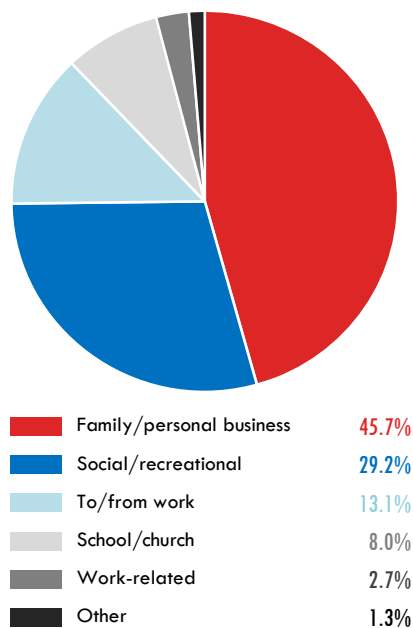
## AVERAGE DAILY PERSON TRIPS

Trips per person per day, 2009



## PASSENGER TRAVEL BY TRIP PURPOSE

Percentage of annual person trips, 2009



## TRANSPORTATION INDUSTRY JOBS

**100,454** ▲ 0.0%  
2013 2003-2013

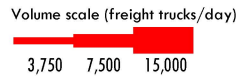
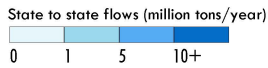
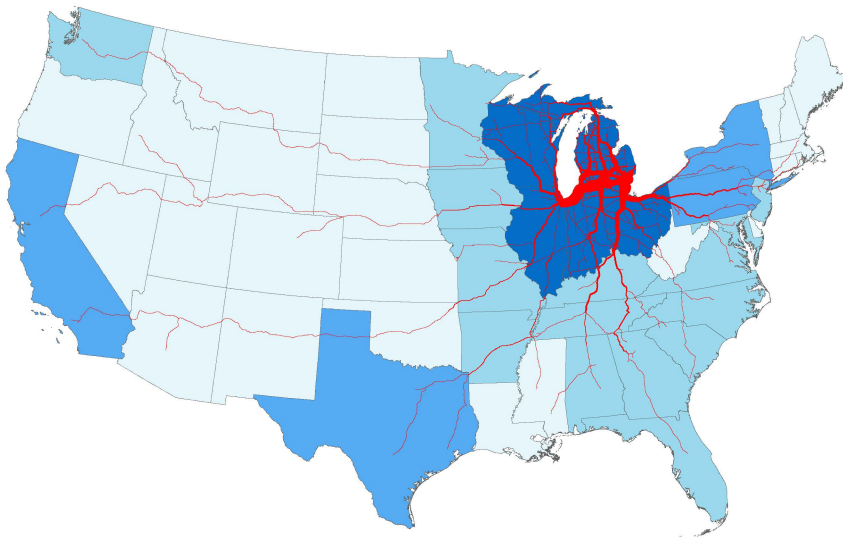
Truck transportation  
**42,509** ▲ 4.2%

