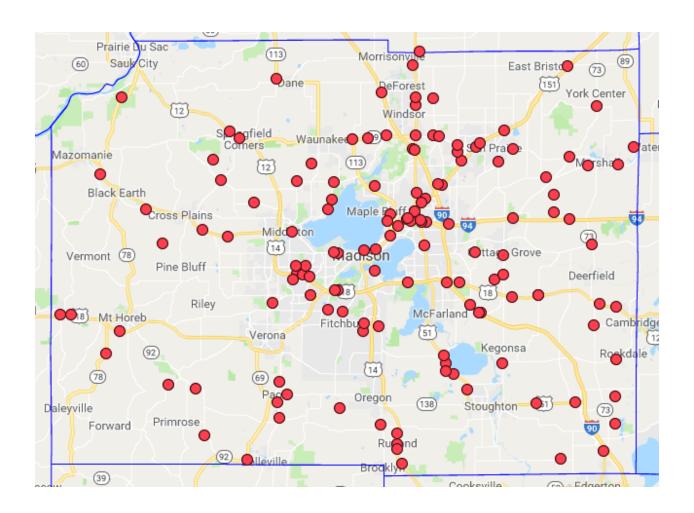
ANATOMY OF DANE COUNTY: A TRAFFIC SAFETY SUMMARY



DID YOU KNOW...

One individual is killed or injured in a crash in Dane County every 2.6 hours?

THE PLACE

Section Summary

Dane County is the center of a metropolitan area with a population of over 600,000 persons. Principal routes include the Interstate highways, USH 12, USH 14 west of STH 138, USH 151, STH 30, and STH 69. Dane County has the highest numbers in the state for total miles of roadway, miles of state highways, and miles of local roads. The county is among the top ten counties for VMT, miles of county highways, and number of registered vehicles. Dane County is among the bottom ten counties for the following: miles of roads per VMT and per capita, miles of state highways per VMT and per capita, miles of county highways per capita, miles of local roads per capita, and number of registered vehicles per capita. It is among the top ten counties for urban population, percentage of the county's population that is urban, urban land area, and percentage of the county's area that is urban.

Urbanization

Dane County is the core of the Madison metropolitan area. Dane County is also adjacent to the Janesville metropolitan area and the Baraboo, Watertown-Fort Atkinson, and Beaver Dam urban clusters. 87.67% of the population of the county lives in urban areas, and 13.76% of the area of the county is urban.¹

Road Network

Interstates 39 and 90 run in a concurrency from north to south through the county bypassing Edgerton, Madison, Windsor, and DeForest. I-94 enters Dane County from the east, traveling through Cottage Grove and meeting I-39/90 to run concurrent with those highways to the north. To the east, I-94 heads to Lake Mills, Waukesha, and Milwaukee. To the south, I-39/90 carries traffic to Janesville and Rockford, Illinois with I-39 carrying traffic toward Bloomington/Normal, Illinois and I-90 carrying traffic toward Chicago, Illinois. To the north, I-39/90/94 head into Columbia County with I-39 continuing north to Portage, Stevens Point, and Wausau, I-90/94 heading west toward Wisconsin Dells, I-90 continuing toward La Crosse, and I-94 continuing to Eau Claire and Minneapolis-St. Paul, Minnesota.

U.S. Highway (USH) 51 enters Dane County through Edgerton in the south, travels along I-39/90 for a few miles, and then turns west into Stoughton. It then travels north through McFarland, Madison's east side, Monona, DeForest, and Windsor. To the south, USH 51 goes to Janesville and to the north it goes to Arlington, Poynette, and Portage.

USH 12 is the Beltline Highway from County Trunk Highway (CTH) N in the town of Cottage Grove to the western end of the USH 12 and USH 14 concurrency in Middleton. At various times around Madison, USH 12, 14, 18, and 151 are carried along the Beltline Highway.

USH 12 is an east-west primary arterial and a multilane divided highway from the Wisconsin River to the town of Cottage Grove traveling through Middleton, Madison, and Monona. Starting in the town of Cottage Grove to the east, USH 12 is a two-lane primary arterial. To the west, USH 12 travels to Sauk City, Baraboo, and Lake Delton, and to the east, it travels to Cambridge before leaving the county to head to Fort Atkinson and Whitewater.

¹ United States Census Bureau. "Percent urban and rural in 2010 by state and county." Accessed Sept. 29, 2017. https://www.census.gov/geo/reference/ua/urban-rural-2010.html

USH 14 is designated as an east-west highway traveling through Mazomanie, Black Earth, Cross Plains, Middleton, Madison, Fitchburg, and Oregon. USH 14 is a freeway through Fitchburg and Oregon south of the Beltline Highway, after which it is a two-lane highway. To the south, USH 14 heads to Evansville and Janesville. From Middleton to the west, USH 14 is a primary arterial that carries traffic to and from Arena, Spring Green, and Richland Center via Cross Plains, Black Earth, and Mazomanie.

USH 151 is a north-south highway that runs from southwest to northeast through Dane County, crossing through Blue Mounds, Mount Horeb, Verona, Fitchburg, downtown Madison and Sun Prairie. It is a freeway starting in Sun Prairie and then to the northeast. To the north, USH 151 travels to Columbus, Beaver Dam, and Fond du Lac, carrying traffic to and from northeast Wisconsin. USH 18 runs east to west through Dane County, entering the county in Cambridge and running through Madison, Monona, Fitchburg, Verona, Mount Horeb, and Blue Mounds. USH 12 and 18 are concurrent from Cambridge to Madison's west side. To the east, USH 18 travels to Jefferson. USH 18 and 151 are concurrent from Madison's south side west to Dodgeville via Barneveld and Ridgeway. USH 18 continues west to Prairie du Chien and USH 151 continues south to Dubuque, Iowa, connecting Wisconsin with points south and west. USH 18/151 is a freeway around Verona and around Mount Horeb, and it is an expressway with at-grade junctions in rural areas.

State Trunk Highway (STH) 69 is a primary arterial that begins at USH 18/151 near Verona and heads south to Belleville, carrying traffic to and from New Glarus, Monroe, and Freeport, Illinois. CTH PB, a highway that travels from Verona and Belleville, also carries some of this traffic.

STH 73 begins at I-39/90 near Edgerton and runs north through Deerfield and Marshall before heading to Columbus and Randolph. STH 78 runs south to north along the west side of the county through Mazomanie, Black Earth, and Mount Horeb. To the north, it heads to Sauk City, Prairie du Sac, and Merrimac, and to the south it heads to Blanchardville, Argyle, and Gratiot. STH 19 begins at STH 78 east of Mazomanie and heads west through Waunakee, DeForest, Windsor, Sun Prairie, and Marshall before traveling to Waterloo and Watertown. STH 92 begins at STH 78 in Mount Horeb and heads south to Belleville and continues to Brooklyn, ending at USH 14.

STH 113 begins at USH 151 on Madison's isthmus and heads north through Waunakee and Dane. To the north, it heads to Lodi, Merrimac, and Baraboo. STH 30 is a divided highway on Madison's east side that begins at the southern end of the I-39/90/94 concurrency and heads west to USH 151. STH 188 begins at USH 12 in the town of Roxbury and heads north toward the Merrimac Ferry. STH 138 begins at USH 14 in Oregon and heads east to Stoughton, where it turns south into Rock County. STH 106 begins at STH 73 north of Edgerton and heads east to Fort Atkinson. STH 134 begins at USH 12/18 in Cambridge and heads north to the community of London in Jefferson County. STH 89 cuts across the northeast corner of the county in the town of York, connecting Columbus and Waterloo. Rockdale is located along CTH B between Cambridge and Stoughton. Shorewood Hills and Maple Bluff are villages along Lake Mendota surrounded by Madison. CTH MS (University Avenue) connects Shorewood Hills with USH 12/14 via Madison's west side and Middleton.

