

# The Louisiana Department of Transportation & Development Roadway Base Mapping Project

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# Topics to be Discussed

- Project Goal
- Two-Phased Approach
- A Few of the Issues Faced
- Summary & Schedule

# Project Goal

*“...develop an accurate, geo-referenced, and topologically correct public road feature...”*

- In other words: A good statewide road layer!
- Needed for:
  - Support Road Inventory Program
  - Pavement Management Needs
  - Common Base Map for exchanging Information between the State and Local Government

# Two-Phase Approach

- Phase One: Public Road Feature Adjustment
  - Conflation of Two Data Sets
    - State maintained roads
    - Non-state maintained roads
  - Ensure direction and position of roads
- Phase Two: Assignment of LRS ID
  - State maintained roads = 12-digit LRS ID
  - Non-state maintained roads = 18 digit LRS ID

# Phase One: State Maintained Roads

- Pavement Management System Data
  - GPS Collected, Right Hand Travel Lane
- Centerline created
- Assigned Tiger Line Identifier
- Assigned & Split into proper Address Ranges

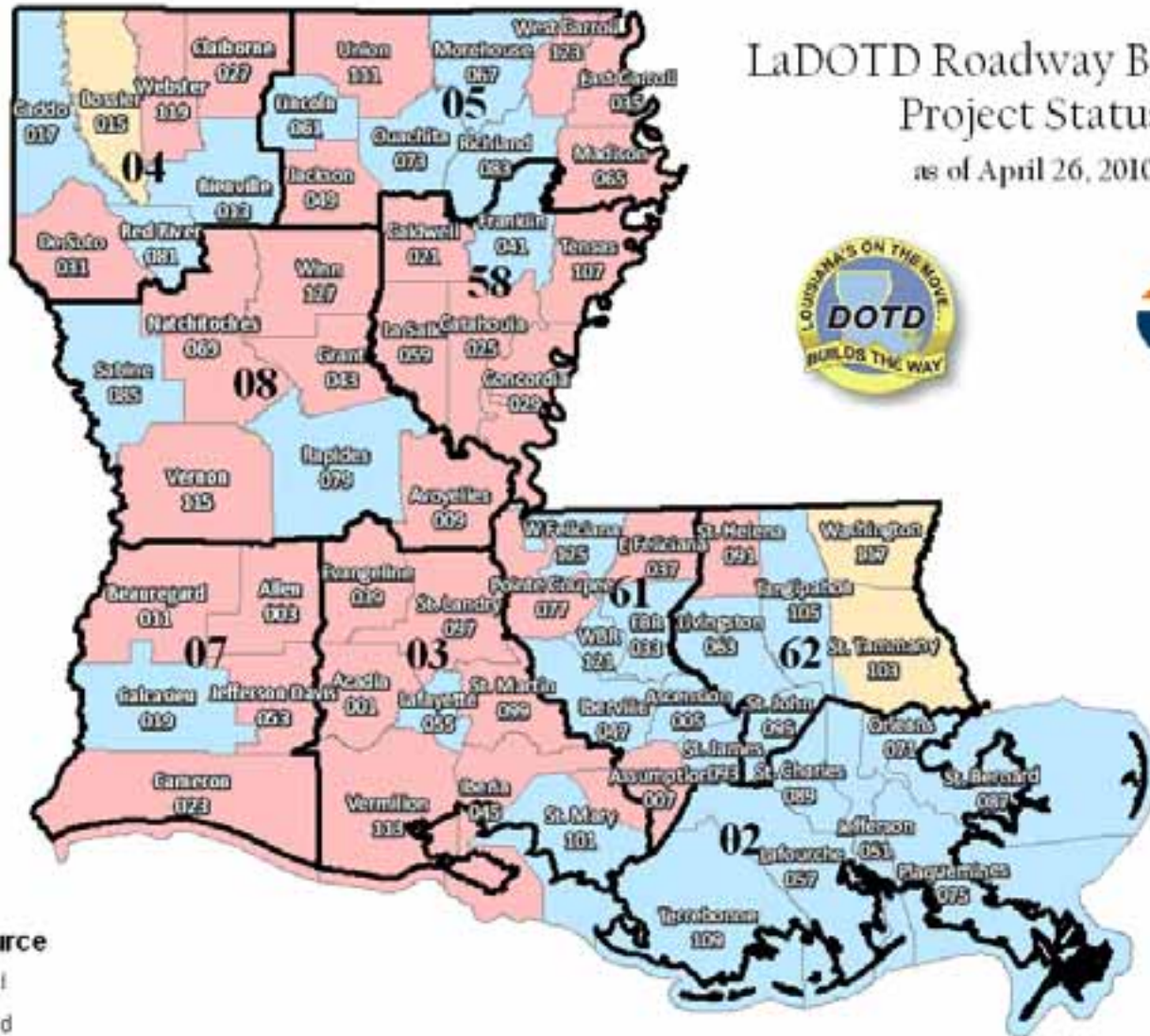


# Phase One: Non-state Maintained Roads

- Best Available Source Data
  - Local Data from Parishes
    - Contact Database
    - Data Sharing
  - TIGER Data
    - Check for orientation
    - Correcting address ranges & coordinating segments
    - Adjust Positional Accuracy against the DOQQs



