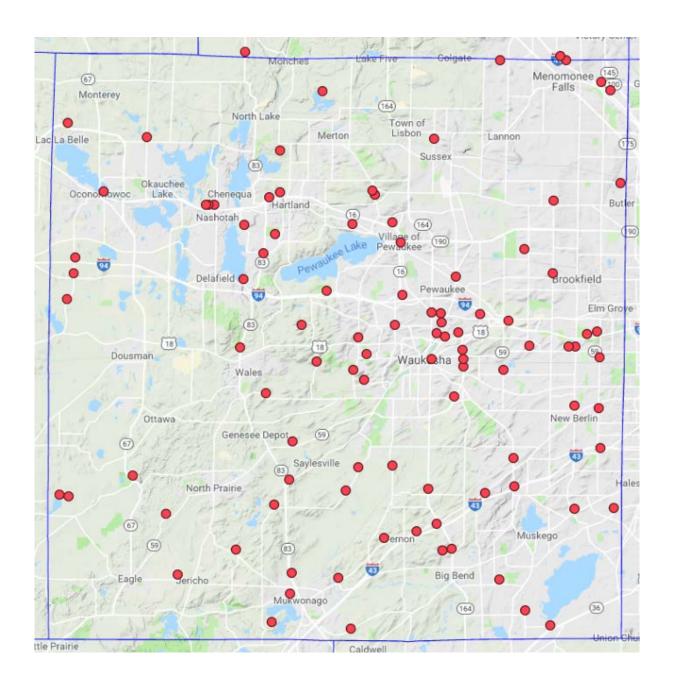
# ANATOMY OF WAUKESHA COUNTY: A TRAFFIC SAFETY SUMMARY



# **DID YOU KNOW...**

An individual is killed or seriously injured in a crash in Waukesha County every 2 ½ days?

#### **THE PLACE**

#### Section Summary

The principal routes in the county are I-94, I-43, I-41, STH 16, and STH 36. Waukesha County is the top county in the state for the amount of urban area. Waukesha County is among the top ten counties for VMT, miles of roads, miles of county highways, miles of local roads, the number of registered vehicles, urban population, the percentage of the population that is urban, and percentage of the county's area that is urban. It is among the bottom ten counties for miles of roads per capita and per VMT, miles of state highways per capita and per VMT, miles of county highways per capita, and miles of local roads per capita.

#### Urbanization

Waukesha County is within the Milwaukee-Waukesha-West Allis metropolitan area, and it is adjacent to the Racine metropolitan area and the Whitewater, Watertown-Fort Atkinson, and Beaver Dam urban clusters. 90.14% of the population of the county lives in urban areas, and 48.65% of the area of the county is urban.<sup>1</sup>

#### **Road Network**

Interstate 94 is an east-west freeway, and it carries traffic that bypasses Summit, Oconomowoc, Delafield, the city of Pewaukee, Waukesha, and Brookfield. To the east, I-94 heads to Milwaukee and then south to Chicago, Illinois via Oak Creek, Racine and Kenosha. To the west, I-94 heads to Madison via Johnson Creek and Lake Mills, and then it heads northwest to Minneapolis-St. Paul, Minnesota via Eau Claire.

Interstate 43 is designated as a north-south highway, and it carries traffic from southwest to northeast in southeastern sections of the county. I-43 travels through Mukwonago, Big Bend, and New Berlin. To the northeast, I-43 heads to Milwaukee via Greenfield and then north to Mequon, Sheboygan, Manitowoc, and Green Bay. To the southwest, I-43 heads to Beloit via East Troy, Elkhorn, and Delavan. I-43 connects Milwaukee with areas to the south and west of Wisconsin.

Interstate 41 is designated as a north-south highway, and it cuts across the northeast corner of the county through Menomonee Falls. To the northwest, I-41 heads to Green Bay via Germantown, Richfield, Fond du Lac, and Appleton. To the southeast, I-41 heads to Milwaukee, Wauwatosa, West Allis, Racine, and Kenosha. United States Highway (USH) 41 and USH 45 are concurrent with I-41 on this section of roadway. To the north, USH 45 carries traffic to and from West Bend via Germantown and Jackson. In Milwaukee County, USH 45 diverges from I-41 in Greenfield carrying traffic south to Hales Corners and Franklin. USH 45 re-enters Waukesha County briefly in Muskego and then travels along the eastern border of the county. USH 45 carries traffic to and from Union Grove and Bristol to the south. State Trunk Highway (STH) 36, a primary arterial and a multilane divided highway, is Loomis Rd in Muskego. STH 36 is designated as a north-south highway. To the northeast, STH 36 carries traffic to and from Milwaukee via Franklin and Greendale. To the southwest, STH 36 carries traffic to and from Burlington via Waterford and Rochester. STH 100 and STH 145 cut across the northeast corner of the county through Menomonee Falls. STH 100 continues to the south in Milwaukee County to travel near

<sup>&</sup>lt;sup>1</sup> 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

its western border, and STH 145 continues to the southeast to Milwaukee as Fond du Lac Frwy and Fond du Lac Ave. STH 100 re-enters Milwaukee County heading east to northern Milwaukee, Brown Deer, and River Hills on W Brown Deer Rd. STH 145 travels north into Germantown. STH 175 is Appleton Ave in Menomonee Falls, carrying local traffic north in an alignment near I-41. To the southeast, STH 175 heads toward Milwaukee, Miller Park, and West Milwaukee.

USH 18 is an east-west highway through the center of the county near I-94 that carries local traffic through Summit, Dousman, Wales, Waukesha, Brookfield, and Elm Grove. To the east, USH 18 carries travels to Milwaukee via Wauwatosa, and to the west, it travels to Jefferson and Cambridge via Sullivan.

STH 16 is an east-west highway that begins at I-94 in the city of Pewaukee and heads north and then west along the municipal boundary of Waukesha and then through the village of Pewaukee, Hartland, Delafield, Chenequa, Nashotah, Oconomowoc Lake, Oconomowoc, and Lac La Belle. STH 16 is a freeway from I-94 west to Oconomowoc Lake, after which it is a multilane divided highway. To the west, STH 16 travels to Watertown and Columbus. STH 67 is a north-south highway in western sections of the county traveling through Oconomowoc, Oconomowoc Lake, Summit, Dousman, and Eagle. To the north, STH 67 carries traffic to and from Mayville via Neosho and Iron Ridge. To the south, STH 67 carries traffic to and from Elkhorn, Williams Bay, Fontana-on-Geneva Lake, and Walworth. STH 16 and STH 67 are concurrent on the bypass around Oconomowoc.

STH 164 is a north-south highway traveling through Sussex, the village of Pewaukee, the city of Pewaukee, Waukesha, and Big Bend. To the north, STH 164 travels to Richfield and Slinger, and to the south it carries traffic to and from Waterford. STH 59 is an east-west highway traveling from southwest to northeast through the county through Eagle, North Prairie, Waukesha, New Berlin, and along the municipal boundary of Brookfield. To the east, STH 59 continues along W Greenfield Ave in West Allis and then into Milwaukee. To the west, STH 59 carries traffic to and from Milton and Whitewater via Palmyra. STH 59 is concurrent with STH 164 along a portion of the Les Paul Parkway in Waukesha.

STH 83 is a north-south highway traveling through Chenequa, Hartland, Delafield, Wales, and Mukwonago. To the north, STH 83 travels to Hartford, and to the south, it heads to Waterford, Rochester, and Burlington. STH 190 begins at STH 16 in the village of Pewaukee and heads east, traveling through the city of Pewaukee and Brookfield. To the east, it heads to Milwaukee and Shorewood via Wauwatosa on W Capitol Dr.