Support activities for transportation  
**13,606** ▲ 16.7%

Air transportation  
**12,545** ▼ -20.4%

Couriers and messengers  
**10,797** ▼ -17.3%

## MAJOR TRUCK FREIGHT FLOWS TO, FROM, AND WITHIN MICHIGAN, 2010



## VALUE OF FREIGHT FLOW

**\$1.0t** ▲ 7.7%  
Current dollars, 2013 2007-2013

## TONS OF FREIGHT FLOW

**694.2m** ▲ 7.8%  
2013 2007-2013

## TON-MILES OF FREIGHT FLOW

**287.9b** ▲ 7.2%  
2013 2007-2013

## STATE GROSS DOMESTIC PRODUCT

**\$434.7b** ▲ 1.3%  
Current dollars, 2013 2003-2013

## TOP COMMODITIES SHIPPED FROM MICHIGAN

By **value** moved in billions of current dollars, 2013

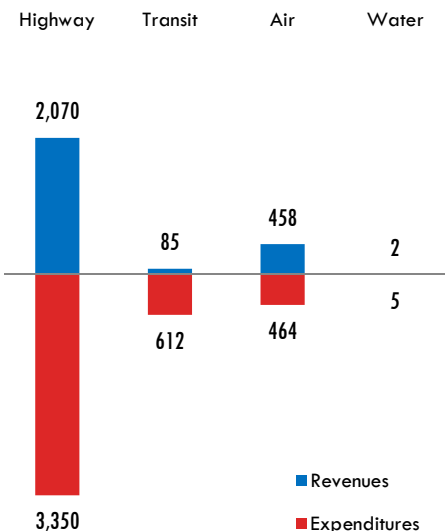
Motorized vehicles	\$121.1
Machinery	\$30.6
Base metals	\$20.0
Electronics	\$15.4
Plastics/rubber	\$14.9

By **weight** moved in millions of tons, 2013

Base metals	18.9
Motorized vehicles	18.1
Gravel	14.7
Nonmetal min. prods.	9.1
Coal-n.e.c.	7.4

## STATE AND LOCAL GOVERNMENT TRANSPORTATION REVENUES AND EXPENDITURES

Millions of current dollars, 2012



## TOP COMMODITIES SHIPPED TO MICHIGAN

By **value** moved in billions of current dollars, 2013

Motorized vehicles	\$95.4
Machinery	\$43.1
Electronics	\$32.5
Coal-n.e.c.	\$23.6
Base metals	\$20.4

By **weight** moved in millions of tons, 2013

Coal-n.e.c.	26.6
Coal	22.0
Base metals	18.8
Motorized vehicles	15.1
Basic chemicals	10.4

## TOP COMMODITIES SHIPPED WITHIN MICHIGAN

By **value** moved in billions of current dollars, 2013

Motorized vehicles	\$101.0
Machinery	\$37.1
Mixed freight	\$21.7
Base metals	\$15.6
Gasoline	\$14.8

By **weight** moved in millions of tons, 2013

Coal-n.e.c.	35.4
Waste/scrap	31.5
Gravel	27.2
Nonmetal min. prods.	26.9
Cereal grains	26.7