Miles of Roadway

There are 4,184 miles of roadway in the county, including 402 (9.6%) miles of state roads, 526 (12.6%) miles of county roads, 3,235 (77.3%) miles of local roads, and 21 miles of another type.²

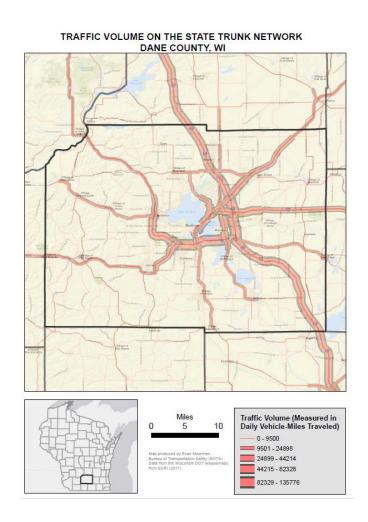
Vehicle Registrations and Vehicle Miles of Travel (VMT)

In 2016, there were 210,626 autos, 21,330 cycles, 30,210 trailers, and 229,714 trucks registered in Dane County.³ VMT in 2016 was 5,127,633,880.⁴

Traffic Volume

As can be seen, traffic volumes in Dane County are highest on Interstate Highways 39, 90, and 94 southeast and north of central Madison, and on USH 12/18 ("the Beltline") south of Madison. The maximum daily VMT in the county is reported at about 135,000.

FIGURE 1:



² Wisconsin Department of Transportation. "County Maps." Accessed Sept. 29, 2017. http://wisconsindot.gov/Pages/travel/road/hwy-maps/county-maps/default.aspx

³ Wisconsin Department of Transportation. "Facts and Figures 2016, Vehicles Registered by County." Accessed Nov. 6, 2017. http://wisconsindot.gov/Documents/about-wisdot/newsroom/statistics/factsfig/vehregcounty.pdf

⁴ Wisconsin Department of Transportation. "2016 Vehicles Miles of Travel (VMT) by County." Accessed Nov. 6, 2017. http://wisconsindot.gov/Documents/projects/data-plan/veh-miles/vmt2016-c.pdf

Commuting Flows

FIGURE 2: COMMUTING FLOWS AMONG COUNTIES

| Workers who Reside in Dane County Wo | ork in: | People who Work in Dane County F | Reside in: |
|--------------------------------------|---------|----------------------------------|------------|
| Dane County | 258,949 | Dane County | 258,949 |
| Rock County | 1,713 | Columbia County | 10,147 |
| Columbia County | 1,669 | Rock County | 8,696 |
| Sauk County | 1,636 | Green County | 5,337 |
| Jefferson County | 1,404 | Jefferson County | 5,311 |
| Waukesha County | 981 | Sauk County | 4,280 |
| Milwaukee County | 881 | Iowa County | 3,221 |
| Iowa County | 751 | Dodge County | 2,196 |
| Green County | 659 | Waukesha County | 1,389 |
| Dodge County | 583 | Milwaukee County | 751 |
| Walworth County | 512 | Walworth County | 561 |
| Cook County, IL | 349 | Lafayette County | 549 |
| Winnebago County | 194 | Cook County, IL | 544 |
| Hennepin County, MN | 167 | Marquette County | 517 |
| Grant County | 135 | Winnebago County, IL | 493 |
| Fond du Lac County | 134 | Grant County | 483 |
| Others | 3,369 | Others | 6,030 |

As seen below in Figure 3, the most common commuting flow between two different municipalities is between residences in Fitchburg and workplaces in Madison.

FIGURE 3: COMMUTING FLOWS BETWEEN MUNICIPALITIES (TOP 15)

| Residence | Place of Work | Number |
|----------------|---------------|--------|
| Fitchburg | Madison | 8,146 |
| Sun Prairie | Madison | 7,911 |
| Madison | Middleton | 6,592 |
| Middleton | Madison | 5,386 |
| Madison | Verona | 3,780 |
| Madison | Fitchburg | 3,430 |
| Madison | Monona | 3,009 |
| Waunakee | Madison | 2,890 |
| Verona | Madison | 2,572 |
| Monona | Madison | 2,465 |
| McFarland | Madison | 2,425 |
| Madison (Town) | Madison | 2,417 |
| Oregon | Madison | 2,400 |
| DeForest | Madison | 2,343 |
| Stoughton | Madison | 2,166 |

⁶

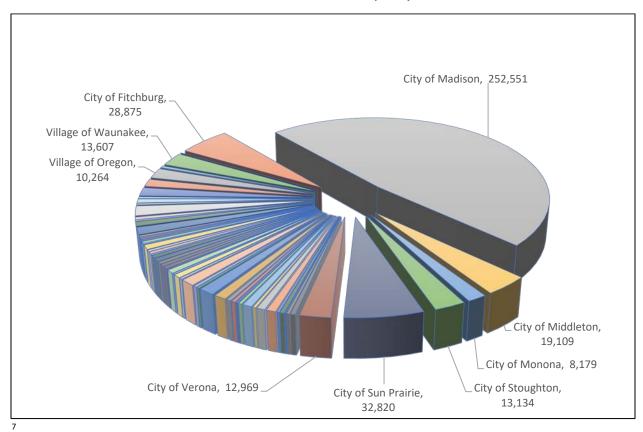
⁵United States Census Bureau. 2009-2013 5-Year American Community Survey Commuting Flows. https://www.census.gov/data/tables/time-series/demo/commuting/commuting-flows.html Accessed Sept. 29, 2017.

⁶ United States Census Bureau. 2009-2013 5-Year American Community Survey Commuting Flows. https://www.census.gov/data/tables/time-series/demo/commuting-flows.html Accessed Oct. 5, 2017.

THE POPULATION

The population of Dane County—slightly over 530,000 individuals—is dispersed through 60 different jurisdictions. The largest city, the city of Madison, reports a population of over 250,000 individuals, while other large communities include the city of Sun Prairie and the city of Fitchburg.

FIGURE 4: POPULATION OF DANE COUNTY MUNICIPALITIES (2016)



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⁷ United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2012-2016 American Community Survey 5-Year Estimates. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_DP03&src=pt Accessed November 4th, 2017.

Population Trends

Between 2010 and 2016, the county's population increased significantly (by about 8.9%). The average age of the county is younger than the state generally (34.7 compared to 39 years). Almost all the jurisdictions in the county are gaining population, although relative growth is highest in the southern and central portions of the county (*i.e.* within the communities of Fitchburg and Verona). (In the images, the measure of absolute population change merely shows the raw population changes between 2010 and 2016, while the measure of "relative population change" weights such absolute changes by the base population figures of 2010).⁸

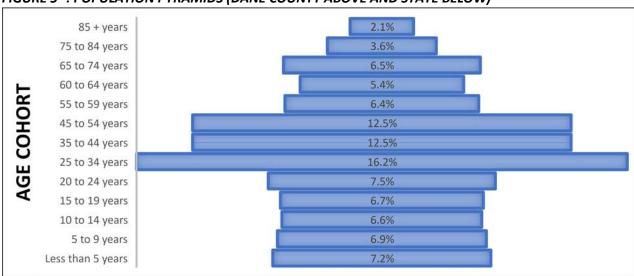
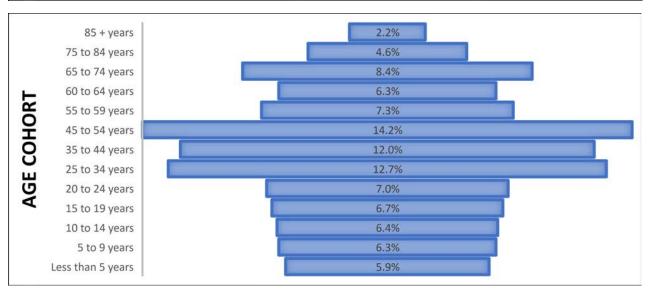


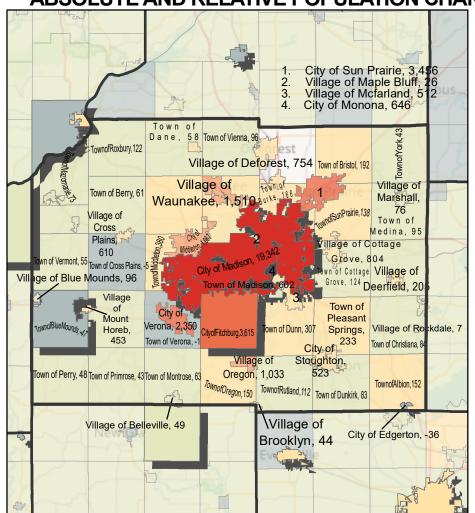
FIGURE 5 9: POPULATION PYRAMIDS (DANE COUNTY ABOVE AND STATE BELOW)

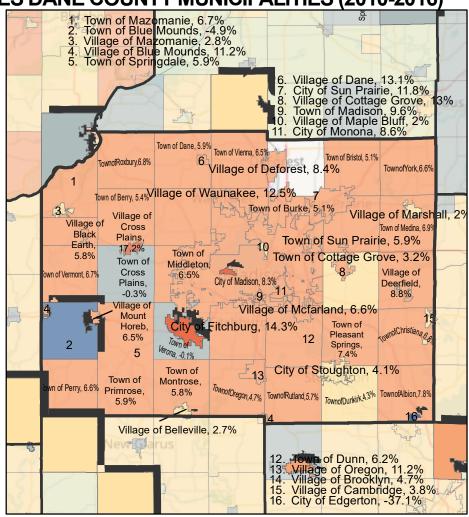


⁸ The highlighted jurisdiction in the image shows the two jurisdictions that are growing fastest and the two jurisdictions growing the slowest.

