

CORRESPONDENCE/MEMORANDUM State of Wisconsin

Date: November 16, 2012

To: **Regional Directors**

Attention: Regional System Planning and Operations Sections

From: **Rebecca Szymkowski, P.E., PTOE**
State Traffic Engineer of Operations

Subject: **2011 Statewide Crash Rates**

The following tables are for the 2011 crash rates. The first table summarizes the state system statewide average crash rates and the last table summarize the local system statewide average crash rates. The crash rates are different for the state system than the local system based on recommendations from the safety engineering community. This format better accommodates the end users of the data and aligns with current WisDOT business practices.

The following bullets apply to the state system statewide average crash rates:

1. Crash rates on the state system are divided into three categories and are divided into 12 functional “peer” groups (i.e. “like” roadways), which are based on the Wisconsin Department of Transportation’s Meta-Manager Management System Database. **Please note that if a roadway is divided, 50% of the average annual daily traffic (AADT) is used when calculating crash rates.**
2. The table provided is for a 5-year running average. The 5-year average takes into account any variances in one particular year and also takes into account trends in traffic volumes.
3. Crash rates are only included for “without deer.”

Meta-manager only includes state routes and therefore, the format of the statewide average crash rates on the local system have not changed from previous years. The following bullets are regarding the local system statewide average crash rates:

1. All crashes that occurred on urban city streets, rural city streets, and urban county highways have been combined into a single category called “Urban Streets.” In past years, the “Urban Streets” category also included Urban State Trunk Highways. All crash rates in the “Urban Streets” category have been recalculated based on the new definition and do not match the “Urban Streets” crash rates provided in previous years (prior to 2009).
2. Similar to the state system, only crash rates for “without deer” have been provided.

The definition of a “reportable crash” is based on a reporting threshold of \$1000 for property damage only “to any one person’s property,” \$1000 for government-owned vehicles and remains at \$200 for all other government-owned property, such as traffic control devices.

The Division of Transportation Investment Management (DTIM) has provided the crash rates for the state system. The University of Wisconsin-Madison Traffic Operations and Safety Laboratory (UW TOPS Lab) prepared the tables for the local system. DTIM has provided the vehicle miles and the Division of Motor Vehicles (DMV) provided the crash data taken from the Accident File.

Table I lists the Wisconsin statewide average crash rates on the state system for 2007 to 2011. These rates are expressed as crashes per 100 million vehicle miles. These rates do not include non-reportable crashes (<\$1000). Table II lists the statewide average crash rates on the local system and excludes deer crashes.

In addition to the total crash rate, the injury crashes have been broken down into three subcategories. Also included is a crash rate for property damage only. This information is included in order to provide the opportunity to conduct a more detailed crash analysis. The following three categories are defined according to the Law Enforcement Officer’s Instruction Manual:

- **Type A:** Incapacitating Injury - Any injury other than a fatal injury, which prevents the injured person from walking, driving, or from performing other activities, which he/she performed before the accident.
- **Type B:** Nonincapacitating Injury - Any injury, other than fatal or incapacitating, which is evident at the scene. Evidence of injury may include known symptoms of an injury, which are not directly observable.
- **Type C :** Possible Injury - Any injury which is not observable or evident at the scene but is claimed by the individual or suspected by the law enforcement officer.

Table I
State Trunk Highway Crash Rates*
(Crashes per 100 million vehicle miles)

5-Year Average (2007-2011)
Excludes Deer Crashes

Meta-manager State Trunk Highway Groups			Total	Fatal	A	B	C	Property Damage Only
	1	Rural and Small Urban Freeways	39	0.3	1.7	4.6	4.6	28.2
	2	Rural and Small Urban Expressways	55	0.7	3.1	7.2	7.6	36.3
	3	Rural STN ADT between 3500 and 8700 ADT	69	1.1	4.9	10.3	10.7	41.8
	4	Rural STN ADT between 2000 and 3500 ADT	81	1.5	6.0	12.8	11.9	48.4
	5	Rural STN ADT between 750 and 2000 ADT	105	1.9	7.4	17.5	14.4	63.4
	6	Rural STN ADT less than 750	159	2.4	13.0	31.1	21.7	90.8
	7	Large Urban Freeways	78	0.3	1.6	6.3	13.6	56.4
	8	Large Urban Divided Highways and One Way	313	0.7	6.8	29.4	71.5	205.1
	9	Large Urban Undivided Highways	343	1.4	9.8	37.1	71.3	222.8
	10	Small Urban STN (excluding freeways, expressways...1 and 2 above)	233	0.7	7.2	24.3	40.2	161.0
	11	Rural STH ADT greater and 8700 ADT	66	0.9	4.0	8.5	10.3	42.5
12	Community of less than 5000 population STN	180	0.9	6.5	19.8	25.4	127.6	

* The rates **do not** include non-reportable crashes.

Table II
Local Road Crash Rates: 2007-2011*
(Crashes per 100 million vehicle miles)
Excludes Deer Crashes

URBAN STREETS							
	Total	Fatal	Injury	A	B	C	Property Damage Only
2007	294	0.7	89	6.6	28	54	204
2008	308	0.6	85	6.3	28	51	222
2009	281	0.5	81	5.9	27	48	200
2010	286	0.6	84	5.9	29	49	201
2011	317	0.6	88	5.8	31	52	228

NOTE: All crashes that occurred on urban city streets, rural city streets, and urban county highways have been combined into a single category called “Urban Streets.” In past years, the “Urban Streets” category also included Urban State Trunk Highways. All crash rates in the “Urban Streets” category have been recalculated based on the new definition and do not match the “Urban Streets” crash rates provided in previous years (prior to 2009).

COUNTY TRUNKS							
	Total	Fatal	Injury	A	B	C	Property Damage Only
2007	148	2.2	60	11.2	23	25	86
2008	160	2.0	58	9.7	24	24	100
2009	142	1.6	53	8.4	23	21	87
2010	101	1.3	37	6.6	16	15	63
2011	100	1.5	36	6	16	15	63

* The rates **do not** include non-reportable crashes. The UW TOPS Lab created the 2011 crash rates from the WisTransPortal database. Crash information was provided by WisDOT DMV Traffic Accident Section. VMT estimates were provided by WisDOT DTIM Traffic Forecasting Section.

If there are questions about how VMT estimates are made, please contact Harold Schumacher at (608) 267-5006.