Merton is along County Trunk Highway (CTH) VV, which has a junction with STH 164 in Sussex. Merton is also along CTH KE, which connects with STH 16 between Hartland and the city of Pewaukee as well as STH 83 in Hartland. Butler is along the county's eastern boundary adjacent to Menomonee Falls and Brookfield. CTH K travels through Butler and along the municipal boundaries of Menomonee Falls and Brookfield and connects with STH 164 in Sussex. CTH VV travels from Butler through Menomonee Falls to connect with STH 164 in Sussex, traveling through Merton, to connect with STH 83 in the town of Merton. There is a small portion of Milwaukee in Waukesha County surrounded by Menomonee Falls on three sides that can only be accessed via local roads from Milwaukee County. Lannon is surrounded by Menomonee Falls and the town of Lisbon. CTH F travels to Lannon, through Sussex, and then connects with STH 190 and I-94 in the city of Pewaukee. CTH W begins at CTH F in Lannon and heads east to STH 175 in Menomonee Falls.

CTH P in the town of Oconomowoc may carry a significant amount of long-distance traffic between western portions of Waukesha County and Fond du Lac, Oshkosh, and Appleton.

# Miles of Roadway

There are 3,074 miles of roads in Waukesha County, of which 2,452 (79.8%) are local roads, 214 (7.0%) are state roads, and 408 (13.3%) are county roads.<sup>2</sup>

Vehicle Registrations and Vehicle Miles of Travel (VMT)

In 2016, there were 159,674 autos, 23,094 cycles, 22,698 trailers, and 192,154 trucks registered in Waukesha County.<sup>3</sup> VMT in 2016 was 3,999,216,670.<sup>4</sup>

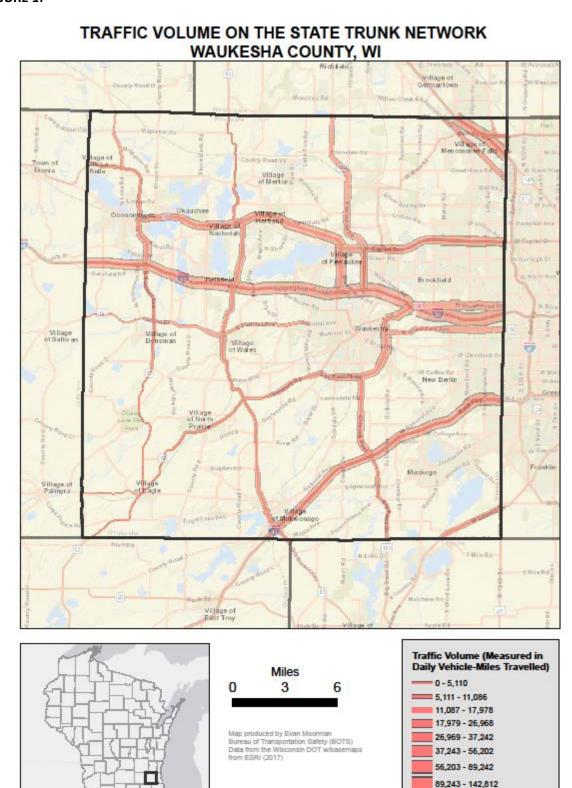
As can be seen, traffic volumes in Waukesha County are highest along Interstate 94, which connects the Milwaukee Metropolitan Area to Madison and the Twin Cities on one hand, and Chicago on the other. Highway 12—which parallels Interstate 94—also attracts high usage. The maximum daily in the county is measured at over 142,000. This high traffic level occurs on I-94.

<sup>&</sup>lt;sup>2</sup> Wisconsin Department of Transportation. "County Maps." Accessed Sept. 29, 2017. <a href="http://wisconsindot.gov/Pages/travel/road/hwy-maps/county-maps/default.aspx">http://wisconsindot.gov/Pages/travel/road/hwy-maps/county-maps/default.aspx</a>

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> 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

FIGURE 1:



#### **Commuting Flows**

FIGURE 2: COMMUTING FLOWS AMONG COUNTIES

Workers who Reside in Waukesha Cou	nty Work in:	People who Work in Waukesha County Reside in:		
Waukesha County	127,596	Waukesha County	127,596	
Milwaukee County	58,030	Milwaukee County	58,389	
Washington County	4,051	Washington County	13,236	
Racine County	2,256	Jefferson County	6,774	
Ozaukee County	1,666	Racine County	4,794	
Dane County	1,389	Walworth County	4,261	
Walworth County	1,268	Dodge County	3,092	
Jefferson County	1,015	Ozaukee County	3,053	
Kenosha County	582	Kenosha County	1,026	
Dodge County	516	Dane County	981	
Cook County, IL	447	Fond du Lac County	532	
Lake County, IL	208	Sheboygan County	419	
DuPage County, IL	169	Cook County, IL	353	
Rock County	150	Lake County, IL	319	
Sheboygan County	134	Rock County	303	
Fond du Lac County	117	Winnebago County	133	
Others	1,896	Others	2,527	

As seen below in Figure 3, the most common commuting flow between two different municipalities is from residences in Milwaukee to workplaces in Brookfield.

FIGURE 3: COMMUTING FLOWS BETWEEN MUNICIPALITIES (TOP 15)

Residence	Place of Work	Number
Milwaukee	Brookfield	6,053
Milwaukee	Menomonee Falls	5,785
Milwaukee	Waukesha	4,852
Waukesha	Milwaukee	4,312
New Berlin	Milwaukee	4,236
Milwaukee	New Berlin	3,935
Brookfield	Milwaukee	3,861
Menomonee Falls	Milwaukee	3,751
Muskego	Milwaukee	2,830
Waukesha	Brookfield	2,794
Waukesha	Pewaukee (City)	2,001
Waukesha	New Berlin	1,898
New Berlin	Brookfield	1,874
Milwaukee	Pewaukee (City)	1,751
Wauwatosa	Brookfield	1,707

<sup>&</sup>lt;sup>5</sup>United States Census Bureau. 2009-2013 5-Year American Community Survey Commuting Flows. <a href="https://www.census.gov/data/tables/time-series/demo/commuting/commuting-flows.html">https://www.census.gov/data/tables/time-series/demo/commuting/commuting-flows.html</a> Accessed Sept. 29, 2017.

<sup>&</sup>lt;sup>6</sup> United States Census Bureau. 2009-2013 5-Year American Community Survey Commuting Flows. <a href="https://www.census.gov/data/tables/time-series/demo/commuting/commuting-flows.html">https://www.census.gov/data/tables/time-series/demo/commuting/commuting-flows.html</a> Accessed Oct. 5, 2017.

#### THE POPULATION

#### *Current Population Figures (2016)*

The population of Waukesha County—about 400,000 individuals—is distributed through 37 jurisdictions, with the largest jurisdictions being the city of Waukesha, the city of New Berlin, and the city of Brookfield (in that order). Together, these three largest jurisdictions comprise slightly less than 40% of the county's overall population.

