

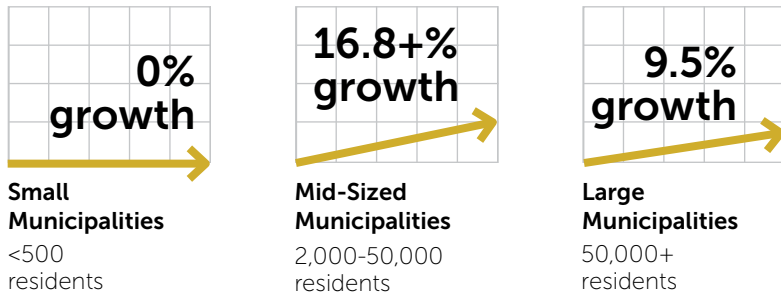


# Population

## WHERE WILL GROWTH HAPPEN THROUGH 2040?

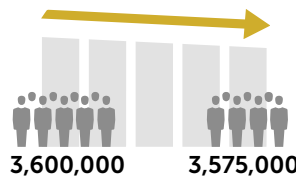
As illustrated below, projected population growth will not happen equally across all communities.

### WISCONSIN GROWTH THROUGH 2040



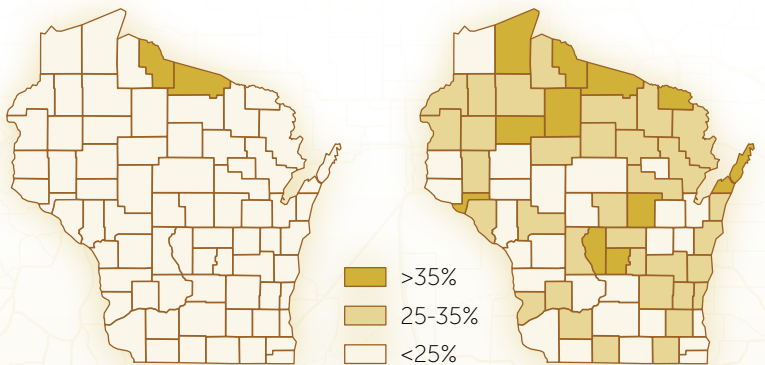
## WISCONSIN'S WORKING AGE POPULATION

The traditional working-age population in Wisconsin — ages 18 through 64 — is forecast to begin a slow decline during the 2020s and 2030s from approximately 3,600,000 to 3,575,000 in 2040.



## WISCONSIN'S SENIOR POPULATION

Wisconsin's 65+ population is expected to double from 2010 to 2040, particularly in Wisconsin's northern and rural counties.

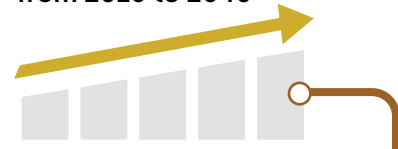


Percentage of Population, Age 65+  
2010 Census

Percentage of Population, Age 65+  
2040 Projection

## KEY FACTS

**13.5%**  
population growth  
from 2010 to 2040



Wisconsin's population in 2040 is projected to be nearly 6,500,000, a gain of over 800,000 people from 2010



According to the Wisconsin Dept. of Administration, growth from 2010-2040 is expected to follow **WISCONSIN'S INTERSTATE CORRIDORS** in and around existing urbanized areas

Mid-sized municipalities (2,000 to 50,000 residents) account for **more than two-thirds of Wisconsin population growth** by 2040

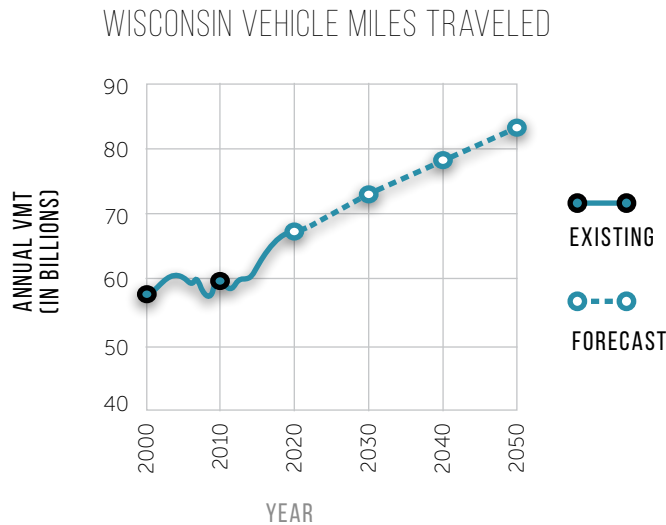




# Travel Patterns

## VEHICLE MILES TRAVELED

WisDOT anticipates the annual statewide vehicle miles traveled, or VMT, to go from 65.9 billion (2018) to 82.9 billion (2050), requiring our transportation network to accommodate increased use.

