



GIS-T Presentation Roads and Highways Consulting

Thursday April 25th, 2019

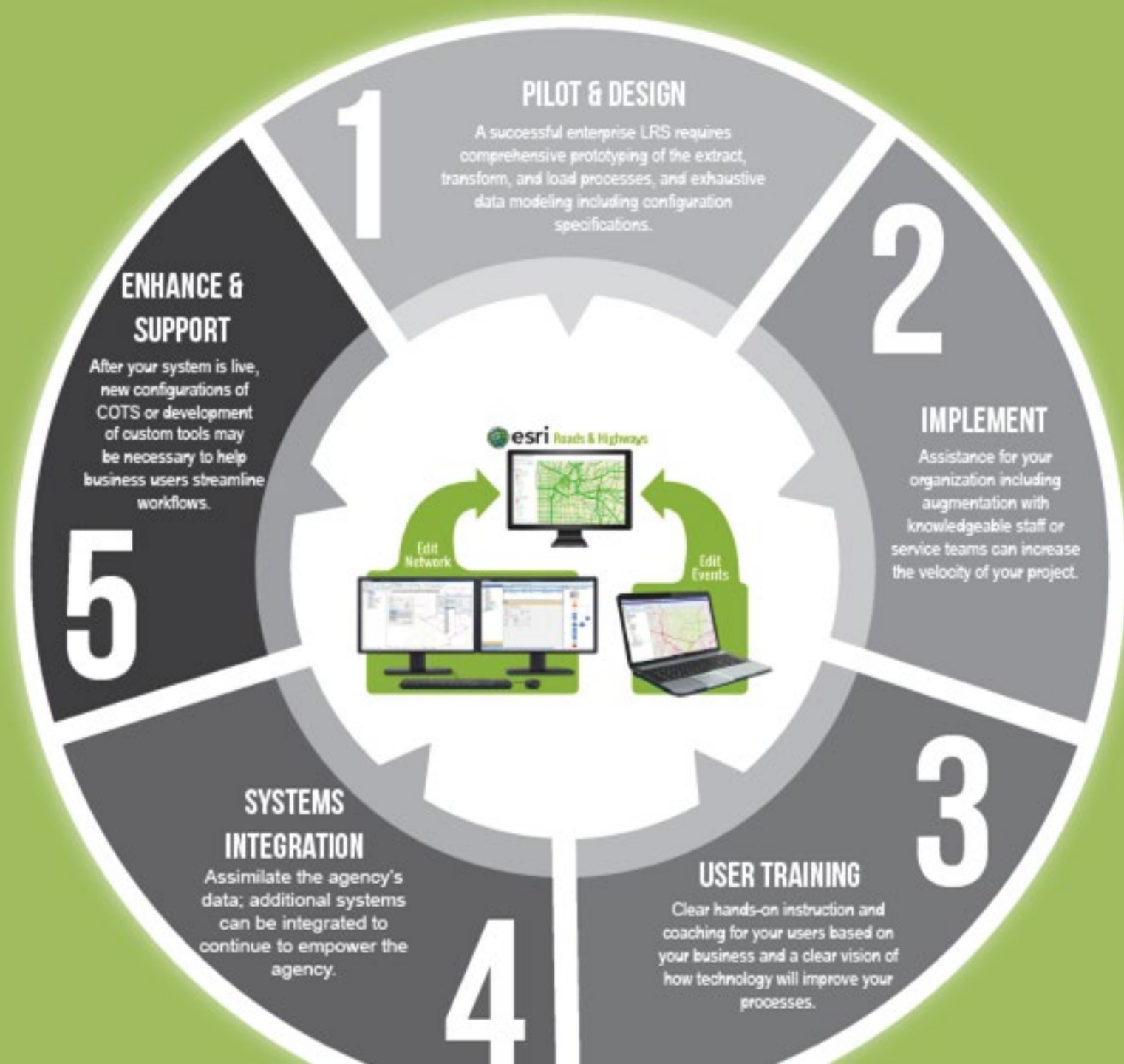
Geospatial Transportation at Timmons Group

- 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



Enterprise Implementations LRS

- 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
- Have developed several configurable products against R&H API
 - LRS Bulk Tools
 - LRS Validation Tools
 - Find LRS Edits
 - Traffic Step Down Tool
- Lead business alignment, software testing, and regression analysis for NCDOT to actively report and provide feedback to Esri and RHUG on R&H