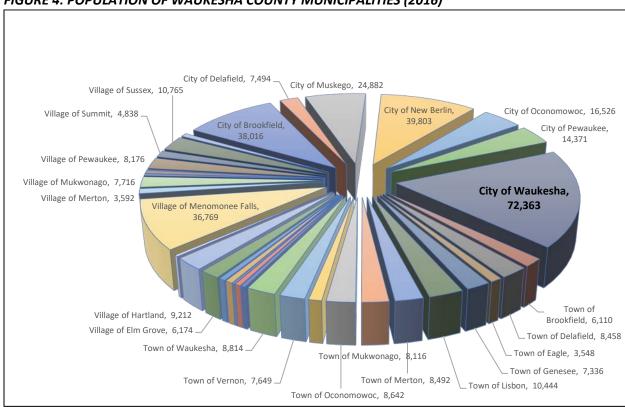
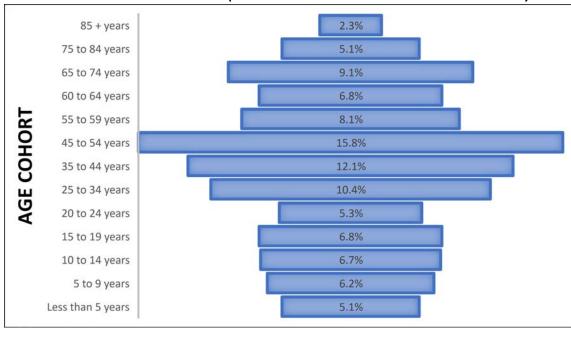
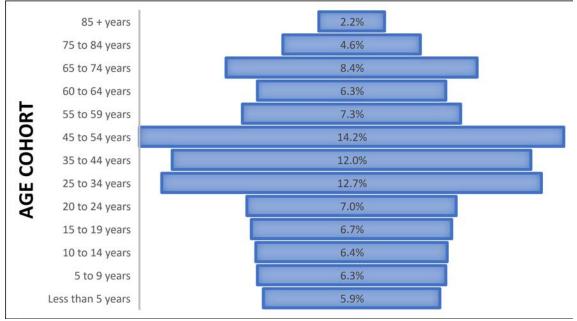


FIGURE 4: POPULATION OF WAUKESHA COUNTY MUNICIPALITIES (2016)

Generally, jurisdictions throughout the county are growing slowly but steadily. (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).

FIGURE 5 7: POPULATION PYRAMIDS (WAUKESHA COUNTY ABOVE AND STATE BELOW)



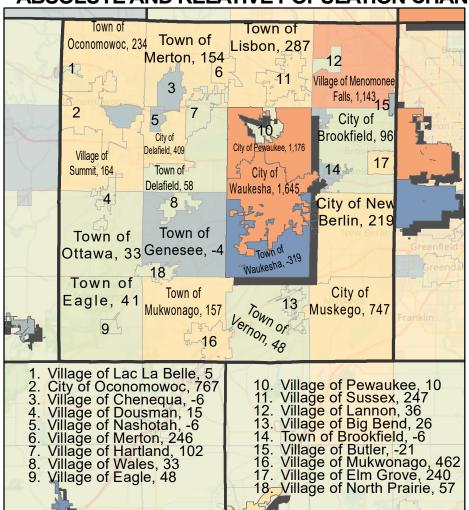


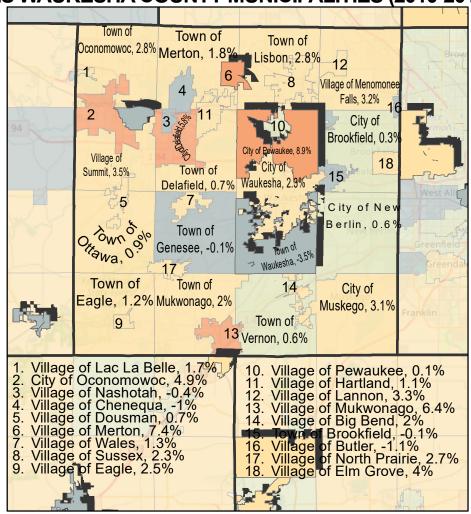
#### **Population Trends**

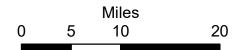
Between 2010 and 2016, the county's population increased by about 2.3%. The average age of the county is slightly older than that of the state (43.0 vs. 39 years). Waukesha County's population pyramid is thus slightly more "top-heavy" than Wisconsin's population pyramid.

<sup>7</sup> United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2012-2016 American Community Survey 5-Year Estimates. <a href="https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\_15\_5YR\_DP03&src=pt">https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\_15\_5YR\_DP03&src=pt</a> Accessed November 6th, 2017.

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











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

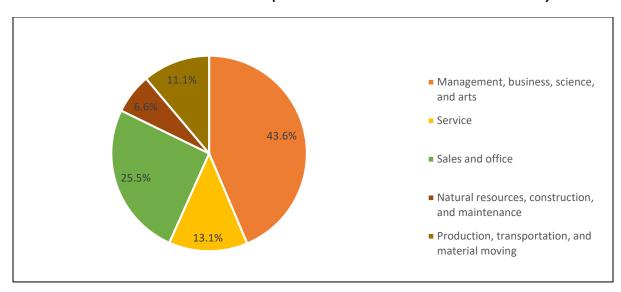


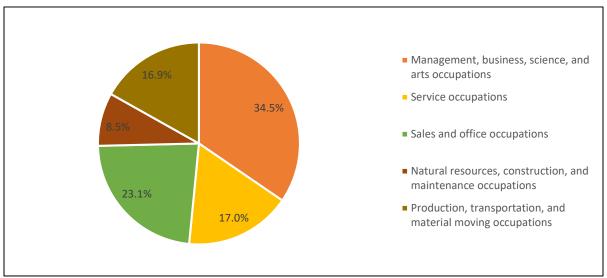
#### THE ECONOMY

#### **Section Summary**

The unemployment rate in Waukesha County has been, on average, 1.1% lower than that of the state over the last decade. Generally, the county has a comparatively high number of jobs in management, business, science, or the arts, while it has a comparatively low number of jobs in production, transportation, or material moving. The proportion of the population that works in the agriculture, forestry, fishing or hunting, or mining industries is small.

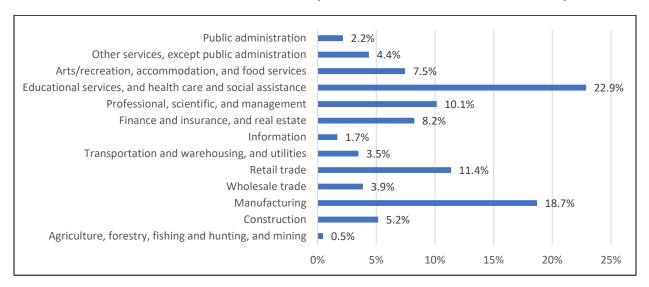
FIGURE 7: EMPLOYMENT BY OCCUPATION (WAUKESHA ON TOP AND THE STATE BELOW) 8

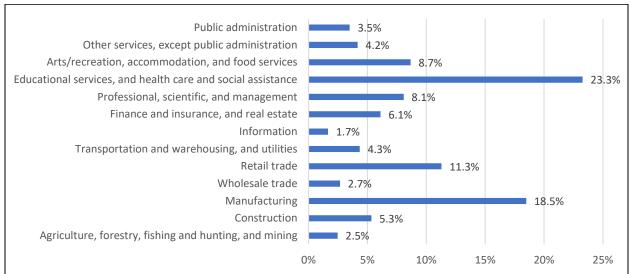




<sup>&</sup>lt;sup>8</sup> United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2011-2015 American Community Survey 5-Year Estimates. <a href="https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS">https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS</a> 15 5YR DP03&src=pt Accessed September 29, 2017.

