Lake County Division of Transportation

Bluetoad Integration Proposal

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REVISION TABLE

Date	Version	Description	Author
6/27/2011	R01	Initial Draft	D. Irwin/J. Brahm
7/11/2011	R02	Final initial draft	D. Irwin/J. Brahm

Purpose

The purpose of this task is to add a Bluetoad interface to the existing ATMS VDS module that will gather speed and travel time information from a Bluetoad server.

Description

The current ATMS VDS module has a VDS interface to the Centracs signal system using a custom XML based interface. This task would add a second VDS interface to a Bluetoad system. In particular the Bluetoad VDS module will interface with an existing Bluetoad server over the Internet and retrieve both travel time and speed information for one or more Bluetoad links. The Bluetoad VDS data will be on a station-by-station basis (no lane-by-lane information will be available). The ATMS will actively poll the Bluetoad server; the polling interval will be configurable via a configuration file property.

The Bluetoad VDS real time data will be presented to ATMS operators in a new ATMS Bluetoad UI window in a simple tabular format. In particular the table will contain:

- To and from Bluetoad node location information (Main Street @ Cross Street)
- Link speed data
- Link travel time data
- Last update timestamp

The table will automatically update as new Bluetoad data is retrieved. No Bluetoad VDS icons or segment information will be displayed on the internal or external ATMS map.

The ATMS will archive the Bluetoad speed and travel time link information into the existing ATMS archive database. No archive data plotting, graphing, or reporting will be included as part of this task.

Cost Estimate

The following describes the hours estimates effort to implement the Bluetoad VDS interface:

System design:	8 hours
New backend Bluetoad service development:	36 hours
Bluetoad VDS archiver:	12 hours
New Bluetoad VDS UI:	16 hours
Working with vender to set up comm/connection	6 hours
Testing:	12 hours
Integration/deployment/documentation:	16 hours

Total estimate: **106 hours or about $14,925**