Crash Data
Past, Present, and Future

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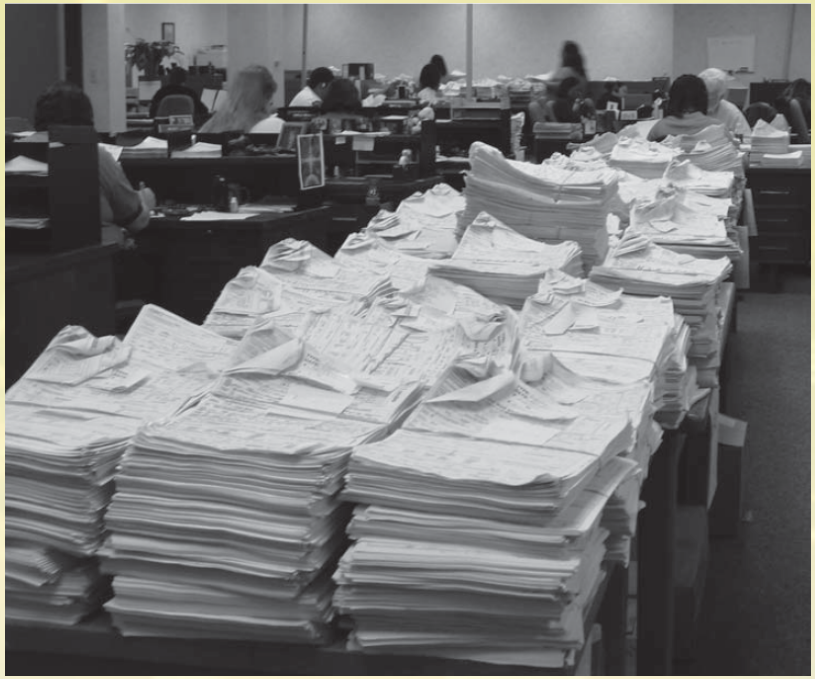
Audience

- Law Enforcement?
- Admin?
- IT?
- Dispatchers?
- Other?

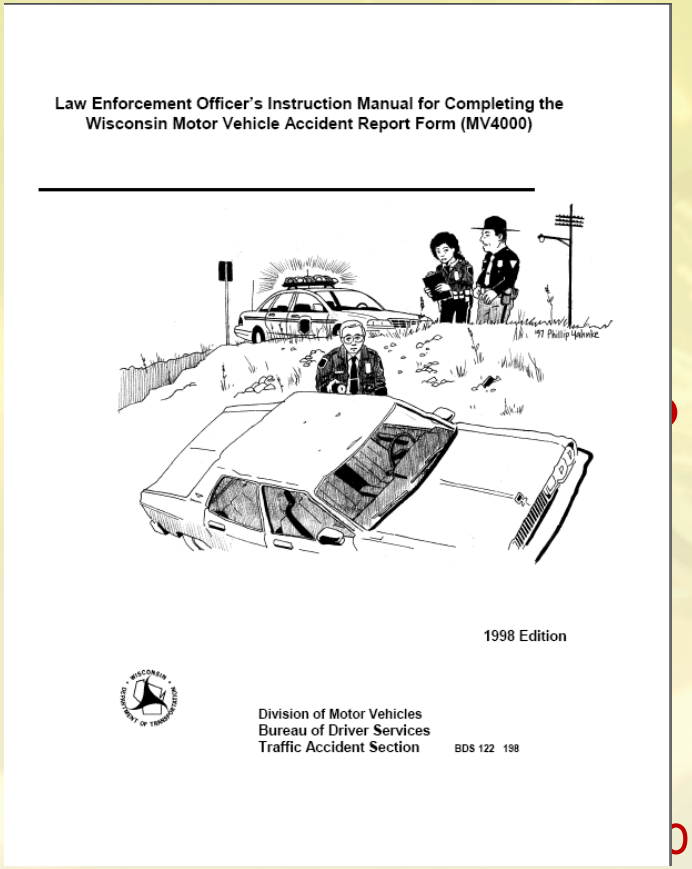
- **Past**
  - MV4000
  - Training
  - Paper
- **Present**
  - TraCS
  - WisTransPortal
- **Future**
  - Crash Data 2.0

Past



Paper crash report backlogs in Texas. (GAO-10-454)

People & Training



- According to the CDIPG, one refrain commonly heard from police is that "crash forms are being completed just for insurance companies"
- *WisDOT MV4000 Instruction Manual*
  - Primary training resource for WI officers
  - Last updated in 1998
  - Brief and vague concerning engineering fields
    - No baseline definition of when to flag hills or curves
    - Poor definition of traffic barrier
    - No discussion of roundabouts

Present

TraCS
Traffic and Criminal Software

Help Screens

TraCS has built-in help screens that can be accessed for a data field by pressing the <F2> key. Help is available for each of the forms in the suite.

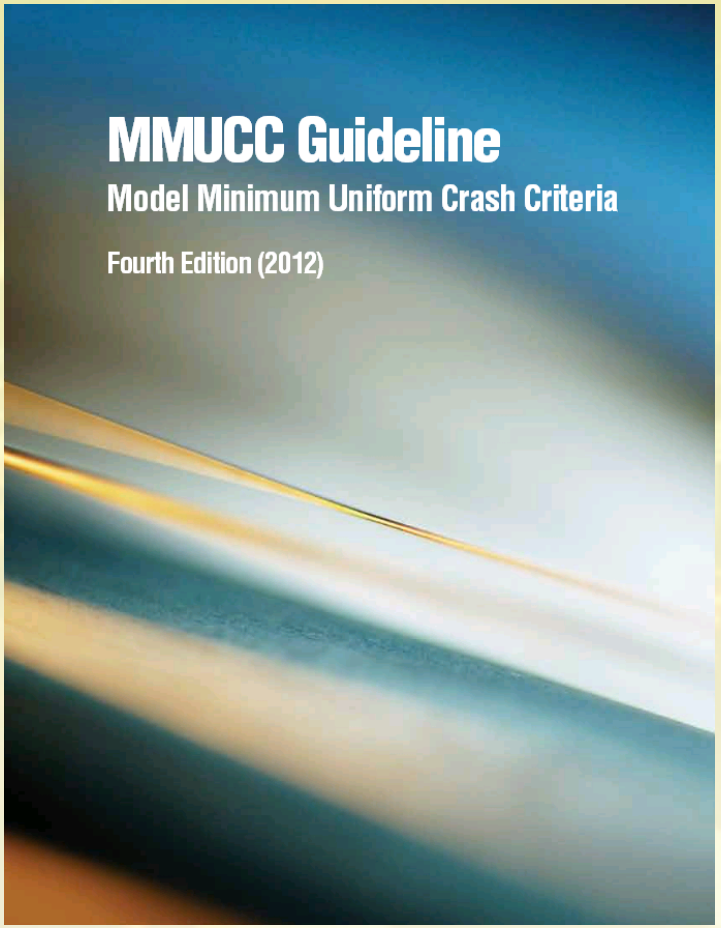
The Help button on the toolbar brings up information about the TraCS software, in general.

