

5.3.2

Creating a Roadway Intersection Point Dataset

Presenter

Michael A. Rutkowski

GIS Application Developer/Analyst

CDM Smith

rutkowskima@cdmsmith.com

Co-Presenter

MassDOT (Massachusetts Department of Transportation), Office of Transportation Planning (OTP) has the responsibility of maintaining the statewide roads data within a Geographical Information System (GIS). After several requests, OTP determined the need to create a road intersection point feature class for their safety and traffic planning activities at MassDOT. However with 461,000 road segments within the GIS, coupled with massive amounts of supporting events, generating a point layer for all the road intersections in Massachusetts would prove to be an arduous task. Determining, what points to be collected and where they were proved problematic. Additionally, the mere definition of an intersection was ambiguous and varied among the different departments who would use the data. As a result, a tool was developed to help in the process. This presentation details the effort in creating an intersection point layer, why it was necessary, the issues that made it difficult, and how the problems were resolved. The presentation will also attempt to review the logic behind the tool that created the intersection layer which ended up saving hundreds of hours had the points been created manually.

Bio(s):

Michael Rutkowski has been an Application Developer and GIS Analyst for over 14 years in the civil engineering industry. He has worked on a wide array of projects such as mobile asset management, urban systems modeling, and GIS for transportation.