

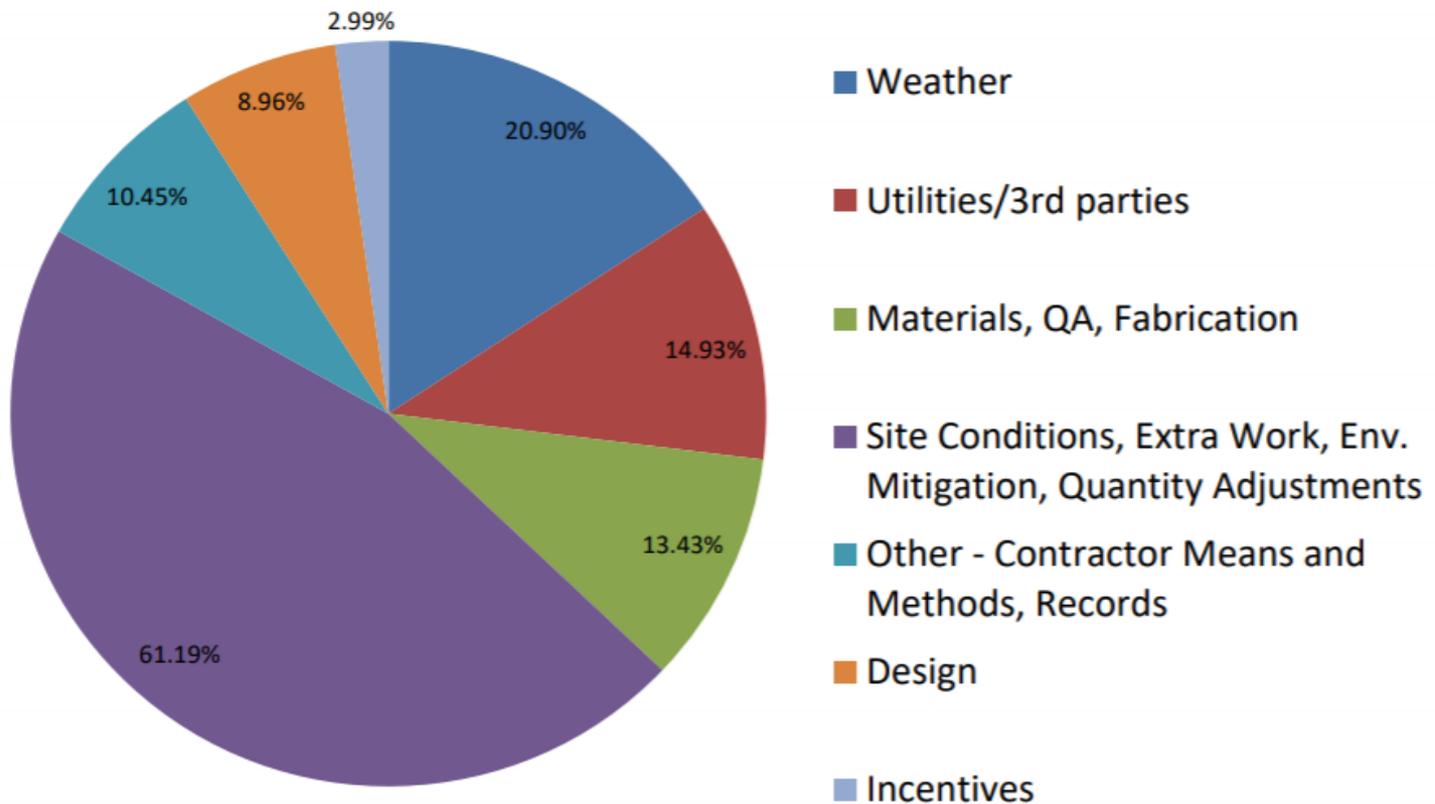
Infrastructure Conflict Investigation and Engineering Program (ICIE)



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Roy Sturgill, Iowa State University

Why ICIE?



Source: 2018 AASHTO CRUO Annual Meeting FHWA Presentation, Julie Johnston

What is ICIE?

- Spurred from conversations with other DOTs
- A constructability review approach
- Utility and rail specific knowledge
- Identify, analyze, and resolve impacts
- Varying stages
 - PL&G, 60%, more?



How can ICIE help your project?