# LaDOTD Roadway Base Map Project Status as of April 26, 2010



**Data Source**

- Local
- Mixed
- Tiger

Parishes are labeled with their name and FIPS code



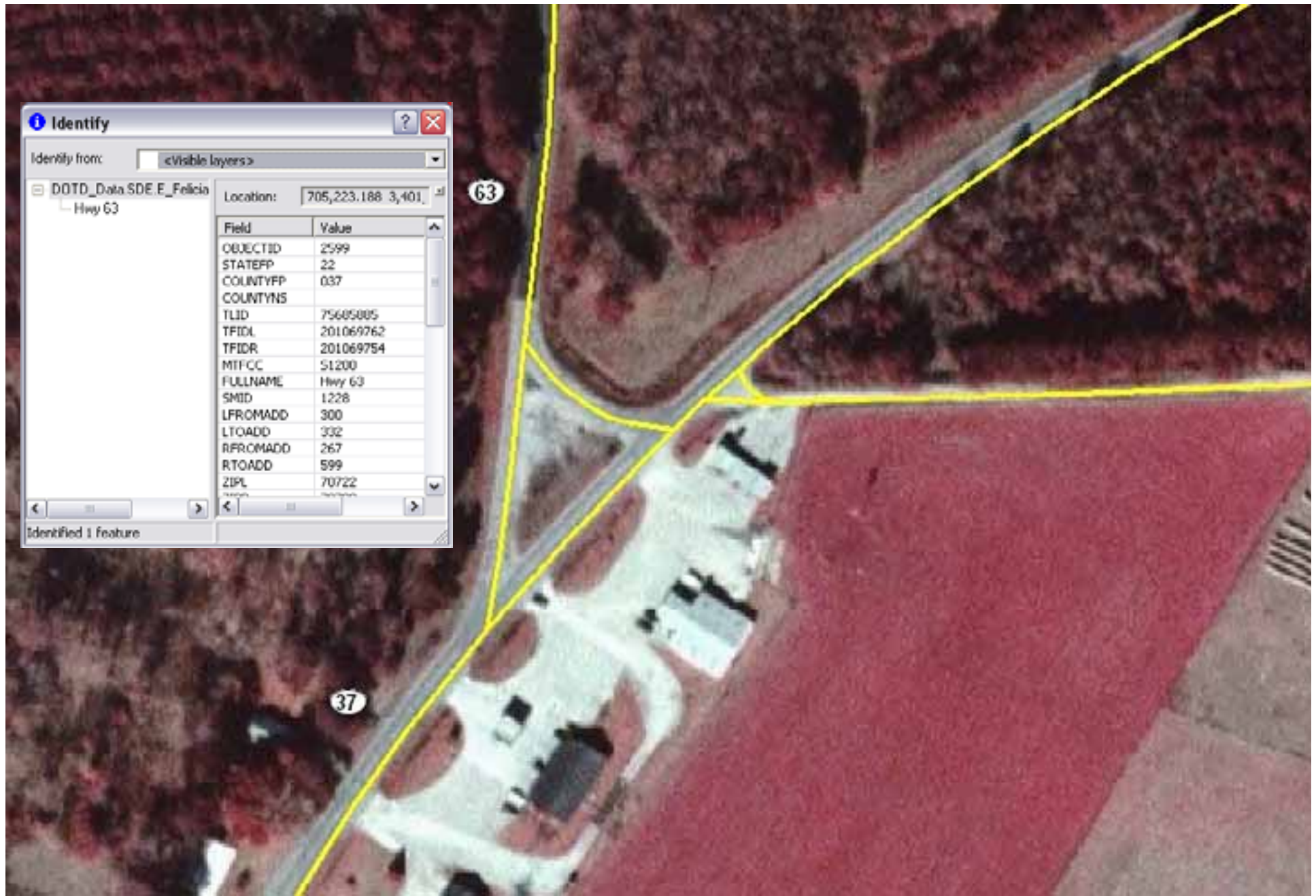




# Phase One Result

- State & Non-state maintained roads merged
- Topology checked and double checked
- Meticulous internal QA/QC





# Phase Two: LRS ID

- State Maintained Roads = 12 Digit Code

XXX-XX-F-LLL, Ex: 819-12-1-010

X = Control Section

F = Feature Type Code

L = Sequential Occurrence

- Non-state Maintained Roads = 18 Digit Code

PPPXNNNNNNNTTTSFLLL, Ex: 037900973203691010

P = Parish FIPS, X = Prefix Code

N = Road Name Code, T = Type code, S = Suffix

F = Feature Type Code, L = Sequential Occurrence

# Issues Overcome

- Three new ESRI Bugs Recorded
  - 2 Critical
- Efficient LRS ID Assignment
- QA/QC of the Dataset
- Getting Paid by the Mile
- Aerial Photo Acquisition

