

### 3.2.1

#### CAD-GIS integration in highway engineering design projects

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Highway engineering design projects depend heavily on survey and mapping data. Much of this data can be found in various company's mapping environments (Owner, Contractor/Consultant, Engineering Firm) in the form of GIS data. Highway design projects also have a requirement for certain analytical processes, most often found in GIS systems.

This presentation will explore how CAD-based GIS interoperability and analytical tools were used in the engineering design process on a design-build highway lane expansion project in a highly sensitive environmental area. Lessons learned and solutions provided will be discussed.

By reducing the "friction" between GIS and CAD design processes, transportation agencies can realize reduced costs and timelines through the value of tighter interoperability.