USDOT Safety Data Initiative

Comprehensive Roadway Safety Data Visualization and Evaluation Platform

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CONFEDERATED TRIBES AND BANDS
YAKAMA NATION
TREATY OF 1855

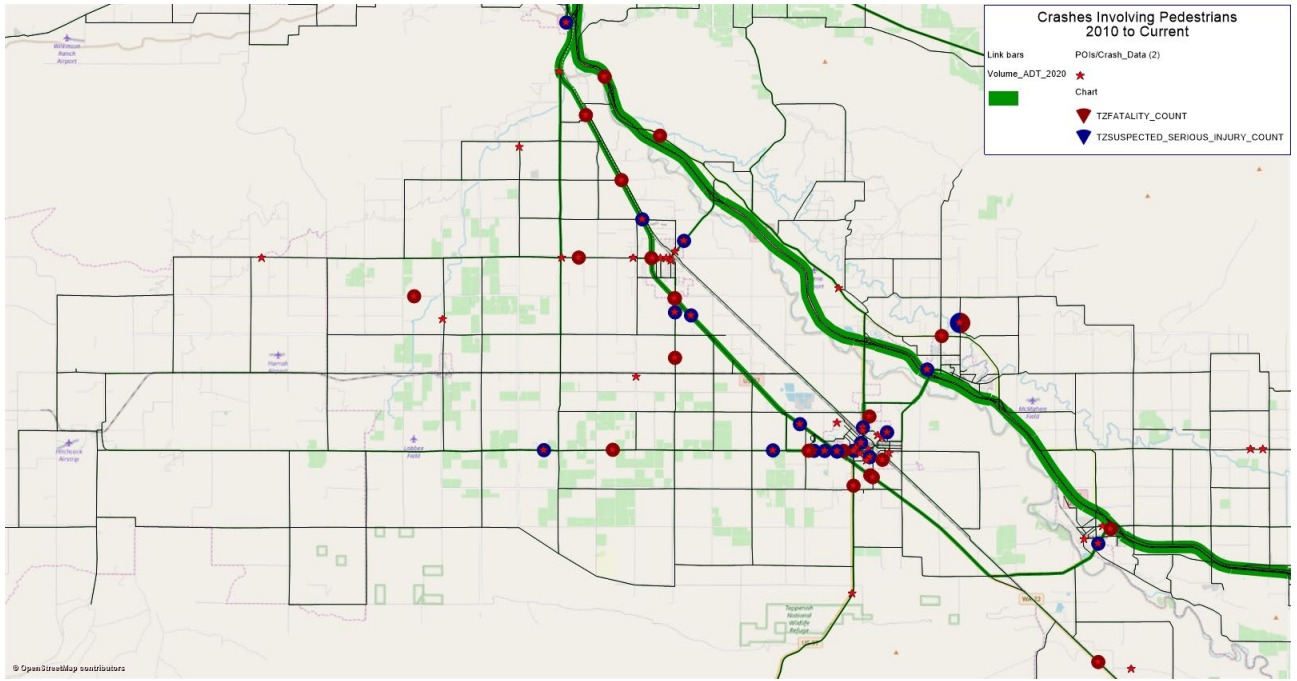
STARLab 11111010011

CSET
rural • isolated • tribal • indigenous

PACIFIC NW TRANSPORTATION CONSORTIUM
PACTRANS
REGION 10

Prevailing Safety Issues of Yakama Nation

A large portion of these collisions occur on the Yakama Nation reservation and ceded territory



Prevailing Safety Issues of Yakama Nation

Weather a major safety concern

- Low visibility due to extreme fog
- Poor road surface conditions due to fog and snow