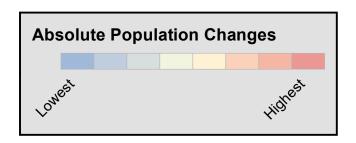
⁹ United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2012-2016 American Community Survey 5-Year Estimates. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS 15 5YR DP03&src=pt Accessed November 6th, 2017.

ABSOLUTE AND RELATIVE POPULATION CHANGES DANE COUNTY MUNICIPALITIES (2010-2016)





Miles 0 10 20 40





Produced by E. Moorman, Bureau of Transportation Safety and the Division of State Patrol, Data from ESRI and the US Census Bureau. 2016

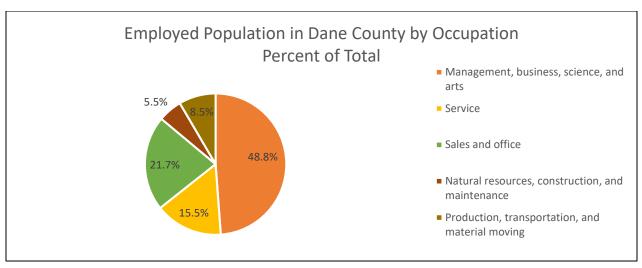


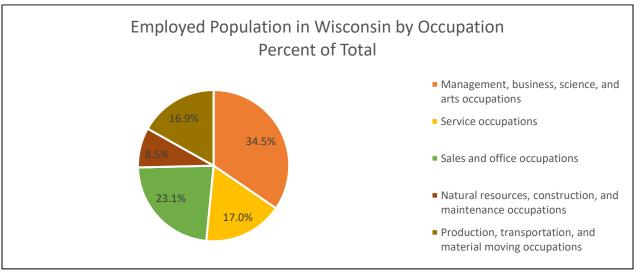
THE ECONOMY

Section Summary

The unemployment rate in Dane County has been, on average, 2.0% lower than that of the state over the last decade. Nearly half of the county's residents that are employed have jobs in management, business, science, or the arts. The proportion of the population that works in the educational services, health care, or social assistance industries is large, and the proportion that works in the professional, scientific, or management industries is fairly large. The county has a small proportion of persons that work in manufacturing.

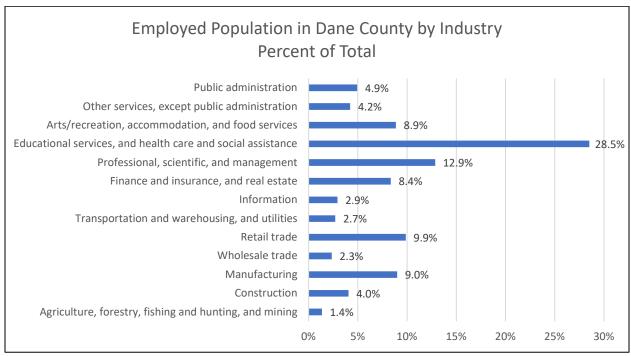
FIGURE 7: EMPLOYMENT BY OCCUPATION 10

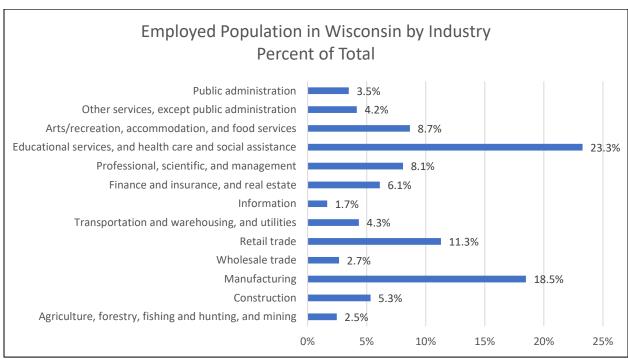




¹⁰ United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2011-2015 American Community Survey 5-Year Estimates. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS 15 5YR DP03&src=pt Accessed September 29, 2017.

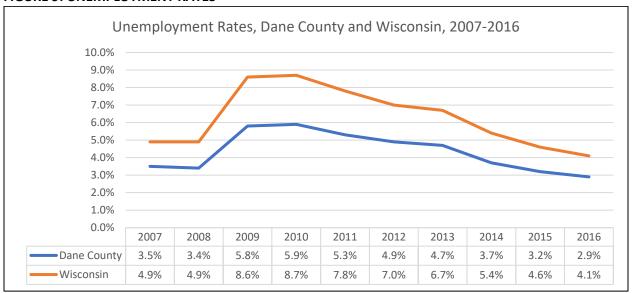
FIGURE 8: EMPLOYED POPULATION BY INDUSTRY





¹¹ United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2011-2015 American Community Survey 5-Year Estimates. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS 15 5YR DP03&src=pt Accessed September 29, 2017.

FIGURE 9: UNEMPLOYMENT RATES



¹² United States Department of Labor, Bureau of Labor Statistics. Local Area Unemployment Statistics. "Labor Force Data by County," annual averages. https://www.bls.gov/lau/#tables Accessed Sept. 29, 2017.

ALCOHOL RISK FACTORS

Section Summary

Nearly 58% of licensees have liquor for sale for consumption on site. Fifty-one percent of licenses are in the city of Madison, 6% are in Middleton, 4% are in Fitchburg, 4% are in Sun Prairie, and 11% are in towns.

FIGURE 10: ALCOHOL BEVERAGE LICENSES BY JURISDICTION, DANE COUNTY

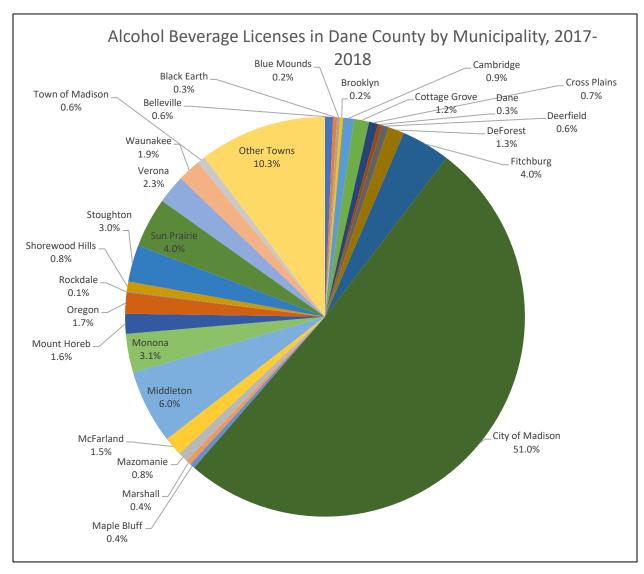
| | AB or AC | AL or ALB | BB or CW | BL or BLB | Others | Total (By Municipality) |
|-------------------------|----------|-----------|----------|-----------|--------|-------------------------|
| Belleville | | 2 | | 6 | | 8 |
| Black Earth | | 2 | | 2 | | 4 |
| Blue Mounds | | | | 2 | 1 | 3 |
| Brooklyn | | 2 | 1 | | | 3 |
| Cambridge | | 6 | 2 | 3 | | 11 |
| Cottage Grove | 2 | 6 | 3 | 4 | | 15 |
| Cross Plains | | 4 | | 5 | | 9 |
| Dane | | 1 | | 3 | | 4 |
| Deerfield | | 2 | | 5 | | 7 |
| DeForest | 3 | 4 | 2 | 7 | | 16 |
| Fitchburg | 7 | 11 | 9 | 22 | | 49 |
| City of Madison | 49 | 73 | 111 | 392 | 7 | 632 |
| Maple Bluff | | 1 | 1 | 3 | | 5 |
| Marshall | | 3 | | 2 | | 5 |
| Mazomanie | 1 | 4 | 1 | 4 | | 10 |
| McFarland | 1 | 7 | 1 | 10 | | 19 |
| Middleton | 7 | 11 | 13 | 43 | | 74 |
| Monona | 5 | 9 | 6 | 19 | | 39 |
| Mount Horeb | 2 | 6 | 4 | 8 | | 20 |
| Oregon | 4 | 4 | 6 | 7 | | 21 |
| Rockdale | | | | 1 | | 1 |
| Shorewood Hills | | 1 | 3 | 6 | | 10 |
| Stoughton | 6 | 6 | 4 | 20 | 1 | 37 |
| Sun Prairie | 2 | 15 | 6 | 25 | 2 | 50 |
| Verona | | 9 | 3 | 17 | | 29 |
| Waunakee | 2 | 7 | 3 | 11 | | 23 |
| Town of Madison | 1 | 2 | | 5 | | 8 |
| Other Towns | 8 | 16 | 18 | 80 | 6 | 128 |
| Total (By Liq. License) | 100 | 214 | 197 | 712 | 17 | 1,240 |

