GIS-T Presentation
Roads and Highways Consulting

Thursday April 25th, 2019
Geospatial Transportation at Timmons Group

- Aligned with DOT Operations with former DOT Managers in LRS/GIS, HPMS, Traffic Data, Pavement Data
- Staffed with industry leading experts in Roads and Highways
- Longest History with R&H Product – part of the first ever implementation and have been involved with R&H since it was pre-beta
- Have conducted webinars on Esri’s R&H and have written blogs on strategies to implement R&H
- Use location (GIS and LRS) to enable business systems
Timmons Group has been involved with 4 major R&H implementations including:
- The 1st - North Carolina Department of Transportation
- Georgia Department of Transportation
- Nevada Department of Transportation
- Montana Department of Transportation

They have developed several configurable products against R&H API:
- LRS Bulk Tools
- LRS Validation Tools
- Find LRS Edits
- Traffic Step Down Tool

They lead business alignment, software testing, and regression analysis for NCDOT to actively report and provide feedback to Esri and RHUG on R&H.
Regional Planning Services:
• Agriculture
• Economic development
• Employment growth
• Land-use
• Transportation
• Water
• Workforce development
MRCOG Decision to Use LRS

• Disparate road networks with related attributes

• A mapping of network relationships revealed the need for something different and better
Network Considerations

• Identified issues:
  • Segmentation
  • Topology

• A Master Network approach mitigates these issues
Why Roads and Highways?

• Attended Esri UC in Summer of 2016 and impressed by demo
• Already an Esri shop and moving forward with online and enterprise initiatives
Plan to work together

Scope of work with Timmons Group serving in an advisory role

MRCOG staff are very hands on, with the will and technical ability to configure and manage their own network and data elements

MRCOG managing their own network, configuring environment and data

Together, we developed a plan to realize the goal of a full R&H implementation, built on an understanding of MRCOG’s data, staff capacity and technical know-how, and business needs.
SCOPE

This plan includes three (3) on-site workshops with remotely conducted activities in between designed to guide MRCOG through implementation.

1. Data Health Check (Legacy)
   - Evaluate Structures
   - Diagram System
   - Data Checks

2. R&H System Review & LRS Consulting
   - R&H Best Practices
   - Review Core Data Model & Structures

3. Data Quality and Data Reviewer
   - Sample Configurations Training
SCOPE (updated)

This plan includes three (3) on-site workshops with remotely conducted activities in between designed to guide MRCOG through implementation.

1. Data Health Check (Legacy)
   - Evaluate Structures Diagram System
   - Data Checks
   - NMDOT / MRCOG LRS comparison

2. R&H System Review & LRS Consulting
   - Logical Model/Physical Model
   - Administrator Training
   - Data Migration

3. Data QC and Model Review
   - LRS Data QC Best Practices
   - Data Reviewer Integration Training
   - Practical Model Review Training
Workshop 1: Health Check

- Basic Geometry Checks of all networks
- Network alignment comparison of MRCOG Major Roads network with NMDOT routes
- Network comparison of full MRCOG network with NMDOT routes
- Find NMDOT Roads that may not be represented in MRCOG Roads
- Compare MRCOG Bikeway Data to NMDOT Routes
Workshop 2: R&H System Review and LRS Consulting

- Logical Model: Route ID, Events
- Administrator Training: configuring R&H
- Data Migration: how to get data into R&H environment
- Data Reviewer and Workflow Manager Introduction
Workshop 3: Data QC and Model Review

- LRS Data QA and QC Best Practices
- Data Reviewer Integration Training
- Practical Model Review
THANK YOU

Caeri Thomas - MRCOG
Sagert Sheets – MRCOG
Jenn Kennedy – Timmons Group
Tim Sheldon – Timmons Group
Sean Diehl – Timmons Group
Progress Review and Communication

CONDUCT BI-WEEKLY CALLS

BASECAMP FOR FILE SHARING AND COMMUNICATIONS