- 1 of Effective Utility Coordination Can save \$4-\$10-\$???
- Utility Issues Ranked 9th/30 Change Order Reasons
 - \$35,000 Average Cost
- Constructability Review Reduces Changed Orders by 1.25%



ICIE Program Key Elements

- Project Identification
- Encourage Utility Partnership
- Utility Conflict Management
- Strategic Use of SUE
- Utility Impact Analysis
- Benefits from Lessons Learned



Next Steps for the ICIE Program

- SPR 20-581: Integration of Utility Coordination & Highway Design
 - Alignment of Utility Engineering & Coordination Phases with Project Development Phases
 - Roles & Responsibilities

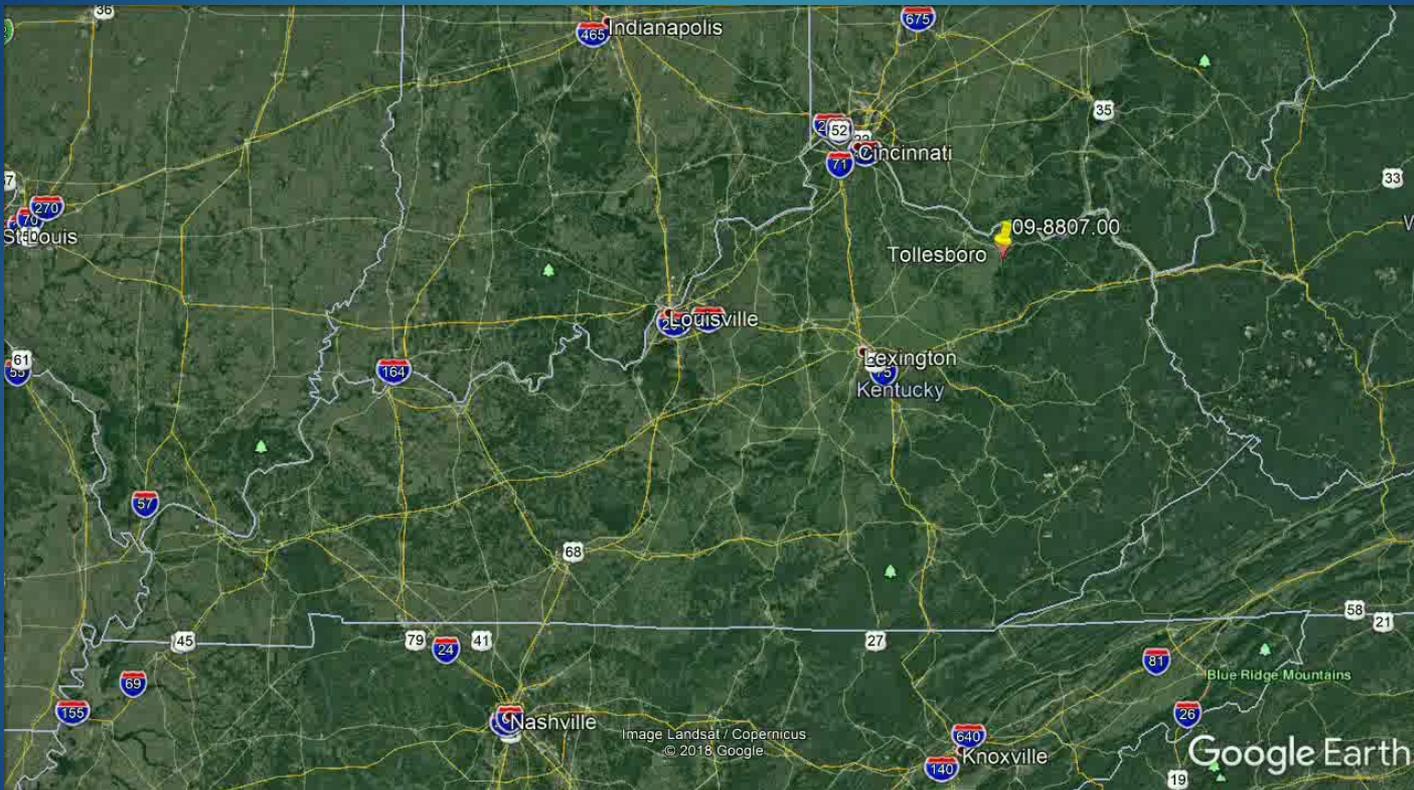