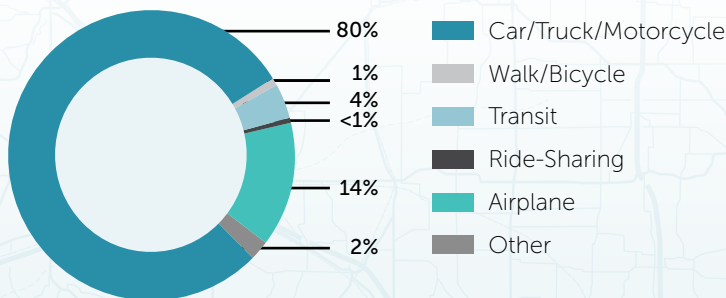


Economic and societal changes such as the Great Recession and the COVID-19 pandemic can impact travel patterns, causing short-term VMT reductions.

## MODE CHOICE

In Wisconsin, nearly 80 percent of person miles traveled (PMT) are by car, truck, or motorcycle. Airplanes, capable of covering large distances, account for just over 14 percent of PMT. Transit is responsible for 3.5 percent of PMT within the state.

PERSON MILES TRAVELED BY MODE, WISCONSIN (2017)

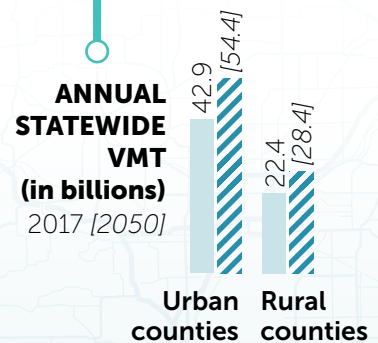
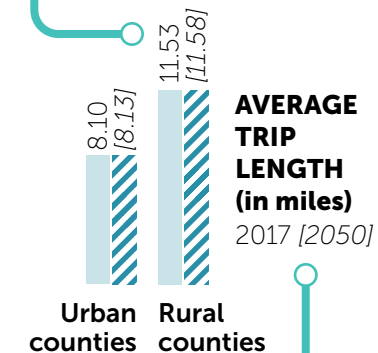


## KEY FACTS

Total statewide **trips** projected to increase by over 20 percent by 2050



**5.3 billion** total statewide trips in 2050

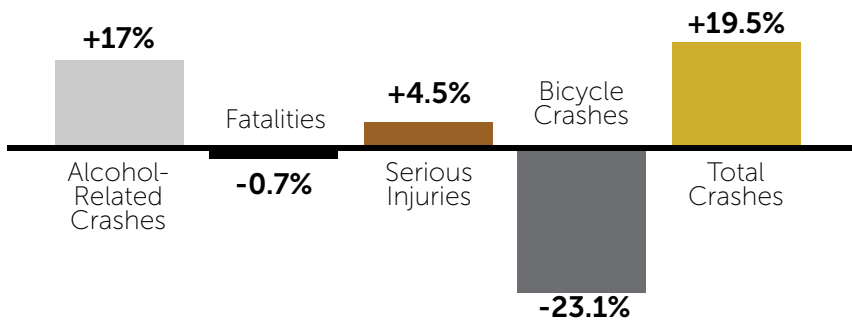




# Safety

Between 2015 and 2019, Wisconsin's roadways averaged 136,007 crashes and 573 fatalities annually.

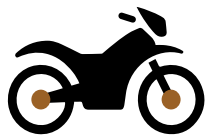
## SAFETY TRENDS ON WISCONSIN PUBLIC ROADS (2015-2019)



## CRASH STATISTICS



Of the 551 traffic fatalities in 2019, 25 percent (140) died in alcohol-involved crashes and 30 percent (163) died in speed-related crashes.



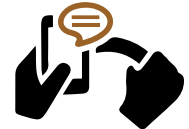
In 2019, when helmet use could be determined by the investigating officer, 65 percent of all motorcyclists killed in crashes were not wearing helmets.



Deer were the third most commonly struck object in Wisconsin (behind other vehicles and fixed objects), causing more than 18,400 crashes in Wisconsin (2019).