Engineering Elements Data Quality Audit

- Low accuracy for access control at partially controlled facilities indicates a lack of understanding for what qualifies as partial control
- When hills or curves are present on at least one approach, when should they be marked?
- Low traffic-way accuracy is a result of misunderstanding what constitute divided roadways and barriers
- Roundabout-specific inaccuracies were especially noteworthy in the horizontal curve and traffic-way fields

National Perspective: Model Minimum Uniform Crash Criteria (MMUCC)

- 110 Crash Data Elements
  - 77 Collected From Scene
  - 10 Derived
  - 23 Linked
- 4 Categories
  - Crash Data Elements
  - Vehicle Data Elements
  - Person Data Elements
  - Roadway Elements



Future

- New Crash Elements and Attributes
  - 2012
  - Brown County Sheriff,
  - La Crosse County Sheriff,
  - City of Madison,
  - City of Milwaukee,
  - Wisconsin State Patrol, and
  - Oneida Tribal Police.

Crash Data Work Group

- DMV
- DSP
- DTIM
- DTSD
- DBM

National Perspective: Crash Data Improvement Program (CDIP)

- The Performance "Six Pack"
  - Timeliness
  - Accuracy
  - Completeness
  - Consistency
  - Accessibility
  - Integration

Traffic Safety Information Systems

Crash Database - Objectives

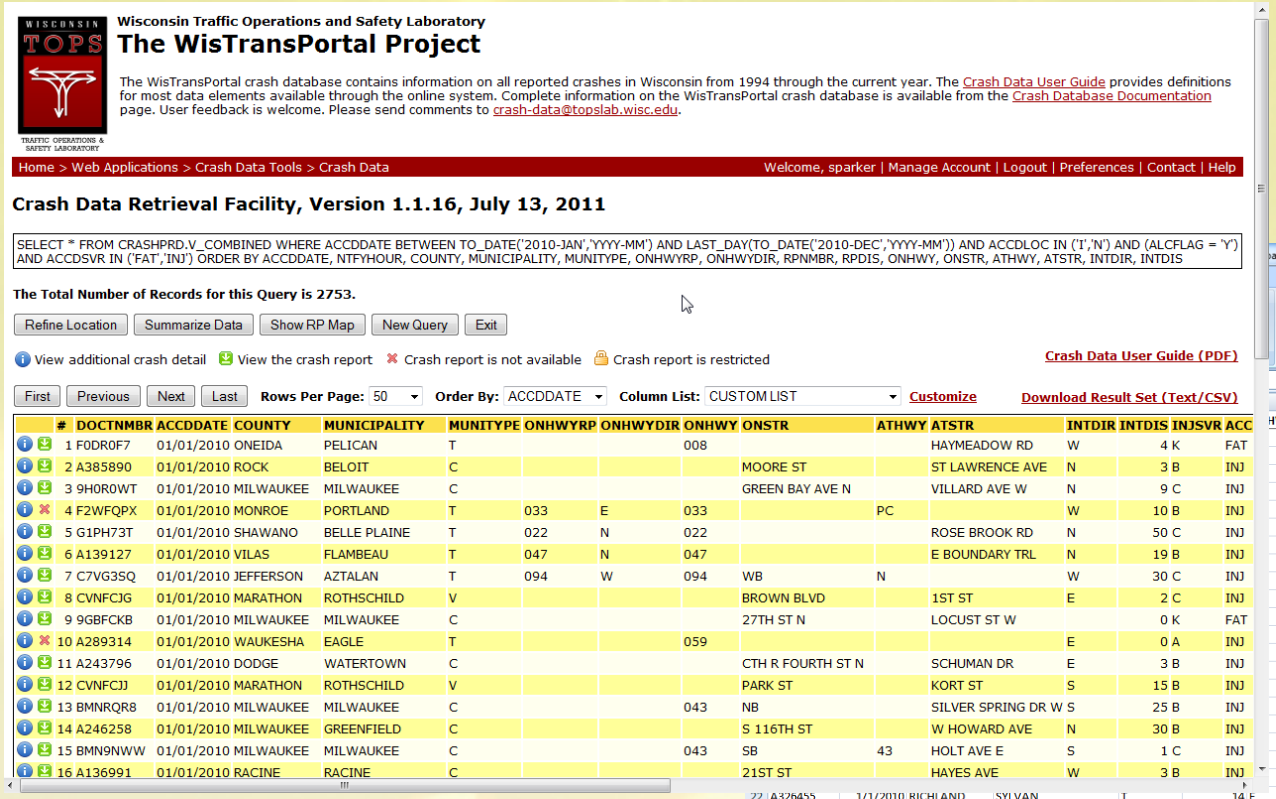
- Implement the Revised Crash Form by January 1, 2017
- Streamline Crash Data Processing
- Modernize the Data Management System
- Improve Crash Data Quality – MMUCC / MIRE
- Take Full Advantage of the TraCS Incident Locator Tool (ILT)
- Enhance Crash Data Access and Interoperability
- Support More Frequent Updates to the Crash Form

Traffic Operations and Safety (TOPS) Laboratory

- Formed in 2003
- Part of UW-Madison CEE Department
- Partnership with Wisconsin Department of Transportation (WisDOT)
- Three Program Areas
  - Information Technology (IT)
  - Traffic Safety Engineering & Microsimulation
  - ITS / Operations (TSM&O)
- Research / Government

ZERO IN WISCONSIN

WisTransPortal Crash Data System



Wisconsin Traffic Operations and Safety Laboratory

The WisTransPortal Project

The WisTransPortal crash database contains information on all reported crashes in Wisconsin from 1994 through the current year. The Crash Data User Guide provides definitions for most data elements available through the online system. Complete information on the WisTransPortal crash database is available from the Crash Database Documentation page. User feedback is welcome. Please send comments to crash-data@topslab.wisc.edu.