Establishments within a municipality but outside the county are not included in the table.

 $^{^{\}rm 13}$ Wisconsin Department of Revenue. Oct. 4, 2017. "WI Liquor Licenses 2017-18."

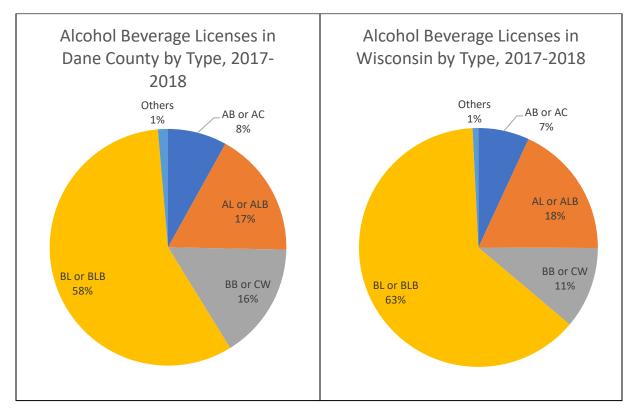
| CODE | DESCRIPTION |
|------|--|
| AB | Beer for sale off site (convenience stores, grocery stores) |
| AC | Cider for sale off site (convenience stores, grocery stores) |
| AL | Liquor for sale off site (drug stores, wineries) |
| ALB | Beer, wine, or liquor for sale off site |
| ВВ | Beer for sale on site or off site |
| BL | Liquor for sale on site (winery) |
| BLB | Beer or liquor for sale on site (taverns, supper clubs) |
| CW | Wine for sale on site (restaurants) (usually in conjunction with BB) |

FIGURE 10.2: ALCOHOL LICENSES IN DANE COUNTY BY JURISDICTION



¹⁴ Wisconsin Department of Revenue. "Liquor License Report, Liquor License Codes." https://www.revenue.wi.gov/Pages/OnlineServices/liqlicrpt.aspx. Accessed Oct. 25, 2017.

FIGURE 11: ALCOHOL BEVERAGE LICENSES BY TYPE



HEALTH INFRASTRUCTURE

Injury-to-Death Ratios

Injury-to-death ratios are computed by dividing the total number of crash injuries by the crash fatalities. Higher rates are positive in that fatalities comprise a smaller percentage of crash victims. In general, higher rates are found in the state's urbanized southeastern and south-central regions and the Fox Valley, where crashes are more likely to occur in more developed areas (and thus at slower speeds). In rural areas, the converse is true (highways and county roads predominate, with crashes occurring at higher average speeds). Generally, rural areas also suffer from a relative lack of proximate hospitals and emergency response services, which means that some crashes which would be survivable in urban areas correspond to fatalities in more rural areas.

Between 2012 and 2017, Dane County reported a far higher injury-to-death ratio than the state generally (102.9 vs. 73.1).

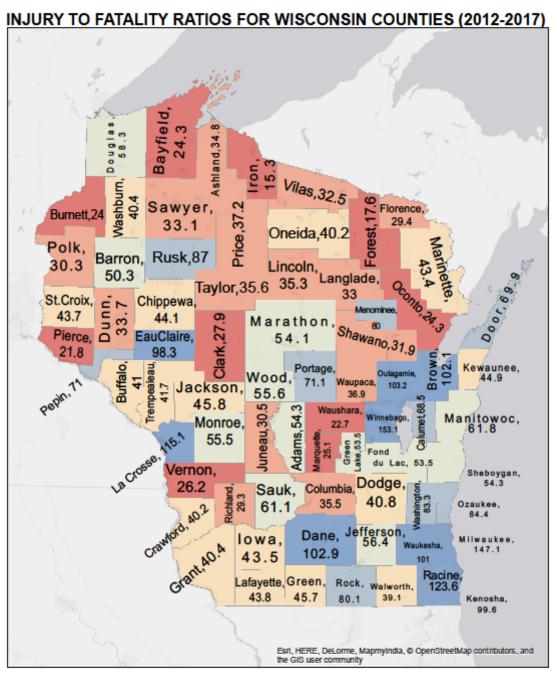
Emergency Services

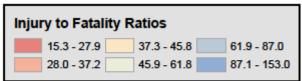
As can be seen, Dane County is well-served by hospitals, as it is the site of five different hospitals (including a hospital that is a level I trauma center and level I pediatric trauma center). 15

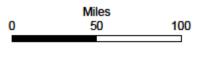
Dane County maintains 33 different emergency providers (listed below). These companies employ 1,596 emergency personnel. Consequently, the county is the site of 3.0 emergency response personnel per 1,000 residents. This is lower than the state figure of 4.02 emergency response personnel per 1,000 residents.

¹⁵ The trauma capacities of hospitals are rated on a I-IV scale, with some remaining unrated; Level I hospitals have the greatest capacity.

FIGURE 12:







Prepared by Evan Moorman, 2017 Bureau of Transportation Safety, Division of State Patrol Data from WisTransPortal and ESRI