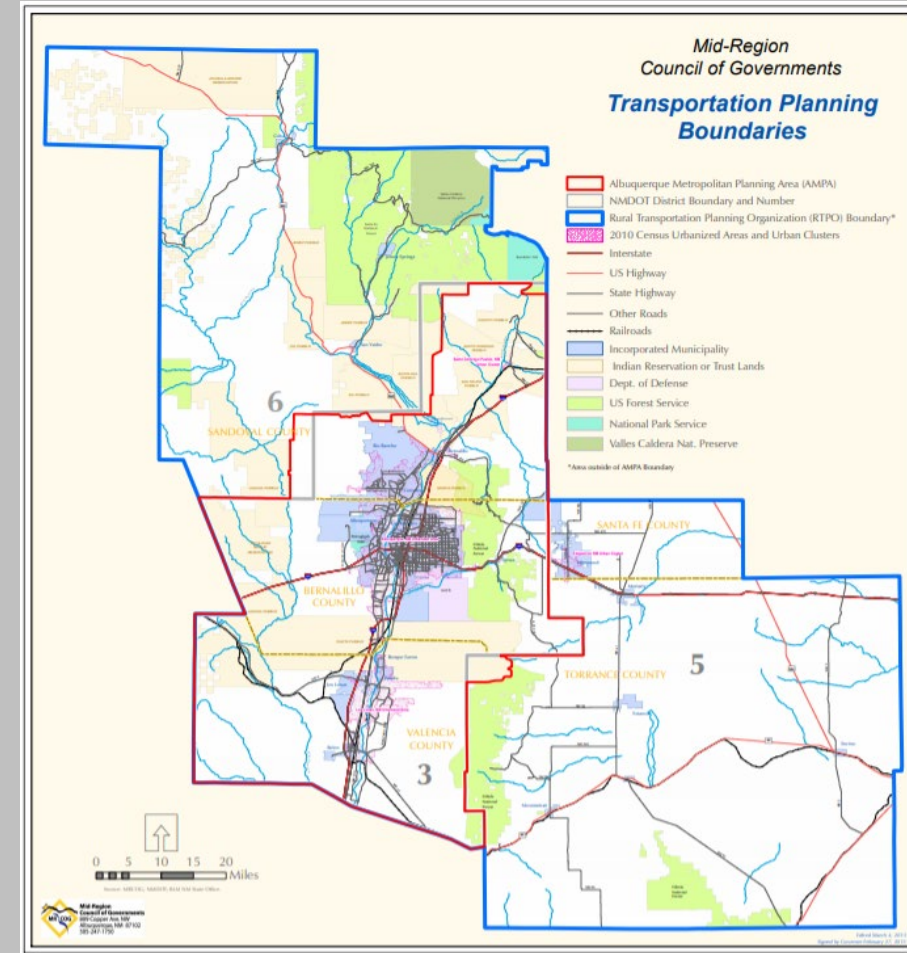




MID-REGION *Council of Governments* OF NEW MEXICO

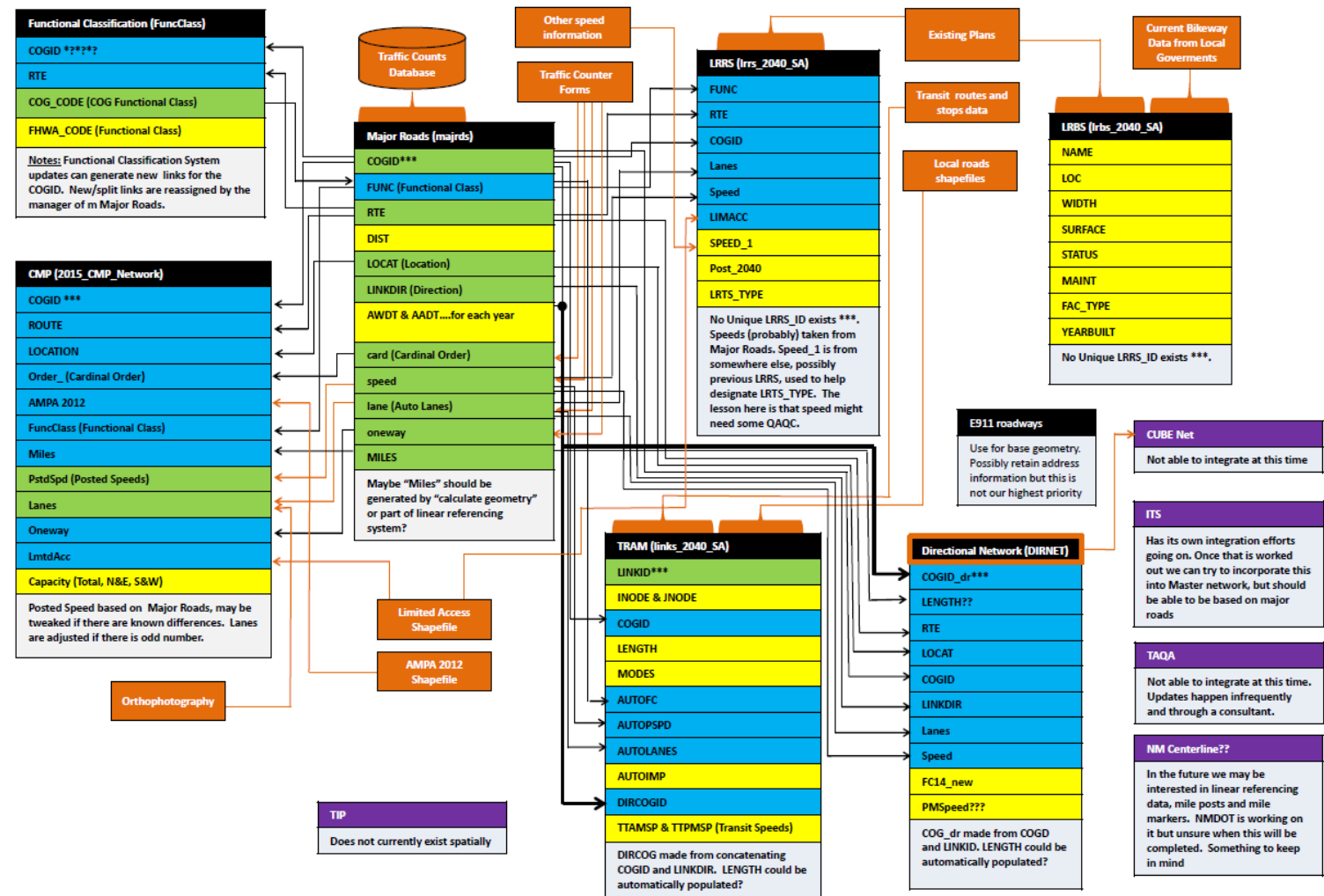
Regional Planning Services:

- Agriculture
- Economic development
- Employment growth
- Land-use
- Transportation
