Road Inventory Data

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- Mainframe System
  - Outdated
  - Not easily modified
  - Not easily edited
  - Very time consuming for otherwise minor edits
  - Segmented by all assets
    - A new “segment” required if change to any one asset

- DB2 Table
- Linked to Mainframe
- Segmented by all assets
- Includes Domains
- Eliminates need for manual entry of calculated or duplicate fields
Roads & Highways
(Current Application)

- GIS Linear Referenced
- Includes Domains
- Eliminates asset segmentation
  - Each asset is a standalone event
- Background “Basemaps” now utilized (imagery, cadd, etc.)
- Temporal (time relational)
FHWA Required Assets

- HPMS (Highway Performance Monitoring System)
- MIRE (Model Inventory of Roadway Elements)
  - FDE – (Fundamental Data Elements)-Safety Analysis Inputs
- FHWA requirements are basis of most collection items
  - Field Manuals used for Domains and Collection Procedures
Why Collect this Data?

- Yearly Federal Highway Administration HPMS Submittals
- Yearly Certified Mileage Submittals
- Data Driven & Safety Analysis
- Cost/Benefit Analysis
- Travel Demand Models
- Tracking of Assets over Time
Roadway Items For All Public Roads
Local & State Highways

- Access Control
- Curb Locations
- Cultural Features
- Curve Class (Horizontal)
- Functional System
- Intersection Control Type
- Lane Width
- HOV Lanes
- Median Type & Width
- Number of Lanes
- On-Route Parking
- Passing Locations
- Public/Private
- Shoulder Type & Width
- Sidewalk Locations
- Special Networks (NHS, Designated Truck, etc)
- Surface Type
- Tolls
- Turn Lane Locations
Data Collection – Contractual Deliveries

- All Public Roads – State & Local
- Identify Public Vs Private
- State Data Loaded into Enterprise GIS
- Local Data Available in Raw Format
Other Means & Methods of Collection

- DOTD Field Collections – Trimble & Garmin Units (GPS and Video)
- Construction Design Files (Cadd Files: Micro-station, AutoCadd, etc.)
- Construction Plans – (Final Plans, As Built, Permits, etc.)
Other Means & Methods of Collection

- Visual Inspection (Aerial Imagery, Recurring Video Logs)
- Future - Lidar Technology, Drone Imagery, etc.
What’s Next, State Road System?

• Continual Updates via Notice to Proceed & Final Acceptances Documents
  • Permitted Jobs usually are missed
• Verifying and continual cleaning of State Road Data
  • State data currently loaded into Roads & Highways Software
• Publish all available GIS services for consumption & use
  • Some services are already available for consumption:
    http://giswebnew/dotd/rest/services
What’s Next, Local Road System?

- Loading of the Local Road Data — (Roads & Highways)
  - FTP Site — Data publically available in contracted raw data now
    ftp://gisweb.dotd.la.gov/Planning/FUGRO_Assets/
  - Publish all available GIS services for consumption & use
    - GIS Rest Services
      http://giswebnew/dotd/rest/services
  - Periodic updates from local entities, MPO, other stakeholders, etc.
    - Working on several different Data Transfer options
    - DOTD unaware of local road projects, not LET through DOTD
Questions?

Contact Information

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