KYTC ICIE Pilot Program



Item No. 09-8807.00

Lewis County KY 57



Item No. 09-8807.00

Lewis County

KY 57

- ▶ Design

- ▶ \$1,000,000

- ▶ Auth. 2018

- ▶ Utilities

- ▶ \$3,830,000

- ▶ 2023

- ▶ Right of Way

- ▶ \$6,020,000

- ▶ 2023

- ▶ Construction

- ▶ \$37,960,000

- ▶ 2024

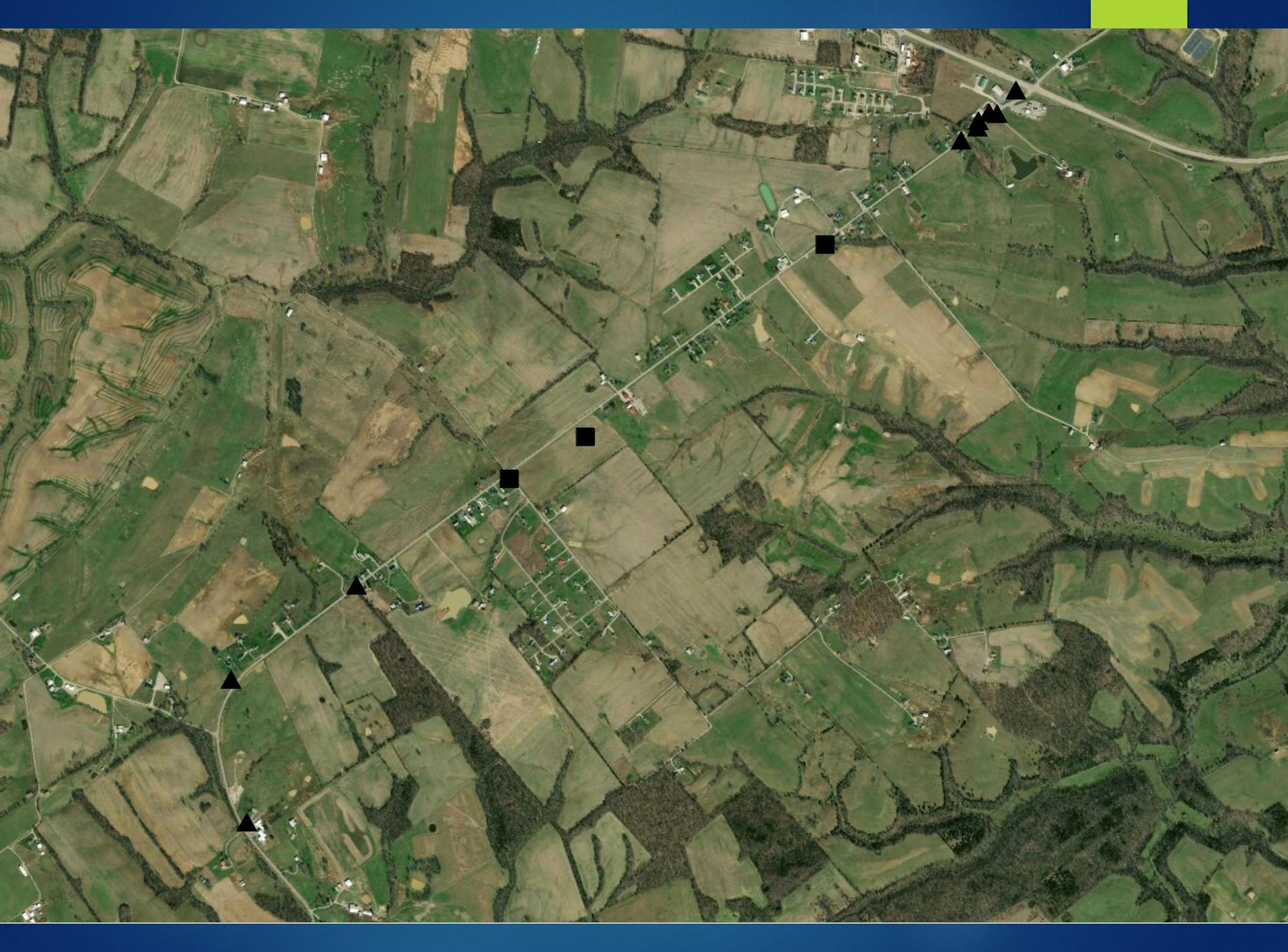
Utilities in project area

Overhead

Fleming-Mason Energy Cooperative - Electric
Windstream Communications – Telephone
Spectrum – Cable TV

Underground

Fleming County Water Association – Water
Western Lewis – Rectorville Water and Gas – Water
Western Lewis – Rectorville Water and Gas – Natural Gas
Lewis County Sanitation District - Sewer







