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### New Jersey Department of Transportation Web Straight Line Diagrams

#### **Presenter**

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For many years, the New Jersey Department of Transportation (NJDOT) Straight Line Diagrams (SLD) has provided valuable roadway and asset information for DOT engineers and planners. Through the course of these years, the system has evolved to include interactive features, data querying, reporting, and roadway inventory imagery. This system has also grown to include all public roadways throughout the state, and contains over 100 roadway attributes and asset features. Until recently, all this information has been only available to New Jersey state employees through the internal NJDOT LAN network. Starting in 2012, NJDOT began development of a system that would mimic much of the functionality contained within the internal client/server applications, but distributed to the user base through a dynamic web application. Due to the intensive dynamic graphics and imagery requirements of the project, NJDOT choose to leverage Microsoft Silverlight Technologies as the core foundation for this system. SLD application functionality has been expanded to include dynamic mapping for SLD sheets, while retaining all of the same real-time data access capabilities of the desktop counterparts. This new SLD system also provides the framework for future expansion by extensively employing Microsoft WPF web services for data access and sheet generation. Attendees will learn the challenges associated with developing this complex system, and techniques used to overcome these hurdles.

#### **Bio(s):**

Mr. Furch is a Technical Manager, Senior DBA, and Project Manager in Baker's GIT Department. His role is to develop and manage software application development projects as well as provide system design and database administration (14 yrs experience)