Best Practices Challenge for 2012

Or - (ATSIP 2012 Traffic Records Project of the Year)

Blank Best Practices Recognition Form

Part 1 - Project Summary

Project Title: Crash Calendar

Project Description (three sentences or less): The Crash Calendar data visualization uses the standard (American) calendar format to provide the time equivalent of a hot spot map. The resulting graphic provides a data summary that is instantly understandable and provides context for a variety of crash factors.

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Lead Agency for Project:

Wisconsin LTAP, with funding from with Wisconsin Bureau of Transportation Safety

Participating/Cooperating Agencies (if any):
(Additional members of project team and their contact information may be provided as desired.)

Which National Agenda goals apply? (May be numbered 1-6 corresponding to the order given in the original document)

Reference the priority in your traffic records strategic plan to which this project applies:

From the Wisconsin Strategic Highway Safety Plan 2011-2013 Action Plan:
Task 1: Improve data information and decision support
- Institutionalize traffic safety by implementing tools developed to share crash data as information across the agency and to local transportation partners.

Project Cost: To-date, the Crash Calendar has been developed using TIC staff time (and personal time), while under contract with the Wisconsin Bureau of Transportation Safety. Cost has not been broken out specifically.

Extent of Project Implementation: Since previewing a beta Crash Calendar on April 27th at a BOTS regional meeting, BOTS and the TIC have distributed approximately 250 poster-size (20x30) full color copies of the 2011 Wisconsin Crash Calendar (July 2012).

Summary of Project Benefits: According to BOTS Director, Major Sandra Huxtable, "BOTS staff have found the crash calendar to be very beneficial as a visual tool when discussing the crash statistics for 2011. The pictorial representation of the data provides a depth of understanding beyond just talking about the numbers. We have been using this tool at various staff meetings and it has been the foundation for very meaningful discussion about highway safety in Wisconsin and what law enforcement and other highway safety partners can do to enhance overall safety. Being able to see the data illustrated in various degrees like what you have portrayed is very beneficial. It allows a person to focus in on a particular area that is of specific interest. It also assists in planning and reaffirms assignment of resources based on what the data shows." (20 June 2012)

Part Two: Project Detail

Project Description: *(your opportunity to write more than the three sentences permitted in Part One)*

Describe the major process steps for your project, including any unique aspects that enhanced success:

The TIC's ROaDS (resources, outreach, and data support) initiative (FFY2011) included a project to develop some format of county safety summaries, which BOTS' Regional Program Managers (RPMs) could use. By statute, Wisconsin's 72 counties have multi-disciplinary Traffic Safety Commissions, which meet quarterly. The RPMs attend these meetings and BOTS goal was to provide summary resources that would convey a consistent message. Various charts and graphs were developed, and input was sought from stakeholders. Facing mixed input, a survey was put together that provided examples from other states (Indiana, Michigan, Ohio), organizations (NHTSA, WI CODES project), and included the TIC prototype. The responses to these examples included:

- "Nice to see type of accidents … numbers are interesting, but not as useful."
- "I like the number format vs. graphs and charts."
- "Nice balance of numbers vs. graphs and charts – am pressed for time, so very much a visual map and chart reader. Need to be able to readily get the feel for whatever data or trend is being communicated."
- "More charts and graphs, less numbers, is a good thing."
- "Putting the most useful info into graphs and charts allows quicker understanding of the gist of the data."
- "Numerical data can be converted to charts as needed, whereas charts can't always be converted to data."
- "Breakdown of location / reason / season."
- "Location, time of day, day of week, month, injury type, weather conditions…"

Provide the evidence and reasoning used to determine the success of the project:

Why should this project be recognized as a best practice in traffic records?

The crash calendar addresses one of two key characteristics in the visualization and understanding of traffic records: Temporal and spatial variation. GIS has been recognized as addressing the latter, serving as an integrator of large amounts of information. "Time" in GIS has long been considered an Achilles Heel, and is a recognized research area ripe for study and improvement. The crash calendar goes a long way towards filling the void of visualizing and understanding temporal patterns of crash data. The calendar also has potential for integration with GIS and implementation on the Web. To date, I feel the Calendar is an excellent and unique example of visualization in traffic records. Further, Joni Graves has dedicated many personal hours towards development of the Calendar, and such energy and enthusiasm should be recognized by the Traffic Records Community. Thank you for your consideration.

See the Wisconsin Crash Calendar at
http://www.ghsa.org/html/resources/files/pdf/showcase/wi1.pdf

2011 WISCONSIN
Crash Calendar
by Crash Severity and Type*
SEE LEGEND BELOW

Crash Clock

6-11:59 AM	12-3:59 PM	4-7:59 PM	8 PM-5:59 AM

Column categories:
Reportable Crashes · Property Crashes · Rural Single-Vehicle · Ice, Snow, Wet Roads · Injury Crashes · Speed ** · Deer *** · Alcohol · Motorcycle · Work Zone · Young Driver · Pedestrian · Bicycle · Fatal Crashes

Months (rows): JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER

Day-of-week headers: Su · M · T · W · Th · F · Sa

Calendar (enlarged detail)

	Su	M	T	W	Th	F	S
JANUARY							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31					
FEBRUARY			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28					
MARCH			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
APRIL						1	2