DANE COUNTY FATALITIES AND SERIOUS INJURIES (2014-2017)
WITH MAP OF HOSPITALS

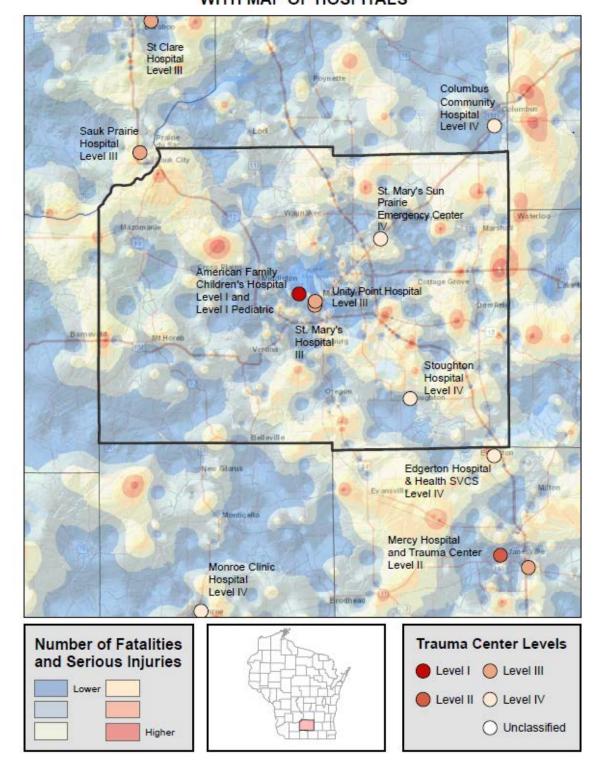


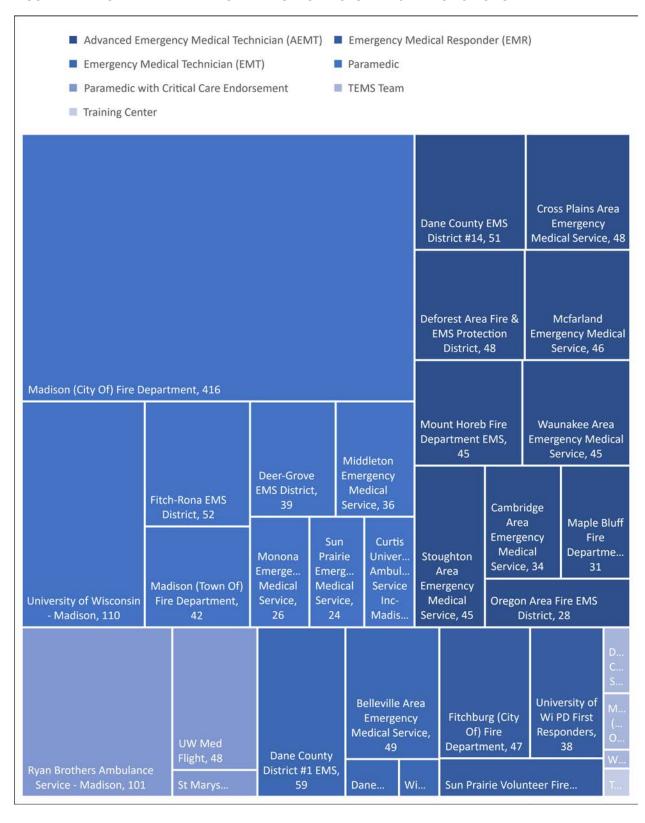
FIGURE 14: NUMBER OF EMT PERSONNEL/JURISDICTION 16

| Primary Address | Service License | | Number of |
|-----------------|--|---|-----------|
| County Name | Level | Service Name | Personnel |
| Dane | Advanced Emergency Medical Technician (AEMT) | Dane County EMS District #14 | 51 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Cross Plains Area Emergency Medical Service | 48 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Deforest Area Fire & EMS Protection District | 48 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Mcfarland Emergency Medical Service | 46 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Mount Horeb Fire Department EMS | 45 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Waunakee Area Emergency Medical Service | 45 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Stoughton Area Emergency Medical Service | 45 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Cambridge Area Emergency Medical Service | 34 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Maple Bluff Fire Department | 31 |
| Dane | Advanced Emergency Medical Technician (AEMT) | Oregon Area Fire EMS District | 28 |
| Dane | Emergency Medical Responder (EMR) | Fitchburg (City Of) Fire Department | 47 |
| Dane | Emergency Medical Responder (EMR) | University of Wi PD First Responders | 38 |
| Dane | Emergency Medical Responder (EMR) | Sun Prairie Volunteer Fire Department Inc | 25 |
| Dane | Emergency Medical Technician (EMT) | Dane County District #1 EMS | 59 |
| Dane | Emergency Medical Technician (EMT) | Belleville Area Emergency Medical Service | 49 |
| Dane | Emergency Medical Technician (EMT) | Dane County Emergency Medical Services (No Rpt) | 8 |
| Dane | Emergency Medical Technician (EMT) | Wi EMS Test Service | 6 |
| Dane | Paramedic | Madison (City Of) Fire Department | 416 |
| Dane | Paramedic | University of Wisconsin - Madison | 110 |
| Dane | Paramedic | Fitch-Rona EMS District | 52 |
| Dane | Paramedic | Madison (Town Of) Fire Department | 42 |
| Dane | Paramedic | Deer-Grove EMS District | 39 |

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 $^{^{\}rm 16}$ Department of Health Services, 2017, Received through Happel, C.

FIGURE 14.2: NUMBER AND LEVEL OF EMERGENCY RESPONDERS PER JURISDICTION



THE CRASHES

The State of Wisconsin, in a months-long process, solicited input from a diverse variety of stakeholders to create the most recent version of our Strategic Highway Safety Plan (SHSP), a document that guides investment and safety decisions for three years. The plan has ten different issue areas. General crash-related statistics for Dane County are listed below, and then facts and figures are organized to correspond with these ten issue areas.

GENERAL CRASH-RELATED STATISTICS

FIGURE 15: NUMBER OF CRASHES BY MOST SEVERE INJURY IN THE CRASH AND PERSONS INVOLVED IN CRASHES BY INJURY SEVERITY

| | 20 | 012 | 20 | 13 | 20 | 14 | 20 | 15 | 20 | 16 | 2012-201 | 6 Average |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|
| | Crashes | Persons | Crashes | Persons |
| Fatality | 27 | 32 | 33 | 35 | 28 | 30 | 30 | 30 | 33 | 38 | 30.2 | 33.0 |
| Incapacitating Injury | 159 | 178 | 162 | 197 | 140 | 175 | 169 | 208 | 152 | 188 | 156.4 | 189.2 |
| Non- Incapacitating Injury | 881 | 1,077 | 847 | 1,048 | 827 | 1,057 | 962 | 1,201 | 1,023 | 1,316 | 908.0 | 1,139.8 |
| Possible Injury | 1,322 | 1,796 | 1,365 | 1,913 | 1,452 | 1,990 | 1,416 | 1,972 | 1,542 | 2,189 | 1,419.4 | 1,972.0 |
| No Apparent Injury | 6,921 | 18,804 | 7,633 | 20,404 | 8,215 | 22,269 | 8,453 | 22,455 | 9,075 | 24,450 | 8,059.4 | 21,676.4 |
| Totals | 9,310 | 21,887 | 10,040 | 23,597 | 10,662 | 25,521 | 11,030 | 25,866 | 11,825 | 28,181 | 10,573.4 | 25,010.4 |

FIGURE 16: FATALITIES AND INCAPACITATING INJURIES BY ROLE, DANE COUNTY, 2012-2016

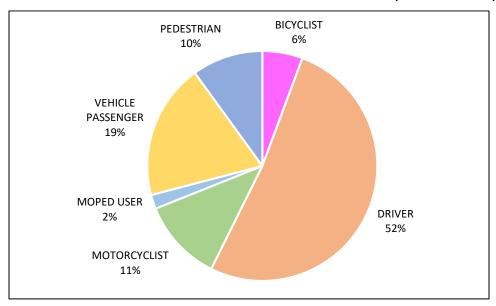
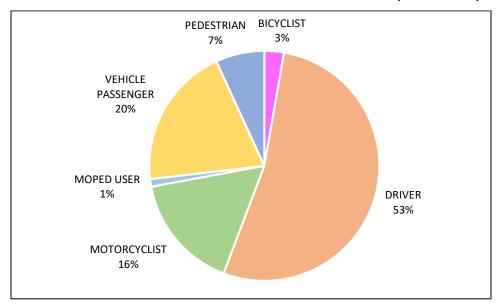


FIGURE 17: FATALITIES AND INCAPACITATING INJURIES BY ROLE, WISCONSIN, 2012-2016



Vehicle drivers make up the highest percentage of traffic fatalities and incapacitating injuries within Dane County. Vehicle passengers make up almost 1/5 of traffic fatalities and incapacitating injuries within Dane County. Vehicle drivers make up the highest percentage of traffic fatalities and incapacitating injuries within state of Wisconsin.

