

## 5.2.2

### Moving to a web based mapping application for coding crashes

#### Presenter

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ODOT is required by state statute law to collect information on crashes each year in Oregon that meet certain criteria. Oregon does not require police to respond to and submit a crash report, rather, Oregon allows involved parties to submit a crash report. ODOT gathers these reports and interprets and stores the information into a database of crashes on all open to the public roads.

Traditionally, only crashes on the state highway system had components within the data to geocode it to the location described and interpreted in and from the crash report. These crashes utilized a linear referencing system from our GIS highway network. Those crashes not on the highway system still went through all of the same interpretation from the original crash reports, however, there wasn't an easy way to establish geospatial reference information for those crashes because non-state highways lacked any sort of LRS at a statewide level.

In 2007 that changed. ODOT developed a web mapping interface that allowed crash coders to geographically "pick" the location of the crash described in the crash report in a thin client web interface. This application collected additional information about the location necessary for the crash database. This included information like county, city, urban area, regions, districts, latitude and longitude, various roadway attributes, like LRS and mp (where applicable) and new statewide road segment identifications system for all roads through a single click of a button.

A crash coder can now search for a particular road intersection throughout the state and the application could navigate them to that location or let them select from a list of possible matches. They can accept intersection or measure from a location if the crash occurred at an offset from an intersection. They can review and change the data "harvested" from the map based on business needs and send that information to the crash data entry screen "front end" to the database.

Most importantly, the GIS data the road data is directly from local jurisdictions so the data is being geocoded to data that is used by cities, counties and other agencies throughout the state. The crash data can be provided back to them and with minimal effort they can begin analyzing crash data themselves. Now, crash data statewide, on all jurisdictions of roads, can be geocoded using a statewide LRS or through coordinate geocoding, thus fulfilling geospatial requirements for crash reporting and benefiting local agencies with crash data based on their own local data.