Home > Web Applications > Crash Data Tools > Crash Data — Welcome, sparker | Manage Account | Logout | Preferences | Contact | Help

Crash Data Retrieval Facility, Version 1.1.16, July 13, 2011

```
SELECT * FROM CRASHPRD.V_COMBINED WHERE ACCDDATE BETWEEN TO_DATE('2010-JAN','YYYY-MM') AND LAST_DAY(TO_DATE('2010-DEC','YYYY-MM')) AND ACCDLOC IN ('I','N') AND (ALCFLAG = 'Y')
AND ACCDSVR IN ('FAT','INJ') ORDER BY ACCDDATE, NTFYHOUR, COUNTY, MUNICIPALITY, MUNITYPE, ONHWYRP, ONHWYDIR, RPNMBR, RPDIS, ONHWY, ONSTR, ATHWY, ATSTR, INTDIR, INTDIS
```

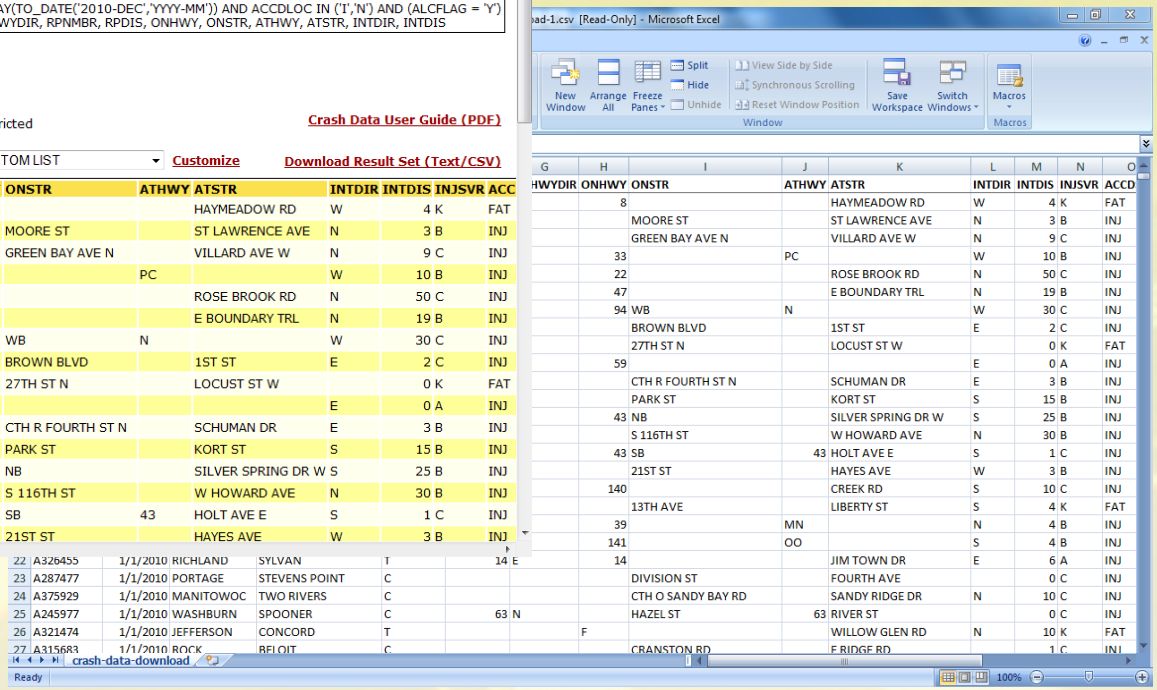
The Total Number of Records for this Query is 2753.

Refine Location | Summarize Data | Show RP Map | New Query | Exit

View additional crash detail | View the crash report | Crash report is not available | Crash report is restricted — Crash Data User Guide (PDF)

First | Previous | Next | Last — Rows Per Page: 50 — Order By: ACCDDATE — Column List: CUSTOM LIST — Customize — Download Result Set (Text/CSV)

#	DOCTNMBR	ACCDDATE	COUNTY	MUNICIPALITY	MUNITYPE	ONHWYRP	ONHWYDIR	ONHWY	ONSTR	ATHWY	ATSTR	INTDIR	INTDIS	INJSVR	ACC
1	F0DR0F7	01/01/2010	ONEIDA	PELICAN	T			008			HAYMEADOW RD	W	4	K	FAT
2	A385890	01/01/2010	ROCK	BELOIT	C				MOORE ST		ST LAWRENCE AVE	N	3	B	INJ
3	9H0R0WT	01/01/2010	MILWAUKEE	MILWAUKEE	C				GREEN BAY AVE N		VILLARD AVE W	N	9	C	INJ
4	F2WFQPX	01/01/2010	MONROE	PORTLAND	T	033	E	033		PC		W	10	B	INJ
5	G1PH73T	01/01/2010	SHAWANO	BELLE PLAINE	T	022	N	022			ROSE BROOK RD	N	50	C	INJ
6	A139127	01/01/2010	VILAS	FLAMBEAU	T	047	N	047			E BOUNDARY TRL	N	19	B	INJ
7	C7VG3SQ	01/01/2010	JEFFERSON	AZTALAN	T	094	W	094	WB	N		W	30	C	INJ
8	CVNFCJG	01/01/2010	MARATHON	ROTHSCHILD	V				BROWN BLVD		1ST ST	E	2	C	INJ
9	9GBFCKB	01/01/2010	MILWAUKEE	MILWAUKEE	C				27TH ST N		LOCUST ST W		0	K	FAT
10	A289314	01/01/2010	WAUKESHA	EAGLE	T			059				E	0	A	INJ
11	A243796	01/01/2010	DODGE	WATERTOWN	C				CTH R FOURTH ST N		SCHUMAN DR	E	3	B	INJ
12	CVNFCJJ	01/01/2010	MARATHON	ROTHSCHILD	V				PARK ST		KORT ST	S	15	B	INJ
13	BMNRQR8	01/01/2010	MILWAUKEE	MILWAUKEE	C			043	NB		SILVER SPRING DR W	S	25	B	INJ
14	A246258	01/01/2010	MILWAUKEE	GREENFIELD	C				S 116TH ST		W HOWARD AVE	N	30	B	INJ
15	BMN9NWW	01/01/2010	MILWAUKEE	MILWAUKEE	C			043	SB	43	HOLT AVE E	S	1	C	INJ
16	A136991	01/01/2010	RACINE	RACINE	C				21ST ST		HAYES AVE	W	3	B	INJ



ad-1.csv [Read-Only] - Microsoft Excel

New Window | Arrange All | Freeze Panes | Split | Hide | Unhide | View Side by Side | Synchronous Scrolling | Reset Window Position | Save Workspace | Switch Windows | Macros — Window — Macros