## KEY FACTS

In 2019, distracted driving crashes totaled 12,377 resulting in **5,273 injuries and 26 deaths**



Between 2010 and 2019, an average of **37 vehicle-train incidents** occurred each year

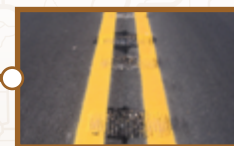


In 2019, **2,489 work zone crashes** resulted in 899 injuries and 17 deaths



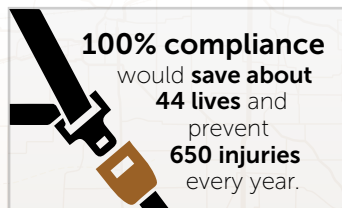
**\$153.5 million** obligated (FY 2015-2019) to the Wisconsin Highway Safety Improvement Program to fund safety projects across the state

Center line rumble strips reduce head-on fatal and injury crashes by **45 percent on rural two-lane roads** and **64 percent on similar urban two-lane roads**



## SAFETY BELTS

Approximately 89 percent of Wisconsinites wear safety belts. About half of all passenger vehicle fatalities in Wisconsin are unbelted making an occupant almost 50 times more likely to be ejected from a vehicle in the event of a crash.



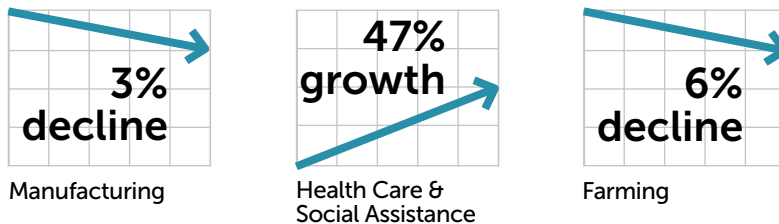


# Economic Activity

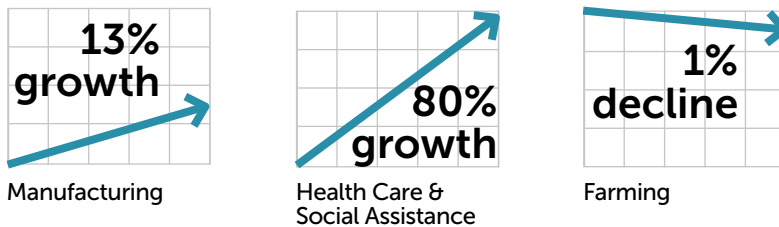
## INDUSTRY TRENDS

Projected changes in employment and earnings by industry can help provide a snapshot of how Wisconsin's economy might change by 2050.

WISCONSIN EMPLOYMENT THROUGH 2050\*



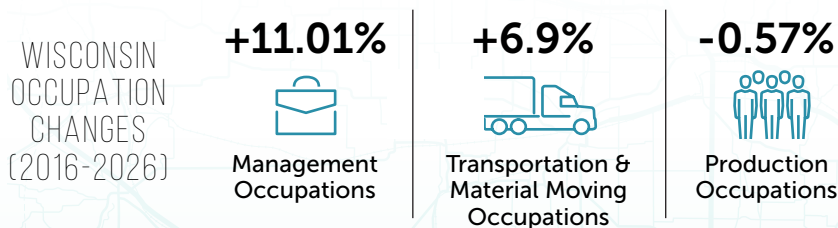
WISCONSIN EARNINGS THROUGH 2050



\*Percentages based on the value of the 2009 dollar.

## OCCUPATIONS

Between 2016 and 2026, management and transportation occupations are expected to grow in Wisconsin. During that same period, production occupations, like manufacturing, are expected to decline slightly.



## TRAVEL DELAYS

Smooth flowing traffic increases the economic competitiveness of Wisconsin businesses while producing benefits for all travelers.



Extra time spent driving in 2017 in Wisconsin  
16.4 million hours or \$517 million

## KEY FACTS

**30.8%** Total per capita income projected to rise from 2020 to 2050

**50.2%** Total Gross Regional Product (state gross domestic product) expected to increase between 2020 and 2050

Per FHWA, Wisconsin has the **9th most reliable highway system** in the U.S. according to the Interstate Truck Travel Time Highway Reliability measure (2017)

### \$3 BILLION

The approximate value of the more than **27 million tons of cargo** Wisconsin's commercial ports process annually



### \$150 BILLION

The approximate value of the **190 million tons of cargo** moved by Wisconsin freight rail companies in 2017



Connect2050.WisconsinDOT.gov

Note: The information included in this factsheet is based on estimates, projections and forecasts calculated prior to the COVID-19 pandemic.

Sources available on file



# Energy and Environment

## DID YOU KNOW?

WisDOT works to balance our system needs with a healthy environment and natural resources. Some of our activities include recycling pavement, seeding native plants along highways, wetland reclamation, using solar power at rest areas, reducing salt use, and planning for alternative fuels.