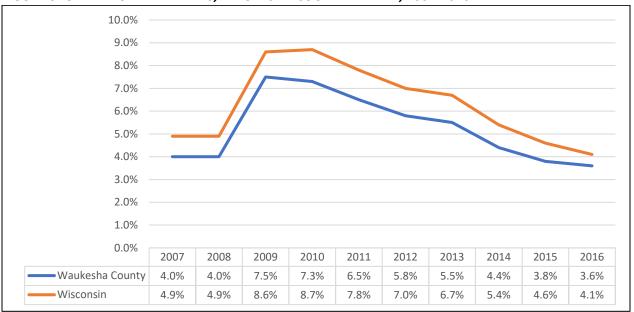
FIGURE 8: EMPLOYED POPULATION BY INDUSTRY (WAUKESHA ON TOP AND STATE BELOW)





<sup>&</sup>lt;sup>9</sup> United States Census Bureau. "Selected Economic Characteristics DP03, Employment Status." 2011-2015 American Community Survey 5-Year Estimates. <a href="https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS">https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS</a> 15 5YR DP03&src=pt Accessed September 29, 2017.

FIGURE 9: UNEMPLOYMENT RATES, WAUKESHA COUNTY AND WI, 2007-2016



<sup>&</sup>lt;sup>10</sup> United States Department of Labor, Bureau of Labor Statistics. Local Area Unemployment Statistics. "Labor Force Data by County," annual averages. <a href="https://www.bls.gov/lau/#tables">https://www.bls.gov/lau/#tables</a> Accessed Sept. 29, 2017.

# **ALCOHOL RISK FACTORS**

#### Section Summary

Fifty-eight percent of licensees have liquor for sale for consumption on site. Seventeen percent of the licenses are in Waukesha, 10% are in Brookfield, 9% are in New Berlin, and 8% are in Menomonee Falls.

FIGURE 10: ALCOHOL BEVERAGE LICENSES BY JURISDICTION, WAUKESHA COUNTY

	AB or	AL or	BB or	BL or	Others	Total (By
	AC	ALB	CW	BLB	Others	Municipality)
Big Bend	1	3	2	5		11
City of Brookfield		17	11	54		82
Butler		3	1	4		8
Chenequa				1		1
Delafield		10	8	19		37
Dousman	1	1	4	4		10
Eagle		2		4		6
Elm Grove	1	3	4	7		15
Hartland	1	5	4	15		25
Lac La Belle				1		1
Lannon		1		3		4
Menomonee Falls	1	17	8	40		66
Merton			1	2		3
Village of Mukwonago	5	8	2	11		26
Muskego	1	11	1	27		40
Nashotah			1	2		3
New Berlin	6	17	10	36		69
North Prairie		2	2	2		6
City of Oconomowoc	8	9	10	28		55
Oconomowoc Lake		1		1		2
City of Pewaukee	1	2	7	19		29
Village of Pewaukee	5	6	5	16		32
Summit				5		5
Sussex	3	5		9		17
Wales		4	1	3		8
Waukesha	19	25	13	79	1	137
Town of Brookfield	2	9	6	12		29
Town of Mukwonago				3		3
Town of Oconomowoc	5	1	1	21		28
Other Towns	1	8	6	38		53
Total (By Liq. License)	61	170	108	471	1	811

 $<sup>^{\</sup>rm 11}$  Wisconsin Department of Revenue. Oct. 4, 2017. "WI Liquor Licenses 2017-18."

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

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)			

<sup>&</sup>lt;sup>12</sup> Wisconsin Department of Revenue. "Liquor License Report, Liquor License Codes." <u>https://www.revenue.wi.gov/Pages/OnlineServices/liqlicrpt.aspx</u>. Accessed Oct. 25, 2017.

FIGURE 10.2: ALCOHOL LICENSES IN WAUKESHA COUNTY BY JURISDICTION

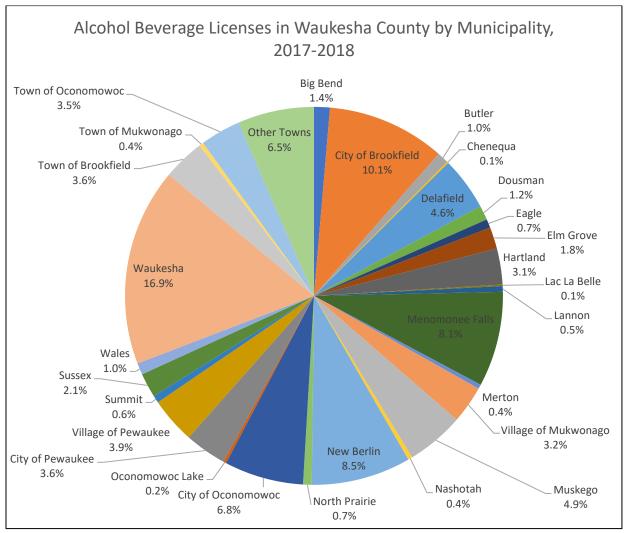
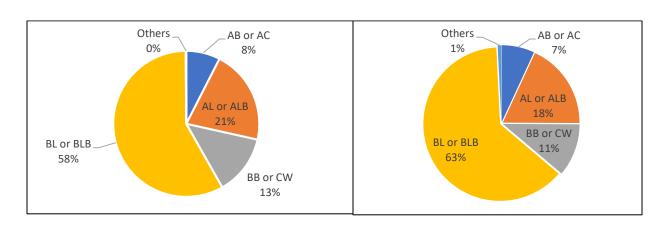


FIGURE 11: ALCOHOL BEVERAGE LICENSES BY TYPE, 2017-2018 (WAUKESHA COUNTY ON THE LEFT, STATE ON THE RIGHT)



#### **HEALTH INFRASTRUCTURE**

#### **Section Summary**

As can be seen, Waukesha County contains multiple trauma centers within its borders of all different levels.

#### 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, Waukesha County reported a significantly higher injury-to-death ratio than the state generally (101 vs. 73.1).

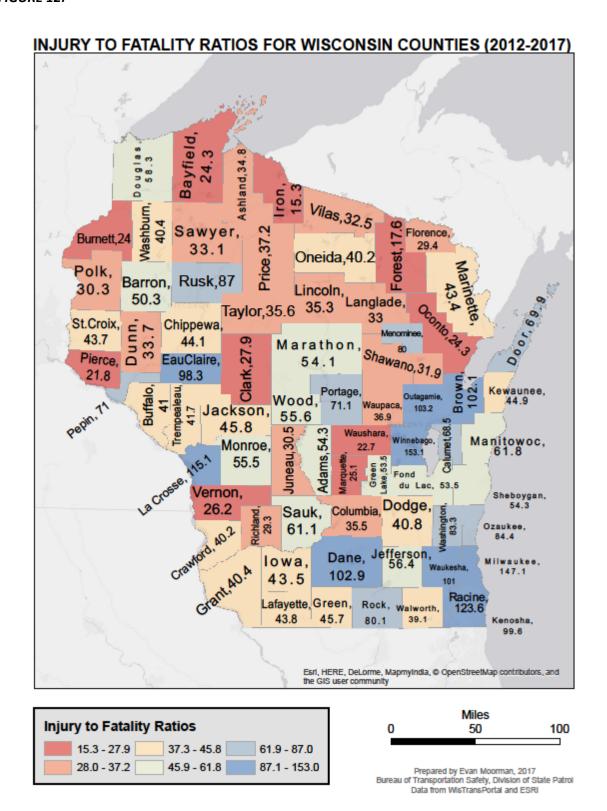
#### Hospital and EMT Access

As can be seen, Waukesha County contains multiple trauma centers within its borders of all different levels, except level I.<sup>13</sup> The closest level II and level I trauma centers are in Waukesha County and Milwaukee County respectively.

Waukesha County maintains 27 different emergency providers (listed below). This company employs 1,412 emergency personnel. Consequently, the county is the site of 3.5 emergency response personnel per 1,000 residents. This is slightly lower than the state figure of 4.02 emergency response personnel per 1,000 residents.

