

5.1.1

Creating a Transportation Database Using a Linear Referencing System (LRS)

Presenter

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As Northwest Ohio's Metropolitan Planning Organization (MPO), the Toledo Metropolitan Area Council of Governments (TMACOG) works with transportation data from several counties in Ohio as well as counties in Michigan. With the need to manage this data more effectively, TMACOG has developed a strategy to implement an Integrated Transportation Database (ITD), which will house all of the regional transportation data in a single set of relational databases. These datasets could then be mapped by using a Linear Referencing System (LRS) built on existing DOT frameworks. Tools available in ArcInfo 9 will be used to build the LRS as well as conflate attributes from multiple geographic networks into one universal system. Once the ITD is completed it will reduce the time needed to do various GIS analyses, produce maps and ease the transfer of data among participating agencies. This presentation discusses the design of the database; various conflation techniques used and detail the quality control of the database.