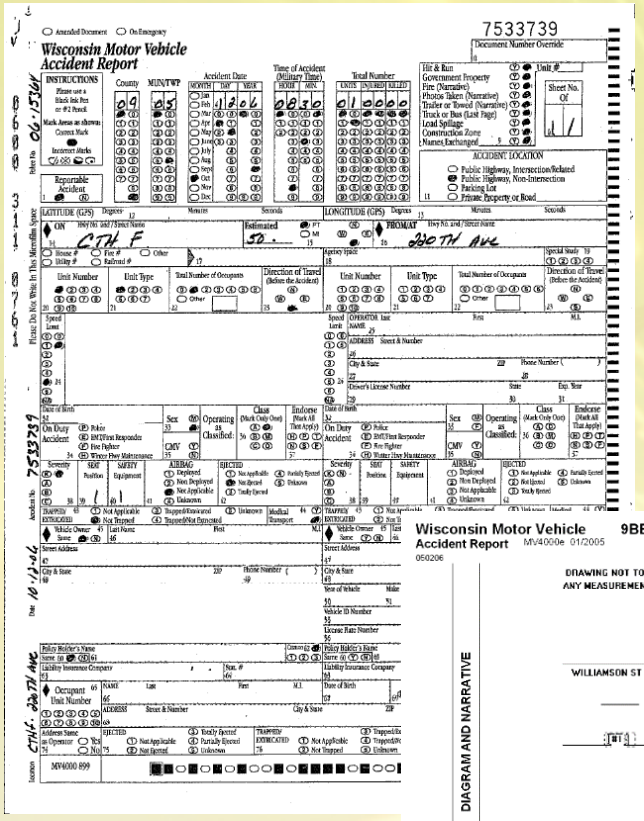
HWYDIR	ONHWY	ONSTR	ATHWY	ATSTR	INTDIR	INTDIS	INJSVR	ACCD
	8			HAYMEADOW RD	W	4	K	FAT
		MOORE ST		ST LAWRENCE AVE	N	3	B	INJ
		GREEN BAY AVE N		VILLARD AVE W	N	9	C	INJ
	33		PC		W	10	B	INJ
	22			ROSE BROOK RD	N	50	C	INJ
	47			E BOUNDARY TRL	N	19	B	INJ
	94	WB	N		W	30	C	INJ
		BROWN BLVD		1ST ST	E	2	C	INJ
		27TH ST N		LOCUST ST W		0	K	FAT
	59				E	0	A	INJ
		CTH R FOURTH ST N		SCHUMAN DR	E	3	B	INJ
		PARK ST		KORT ST	S	15	B	INJ
	43	NB		SILVER SPRING DR W	S	25	B	INJ
		S 116TH ST		W HOWARD AVE	N	30	B	INJ
	43	SB	43	HOLT AVE E	S	1	C	INJ
		21ST ST		HAYES AVE	W	3	B	INJ
	140			CREEK RD	S	10	C	INJ
		13TH AVE		LIBERTY ST	S	4	K	FAT
	39		MN		N	4	B	INJ
	141		OO		S	4	B	INJ
	14			JIM TOWN DR	E	6	A	INJ
		DIVISION ST		FOURTH AVE		0	C	INJ
		CTH O SANDY BAY RD		SANDY RIDGE DR	N	10	C	INJ
		HAZEL ST	63	RIVER ST		0	C	INJ
F				WILLOW GLEN RD	N	10	K	FAT
		CRANSTON RD		E RIDGE RD		1	C	INJ

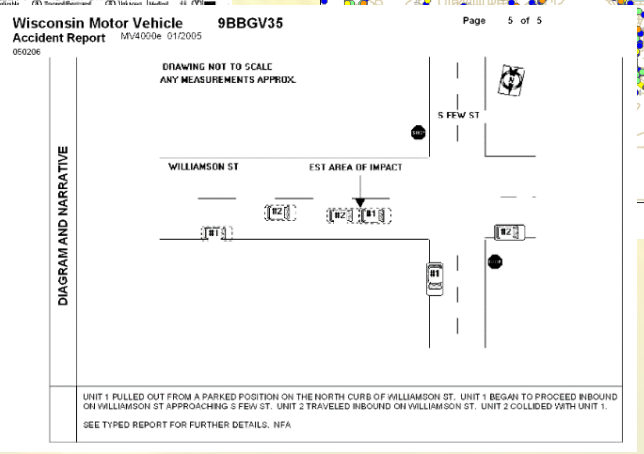
22	A326455	1/1/2010	RICHLAND	SYLVAN	T	14	E
23	A287477	1/1/2010	PORTAGE	STEVENS POINT	C		
24	A375929	1/1/2010	MANITOWOC	TWO RIVERS	C		
25	A245977	1/1/2010	WASHBURN	SPOONER	C	63	N
26	A321474	1/1/2010	JEFFERSON	CONCORD	T		
27	A315683	1/1/2010	ROCK	BELOIT	C		