FIGURE 18: FATAL AND INCAPACITATING INJURIES BY AGE IN DANE COUNTY, 2012-2016

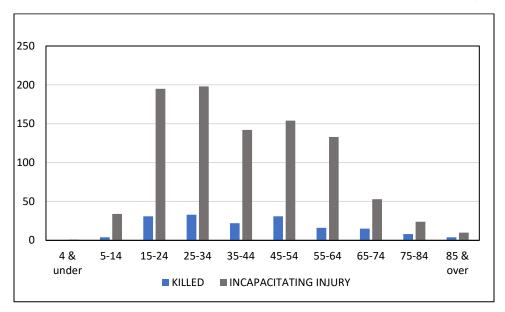
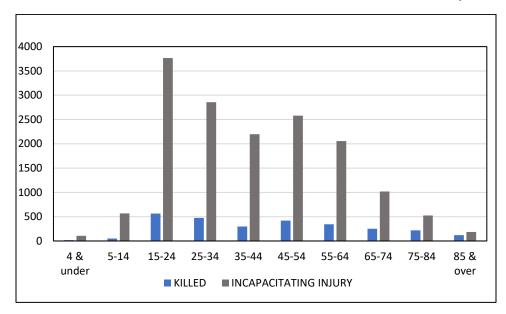
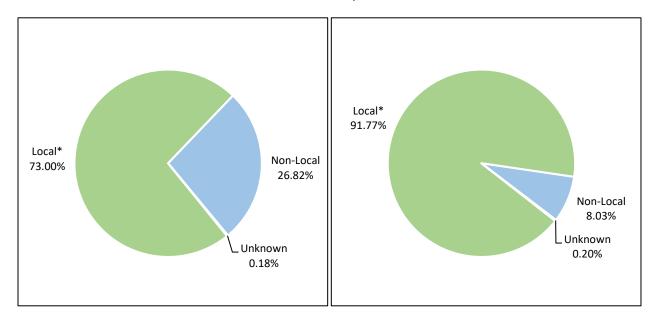


FIGURE 19: FATAL AND INCAPACITATING INJURIES BY AGE IN WISCONSIN, 2012-2016



The highest number of incapacitating injuries in traffic crashes occurred in the age group 25-34 for Dane County compared to the age group 15-24 for the state of Wisconsin. The highest number of traffic fatalities occurred in the age group 25-34 in Dane County, compared to the 15-24 age group for the state of Wisconsin.

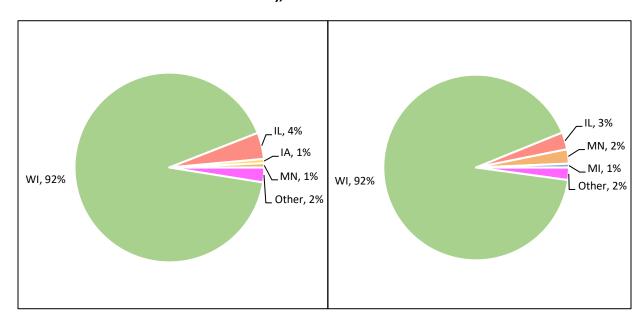
FIGURE 20: TOTAL FATALITIES AND INCAPACITATING INJURIES BY PLACE OF RESIDENCE (DANE COUNTY ON LEFT AND STATE OF WISCONSIN ON RIGHT), 2012-2016



^{*}Local is defined as persons with addresses that have ZIP codes fully or partially within the county.

Over 1/4 of the traffic fatalities and incapacitating injuries in Dane County occurred to non-local individuals.

FIGURE 21: FATALITIES AND INCAPACITATING INJURIES BY STATE OF RESIDENCE (DANE COUNTY ON LEFT AND STATE OF WISCONSIN ON RIGHT), 2012-2016



92% of traffic fatalities and incapacitating injuries in Dane County occur to Wisconsin residents. 92% of traffic fatalities and incapacitating injuries in Wisconsin occur to Wisconsin residents.

FIGURE 22: LOCATION OF CRASHES BY ROAD TYPE IN DANE COUNTY, 2012-2016

| | Total | Total Non- Fatal |
|----------------------|---------|------------------------|
| | Fatal | Injury |
| | Crashes | Crashes |
| Interstate | | |
| Highways | 5.3% | 5.6% |
| US/State Highways | 48.3% | 34.4% |
| County | | |
| Highways | 11.9% | 5.5% |
| Local Roads | 34.4% | 54.5% |

The highest percentage of fatal crashes occurred on US/state Highways within Dane County.

FIGURE 23: REPORTING OF FATAL AND SERIOUS INJURY CRASHES BY AGENCY, 2012-2016

| LEA | TOTAL |
|--------------------------------|-------|
| COTTAGE GROVE POLICE | 24 |
| DEPARTMENT | |
| CROSS PLAINS POLICE DEPARTMENT | 2 |
| DANE COUNTY SHERIFF | 283 |
| DEFOREST POLICE DEPARTMENT | 6 |
| EDGERTON POLICE DEPARTMENT | 1 |
| FITCHBURG POLICE DEPARTMENT | 53 |
| MADISON POLICE DEPARTMENT | 350 |
| MAPLE BLUFF POLICE DEPARTMENT | 1 |
| MARSHALL POLICE DEPARTMENT | 2 |
| MCFARLAND POLICE DEPARTMENT | 4 |
| MIDDLETON POLICE DEPARTMENT | 18 |
| MONONA POLICE DEPARTMENT | 4 |
| MOUNT HOREB POLICE DEPARTMENT | 2 |
| OREGON POLICE DEPARTMENT | 5 |
| SHOREWOOD HILLS POLICE | 6 |
| DEPARTMENT | |
| STOUGHTON POLICE DEPARTMENT | 8 |
| SUN PRAIRIE POLICE DEPARTMENT | 18 |
| TOWN OF MADISON POLICE | 16 |
| DEPARTMENT | |
| UW MADISON POLICE DEPARTMENT | 3 |
| VERONA POLICE DEPARTMENT | 6 |
| WAUNAKEE POLICE DEPARTMENT | 9 |
| WISCONSIN STATE PATROL | 112 |
| TOTAL | 933 |

Madison Police Department has the highest reporting of fatal and serious injury crashes within Dane County.

ISSUE AREA: IMPROVE SAFETY CULTURE, SAFETY DATA, AND DATA TECHNOLOGY

Because this information is difficult to quantify and visualize, we recommend that readers view the most recent edition of the Wisconsin Strategic Highway Safety Plan at the following location: http://wisconsindot.gov/Documents/safety/education/frms-pubs/strategichwy-17-20.pdf

ISSUE AREA: REDUCE DRIVER DISTRACTION/IMPROVE DRIVER ALERTNESS

FIGURE 24: INATTENTION-RELATED STATISTICS, 2012-2016

| | Inattention-Related Fatal Crashes | Inattention-Related Non-Fatal Injury Crashes |
|------------------------|--------------------------------------|---|
| Interstate Highways | 10.0% | 5.8% |
| US/State Highways | 60.0% | 38.9% |
| County Highways | 10.0% | 6.0% |
| Local Roads | 20.0% | 49.3% |

| Dane County | % of inattention-related fatal crashes to all fatal crashes | 13.2% |
|-------------|---|-------|
| Wisconsin | % of inattention-related fatal crashes to all fatal crashes | 18.5% |

ISSUE AREA: REDUCE ALCOHOL & DRUG-IMPAIRED DRIVING

FIGURE 25: ALCOHOL OR DRUG-RELATED CRASHES BY LOCATION, 2012-2016

| | Alcohol or Drug- Related Fatal Crashes | Alcohol or Drug-Related Non-Fatal Injury Crashes |
|-------------|---|---|
| Interstate | | |
| Highways | 4.4% | 7.1% |
| US/State | | |
| Highways | 31.8% | 42.9% |
| County | | |
| Highways | 8.7% | 7.1% |
| Local Roads | 55.2% | 42.9% |

FIGURE 26: IMPAIRED DRIVING STATISTICS IN DANE COUNTY, 2012-2016

| Average Total | Average Alcohol or Drug- | Average Alcohol or Drug-Related |
|---------------|--------------------------|---------------------------------|
| Fatal Crashes | Related Fatal Crashes | Non-Fatal Injury Crashes |
| 30.2 | 16.6 | 173.2 |

| Dane County | % of alcohol or drug-related fatal crashes to all fatal crashes | 55.0% |
|-------------|---|-------|
| Wisconsin | % of alcohol or drug-related fatal crashes to all fatal crashes | 45.0% |

Among fatal crashes, Dane County has a higher percentage of alcohol/drug related fatal crashes, but a lower percentage of inattentive driving and speed-related fatal crashes when compared to the state.

ISSUE AREA: REDUCE THE INCIDENCE AND SEVERITY OF MOTORCYCLE CRASHES

FIGURE 27: DANE COUNTY MOTORCYCLISTS KILLED OR SERIOUSLY INJURED, 2012-2016

| | % Killed | % Seriously Injured | 5-Yr Ave. Killed | 5-Yr Ave. Seriously Injured |
|--------|----------|------------------------|---------------------|--------------------------------|
| County | 14.5% | 11.1% | 4.8 | 21.0 |
| State | 15.3% | 16.5% | 84.8 | 525.6 |

Among those killed or injured in traffic crashes, Dane County had a lower percentage of motorcyclists killed and seriously injured when compared to the state.