<sup>13</sup> The trauma capacities of hospitals are rated on a I-IV scale, with some remaining unrated; Level I hospitals have the greatest capacity. In the image, brighter colors show hot spots, where crash numbers are (locally) concentrated.

FIGURE 12:



#### FIGURE 13:

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

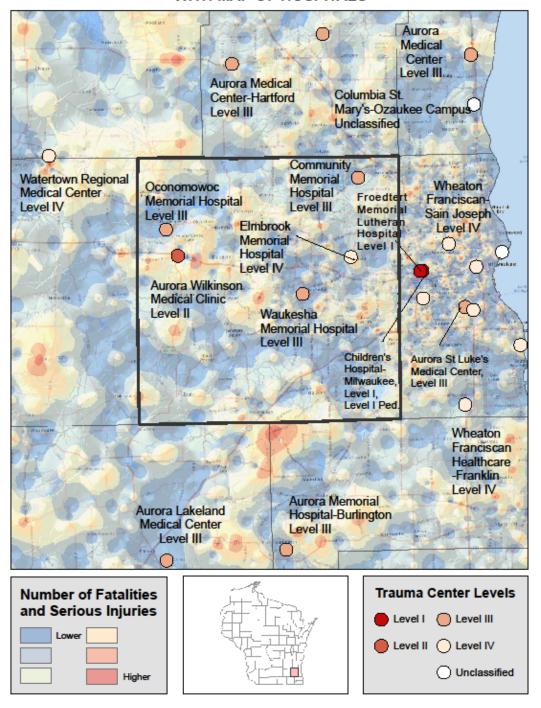


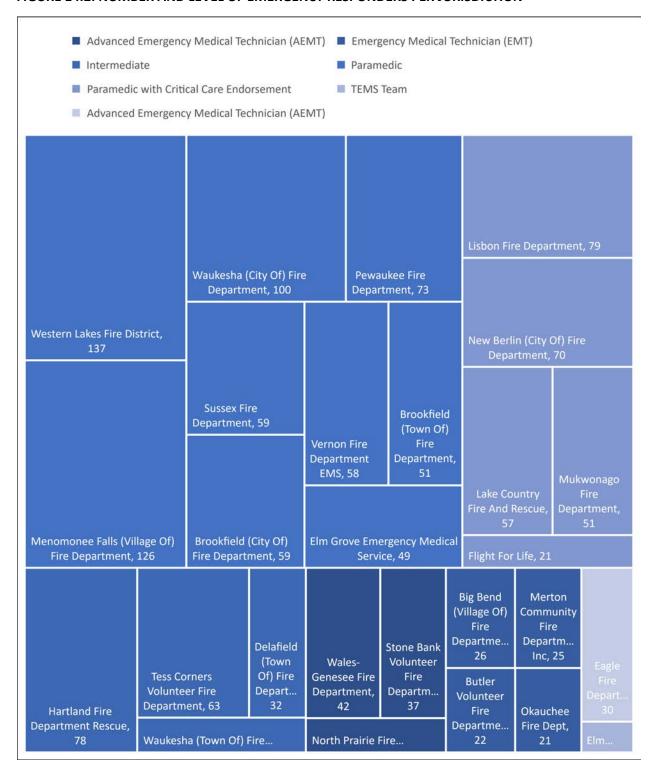
FIGURE 14: NUMBER OF EMT PERSONNEL/JURISDICTION 14

Primary address county name	Service License Level	Service Name	Number of Personnel
Waukesha	Advanced Emergency Medical Technician (AEMT)	Wales-Genesee Fire Department	42
Waukesha	Advanced Emergency Medical Technician (AEMT)	Stone Bank Volunteer Fire Department	37
Waukesha	Advanced Emergency Medical Technician (AEMT)	North Prairie Fire Department	18
Waukesha	Emergency Medical Technician (EMT)	Big Bend (Village Of) Fire Department	26
Waukesha	Emergency Medical Technician (EMT)	Merton Community Fire Department Inc	25
Waukesha	Emergency Medical Technician (EMT)	Butler Volunteer Fire Department	22
Waukesha	Emergency Medical Technician (EMT)	Okauchee Fire Dept	21
Waukesha	Intermediate	Hartland Fire Department Rescue	78
Waukesha	Intermediate	Tess Corners Volunteer Fire Department	63
Waukesha	Intermediate	Delafield (Town Of) Fire Department	32
Waukesha	Intermediate	Waukesha (Town Of) Fire Department	22
Waukesha	Paramedic	Western Lakes Fire District	137
Waukesha	Paramedic	Menomonee Falls (Village Of) Fire Department	126
Waukesha	Paramedic	Waukesha (City Of) Fire Department	100
Waukesha	Paramedic	Pewaukee Fire Department	73
Waukesha	Paramedic	Sussex Fire Department	59
Waukesha	Paramedic	Brookfield (City Of) Fire Department	59
Waukesha	Paramedic	Vernon Fire Department EMS	58
Waukesha	Paramedic	Brookfield (Town Of) Fire Department	51
Waukesha	Paramedic	Elm Grove Emergency Medical Service	49
Waukesha	Paramedic with Critical Care Endorsement	Lisbon Fire Department	79
Waukesha	Paramedic with Critical Care Endorsement	New Berlin (City Of) Fire Department	70
Waukesha	Paramedic with Critical Care Endorsement	Lake Country Fire And Rescue	57
Waukesha	Paramedic with Critical Care Endorsement	Mukwonago Fire Department	51
Waukesha	Paramedic with Critical Care Endorsement	Flight For Life	21
Waukesha	TEMS Team	Elm Grove Emergency Medical Services TEMS Unit	6
Waukesha	Advanced Emergency Medical Technician (AEMT)	Eagle Fire Department	30

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 $<sup>^{\</sup>rm 14}$  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 Waukesha County are listed below, and then facts and figures are organized to correspond with these ten issue areas.

#### **GENERAL CRASH-RELATED STATISTICS**

FIGURE 14.2: NUMBER OF CRASHES BY MOST SEVERE INJURY IN THE CRASH AND PERSONS INVOLVED IN CRASHES BY INJURY SEVERITY

	20	012	20	013	20	014	20	015	20	016	2012-201	L6 Average
	Crashes	Persons	Crashes	Persons								
Fatality	22	28	28	29	22	24	9	10	25	27	21.2	23.6
Incapacitating Injury	149	184	124	143	120	139	108	121	108	129	121.8	143.2
Non- Incapacitating Injury	596	776	586	741	586	750	575	727	669	871	602.4	773.0
Possible Injury	985	1,420	995	1,456	1,032	1,465	1,101	1,589	1,178	1,674	1,058.2	1,520.8
No Apparent Injury	4,754	12,671	5,418	14,143	5,487	14,395	5,515	14,158	6,081	16,018	5,451.0	14,277.0
Totals	6,506	15,079	7,151	16,512	7,247	16,773	7,308	16,605	8,061	18,719	7,254.6	16,737.6

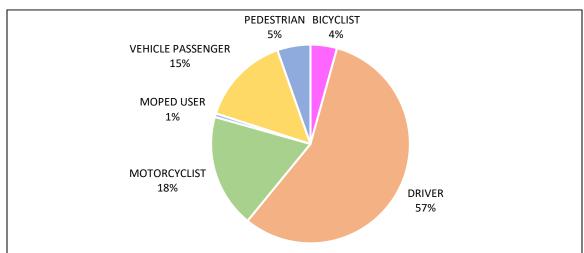


FIGURE 15: FATALITIES AND INCAPACITATING INJURIES BY ROLE, WAUKESHA COUNTY, 2012-2016

Vehicle drivers make up the highest percentage of fatalities and incapacitating injuries within Waukesha County. Motorcyclists make up the second largest percentage of fatalities and incapacitating injuries within Waukesha County

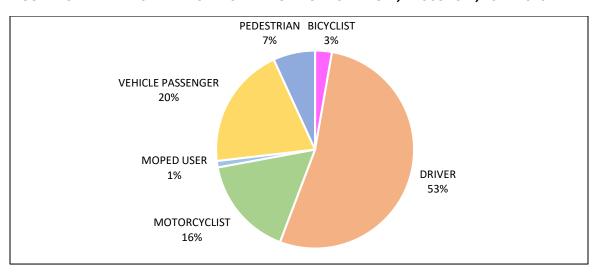


FIGURE 16: FATALITIES AND INCAPACITATING INJURIES BY ROLE, WISCONSIN, 2012-2016

Vehicle drivers make up the highest percentage of fatalities and incapacitating injuries within the state of Wisconsin.