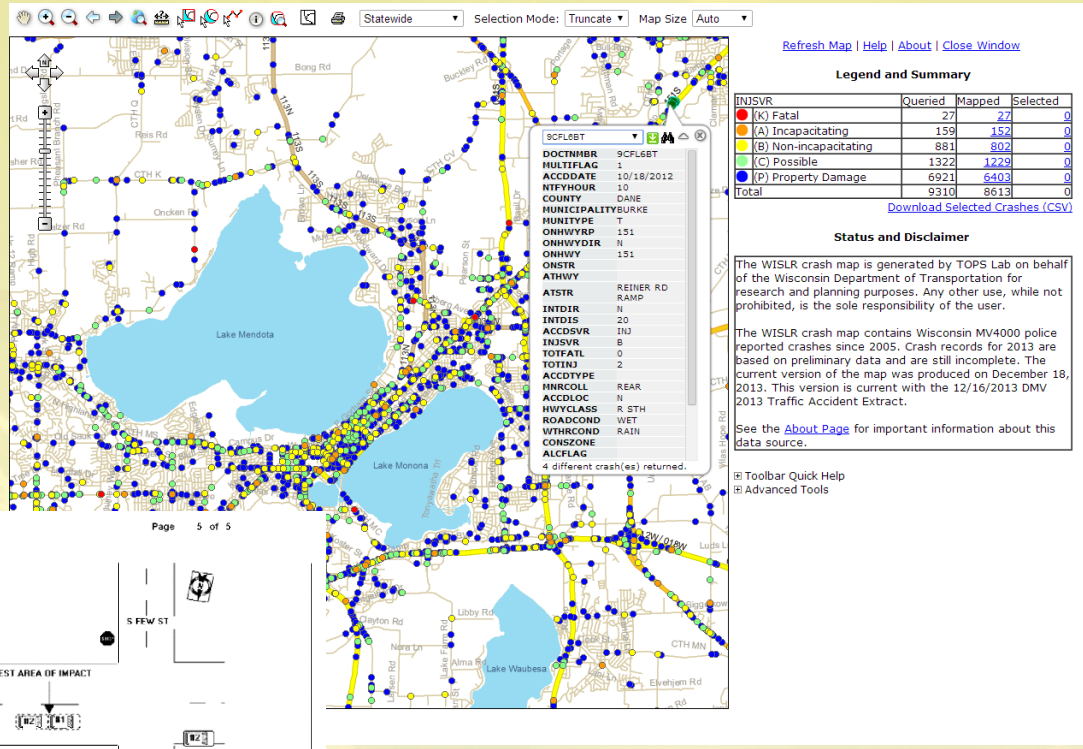
crash-data-download — Ready — 100%

Initial System Deployed in 2006

WisTransPortal Crash Data System







Crash Reports (2008) and Statewide GIS Crash Map (2012)

Community Maps – TSC Crash Mapping

Community Maps - Wisconsin County TSC Crash Mapping

Crash data on this site is entered by local agencies and is not an official source of crash data. [More]

About | Search | Advanced | Admin | Contact | Help

Home > Community Maps > Crash > Search

Login | Contact | Help | Release Notes

Search Results

Collection: TSC Statewide Crash Map

New Search

Fatality Injury (A) Injury (B) Injury (C)
Property Damage

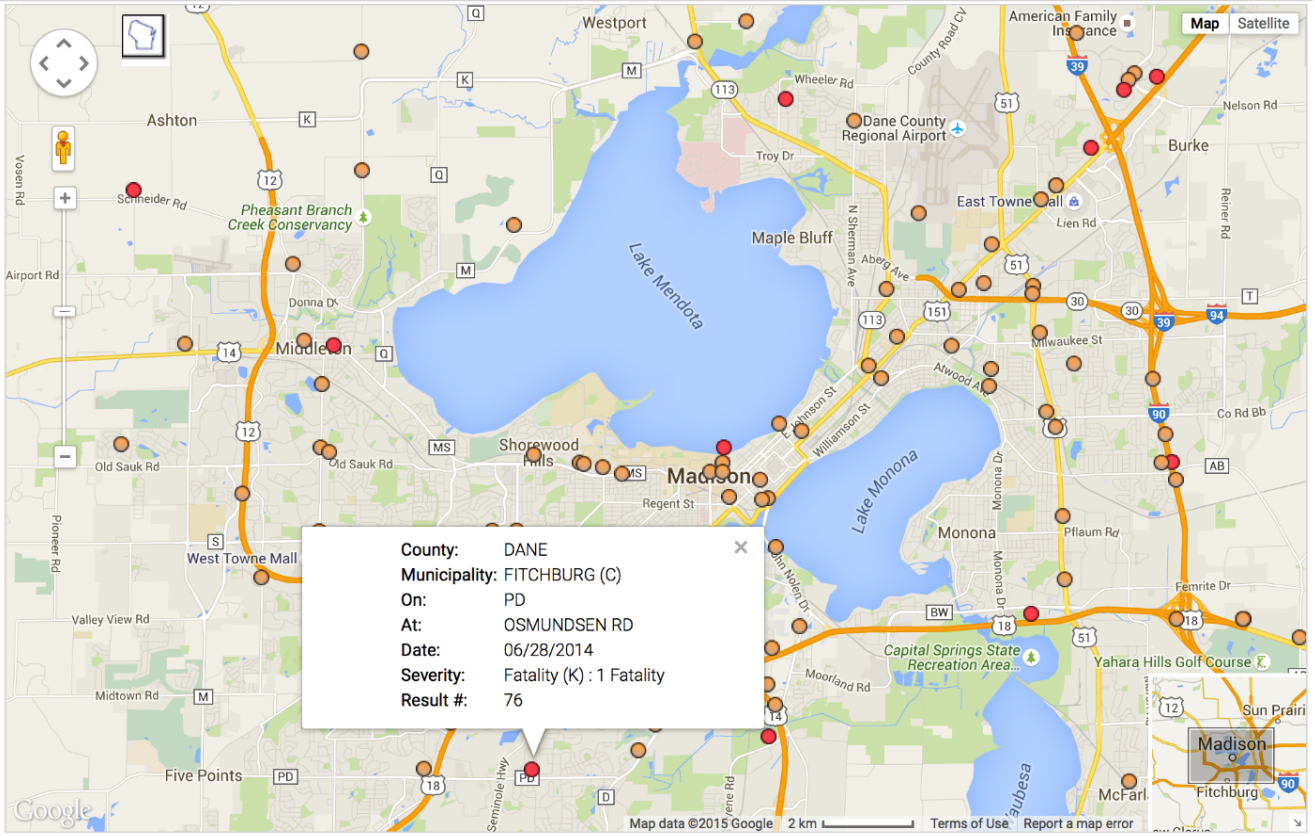
There were **156** crashes meeting the following criteria.

