

How Knox County centralized road planning and inventarisation with vialyics

Faced with scattered data, paper-based systems, and thousands of untracked infrastructure assets, Knox County needed a modern way to manage its roads.

With vialytics, the county gained a unified, field-driven platform for asset inventory, road condition assessments, and proactive planning—empowering a 28-person team to centralize operations and save time across the board.

About Knox County

Location: Knox County, Indiana

Road Network: 870 miles

Bridges: 200+

Culverts & Small Structures: 2000+

vialytics Users: 28 highway department staff



The Challenges:

Disconnected Data and Outdated Inventory Methods

Before adopting vialytics, Knox County's Highway Department faced a major organizational hurdle: It's asset data, ranging from bridges and culverts to pavement condition, was scattered across multiple systems and formats.

"I had some data, but it was in different places—different programs, or even on paper maps," said Matt Holden, Knox County's former Highway Engineer and Superintendent. "When I looked at a road project, I had to switch between data sources and sometimes physically drive to recollect information because it wasn't documented well."



Despite having a work order system, it wasn't equipped to handle the complexity and volume of assets that needed to be managed across the county's expansive network. Tracking culverts and bridges was particularly difficult, with little to no centralized inventory on hand.



Smart Inventory and Planning with vialytics

Matt began exploring more advanced asset management solutions in 2019. By 2023, while leading Knox County's highway operations, he was introduced to vialytics through a cold call from the team.

The turning point?

vialytics' flexibility, local support, and ability to integrate Indiana's PASER rating system—quickly.

"I wanted a system where I could collect my own data. I didn't want to rely on someone else. The ToDo app worked on nearly any device, and I could have my crew out there collecting real-time data—right from the field."

Matt and his team configured custom property fields for culverts and bridges based on local needs, collecting detailed asset data including pipe type, diameter, condition, and location.







Implementation: 28 Person Team, One Streamlined Workflow

Implementation was fast and intuitive. After a quick onboarding with vialytics, Matt trained his entire team internally.

Using the ToDo app, field crews inventoried culverts and bridges in real time—often during winter or inclement weather—capturing geolocated photos and completing asset forms using dropdown menus. Matt could monitor progress live from his laptop, correct entries, or provide remote guidance.

"If a crew member found a new material type, I could update the form from my computer in seconds. Everything stayed consistent and streamlined."

"I now have confidence in the accuracy of our data. I can pull up road segments, look at photos from a year ago, and immediately know what's changed. That credibility is huge."

Matt Holden

Knox County's former Highway Engineer and Superintendent



Confidence, Credibility, and Centralization

With over 2000 small structures inventoried and all 200+ bridges documented, Knox County now has a unified view of its infrastructure. The benefits were immediate:

Massive time savings:

PASER condition assessments can now be completed every six months instead of every 2 years.

Budget forecasting:

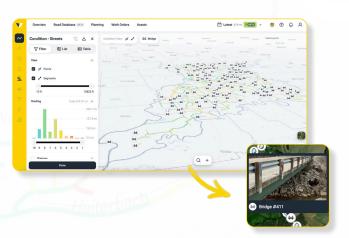
Exporting culvert data to Excel enabled precise cost projections helping justify budget requests.

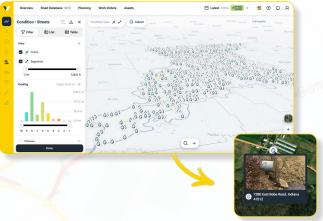
Proactive maintenance:

The ability to filter road defects and flag issues enabled crews to fix problems before they became complaints.

Increased credibility:

County officials, residents, and field crews gained confidence in the highway department's data and planning.





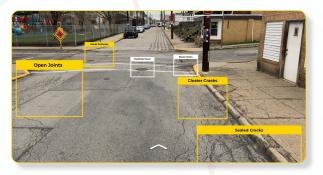
A Model for Other Counties

Even as Matt transitions to a similar role in neighboring Gibson County, his experience with vialytics continues to shape how he approaches infrastructure management.

"vialytics has exceeded my expectations. It's a system that's usable from start to finish for everything in my inventory."

His advice for other counties?

"Start with condition assessments and PASER ratings—you'll get more than just a rating tool. The added features are a bonus."



Conclusion

Knox County's story shows how even the most complex public works departments can modernize with the right tools. By putting real-time data into the hands of field crews and leadership alike, vialytics didn't just improve workflows—it helped build trust, transparency, and long-term planning capacity. For other counties looking to move beyond spreadsheets and guesswork, Knox County offers a clear path forward.