INTEGRATING BUSINESS SYSTEMS WITH ESRI ROADS AND HIGHWAYS

GIS-T 2019
PHASE 1 - BUSINESS SYSTEMS

- Administration of Roads & Highways
  
  *(It’s NEVER Finished)*

- **LADOTD DATA** associated with roadway network
  - Traffic Data – MS2 is the Vendor
  - Pavement Data – Deighton is the Vendor

- **Esri System of Engagement**
  - Project Systems Data – SAP is the Vendor (behind a firewall)
  - Operations Data – Agile Assets is the Vendor (behind a firewall)
Traffic Data - MS2

1. Update traffic station table in the Traffic Count Database System (TCDS) as traffic counts are collected and traffic stations are added or deleted.

1. Update traffic station attributes in TCDS through Rest Service connections to events in LaDOTD Roads & Highways (R&H).

1. Update traffic segment geometries and traffic station assignments in events created by LaDOTD’s R&H implementation.
Traffic Data - MS2

Esri Roads and Highways

Roadway Characteristics

Traffic Stations Traffic Segments

HPMS Traffic Segment Data
LaDOTD Responsibilities

1. Responsible for providing and maintaining a production R&H environment (R&H Production), and a quality control R&H environment (R&H QC) for development, quality control, and user acceptance testing.

2. Notification by email of scheduled non-emergency outages to any part of the R&H Production or R&H QC environment two weeks prior and reasonable notice to MS2 by email of scheduled emergency outages to any part of the R&H Production or R&H QC environment prior to it occurring.

3. Notification by email of unscheduled outages to any part of the R&H Production or R&H QC environment within one hour of it occurring and notice of scheduled changes (including all updates or configuration changes) to any part of the R&H Production or R&H QC environment one month prior to them occurring (including patches or configuration changes) to any part of the R&H Production or R&H QC environment prior to them occurring.

4. All read operations to Production R&H will occur via the R&H REST API for read operations and will occur as required. All read operations to TDMS will be managed by TDMS and will occur
Traffic Data - MS2

MS2 Responsibilities

1. Provide and maintain a production TDMS environment (TDMS Production)

2. Notify LaDOTD of any outages or changes to the TDMS Production as per existing service level agreements.

3. Connections are initiated from TDMS to ArcGIS either by TDMS Job Manager or the TCDS UI.

4. All write operations to Production R&H will occur via the R&H REST API for write operations and will be limited to a timeframe beginning at 4am CST daily.

5. All write operations to TDMS will be managed by TDMS and will occur as required.

6. All read operations to Production R&H will occur via the R&H REST API for read operations and will occur as required.

7. All read operations to TDMS will be managed by TDMS and will occur as required.
Pavement Data - Deighton

Esri Roads and Highways

Roadway Characteristics

Pavement Condition Data

Traffic Stations Traffic Segments

Deighton Analyzed Pavement Data

HPMS Traffic Segment Data