ISSUE AREA: IMPROVE NON-MOTORIST SAFETY

FIGURE 28: DANE COUNTY PEDESTRIANS KILLED OR SERIOUSLY INJURED, 2012-2016

| | % Killed | % Seriously Injured | 5-Yr Ave. Killed | 5-Yr Ave. Seriously Injured |
|--------|----------|------------------------|------------------------|--------------------------------|
| County | 12.1% | 9.6% | 4.0 | 18.2 |
| State | 8.1% | 6.6% | 44.8 | 211.2 |

Among those killed or injured in traffic crashes, Dane County had higher percentages of pedestrians killed and injured when compared to the state.

FIGURE 29: DANE COUNTY BICYCLISTS KILLED OR SERIOUSLY INJURED, 2012-2016

| | % Killed | % Seriously | 5-Yr Ave Killed | 5-Yr Ave Seriously Injured |
|--------|----------|-------------|--------------------|-------------------------------|
| County | 4.8% | 5.8% | 1.6 | 11.0 |
| State | 1.8% | 2.9% | 10.2 | 92.4 |

Among those killed or injured in traffic crashes, Dane County had higher percentages of bicyclists killed and seriously injured when compared to the state.

ISSUE AREA: IMPROVE SAFETY OF INTERSECTIONS

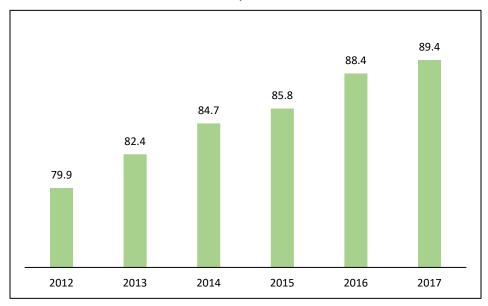
FIGURE 30: DANE COUNTY TOTAL CRASHES BY LOCATION, 2012-2016

| | County | State |
|--------------------|--------|-------|
| % Intersection | 42.5% | 37.8% |
| % Non-Intersection | 57.5% | 62.8% |

Compared to the state, a higher percentage of crashes (42.5%%) occurred at intersections in Dane County. A higher percentage of crashes occurred at non-intersections within Dane County.

ISSUE AREA: INCREASE OCCUPANT PROTECTION

FIGURE 31: SEATBELT USE STATEWIDE, 2012-2017



Seatbelt usage statewide has increased over the past six years.

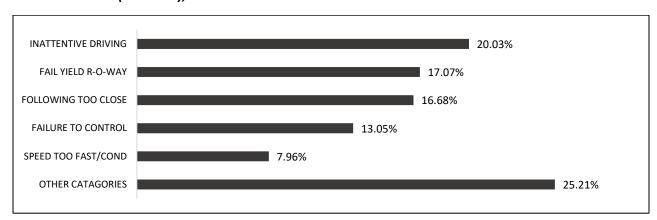
FIGURE 31.2: SAFETY EQUIPMENT USAGE IN PASSENGER CAR AND LIGHT TRUCKS DURING CRASHES, 2012-2016

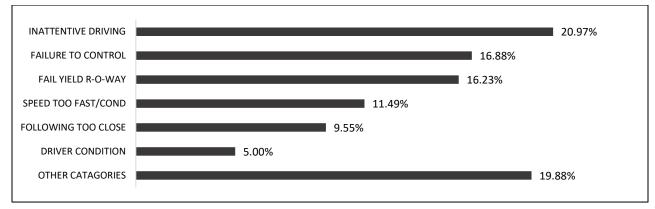
| | Belted | Unbelted |
|------------------------|--------|----------|
| Fatalities and Serious | | |
| Injuries | 78.4% | 21.6% |

Over 20% of all fatalities and serious injuries in passenger cars and light trucks occurred to an unbelted driver or passenger.

ISSUE AREA: CURB AGGRESSIVE DRIVING/REDUCE SPEED-RELATED CRASHES

FIGURE 32: DRIVER POSSIBLE CONTRIBUTING CIRCUMSTANCES FOR CRASHES IN DANE COUNTY (TOP) AND STATEWIDE (BOTTOM), 2012-2016





Inattentive driving is the most significant contributing factor for all crashes within Dane County. Inattentive driving is the most significant contributing factor for all crashes within the state of Wisconsin.

FIGURE 33: SPEEDING STATISTICS IN DANE COUNTY, 2012-2016

| Average Speed-Related Fatal Crashes | Average Speed-Related Non- Fatal Injury Crashes |
|-------------------------------------|--|
| 8.4 | 376.4 |

| | Total Fatal Crashes | Total Non-Fatal Injury Crashes | Speed-Related Fatal Crashes | Speed-Related Non- Fatal Injury Crashes |
|------------------------|------------------------|-----------------------------------|--------------------------------|--|
| Interstate Highways | 5.3% | 5.6% | 7.1% | 11.3% |
| US/State | 3.370 | 3.070 | 7.170 | 11.570 |
| Highways | 48.3% | 34.4% | 42.9% | 35.3% |
| County | | | | |
| Highways | 11.9% | 5.5% | 7.1% | 10.7% |
| Local Roads | 34.4% | 54.5% | 42.9% | 42.7% |

| Dane County | % of speed-related fatal crashes to all fatal crashes | 27.8% |
|-------------|--|-------|
| Wisconsin | % of speed-related fatal crashes to all fatal crashes | 28.9% |

ISSUE AREA: REDUCE LANE DEPARTURE CRASHES

FIGURE 34: DANE COUNTY RUN-OFF-THE-ROAD CRASHES, 2012-2016

| | 5 Year Average of Run- Off-the-Road Crashes | % of Run-Off-the-Road crashes to total crashes |
|--------|--|--|
| County | 2,468.4 | 23.3% |
| State | 30,395.6 | 25.4% |

Dane County had a lower percentage of run-off-the-road crashes than the state.

THE IMPACT

Crash-related emergency room visits are low, comparatively.

2011-2015 ANNUAL AVERAGES

| | Dane County | Wisconsin |
|-------------------------------------|--------------|--------------|
| Average Annual Population | 503,636 | 5,716,883 |
| Persons in Crashes | 50.3 | 46.0 |
| (per 1,000 residents) | | |
| Crash-Related Emergency Room Visits | 288.9 | 407.3 |
| (per 100,000 residents) | | |
| Crash-Related Hospitalizations | 56.3 | 49.3 |
| (per 100,000 residents) | | |
| Quality of Life Costs | \$27,993,809 | \$36,819,900 |
| (per 100,000 residents) | | |
| Lost Years of Life | 2.12 | 3.04 |
| (per 1,000 residents) | | |
| Medical Costs | \$9,341,286 | \$10,482,526 |
| (per 100,000 residents) | | |

17,18

¹⁷University of Wisconsin-Madison, Center for Health Systems Research & Analysis. Wisconsin Crash Outcome Data Evaluation System Project. "Wisconsin CODES Report Builder Custom Reporting System," http://www.chsra.wisc.edu/codes/query/overview.html Accessed Oct. 2, 2017.

¹⁸University of Wisconsin-Madison, Center for Health Systems Research & Analysis. Wisconsin Crash Outcome Data Evaluation System Project. "Community Crash Reports," http://www.chsra.wisc.edu/codes/community/default.htm Accessed Oct. 3, 2017.

THE GRANTS

The Bureau of Transportation Safety targets counties throughout the state based on crash frequency and severity, considering their size, location, and contributing behavioral factors as indicated on crash forms received from local law enforcement agencies. Overtime enforcement grants are offered to the law enforcement agencies of a county to form a high-visibility enforcement task force that will coordinate efforts with each other and locals to change the driving behavior in their county. If a county makes the targeting list for an enforcement grant to address a behavioral highway safety issue, all law enforcement agencies within the county are eligible to participate on a task force to address the problem. National priority issue areas include impaired driving, seat belt use, speeding, and distracted driving.

