

5.3.2

Development of a Spatial Database for Roadway Intersections

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Representatives of the Kentucky Transportation Cabinet have expressed the interest and need for a maintainable intersection database for many years. With the ever increasing dependence on spatial data, a spatially-enabled intersection database would benefit many areas of transportation. Several years ago, The Transportation Center conducted a research study on crashes at intersections and the resulting database has been used by the Cabinet for safety analysis and prioritization ranking. Unfortunately, this database was created for safety analysis and has not been maintained and is now out-of-date. This research aims to create a maintainable database that the Transportation Cabinet can include in their Enterprise system. The database would be spatially linked to other features allowing its attributes to be updated with major roadway changes.

The development of this database will require input from several functions within the Transportation Cabinet, including planning, traffic, safety, maintenance, and information technology to ensure that the database will be sustainable. A study advisory committee will be formed to discuss and decide appropriate attributes for inclusion in the database. Necessary input will be solicited from information technology to ensure proper protocol for format and structure.