# Summary

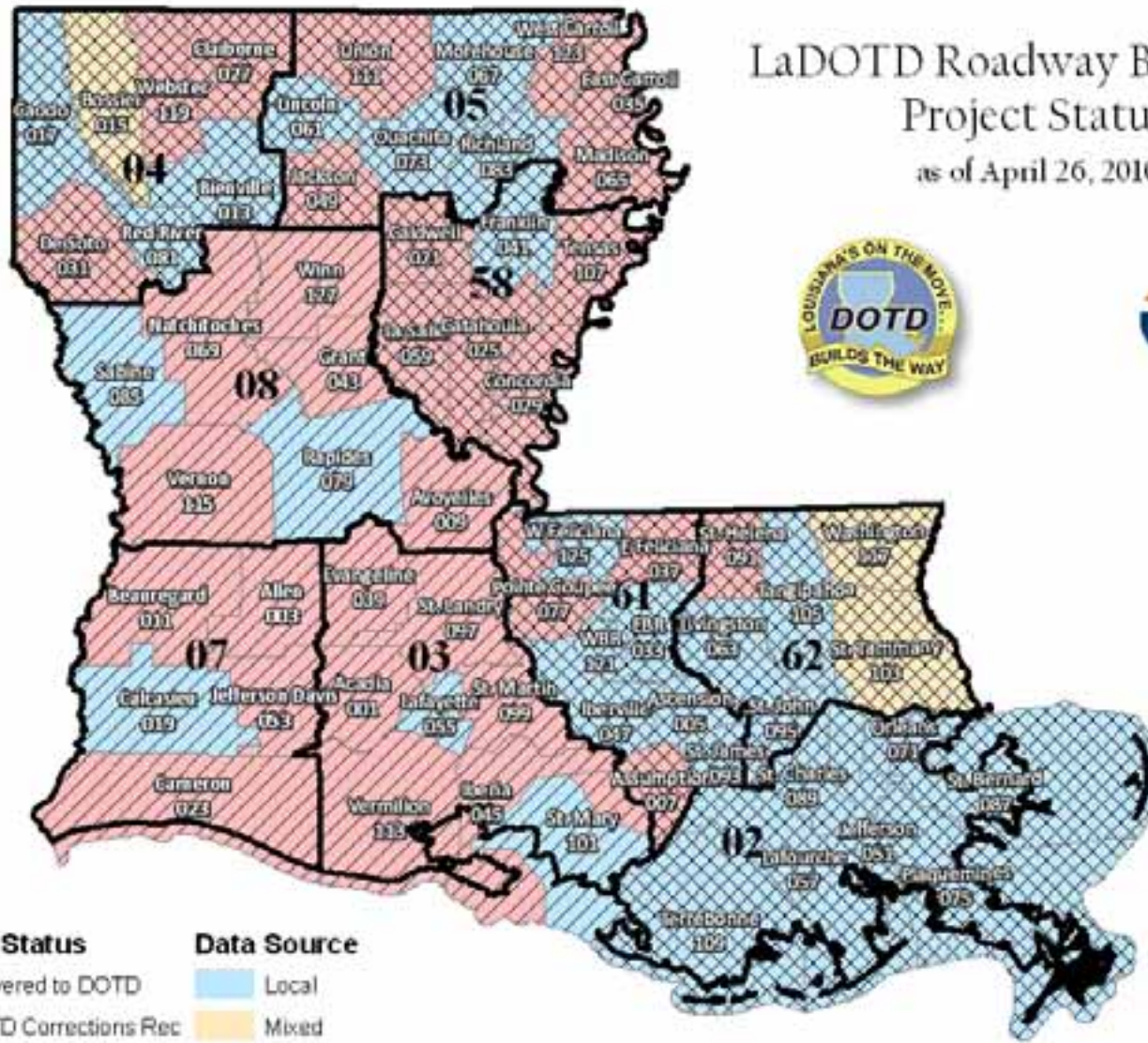
- Project Totals
  - Over 95,000 miles of Roadway Spatially Adjusted
  - Over 185,000 Unique LRS ID Assignments
  - Over 12,000 Man Hours
  - Over 60,000 Un-Named Roadways
  - Final Delivery Expected Early and Under Budget



# Summary

- Project scheduled to be complete June 2010
- All Parishes have been approved by DOTD
- Project will result in an accurate Road Base Map for use throughout the State of Louisiana
  - Linear Referencing
  - Planning
  - Engineering
  - Emergency Operations Support

# LaDOTD Roadway Base Map Project Status as of April 26, 2010



### Delivery Status

- Delivered to DOTD
- DOTD Corrections Rec
- Final Delivered

### Data Source

- Local
- Mixed
- Tiger

Parishes are labeled with their name and FIPS code



# *Special Thank You*

**Brook Bourgeois – G.E.C., Inc.**

**Colby Decoteau – G.E.C., Inc.**

*Thank you for your time. Feel free  
to contact the team with any questions.*

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