



**INDIANA**  
TRANSPORTATION TEAM

# **UTILITY COORDINATION BEST PRACTICES FROM OTHER STATES**

*(By Jeremy Hunter, Indiana Transportation Team Member)*

# THE TOP TEN LIST

## **Top 10 Reasons Indiana Needs to Modernize Utility Coordination**

*Featuring a perspective on Digital Delivery*

10

**Because paper plans  
do not detect conflicts.**



# 10

## **Paper plans do not detect conflicts.**

- Traditional utility coordination = letters sent, plans mailed, conflicts found in the field
- Digital delivery moves to 3D models shared live with all stakeholders
- A Digital Twin of the subsurface lets everyone see what's underground before a shovel moves

*FHWA: effective digital data sharing reduces project delivery time by 20-50%*

**Because Colorado figured it out,  
and they have mountains to deal  
with.**



# 9

**Because Colorado figured it out — and they have mountains to deal with.**

- Built a 3D utility database from SUE data and pushed it to field crews via mobile devices
- Augmented reality overlays let excavators see utilities before they hit them
- Result: fewer utility strikes, fewer surprises, fewer angry phone calls



8

**Because Georgia made it look easy.**



# 8

## **Because Georgia made it look easy.**

- Embedded SUE quality levels (A/B/C/D) directly in GIS layer names
- Every designer sees conflict risk the moment they open the file — no extra step
- Utility data flows from design platform to GIS and exports to DXF for drawings



7

**Because Alabama delivered a complex project on a 14-month schedule.**



# 7

## **Because Alabama delivered a complex project on a 14-month schedule.**

- Gave contractors a full 3D utility model before bidding — no surprises at groundbreaking
- Accurate information exchange replaced guesswork at every stage
- Tight schedule. Met it.



6

**Because Minnesota saved \$15 million on one project.**



# 6

## **Because Minnesota saved \$15 million on one project.**

- 3D model-based delivery on a \$130M project — \$15M in documented savings
- The model caught conflicts that would have become change orders
- That's not a rounding error. That's a bridge.

5

**Because Utah doesn't even print paper anymore — and they're fine.**



# 5

## **Because Utah doesn't even print paper anymore — and they're fine.**

- Went fully paperless — the 3D model IS the legal document
- 20+ projects completed with no plan sheets cut
- When contractors first heard this, many threatened to retire. Most didn't.

4

**Because 30% design is already too late if utilities don't know yet.**



# 4

## **Because 30% design is already too late if utilities don't know yet.**

- Best practice: engage utilities at 30% design — before alignment and right-of-way is locked
- Not knowing where utilities can go during preliminary design, can lead to big issues later
- Currently, we notify utilities. We need to find ways to be co-designing with them.

3

**Because "I think there's a gas line somewhere around here" is not a plan.**



# 3

**Because “I think there’s a gas line somewhere around here” is not a plan.**

- Quality Level D utility data = records, memories, and educated guesses
- Digital delivery upgrades this to SUE Quality Level A/B embedded in the design model
- Clash detection in the model beats clash detection with a backhoe



2

**Because INDOT leadership deserves a real dashboard, not a phone call.**



# 2

## **Because INDOT leadership deserves a real dashboard, not a phone call.**

- Require ESRI-compatible utility data as a standard PDP submittal
- A live GIS utility submission dashboard exists in prototype form — today — in other states
- One source of truth. No re-entry. No lost PDFs. No surprises.

1

**And now the #1 way other States are improving their utility coordination...**



1

# First a story



## BEFORE ITT

Consultants, INDOT, and Contractors — in separate corners.  
Everyone pulling in different directions.





## LOOK AT US NOW

Same three groups. One campfire. Partnership changed everything.



## TODAY WITH UTILITIES

We solved the consultant-INDOT-contractor equation but utilities are still across the ring.





## THE FUTURE WE WANT

Everyone around the campfire. Utilities as partners.  
That's the goal.





**INDIANA**  
TRANSPORTATION TEAM

and the number one reason it can work...

**WE ALREADY DID IT ONCE.**



# LET'S INVITE THEM.

Utility companies aren't our adversaries.  
They are our partners.