

# WA Crash Visualization and Analysis

# Background & Data

- A broad variety of factors contribute to a road's overall safety, and understanding how crashes happen is an ongoing need.
- Visualization is an important part of this understanding. Both professional and non-professional users need user-friendly interfaces to efficiently query and visualize data.
- Highway Safety Information Systems data including information about crash incident severity, geographical location, and environmental features at the time of incident

# Use Cases

- Visualization: before hitting the road for a trip, average drivers would like to understand risks.
  - They can select time, path, weather, and various other features on the platform and thus visualize what crashes in past years meet their criteria.
- Professional analysis: planners and police officers are interested in obtaining reports of past crashes
  - They will select conditions as general users do, which will generate plots and statistical analysis of which factors contributed the most to crashes selected.

# Demo

Demo the user interface

# Lessons learned and future work

- Still working on the the professional analysis use case functions
- Continuous integration
- More unit tests
- Packaging – generating the setup.py script