

### 7.1.3

## Wisconsin All Roads Network Planning and Implementation

### Presenter

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The Highway Performance Monitoring (HPMS) Field Manual includes the requirement for States to submit their linear referencing system (LRS) network for all roads eligible for Federal Aid. On August 2012, FHWA announced an expansion of this requirement to cover all public roads including dual carriageways on divided highways. Each State was asked to submit a Plan of Action by June 15, 2013 to meet the new All Roads Network (ARNOLD) requirement. Based on existing capabilities and resources, there will be variety of strategies that states adopt to meet this new requirement. Whereas most states have maintained a highway LRS network and inventory program for many years, fewer states have an LRS network for all public roads, and fewer still manage business data along a local road network.

The Wisconsin Department of Transportation (WisDOT) maintains two separate linear referencing systems: the State Trunk Network (STN) contains a complete GIS network of the Wisconsin state trunk highway system. The Wisconsin Information System for Local Roads (WISLR) contains a complete GIS network of all publically maintained roadways in Wisconsin, although specific detail is given to local roads. Individual municipalities are responsible for submitting updates to their local road networks and business data. GTA funding decisions are based on WISLR, hence there is a high degree of participation by local authorities. This presentation will cover the State of Wisconsin's approach to meet the FHWA ARNOLD goal by enhancing the WISLR highway network and providing a relational "crosswalk" to transfer business data from STN to WISLR. The benefits of this approach are that it leverages existing GIS resources without impacting current business data requirements within the Department, while at the same time advancing the possibility of a full GIS roadway network integration in the future.