- Water
- Workforce development



MRCOG Decision to Use LRS

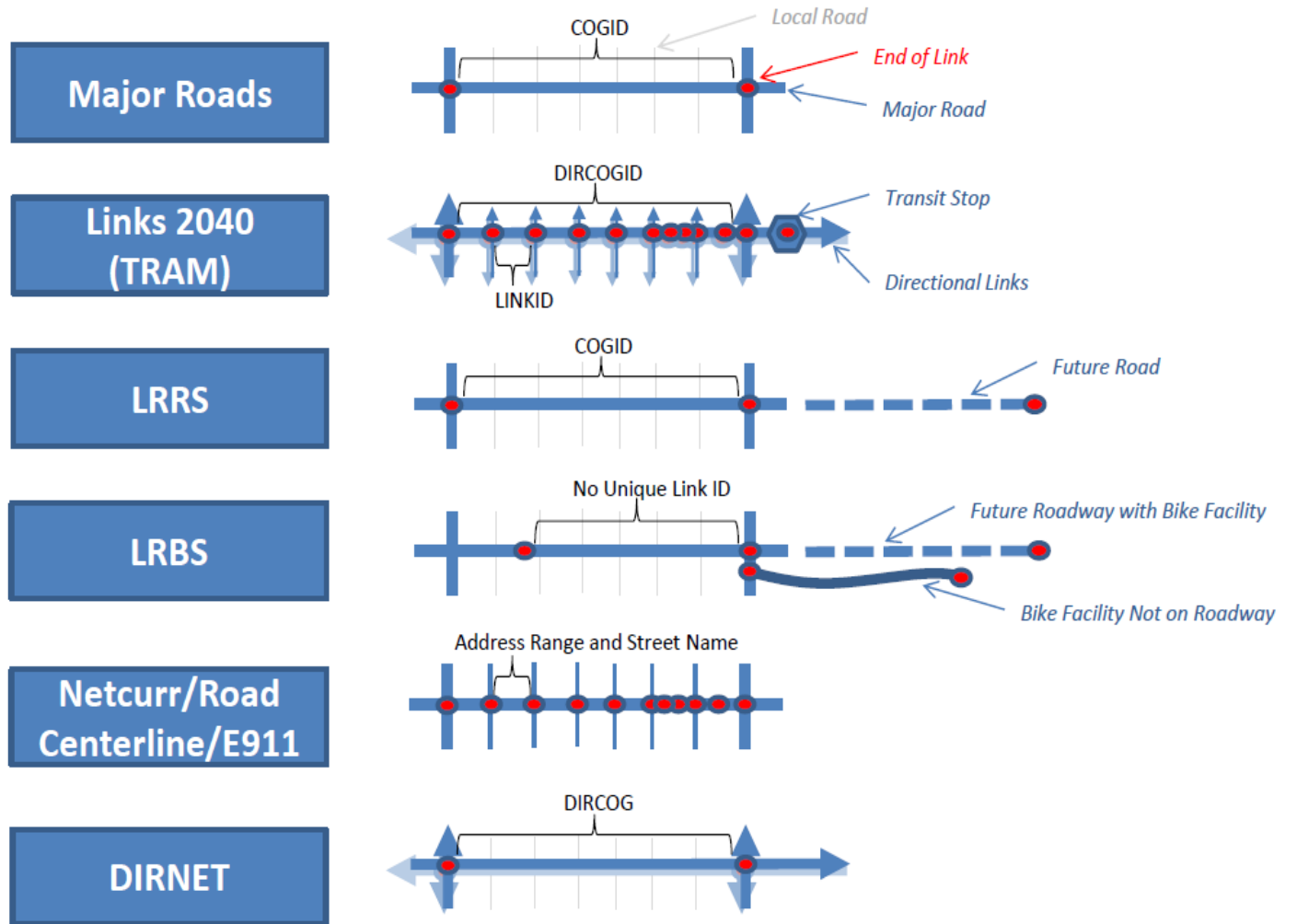
- Disparate road networks with related attributes
- A mapping of network relationships revealed the need for something different and better