## AIR QUALITY

The Congestion Mitigation and Air Quality Program allocated \$33.2 million to transit, bike and traffic signal projects in Wisconsin for the 2020-2024 cycle.



WisDOT secured a \$1.5 million grant in 2018 from the Federal Transit Administration's Low or No Emission Program to acquire six battery electric buses for three rural transit agencies.

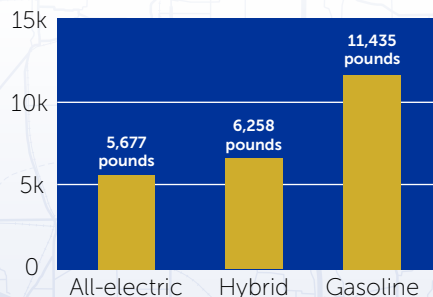
## ALTERNATIVE FUELS

Wisconsin's Interstate highways, (I-39, I-41, I-43, I-90, I-94, I-535) and US 53 and US 151 have been designated as Alternative Fuel Corridors to create a national network of alternative fueling and charging infrastructure.




There are approximately **4,500 electric vehicles** registered in Wisconsin today

ANNUAL CO<sub>2</sub> EMISSIONS PER WISCONSIN VEHICLE




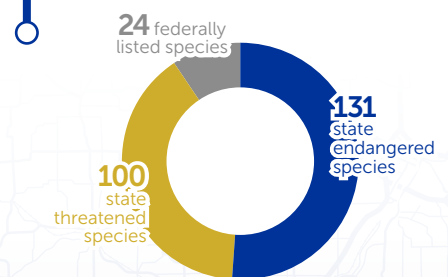
## KEY FACTS

For every **acre** of wetland impacted by highway projects, 

 **1.4 acres** are restored within the state

Since 1993, WisDOT has restored 5,800 acres of wetlands in the state

Living snow fences — strategically planted trees and shrubs — resulted in **50-75 percent fewer winter weather-related crashes** and provide habitat for pollinators including the endangered Rusty Patched Bumble Bee 



To help protect the **200+ at-risk species in Wisconsin**, WisDOT plants native seed mixes, reduces roadside mowing, sets aside habitat and preserves remnant prairie sites



# Connected and Automated Vehicles



By 2050, Wisconsin's transportation landscape will likely look very different. While some early connected and automated vehicle (CAV) technology has already arrived, WisDOT continues to explore what introducing CAVs to Wisconsin's roadways will mean for infrastructure, policy, administrative requirements, enforcement, and communities.

**Connected vehicles (CVs)** communicate with other vehicles and transportation infrastructure



**Automated vehicles (AVs)** operate with varying levels of human involvement

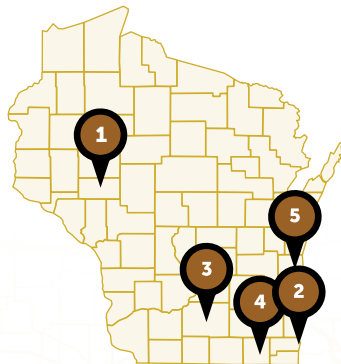
**Connected and automated vehicles (CAVs) utilize AV and CV technologies**

## WISCONSIN CAV RESEARCH

A number of Wisconsin organizations and companies are involved in CAV research including the University of Wisconsin-Madison, UW-Milwaukee, MGA Research Corporation, Traffic & Parking Control Co. Inc., the city of Madison, and WisDOT.

### TEST FACILITY LOCATIONS

- 1 Eau Claire**  
Chippewa Valley Regional Airport
- 2 Racine**  
• UW-Madison Extension Racine County  
• Gateway Technical College  
• City of Racine
- 3 Madison**  
• UW-Madison  
• City of Madison
- 4 Burlington**  
MGA Research
- 5 Elkhart Lake**  
Road America



## WAVE ADVISORY COMMITTEE

In 2020, WisDOT created the Wisconsin Automated Vehicle External (WAVE) Advisory Committee. Consisting of representatives from the private sector, nonprofit groups, various associations, academia, and other government agencies, the committee's goal is to gather stakeholder input and advice on CAV-related planning priorities, implementation policies, and impacts on the state's transportation system.

## KEY FACTS



There is a high degree of uncertainty with CAV technologies. They are expected to **achieve anywhere from 10 percent to 90 percent market penetration nationally by 2050**



With the introduction of CAVs, data will enable **real-time adjustments to traffic situations**

AVs may change **parking demand**, which could affect roadway design and land use patterns



CAVs may platoon close together in the future, **changing traffic models and roadway planning**

