

City of Madison

Problem Identification: Vision Zero

1.0: Contact Information	
City Data Team Lead	E. Anderson, Finance (eanderson3@cityofmadison.com)
Traffic Engineering SME	Eric Poffenberger (EPoffenberger@cityofmadison.com) traffic flow data
UW Madison Lead	Tyler Harter-Caraza (tylerharter@gmail.com)
UW Madison Project Team	

2.0 Problem Statement (max 200 words)
<i>Prompt: What's the problem we are trying to solve? What is actually happening? Where does the problem exist? How do you know this is a problem?</i>
Fatalities and serious injuries due to traffic accidents occur within the City of Madison. Current analyses of crash data consider the top streets and intersections where crashes occur, but do not provide high-level trend analysis. A capital budget funding strategy supported by this data does not currently exist.

3.0 Impact Statement (max 100 words)
<i>Prompt: What change would you like to see happen? What should be happening?</i>
The City is considering adopting the Vision Zero strategy, orienting traffic engineering resources to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all. Analyses of crash data must reflect the Vision Zero strategy.
This project should address the following three issues using San Francisco as an example:
<ul style="list-style-type: none">• Establish a prioritized list of the most dangerous streets/intersections in Madison while answering the following: X% of traffic fatalities and serious injuries occur on Y% of Madison's streets/intersections.• Analyze and present trends in weekday traffic flow versus weekend traffic flows.• Analyze and present trends in factors in vehicle crashes.

4.0 Service Change Statement	
<i>Prompt: What is the results you are trying to make with this project?</i>	
Current State	Future State
At this time, analyses of fatalities and serious injuries due to traffic accidents that occur within the City of Madison do not provide high-level trend analysis. The capital budget process lacks a defined strategy backed by data to know the City is consistently prioritizing making the most dangerous streets/intersections safer.	Analyses will reveal a prioritized list of streets/intersections to support establishing a potential capital budget funding strategy in alignment with Vision Zero.

5.0 Project Success Statement
<i>Prompt: How will we know the project is successful?</i>
In order for the City of Madison to develop a data informed capital budget funding strategy in support of Vision Zero, UW students will complete analyses of traffic accidents in Madison outlining the most dangerous streets/intersections and providing trend analysis regarding traffic flow and crash factors.

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6.0 Data Resources

The following data resources are available to support this project.

- *TOPS crash data*
The UW student team will retrieve this data from the Traffic Operations and Safety Laboratory (TOPS) with support from Tyler.
- *City traffic flow data*
This dataset gives traffic flows for three locations throughout the city, broken out by hour, for a week of each month for a year. This dataset can be used to extrapolate weekend traffic flows citywide, which are available in typical traffic flow data. This is available on the City's Open Data Portal at <https://data-cityofmadison.opendata.arcgis.com/datasets/city-of-madison-traffic-flow>.