Yakama Nation DNR

Prevailing Safety Issues of Yakama Nation

Lack of adequate pedestrian crossings in Toppenish

Yakama Nation DNR

Prevailing Safety Issues of Yakama Nation

Lack of Pedestrian Vehicle separation on major roadways

Yakama Nation DNR

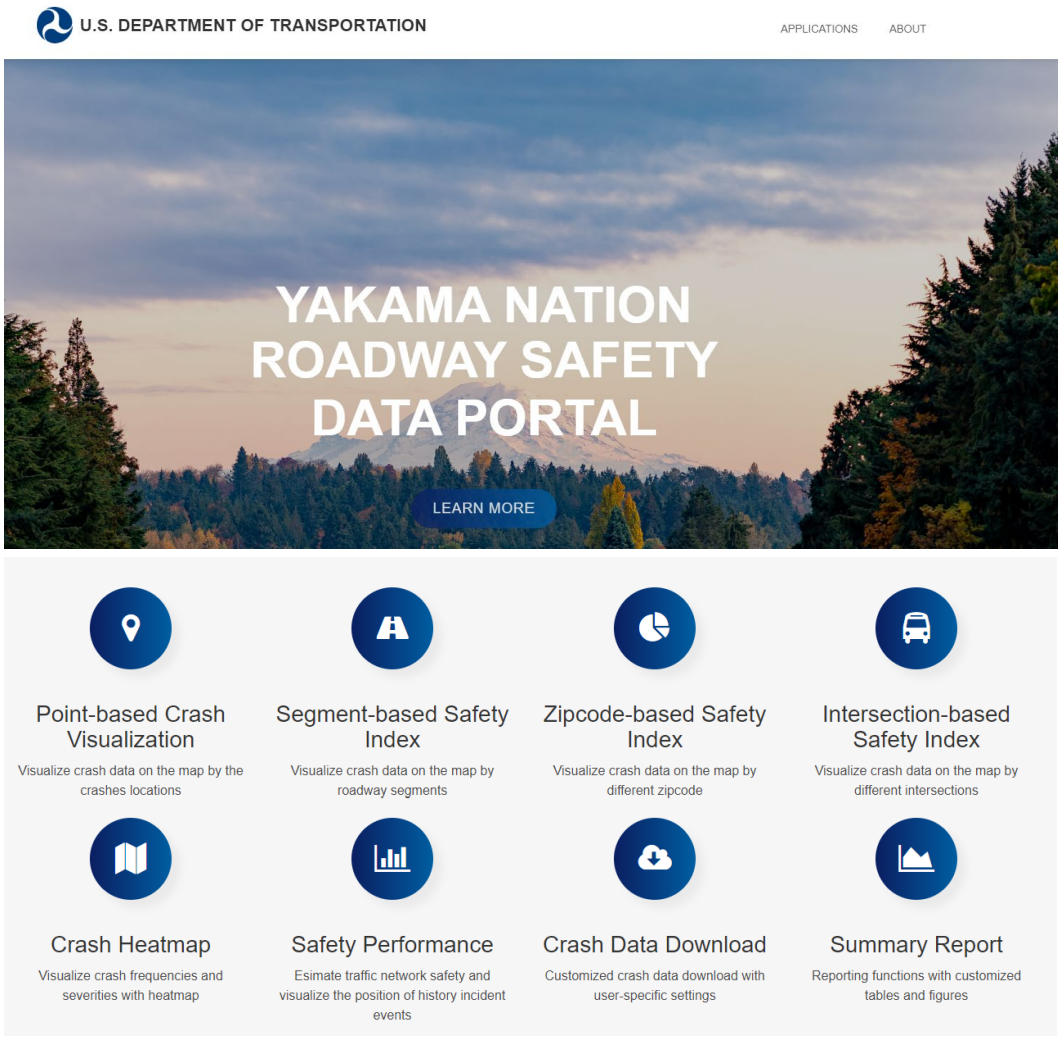
Prevailing Safety Issues of Yakama Nation

Inadequate signage to warn vehicles of pedestrians

Yakama Nation DNR

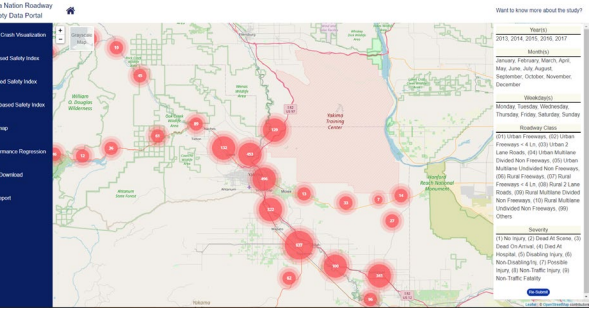
Safety Data Tool

- Data Sources:
  - Collision Data
  - Roadway Geometry Data
- Modeling Techniques:
  - Machine Learning: Random Forest and Decision Tree
  - Segment Based Regression Modeling

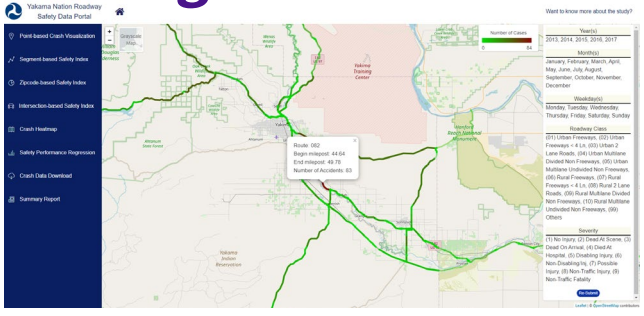


Safety Data Tool - Visualization

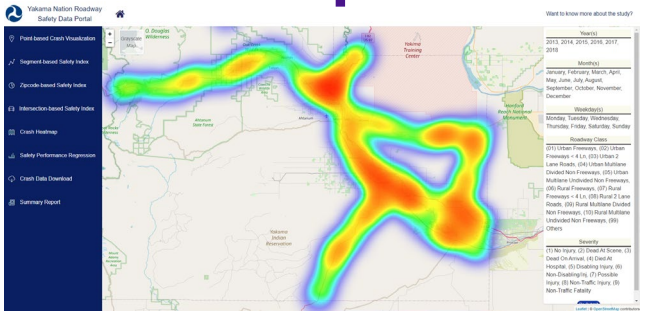
Point-Based



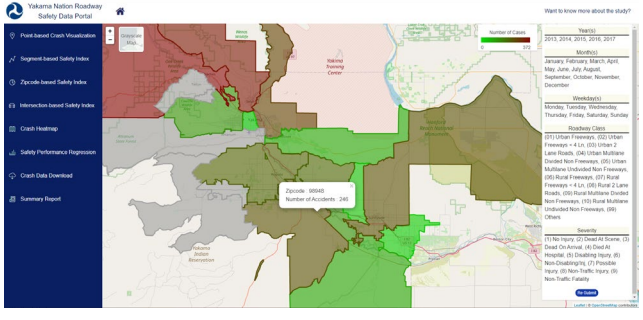
Segment-Based