Counties:
- DANE
Begin Date: 01/01/2014
End Date: 12/31/2014
Crash Severity Filters:
- K
- A
Checked Flags:
NONE

Check ALL | UnCheck ALL | Zoom To Selected

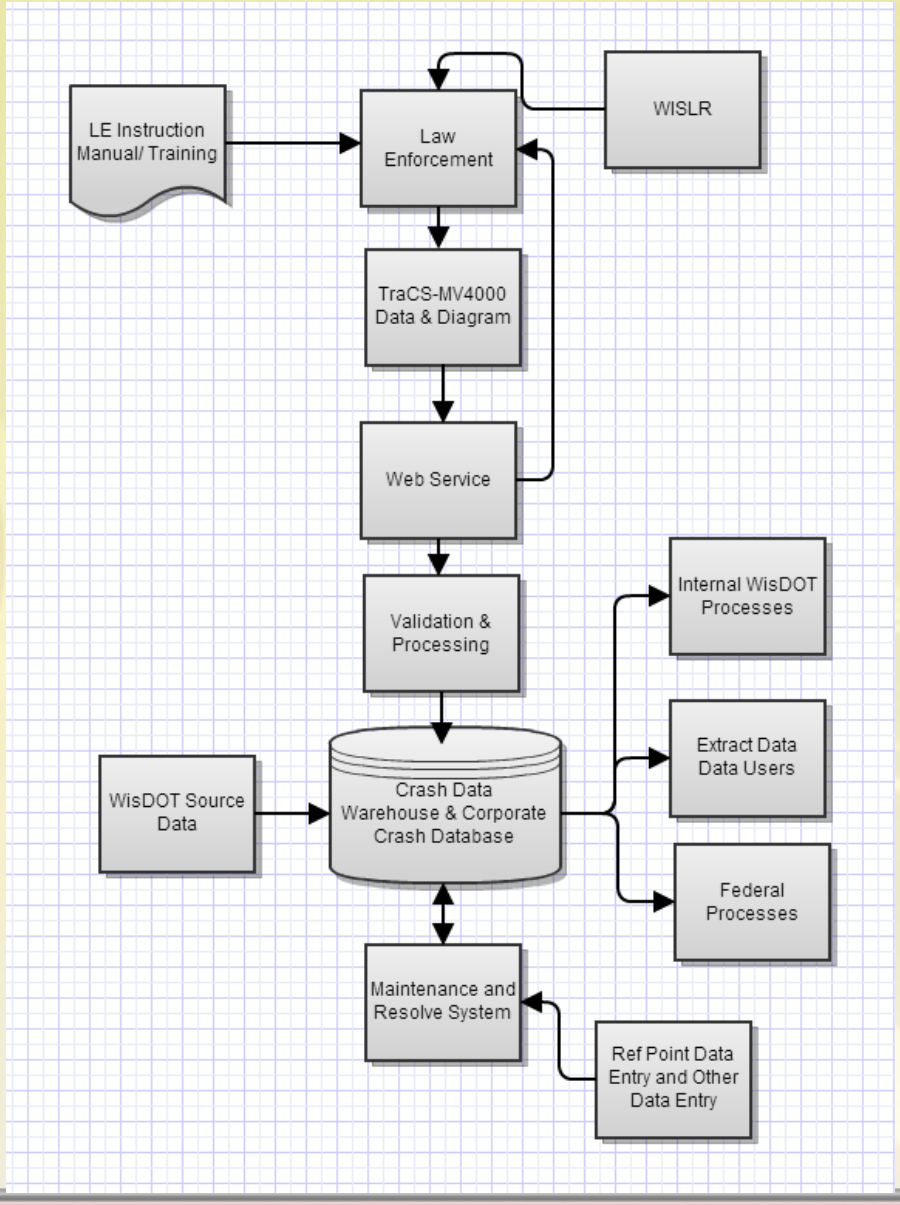
Sort By: Accident Date Display: Points

- **051 / N STOUGHTON RD** AT 30 / RAMP
  MADISON (C), DANE County
  01/02/2014
  INJURY(A) 1
- **012** AT MINERAL POINT RD
  MADISON (C), DANE County
  01/03/2014
  INJURY(A) 2
- **073** AT DAHL RD
  DEERFIELD (T), DANE County
  01/13/2014
  INJURY(A) 3
- **FISH HATCHERY RD** AT TRACEWAY DR
  FITCHBURG (C), DANE County
  01/14/2014



WisDOT Crash Database and Resolve System

- MV4000, MV4002, MV3480
- Crash Database (Oracle)
- Crash Report Image Files
- TraCS Web Services
- Web Based Resolve System
- Linkages to WisDOT DMV Systems
- Data Extracts and External Interfaces
- Linkages to Other Datasets

