Projects First-Round Winner
Innovations Challenge
http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm

April 2015
Prepared by Transportation Planning
Missouri Department of Transportation

InnovationsShowcase

Crash Trend Spreadsheet

Description

The Crash Trend Spreadsheet uses formulas and raw crash data from TMS to create graphs and charts providing insights into crash trends. The current graphs depict the following data: crash types, crash severity, crashes per year, crashes per season, crashes by month, crashes by day of week, crashes by time of day, crashes by weather, road surface conditions, driver gender, driver age, cost analysis, and average response time. A summary table also is created breaking out crashes by severity, year, and type.

A second Excel workbook tracks fatal and serious injury crashes within the district. Operating similarly to the Crash Trend Spreadsheet, it compares the previous year's data to current data. The graphs within this spreadsheet are as follows: urban/rural fatalities, on/off roadway, safety device usage of the drivers involved in a fatal accident, time of day frequency, accident type, alcohol involvement, fatalities per month, fatalities per day of week, fatalities per county, CMV involvement, age of drivers involved, gender of drivers, average response time and current cost of fatal crashes.

Benefit

The Crash Trend Spreadsheet worksheet improves safety, saves time, and saves money. It improves safety by providing visual data for insights into crash trends for stakeholders to identify crash mitigation methods. These methods – education programs, engineering solutions, enforcement practices or emergency management services – can then be implemented with more confidence that they will address the problem. Data visualization saves time and money by automating the creation of graphs and charts. This in turn, allows for time and money to be spent on determining ways to reduce the number and severity of crashes at the location being analyzed.

Labor

80 hours

For More Information Contact:

Allison Brucker at Allison.Brucker@modot.mo.gov or (816) 387-2407.

Additional photos can be seen by accessing the Innovations Challenge homepage at:
http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm.