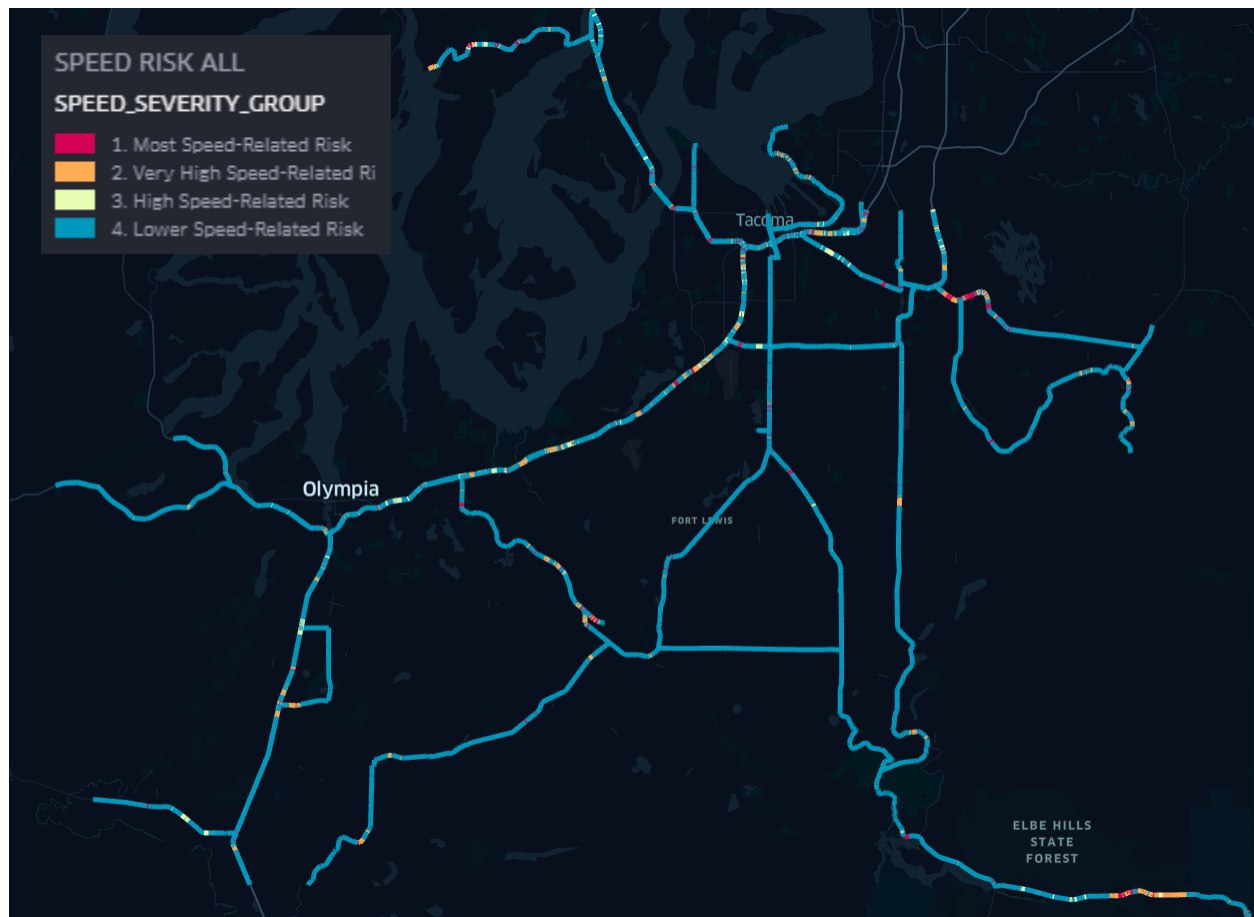


Custom Kepler Maps for WSP Enforcement Planning: Overview

A Kepler map is an interactive tool that visualizes complex data on a map, making it easy to explore and understand various patterns and trends. In the context of the study on state routes in Washington state, Kepler maps display important insights such as traffic speeds, hotspots for harsh braking and acceleration, and crash locations. These maps allow users to view different layers of data, apply filters, and interact with the information to gain a deeper understanding of high-risk areas and traffic behaviors.

In 2025 the WTSC was awarded a grant by the [Governor's Highway Safety Association](#) to access Michelin Mobility Intelligence data credits to access telematics data analysis for addressing highway safety issues. MMI developed risk-based Kepler maps for all eight Washington State Patrol [districts](#). Examples of the data included in these maps are summarized in this overview.

Figure 1: Default view of WSP district 1 Kepler Map. This layer shows speed severity groupings (all times) for state routes in district 1.



The risk maps color code corridors based on the severity of aggregate driver speeding behavior. Speeding data is anonymized and aggregated from thousands of trips and events.

The maps are interactive and allow users to zoom into specific locations. There are an additional 12 speeding map layers distributed by time; weekend versus weekdays, and early morning (02:00 – 07:00), morning rush hour (07:00 – 10:00), midday (10:00 – 16:00), afternoon rush hour (16:00 – 18:00), evening (18:00 – 22:00), and night (20:00 – 02:00).

Figure 2: Speeding risk at the Highway 101 interchange with I-5 in Olympia, Thurston County. The image on the left represents categorized speeding risk on weekdays during afternoon rush hour and the image on the right is speeding risk on weekday nights.



Another layer built into the maps is five year injury crash history. Users can view the locations of injury crashes overlaid with the speed risk layers.

Figure 3: Weekday night speeding risk at the Highway 101 interchange with I-5 in Olympia, Thurston County overlaid with injury crash locations.