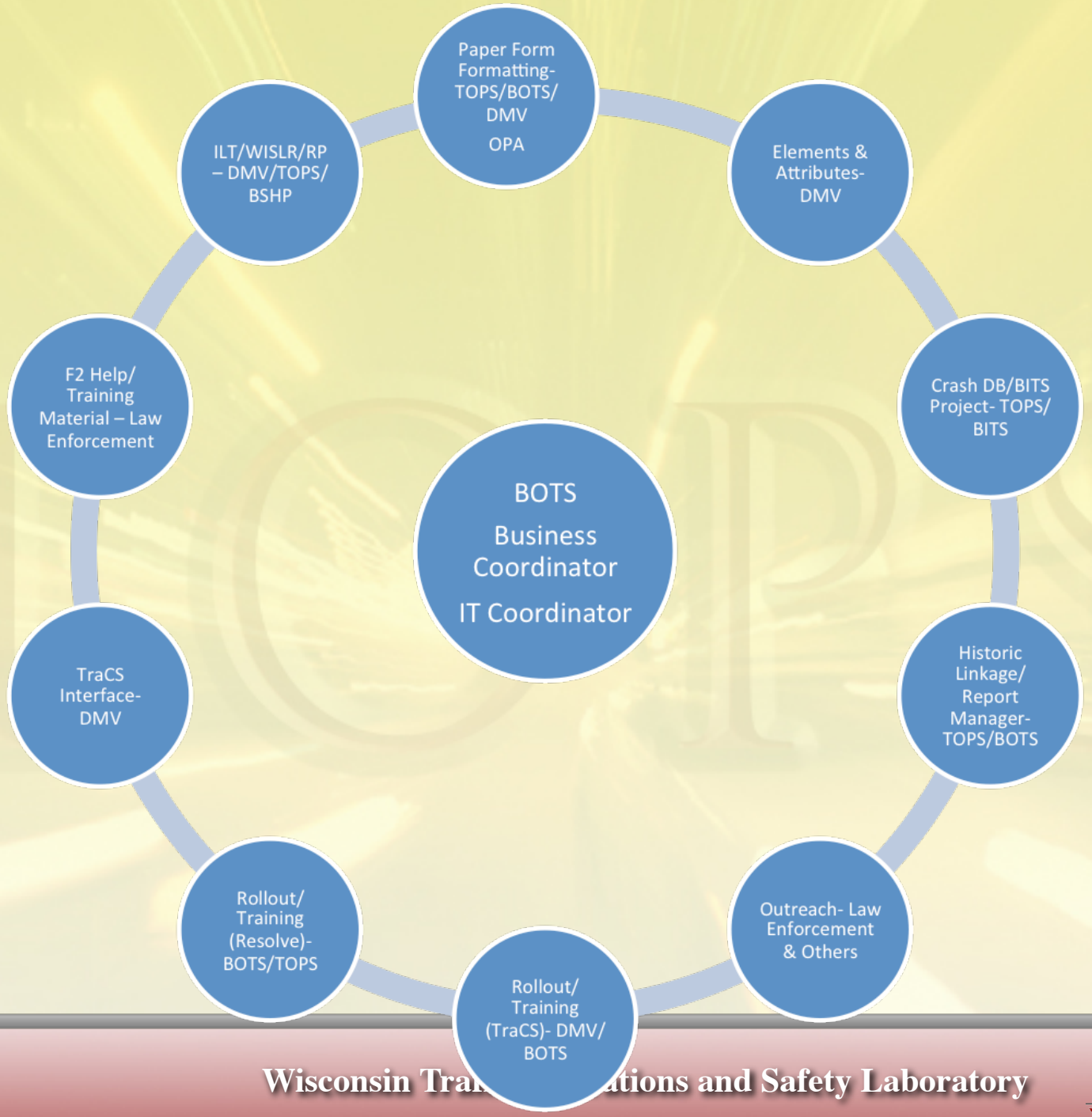


Impacts to Law Enforcement

- TraCS Form Transmission Process
- Automate Up Front Validation Steps
- Requirement for Electronic Reporting
- Maintain Communication & Feedback During Resolve Processing
- TIME, Wisconsin.Gov Access Unchanged
- Changes to Data Extracts, WisTransPortal

Crash Database - Timeline

Elements and Attributes	March 2015
High Level Requirements	June 2015
Crash Data Dictionary	October 2015
New TraCS Crash Form	December 2015
Database System Development	October 2015 – June 2016
Testing and Acceptance	July 2016
Law Enforcement Training	August – October 2016
Law Enforcement TraCS Patch	September – December 2016
Go Live	**January 1, 2017**



WISCONSIN TOPS

Wisconsin Tra ations and Safety Laboratory

Department of Civil and Environmental Engineering
University of Wisconsin-Madison

THE UNIVERSITY of WISCONSIN MADISON

Outreach

- Letters in Red Folders
- RMS
- Dispatchers
- Others??

- Weed out fields that had become obsolete and identify others that were not being collected (i.e. roundabouts or cell phone use)
- Form is more intuitive and that there is a great savings at both the state and local level by gathering correct and accurate data
- Easily describe what happened (i.e., cell phone usage, roundabouts, cross median crashes)

Work Zone

NEW	TYPE OF WORK ZONE	LANE CLOSURE LANE SHIFT/CROSSOVER WORK ON SHOULDER OR MEDIAN INTERMITTENT OR MOVING WORK OTHER
NEW	WORKERS PRESENT	NO YES UNKNOWN
NEW	LAW ENFORCEMENT PRESENT	NO OFFICER PRESENT LAW ENFORCEMENT VEHICLE ONLY PRESENT

Scene Management

NEW	LANE CLOSURE	YES NO
NEW	TYPE OF CLOSURE	FULL CLOSURE CLOSURE - ONE DIRECTION LANE CLOSURE OTHER CLOSURE
NEW	REASON FOR CLOSURE	TOW TRUCK EMS MED FLIGHT WEATHER CONDITIONS SECONDARY CRASH OTHER
NEW	TIME INITIAL LANE/ROAD CLOSED (MILITARY TIME)	TIME ROAD CLOSED (SAME AS TIME ARRIVED)

CURRENT FIELD #	FIELD NAME	NEW CODES AND FORMATTED VALUES
NEW	TIME ALL LANES OPEN (MILITARY TIME)	TIME ROAD/ALL LANES WERE OPENED
NEW	DATE SCENE CLEARED	DATE THE SCENE WAS CLEARED
NEW	TIME SCENE CLEARED (MILITARY TIME)	TIME SCENE WAS CLEARED

Pedestrian

Pedestrian Location (Existing MV4000)	Non-Motorist Location at Time of Crash (New MV4000)
Blank	Blank
In Crosswalk	Intersection – Marked Crosswalk
	Intersection – Unmarked Crosswalk
	Midblock – Marked Crosswalk
	Median/Crossing Island
In Roadway	Travel Lane – Other Location
	Bicycle Lane
	Shoulder/Roadside
	Intersection – Other
Not In Roadway	Driveway Access
	Non-Trafficway Area
On Sidewalk	Shared-Use Path or Trail
	Sidewalk
	Other
	Unknown