2016 Grant Participation

| | Impaired Driving | Occupant Protection | Speed |
|--------------------------------|------------------|---------------------|-------------|
| Dane County Sheriff's Office | \$80,005.20 | | |
| Belleville Police Dept. | | | |
| Blue Mounds Police Dept. | | | \$11,415 |
| Brooklyn Police Dept. | | | |
| Cottage Grove Police Dept. | | | |
| Cross Plains Police Dept. | | | |
| Dane Police Dept. | | | |
| DeForest Police Dept. | | | \$11,064 |
| Edgerton Police Dept. | | | |
| Fitchburg Police Dept. | \$9,928.80 | | \$7,955.20 |
| Madison Police Dept. | \$69,987.84 | | |
| Madison Town Police Dept. | | | |
| Maple Bluff Police Dept. | | | \$19,879 |
| Marshall Police Dept. | | | \$11,059 |
| McFarland Police Dept. | | | |
| Middleton Police Dept. | \$9,940.56 | | \$10,035.64 |
| Monona Police Dept. | | | \$12,944.28 |
| Mount Horeb Police Dept. | | | |
| Oregon Police Dept. | | | |
| Shorewood Hills Police Dept. | | | |
| Stoughton Police Dept. | | | \$9,552.32 |
| Sun Prairie Police Dept. | | | |
| UW-Madison Police Dept. | | | |
| Verona Police Dept. | | | |
| Waunakee Police Dept. | | | |
| Wisconsin State Capitol Police | | | |

The Dane County Sheriff's Office received a grant to address distracted driving. Madison Police Department received a bicyclist safety enforcement grant focusing on motorist violations that negatively impact bicyclist safety.

2016 Task Forces

| | Grant Amount |
|---|--------------|
| Dane County OWI Task Force | \$84,480 |
| Dane County Seat Belt Task Force | \$124,999.65 |
| Dane County DDACTS Seat Belt Task Force | \$120,012.48 |
| Madison PD/Dane SO Speed Enforcement Task Force | \$129,989.60 |

The Dane County Sheriff's Office participated on the Sheriffs' Traffic and OWI Patrols (STOP) Task Force with the sheriff's offices in Rock, Sauk, Jefferson, Iowa, and Columbia counties. Madison Police Department and UW-Madison Police Department participated on the Madison Pedestrian High-Visibility Enforcement Task Force focusing on motorist violations that negatively impact pedestrian safety. The Dane County Sheriff's Office and the Madison Police Department formed a coalition to increase motorcyclist safety at large motorcycle events.

2016 Task Force Participation

| | Impaired Driving | Occupant Protection | Speed | |
|--------------------------------|------------------|-----------------------|--------------------------|--|
| Dane County Sheriff's Office | STOP Task Force | DDACTS Seat Belt | Madison PD/Dane SO Speed | |
| Belleville Police Dept. | | | | |
| Blue Mounds Police Dept. | | | | |
| Brooklyn Police Dept. | | | | |
| Cottage Grove Police Dept. | Dane County OWI | | | |
| Cross Plains Police Dept. | | | | |
| Dane Police Dept. | | | | |
| DeForest Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Edgerton Police Dept. | | | | |
| Fitchburg Police Dept. | | | | |
| Madison Police Dept. | Dane County OWI | DDACTS Seat Belt | Madison PD/Dane SO Speed | |
| Madison Town Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Maple Bluff Police Dept. | Dane County OWI | | | |
| Marshall Police Dept. | | | | |
| McFarland Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Middleton Police Dept. | | Dane County Seat Belt | | |
| Monona Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Mount Horeb Police Dept. | | | | |
| Oregon Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Shorewood Hills Police Dept. | Dane County OWI | | | |
| Stoughton Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Sun Prairie Police Dept. | Dane County OWI | | | |
| UW-Madison Police Dept. | Dane County OWI | | | |
| Verona Police Dept. | Dane County OWI | Dane County Seat Belt | | |
| Waunakee Police Dept. | | | | |
| Wisconsin State Capitol Police | Dane County OWI | | | |

2017 Task Forces

| | Grant Amount |
|---------------------------------------|--------------|
| Dane County OWI Task Force | \$200,000 |
| Dane Suburban OWI Task Force | \$63,000 |
| Dane County Belts Task Force | \$161,986.16 |
| Dane County Suburban Belts Task Force | \$132,799.92 |
| Dane County Speed Task Force | \$119,972.16 |
| Dane County Suburban Speed Task Force | \$35,280 |

2017 Task Force Participation

| | Impaired Driving | Occupant Protection | Speed |
|------------------------------|-------------------|---------------------|---------------------|
| Dane County Sheriff's Office | Dane Co. OWI | Dane Co. Belts | Dane Co. Speed |
| Belleville Police Dept. | | Dane Suburban Belts | |
| Blue Mounds Police Dept. | | Dane Suburban Belts | |
| Brooklyn Police Dept. | | Dane Suburban Belts | |
| Cottage Grove Police Dept. | | Dane Suburban Belts | |
| Cross Plains Police Dept. | | | |
| Dane Police Dept. | | | |
| DeForest Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Edgerton Police Dept. | | | |
| Fitchburg Police Dept. | | Dane Suburban Belts | |
| Madison Police Dept. | Dane Co. OWI | Dane Co. Belts | Dane Co. Speed |
| Madison Town Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Maple Bluff Police Dept. | | | |
| Marshall Police Dept. | | Dane Suburban Belts | |
| McFarland Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Middleton Police Dept. | | Dane Suburban Belts | |
| Monona Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Mount Horeb Police Dept. | | | |
| Oregon Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Shorewood Hills Police Dept. | | Dane Suburban Belts | |
| Stoughton Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Sun Prairie Police Dept. | | | |
| UW-Madison Police Dept. | | | |
| Verona Police Dept. | Dane Suburban OWI | Dane Suburban Belts | Dane Suburban Speed |
| Waunakee Police Dept. | | Dane Suburban Belts | |

Madison Police Department received a pedestrian safety enforcement grant focusing on motorist violations that negatively impact pedestrian safety.

2018 Task Force Eligibility

| | Impaired Driving | Occupant Protection | Speed |
|--------------------------------------|------------------|---------------------|----------|
| Dane County Law Enforcement Agencies | eligible | eligible | eligible |

Agency Mobilizations 2016-2017

| | FY2016 | 2016 Click | 2016 Drive | FY2017 | 2017 Click | 2017 Drive |
|------------------------------|------------|--------------|------------|------------|--------------|------------|
| | Drive | It or Ticket | Sober or | Drive | It or Ticket | Sober or |
| | Sober or | | Get Pulled | Sober or | | Get Pulled |
| | Get Pulled | | Over – | Get Pulled | | Over – |
| | Over- | | Labor Day | Over- | | Labor Day |
| | Winter | | | Winter | | |
| | Holidays | | | Holidays | | |
| Dane County Sheriff's Office | yes | yes | yes | yes | yes | yes |
| Belleville Police Dept. | | | yes | yes | yes | |
| Blue Mounds Police Dept. | | | | | | |
| Brooklyn Police Dept. | yes | yes | | yes | yes | yes |
| Cottage Grove Police Dept. | | yes | yes | yes | yes | yes |
| Cross Plains Police Dept. | | | | | yes | |
| Dane Police Dept. | | yes | | | yes | yes |
| DeForest Police Dept. | | yes | | yes | yes | yes |
| Edgerton Police Dept. | | yes | yes | yes | yes | yes |
| Fitchburg Police Dept. | | yes | | yes | yes | |
| Madison Police Dept. | | | | yes | yes | |
| Madison Town Police Dept. | yes | yes | yes | yes | yes | yes |
| Maple Bluff Police Dept. | | yes | | yes | yes | |
| Marshall Police Dept. | | | | yes | yes | |
| McFarland Police Dept. | | | | yes | | |
| Middleton Police Dept. | yes | yes | yes | yes | | |
| Monona Police Dept. | | | | | | |
| Mount Horeb Police Dept. | | | | | | |
| Oregon Police Dept. | yes | | | | | |
| Shorewood Hills Police Dept. | | | | yes | yes | |
| Stoughton Police Dept. | | | | | yes | |
| Sun Prairie Police Dept. | yes | yes | | | | |
| UW-Madison Police Dept. | | | | | | |
| Verona Police Dept. | | yes | yes | | yes | yes |
| Waunakee Police Dept. | yes | | | | yes | yes |

The Wisconsin State Patrol participates in all three mobilizations each year. Law enforcement agencies should participate for the chance to receive an equipment grant for ongoing high-visibility enforcement.