FIGURE 17: FATAL AND INCAPACITATING INJURIES BY AGE IN WAUKESHA COUNTY, 2012-2016

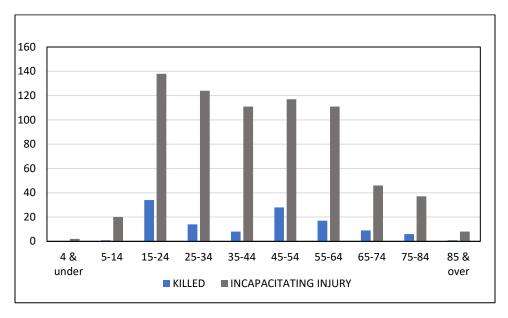
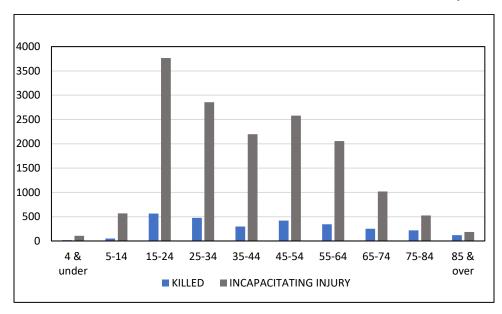
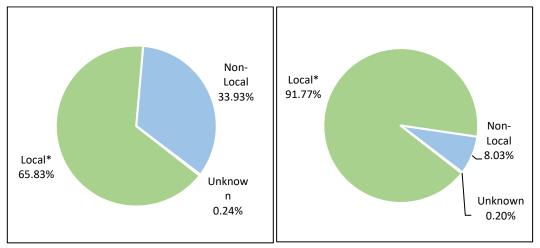


FIGURE 18: FATAL AND INCAPACITATING INJURIES BY AGE IN WISCONSIN, 2012-2016



The highest number of incapacitating injuries and fatalities occurred in the age group 15-24 within Waukesha County and the state of Wisconsin.

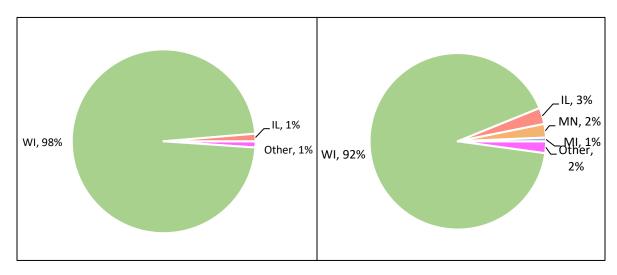
FIGURE 19: FATALITIES AND INCAPACITATING INJURIES BY PLACE OF RESIDENCE IN WAUKESHA COUNTY, 2012-2016 (WAUKESHA COUNTY ON LEFT AND STATE OF WI ON RIGHT), 2012-2016



<sup>\*</sup>Local is defined as persons with addresses that have ZIP codes fully or partially within the County.

Over 1/3 of fatalities and incapacitating injuries are non-local residents.

FIGURE 20: FATALITIES AND INCAPACITATING INJURIES BY STATE OF RESIDENCE (WAUKESHA COUNTY ON LEFT AND STATE OF WI ON RIGHT), 2012-2016



The highest percentage of fatalities and incapacitating injuries within Waukesha County are Wisconsin residents.

FIGURE 21: LOCATION OF CRASHES BY ROAD TYPE IN WAUKESHA COUNTY, 2012-2016

	Total Fatal Crashes	Total Non-Fatal Injury Crashes
Interstate Highways	8.5%	10.9%
US/State Highways	30.2%	29.1%
County Highways	15.1%	6.8%
Local Roads	46.2%	53.2%

The highest percentage of fatal crashes occurred on local roads within Waukesha County.

FIGURE 22: REPORTING OF FATAL AND SERIOUS INJURY CRASHES BY AGENCY, 2012-2016

LEA	TOTAL
BROOKFIELD POLICE DEPARTMENT	38
BUTLER POLICE DEPARTMENT	1
CHENEQUA POLICE DEPARTMENT	3
DELAFIELD POLICE DEPARTMENT	10
EAGLE POLICE DEPARTMENT	4
ELM GROVE POLICE DEPARTMENT	4
HARTLAND POLICE DEPARTMENT	9
LANNON POLICE DEPARTMENT	1
MENOMONEE FALLS POLICE DEPARTMENT	40
MUKWONAGO POLICE DEPARTMENT	8
MUSKEGO POLICE DEPARTMENT	39
NEW BERLIN POLICE DEPARTMENT	58
OCONOMOWOC LAKE POLICE DEPARTMENT	2
OCONOMOWOC POLICE DEPARTMENT	18
PEWAUKEE VILLAGE POLICE DEPARTMENT	11
SUMMIT POLICE DEPARTMENT	20
TOWN OF BROOKFIELD POLICE DEPARTMENT	1
TOWN OF MUKWONAGO POLICE DEPARTMENT	21
TOWN OF OCONOMOWOC POLICE DEPARTMENT	24
WAUKESHA COUNTY SHERIFF	255
WAUKESHA POLICE DEPARTMENT	127
WISCONSIN STATE PATROL	21
TOTAL	715

Waukesha County Sheriff's Department has the highest reporting of fatal and serious injury crashes within Waukesha 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: <a href="http://wisconsindot.gov/Documents/safety/education/frms-pubs/strategichwy-17-20.pdf">http://wisconsindot.gov/Documents/safety/education/frms-pubs/strategichwy-17-20.pdf</a>

#### ISSUE AREA: REDUCE DRIVER DISTRACTION/IMPROVE DRIVER ALERTNESS

Between 2012 and 2016, Waukesha County averaged 2 fatalities annually and 450 crashes relating to inattentive/distracted driving.

FIGURE 23: INATTENTION-RELATED FATAL AND INJURY-CAUSING CRASHES BY LOCATION, 2012-2016

	Inattention-Related Fatal Crashes	Inattention-Related Non-Fatal Injury Crashes
Interstate Highways	0.0%	11.0%
US/State Highways	60.0%	31.0%
County Highways	10.0%	6.4%
Local Roads	30.0%	51.6%

The highest percentage of inattention-related crashes occurred on local roads.