Network Considerations

- Identified issues:
 - Segmentation
 - Topology
- A Master Network approach mitigates these issues

Network Geometry Characteristics

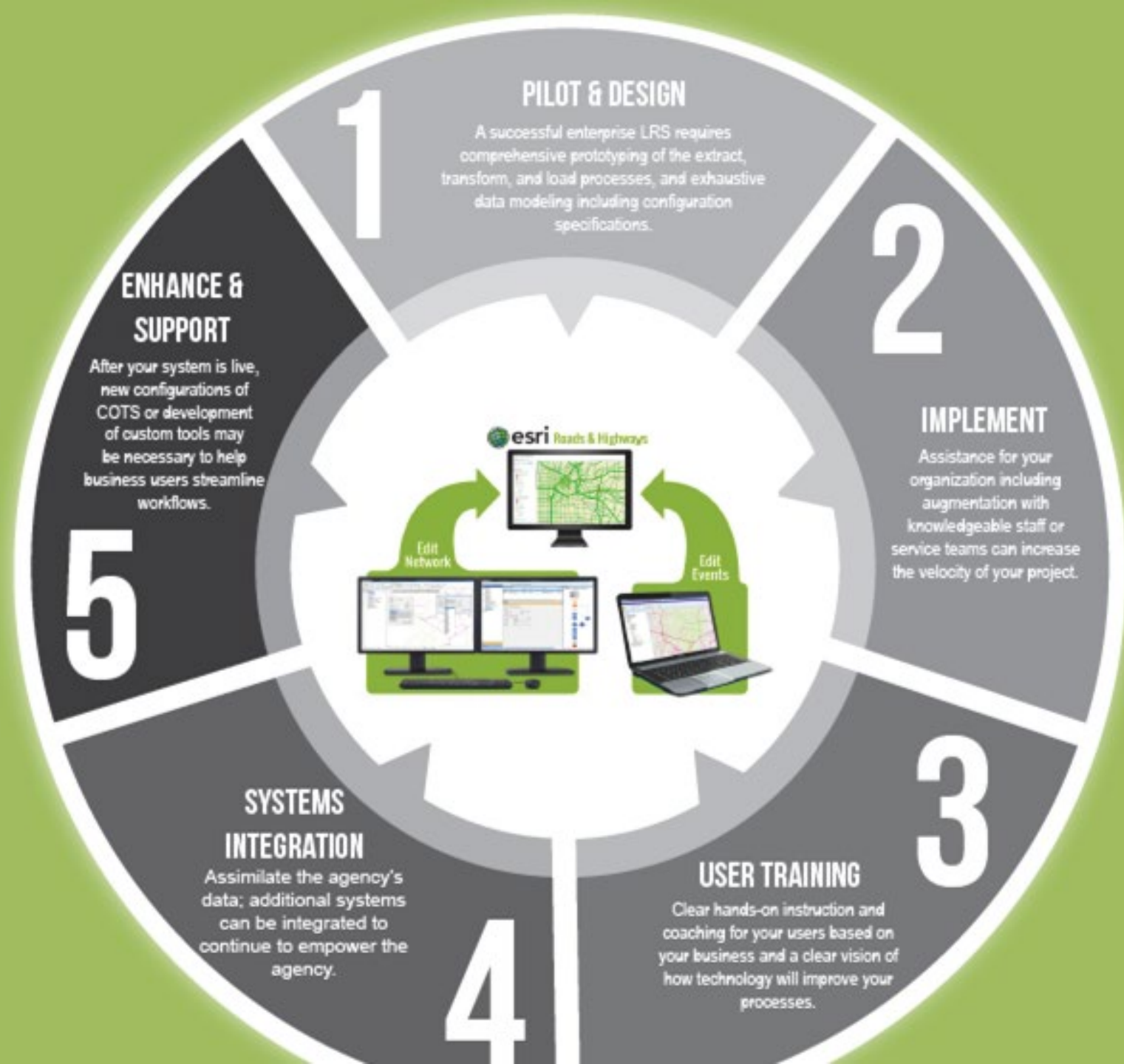


Why Roads and Highways?

- Attended Esri UC in Summer of 2016 and impressed by demo
- Already an Esri shop and moving forward with online and enterprise initiatives



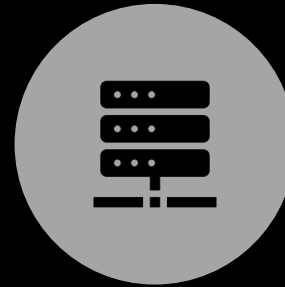
MRCOG & Timmons Group



Plan to work together



Scope of work with Timmons Group serving in an advisory role



MRCOG managing their own network, configuring environment and data



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