CHARLES AND CARLA WILSON

BRENT AND JILL BIDDLE

Google Earth

6" WATER

WM

WM

WM

WM

31

32

33

34

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36

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37

39

(B)

(C)

Next Steps

- ▶ Determine all facility types and sizes
- ▶ Identify any SUE needs
- ▶ Construct first Utility Conflict Matrix

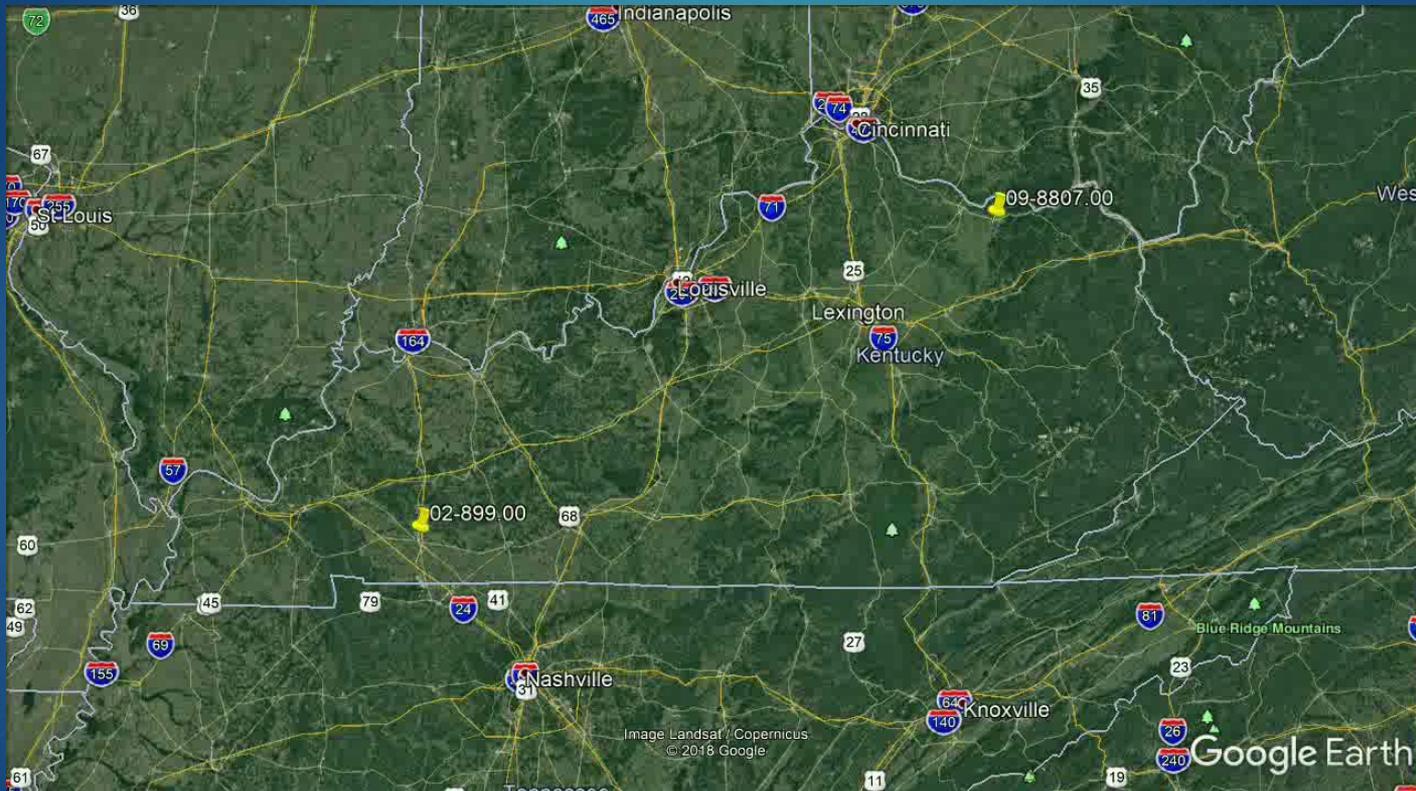
▶ Select Alternate

- ▶ Repeat at finer level

Item No. 02-899.00

Christian County

US 68



Item No. 02-899.00

Christian County

US 68

- ▶ Design

- ▶ \$750,000

- ▶ Auth. 2017

- ▶ Utilities

- ▶ \$4,050,000.

- ▶ 2023

- ▶ Right of Way

- ▶ \$1,840,000

- ▶ 2023

- ▶ Construction

- ▶ \$5,850,000

- ▶ 2024





Questions?

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