Waukesha County	% of inattention-related fatal crashes to all fatal crashes	9.4%
Wisconsin	% of inattention-related fatal crashes to all fatal crashes	18.5%

#### ISSUE AREA: REDUCE ALCOHOL & DRUG-IMPAIRED DRIVING

FIGURE 24: ALCOHOL OR DRUG-RELATED CRASHES BY LOCATION, 2012-2016

	Total Fatal Crashes	Total Non- Fatal Injury Crashes	Alcohol or Drug-Related Fatal Crashes	Alcohol or Drug Related Non- Fatal Injury Crashes
Interstate Highways	8.5%	10.9%	9.3%	9.1%
US/State Highways	30.2%	29.1%	29.6%	23.5%
County Highways	15.1%	6.8%	13.0%	10.8%
Local Roads	46.2%	53.2%	48.1%	56.6%

The highest percentage of alcohol or drug-related crashes occurred on local roads.

FIGURE 25: IMPAIRED DRIVING STATISTICS IN WAUKESHA COUNTY, 2012-2016

Average Total	Average Non-Fatal Injury	Average Alcohol or Drug-	Average Alcohol or Drug-Related
Fatal Crashes	Crashes	Related Fatal Crashes	Non-Fatal Injury Crashes
21.2	1,782.4	10.8	103.8

Waukesha County	% of alcohol or drug- related fatal crashes to all fatal crashes	50.9%
Wisconsin	% of alcohol or drug- related fatal crashes to all fatal crashes	45.0%

Waukesha has a higher percentage of drug or alcohol-related fatal crashes when compared to the state.

#### ISSUE AREA: REDUCE THE INCIDENCE AND SEVERITY OF MOTORCYCLE CRASHES

FIGURE 26: WAUKESHA COUNTY MOTORCYCLISTS KILLED OR SERIOUSLY INJURED, 2012-2016

	% Killed	% Seriously Injured	5-Yr Ave Killed	5-Yr Ave Seriously Injured
County	23.7%	17.6%	5.6	25.2
State	15.3%	16.5%	84.8	525.6

Waukesha County had a higher percentage of motorcyclists killed and seriously injured when compared to the state.

#### **ISSUE AREA: IMPROVE NON-MOTORIST SAFETY**

FIGURE 27: WAUKESHA COUNTY PEDESTRIANS KILLED OR SERIOUSLY INJURED

	% Killed	% Seriously Injured	5-Yr Ave Killed	5-Yr Ave Seriously Injured
County	8.5%	4.9%	2.0	7.0
State	8.1%	6.6%	44.8	211.2

Waukesha County had lower percentages of crashes where pedestrians were seriously injured, but a higher percentage of pedestrian fatalities when compared to the state.

FIGURE 28: PEDESTRIANS INVOLVED IN CRASHES BY ACTION AND LOCATION, 2012-2016

	PEDESTRIAN LOCATION					
PEDESTRIAN ACTION	BLANK	IN CROSSWAL K	IN ROADWAY	NOT IN ROADWAY	ON SIDEWALK	TOTAL
BLANK	6	29	19	5	1	60
WALKING NOT FACING TRAFFIC	0	16	18	5	1	40
DISREGARDED SIGNAL	1	4	0	0	0	5
DARTING INTO ROAD	0	3	34	0	0	37
DARK CLOTHING	0	6	6	0	0	12
WALKING FACING TRAFFIC	3	7	10	1	2	23
TOTAL	10	65	87	11	4	177

The most common pedestrian action contributing to crashes within Waukesha County is darting into the road.

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

	% Killed	% Seriously Injured	5-Yr Ave Killed	5-Yr Ave Seriously Injured
County	5.9%	4.1%	1.4	5.8
State	1.8%	2.9%	10.2	92.4

Waukesha County had higher percentages of bicyclists seriously injured and killed when compared to the state.

#### **ISSUE AREA: IMPROVE SAFETY OF INTERSECTIONS**

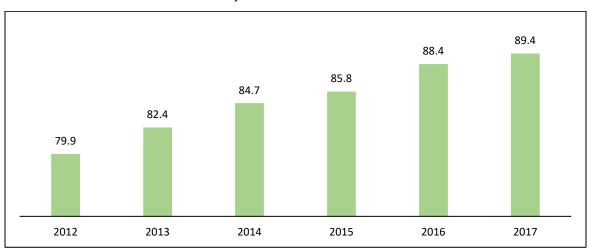
FIGURE 30: WAUKESHA COUNTY TOTAL CRASHES BY LOCATION, 2012-2016

	County	State
% Intersection	44.7%	37.8%
% Nonintersection	55.3%	62.8%

A higher percentage of crashes occurred at non-intersections within Waukesha County

#### **ISSUE AREA: INCREASE OCCUPANT PROTECTION**

FIGURE 31: SEATBELT USE STATEWIDE, 2012-2017



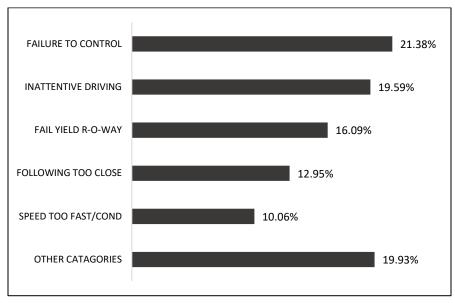
Seatbelt usage Statewide has increased over the past six years.

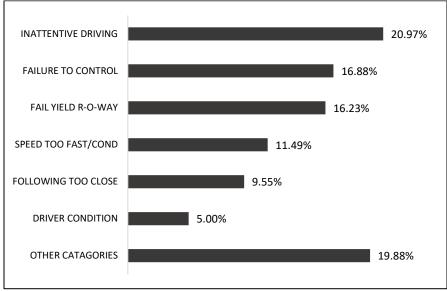
FIGURE 31.2: SAFETY EQUIPMENT USAGE IN PASSENGER CAR AND LIGHT TRUCKS DURING CRASHES, 2012-2016

	Belted	Unbelted
Fatalities and		
Serious Injuries	78.4%	21.6%

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

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





Failure to control is the most significant contributing factor for all crashes within Waukesha County, compared to inattentive driving for the state of Wisconsin.

FIGURE 33: AGGRESSIVE DRIVING STATISTICS IN WAUKESHA COUNTY, 2012-2016

	Average Speed-Related Non-Fatal
Average Speed-Related Fatal Crashes	Injury Crashes
7.4	426.8

	Total	Total Non- Fatal	Speed Related	Speed Related Non-Fatal
	Fatal	Injury	Fatal	Injury
	Crashes	Crashes	Crashes	Crashes
Interstate	8.5%	10.9%	5.4%	15.7%
Highways	8.5%	10.9%	5.4%	15.7%
US/State				
Highways	30.2%	29.1%	29.7%	27.0%
County Highways	15.1%	6.8%	16.2%	10.0%
Local Roads	46.2%	53.2%	48.6%	47.3%

The most common location for speed-related fatal injury crashes in Waukesha County is on local roads.

#### **ISSUE AREA: REDUCE LANE DEPARTURE CRASHES**

FIGURE 34: WAUKESHA 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	4,646.6	21.0%
State	30,395.6	25.4%

Waukesha County had a lower percentage of run-off-the-road crashes when compared to the state.

#### **THE IMPACT**

Traffic crashes in Waukesha County result in nearly 1,240 emergency room visits and nearly 135 hospitalizations resulting in nearly \$30.8 million in medical costs annually.

# 2011-2015 Annual Averages

	Waukesha County	Wisconsin
Average Annual Population	392,891	5,716,883
Persons in Crashes	44.4	46.0
(per 1,000 residents)		
Crash-Related Emergency Room Visits	315.2	407.3
(per 100,000 residents)		
Crash-Related Hospitalizations	34.3	49.3
(per 100,000 residents)		
Quality of Life Costs	\$24,146,784	\$36,819,900
(per 100,000 residents)		
Lost Years of Life	1.84	3.04
(per 1,000 residents)		
Medical Costs	\$7,832,312	\$10,482,526
(per 100,000 residents)		

15,16

<sup>&</sup>lt;sup>15</sup>University of Wisconsin-Madison, Center for Health Systems Research & Analysis. Wisconsin Crash Outcome Data Evaluation System Project. "Wisconsin CODES Report Builder Custom Reporting System," <a href="http://www.chsra.wisc.edu/codes/query/overview.html">http://www.chsra.wisc.edu/codes/query/overview.html</a> Accessed Oct. 2, 2017.

