

### 3.3.3

## Field Asset Data Collection and Integration with the Enterprise Database

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British Columbia Ministry of Transportation and Infrastructure (BC MoT) has a field data collection application that enables district field staff to take records from the BC MoT enterprise asset database into the field for review and updating. This has been in production since October 2008.

The system was designed in collaboration with BC MoT district office staff to ensure ease of use. It supports GPS and Distance Measuring Input for establishing the location of assets as well as data validation rules from the enterprise asset database.

The user interface is designed to be used in the field. It includes a map display and forms to view and update asset attribute information and tools to simplify data entry. Users can collect information about different asset types during the same survey, including multiple parallel continuous assets.

This presentation describes the application and reports on two years of field experience. The application is used to survey physical assets like signs, culverts, and guardrails as well as administrative ones like speed zones. It describes factors that have made it successful and what changes that the users would like to see, especially an expanded capacity to update the road centerline itself.

There is also a discussion of the issues involved in the automated interface used to synchronize data in the field survey devices with the enterprise database, including the management of temporal and spatial data.