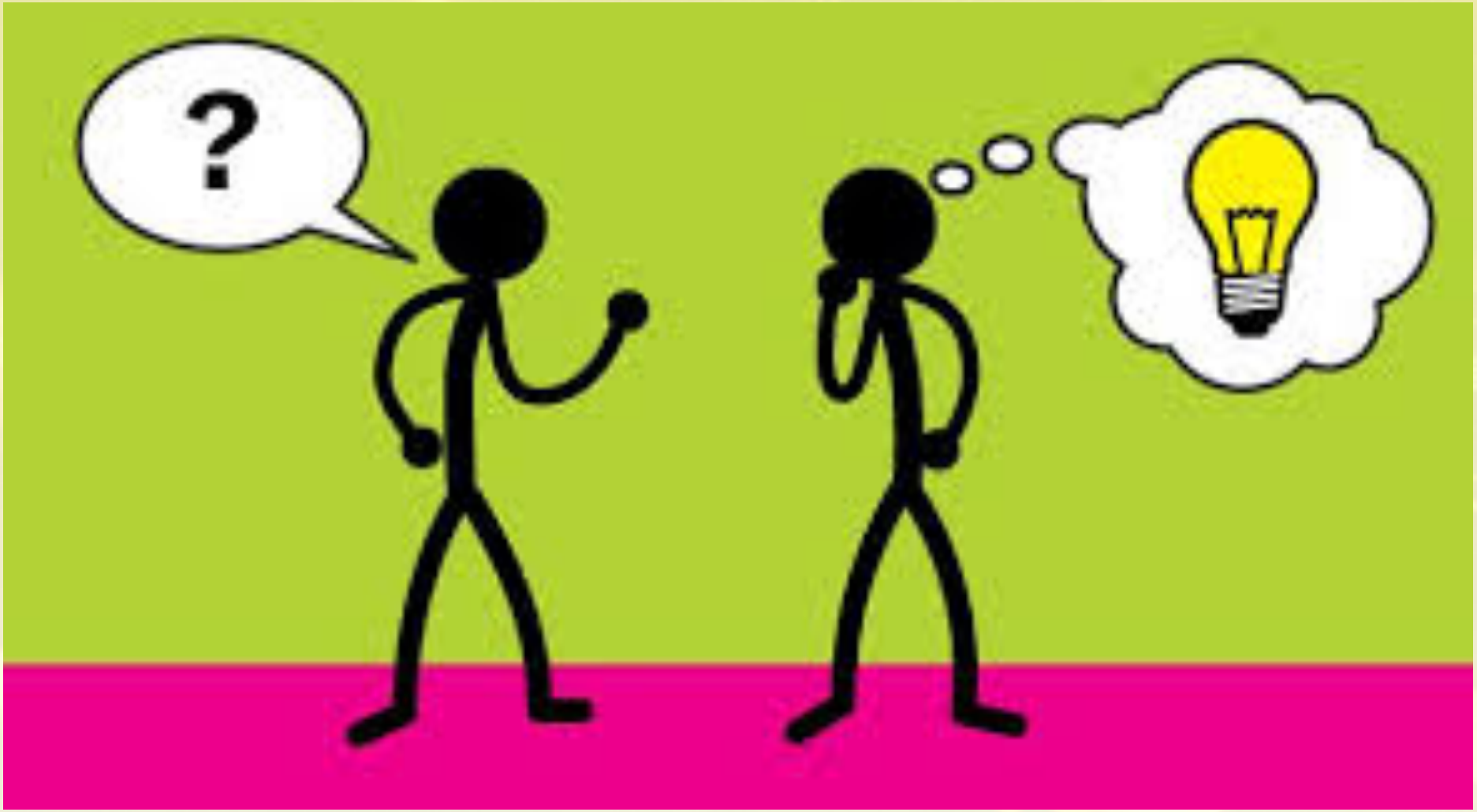
Helmet Use	Unknown	The type of helmet used at the time of the crash
	Half	
	Three-Quarter	
	Full-Face	
	No	
Helmet Compliance	Non Approved	This identifies if helmet was DOT compliant at time of crash
	Approved	
	UNKNOWN	
Eye Protection	Yes: Worn	The type of eye protection that was worn at the time of the crash
	Yes: Windshield	
	Yes: Worn and Windshield	
	No	
	Unknown	
Tint compliance	Yes	This identifies if helmet was tint compliance at time of crash
	No	
	Unknown	
Protective Gear	Reflective	This identifies what protective gear was used at the time of the crash
	Gloves	
	Boots	
	Jacket	
	Long Pants	
	None	
	Unknown	

CURRENT FIELD #	FIELD NAME	NEW CODES AND FORMATTED VALUES
NEW	OPERATOR DISTRACTED BY	NOT DISTRACTED
		MANUALLY OPERATING AN ELECTRONIC COMMUNICATION DEVICE (TEXTING, TYPING, DIALING)
		TALKING ON HANDS-FREE ELECTRONIC DEVICE
		TALKING ON HAND-HELD ELECTRONIC DEVICE
		OTHER ACTIVITY, ELECTRONIC DEVICE
		PASSENGER
		OTHER INSIDE VEHICLE (EATING, PERSONAL, ANIMAL, HYGIENE, ETC)
		OUTSIDE THE VEHICLE (INCLUDES UNSPECIFIED EXTERNAL DISTRACTIONS)
		VEHICLE TECHNOLOGY
		UNKNOWN IF DISTRACTED
		LOOKED BUT DID NOT SEE
		BY A MOVING OBJECT IN VEHICLE
		WHILE TALKING OR LISTENING TO CELLPHONE
		ADJUSTING AUDIO OR CLIMATE CONTROLS
		USING OTHER COMPONENT/CONTROLS INTEGRAL TO VEHICLE
		USING OR REACHING FOR DEVICE/OBJECT BROUGHT INTO VEHICLE
		DISTRACTED BY OUTSIDE PERSON, OBJECT, OR EVENT
		EATING OR DRINKING
		SMOKING RELATED
		OTHER CELLULAR PHONE RELATED
		DISTRACTION/INATTENTION
		DISTRACTION/CARELESS
		CARELESS/INATTENTION
		DISTRACTION DETAILS UNKNOWN
		INATTENTION DETAILS UNKNOWN
		LOST IN THOUGHT/DAYDREAMING
		OTHER DISTRACTION

Crash Database - Future

- Improve Crash Mapping and Analysis Capabilities
- Include Photos & Attachments to the Crash Report
- Linkages to Federal Systems (FARS, FMCSA)
- Linkages to External Data (EMS, Roadway)
- Include Additional TraCS Forms
- Research and Innovation
  - To enable analysis and decision making through downstream applications

- All crash reports will need to be submitted electronically through TraCS 10 as of January 1, 2017 on the new crash report form.
  - Agencies that currently do not have TraCS or are not using TraCS 10 should e-mail badgertracs@dot.wi.gov with questions.
  - XP Upgrade
- Training will be available and provided to law enforcement agencies across the state in the second half of 2016.



Crash Database - Components

- Oracle Database 12c Enterprise Edition
- TraCS Web Services
- Web Based Resolve System