<sup>&</sup>lt;sup>16</sup>University of Wisconsin-Madison, Center for Health Systems Research & Analysis. Wisconsin Crash Outcome Data Evaluation System Project. "Community Crash Reports," <a href="http://www.chsra.wisc.edu/codes/community/default.htm">http://www.chsra.wisc.edu/codes/community/default.htm</a> 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 Task Forces

	Grant Amount
Southern Waukesha County Speed Task Force	\$14,981
Northern Waukesha County Speed Task Force	\$19,998.32
Northern Waukesha County Seat Belt Task Force	\$39,998.88
Mukwonago Seat Belt Task Force	\$19,964

Waukesha Police Department, Brookfield Police Department, Town of Brookfield Police Department, Elm Grove Police Department, Hartland Police Department, Mukwonago Police Department, Town of Mukwonago Police Department, Delafield Police Department, Muskego Police Department, New Berlin Police Department, and Village of Pewaukee Police Department participated on the Southeast Wisconsin Multijurisdictional OWI Task Force.

# 2016 Grant Participation

	Impaired	Occupant Protection	Speed		
Waukesha County Sheriff's	\$49,641.68	\$29,927.52	\$29,913.24		
Big Bend Police Dept.	\$15,000				
Brookfield Police Dept.	\$24,998.40				
Brookfield Town Police Dept.	\$9,804		\$14,966		
Butler Police Dept.					
Chenequa Police Dept.		N. Waukesha Co. Seat Belt Task	N. Waukesha Co. Speed Task		
Delafield Police Dept.		N. Waukesha Co. Seat Belt Task	N. Waukesha Co. Speed Task		
Eagle Police Dept.			So. Waukesha Co. Speed Task		
Elm Grove Police Dept.					
Hartland Police Dept.	\$11,711.94				
Lac La Belle Police Dept.					
Lannon Police Dept.					
Menomonee Falls Police Dept.	\$19,955				
Mukwonago Police Dept.	\$4,840	Mukwonago Seat Belt Task Force	So. Waukesha Co. Speed Task		
Mukwonago Town Police Dept.	\$14,999.36	Mukwonago Seat Belt Task Force	So. Waukesha Co. Speed Task		
Muskego Police Dept.	\$6,664				
Nashotah Police Dept.					
New Berlin Police Dept.					
North Prairie Police Dept.					
Oconomowoc Police Dept.					
Oconomowoc Town Police					
Oconomowoc Lake Police					
Pewaukee Village Police Dept.	\$10,999.52	N. Waukesha Co. Seat Belt Task	N. Waukesha Co. Speed Task		
Summit Police Dept.	\$9,744	N. Waukesha Co. Seat Belt Task	N. Waukesha Co. Speed Task		
Waukesha Police Dept.	\$29,584				

# 2017 Task Forces

	Grant Amount
Waukesha County Northern OWI Enforcement Task Force	\$49,995
Waukesha County Central OWI Enforcement Task Force	\$49,686
Waukesha County Southern OWI Enforcement Task Force	\$19,944.32
Waukesha County Northern Speed Enforcement Task Force	\$24,998.40
Waukesha County Central Speed Enforcement Task Force	\$28,296
Waukesha County Southern Speed Enforcement Task Force	\$12,499.20
Waukesha County Central Seatbelt Enforcement Task Force	\$29,710.80
Waukesha County Southern Seatbelt Enforcement Task Force	\$27,997.92

# 2017 Task Force Participation

	Impaired Driving	Occupant Protection	Speed		
Waukesha County Sheriff's Dept.	Waukesha Co. Central OWI TF	Waukesha Co. Central Speed TF	Waukesha Co. Central Seatbelt TF		
Big Bend Police Dept.	Waukesha Co. Southern OWI TF	Waukesha Co. Southern Speed TF	Waukesha Co. Southern Seat Belt TF		
Brookfield Police Dept.					
Brookfield Town Police Dept.					
Butler Police Dept.					
Chenequa Police Dept.	Waukesha Co. Northern OWI TF	Waukesha Co. Northern Speed TF			
Delafield Police Dept.	Waukesha Co. Northern OWI TF	Waukesha Co. Northern Speed TF			
Eagle Police Dept.	Waukesha Co. Southern OWI TF	Waukesha Co. Southern Speed TF	Waukesha Co. Southern Seat Belt TF		
Elm Grove Police Dept.					
Hartland Police Dept.	Waukesha Co. Northern OWI TF				
Lac La Belle Police Dept.					
Lannon Police Dept.					
Menomonee Falls Police Dept.					
Mukwonago Police Dept.	Waukesha Co. Southern OWI TF	Waukesha Co. Southern Speed TF	Waukesha Co. Southern Seat Belt TF		
Mukwonago Town Police Dept.	Waukesha Co. Southern OWI TF	Waukesha Co. Southern Speed TF	Waukesha Co. Southern Seat Belt TF		
Muskego Police Dept.					
Nashotah Police Dept.					
New Berlin Police Dept.					
North Prairie Police Dept.					
Oconomowoc Police Dept.					
Oconomowoc Town Police Dept.	Waukesha Co. Northern OWI TF				
Oconomowoc Lake Police Dept.					
Pewaukee Village Police Dept.	Waukesha Co. Northern OWI TF	Waukesha Co. Northern Speed TF			
Summit Police Dept.	Waukesha Co. Northern OWI TF	Waukesha Co. Northern Speed TF			
Waukesha Police Dept.					

# 2018 Task Force Eligibility

	Impaired Driving	Occupant Protection	Speed
Waukesha County Law Enforcement Agencies	eligible	eligible	eligible

# Agency Mobilizations 2016-2017

	FY2016	2016	2016	FY2017	2017	2017
	Drive	Click It or	Drive	Drive	Click It or	Drive
	Sober or	Ticket	Sober or	Sober or	Ticket	Sober or
	Get		Get	Get		Get
	Pulled		Pulled	Pulled		Pulled
	Over-		Over –	Over-		Over –
	Winter		Labor Day	Winter		Labor Day
	Holidays			Holidays		,
Waukesha County Sheriff's Dept.		yes	yes		yes	yes
Big Bend Police Dept.						
Brookfield Police Dept.						
Brookfield Town Police Dept.						
Butler Police Dept.					yes	
Chenequa Police Dept.						
Delafield Police Dept.						
Eagle Police Dept.		yes		yes	yes	yes
Elm Grove Police Dept.	yes	yes		yes	yes	yes
Hartland Police Dept.		yes				yes
Lac La Belle Police Dept.						
Lannon Police Dept.		yes		yes	yes	yes
Menomonee Falls Police Dept.						
Mukwonago Police Dept.	yes	yes		yes	yes	yes
Mukwonago Town Police Dept.		yes			yes	
Muskego Police Dept.						
Nashotah Police Dept.						
New Berlin Police Dept.						
North Prairie Police Dept.						
Oconomowoc Police Dept.					yes	yes
Oconomowoc Town Police Dept.						
Oconomowoc Lake Police Dept.						
Pewaukee Village Police Dept.	yes	yes	yes	yes	yes	
Summit Police Dept.	yes	yes	yes		yes	yes
Waukesha 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.