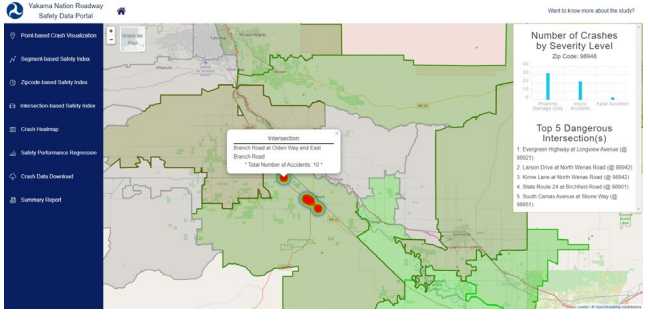
Heatmap-Based



Area-Based

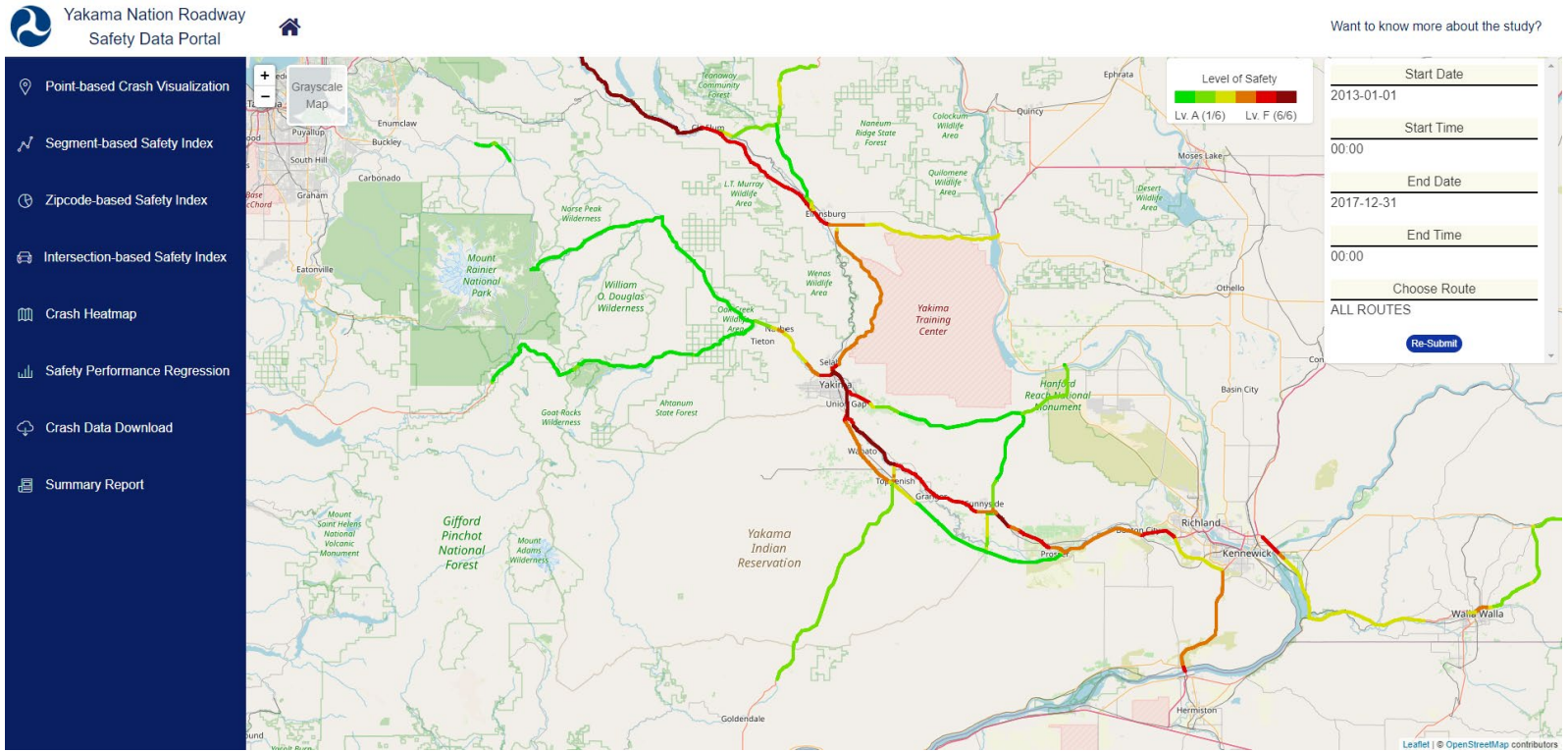


Intersection-Based



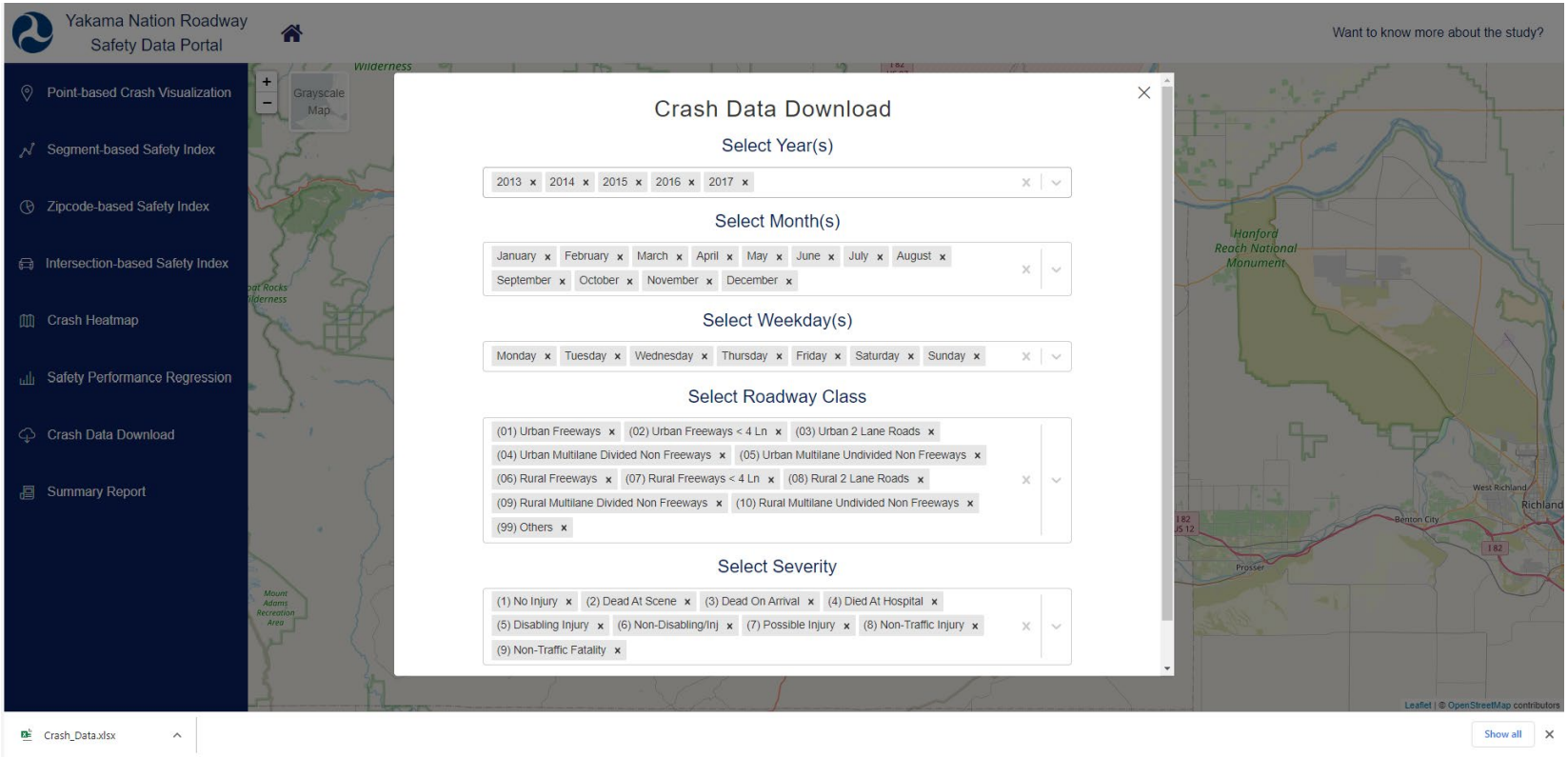
Safety Data Tool

Safety Performance Regression