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

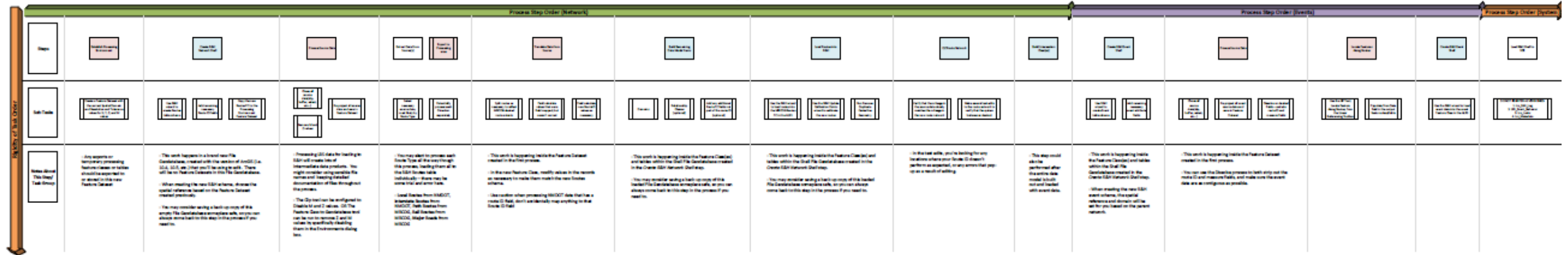
Network alignment
comparison of MRCOG
Major Roads network
with NMDOT routes

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

R&H Data Conversion/System Creation



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



TIMMONS GROUP
GEOSPATIAL SOLUTIONS

THANK YOU

Caeri Thomas - MRCOG

Sagert Sheets – MRCOG

Jenn Kennedy – Timmons Group

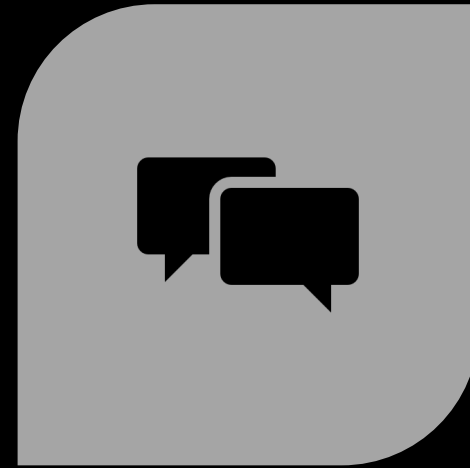
Tim Sheldon – Timmons Group

Sean Diehl – Timmons Group

Progress Review and Communication



CONDUCT BI-WEEKLY CALLS



BASECAMP FOR FILE SHARING
AND COMMUNICATIONS