## RAIL FATALITIES

9 ▼ -40.0%  
2013 2003-2013

## TRANSIT FATALITIES

4 ▲ 100.0%  
2013 2003-2013

## RECREATIONAL BOAT FATALITIES

21 ▼ -27.6%  
2013 2003-2013

## HIGHWAY FATALITIES

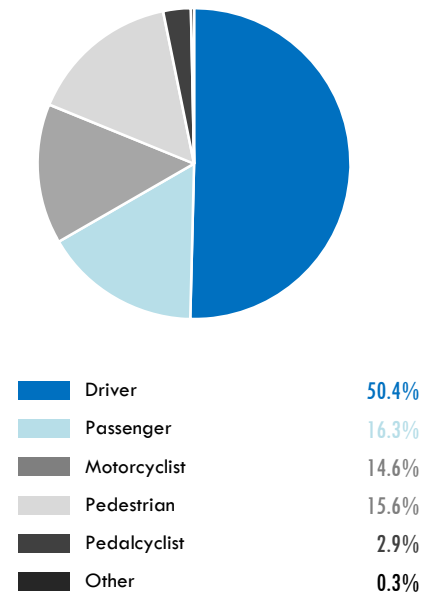
947 ▼ -26.2%  
2013 2003-2013

## HIGHWAY FATALITY RATE

Fatalities per 100 million vehicle miles traveled, 2013

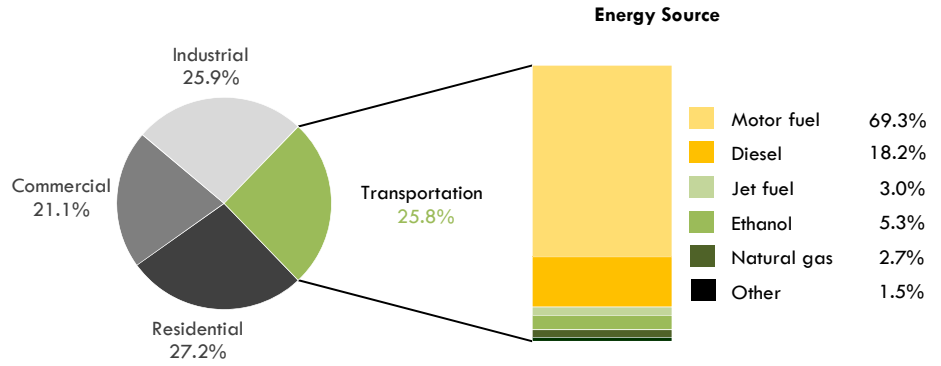


## HIGHWAY FATALITIES BY PERSON



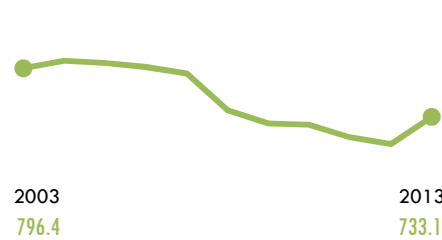
## ENERGY USE BY SECTOR

Percent of Btu consumed, 2013



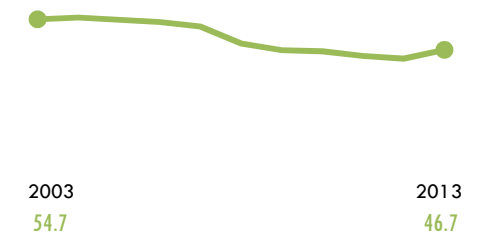
## TRANSPORTATION ENERGY USE

Trillion Btu consumed, 2003-2013



## TRANSPORTATION EMISSIONS

Million metric tons of CO<sub>2</sub>, 2003-2013



## TRANSPORTATION ENERGY USE PER CAPITA

Million Btu per capita, 2013



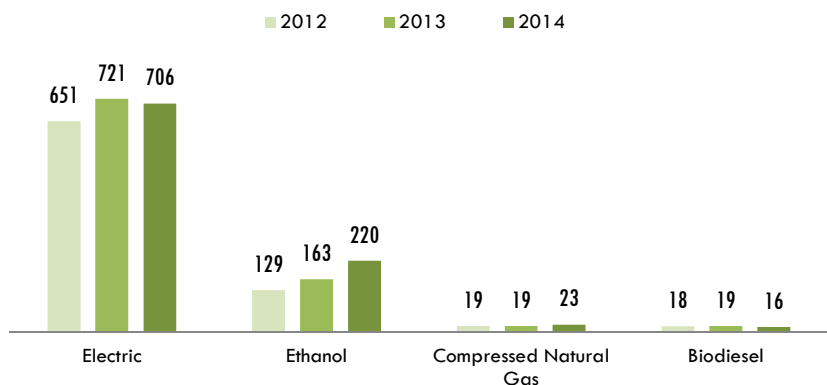
## MOTOR FUEL USE PER CAPITA

Gallons per capita, 2013



## ALTERNATIVE FUEL STATIONS

Number of stations, 2012-2014



SOURCES: **Infrastructure map, water ports, border ports**—U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Atlas Database 2014*. **Airports**—U.S. Department of Transportation, Federal Aviation Administration, *Administrator's Fact Book*. **Employment**—U.S. Census Bureau, County Business Patterns. **Passenger travel by trip purpose, average daily travel**—U.S. Department of Transportation, National Household Travel Survey. **Freight map and data**—U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework. **State GDP**—U.S. Department of Commerce, Bureau of Economic Analysis. **Highway fatalities**—U.S. Department of Transportation, National Highway Traffic Safety Administration. **All other data**—As cited in U.S. Department of Transportation, *State Transportation Statistics 2015*, available at [www.bts.gov](http://www.bts.gov).