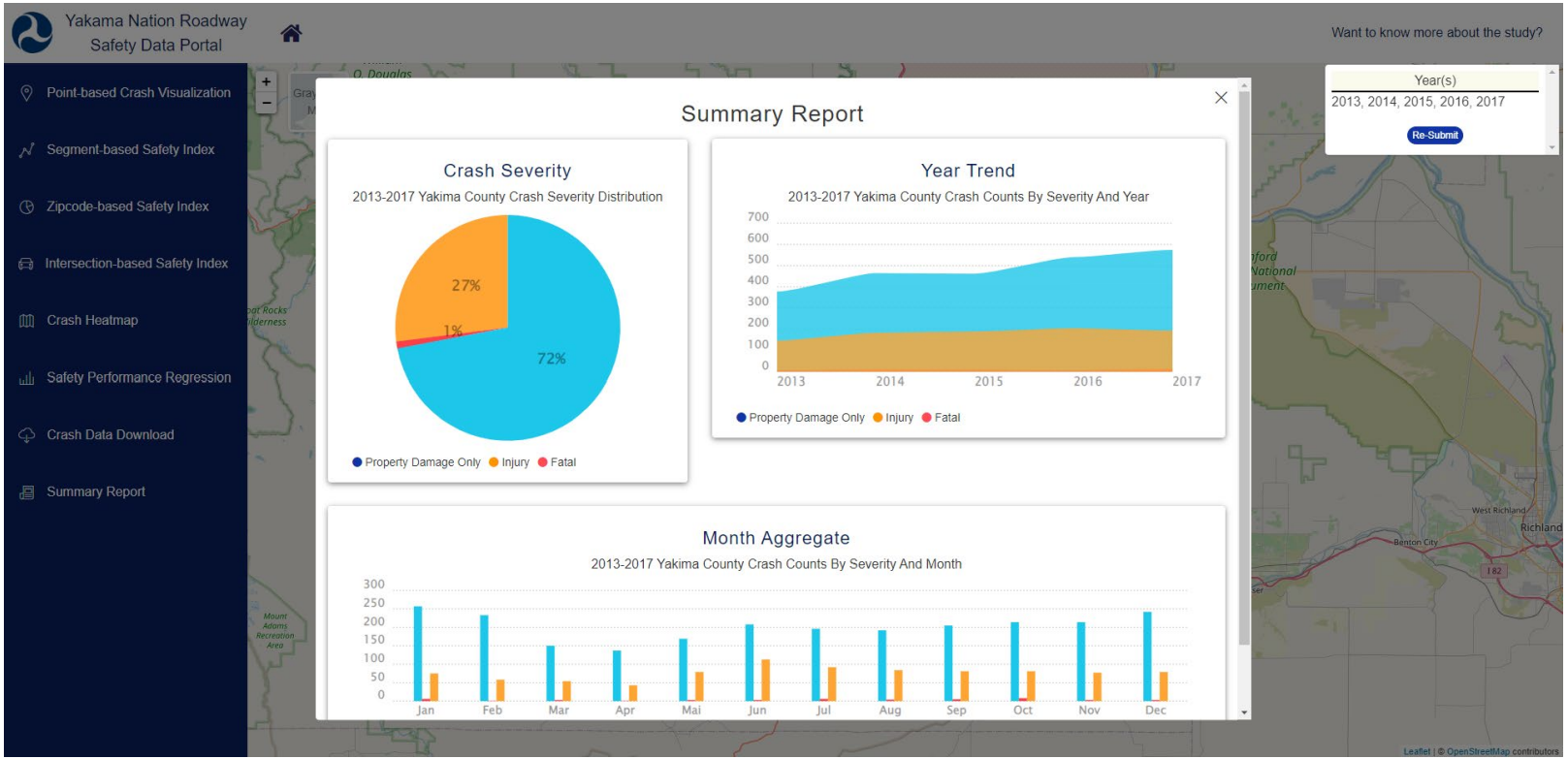
Safety Data Tool

Crash Data Download



Safety Data Tool

Crash Data Download



Thanks!
Questions?

Feel free to reach out with any other questions you may have!

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