

A Clearer Path to Smarter Road Planning

The Town of **Elkton, Maryland** oversees approximately **35 centerline miles** of roadway, along with a range of public assets that require ongoing maintenance and attention.

For years, the Public Works department relied on experience, visual drive-throughs, and resident complaints to guide repair decisions. While this approach kept essential maintenance moving, it often left the team responding to issues instead of preventing them—and without objective data, long-term planning and budget justification were difficult.

A New Approach to Road Management

Elkton paved roughly half a mile per year, often defaulting to two-inch mill-and-overlay projects after each winter season. The process lacked reliable cost tracking and a clear understanding of where investments would make the greatest difference.

With no digital inventory of road assets like storm drains, manholes, or signs, and limited staff to conduct manual inspections, road management remained largely reactive.

The Public Works team recognized that to manage its infrastructure more effectively—and make the most of over half a million dollars in annual highway funds—it needed a data-driven system and the right partners to implement it.





That's where Verdantas Engineering and vialytics came in.

Working in partnership, Verdantas guided Elkton through the deployment of the vialytics system, enabling the town to assess its entire 35-mile road network.

The vialytics system automatically detected pavement damage, assigned severity ratings, and mapped assets across the community. This collaboration gave Elkton's team **immediate visibility into its infrastructure**—from the number of potholes to sign conditions—and **a structured foundation** for prioritizing repairs.

"The biggest change is clarity. The system puts everything into focus instead of blurry images all over. Now we know exactly where to concentrate and how to plan for the long term."

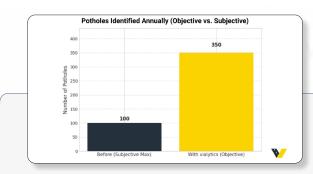
Daniel Handley Elkton Public Works Dpt.



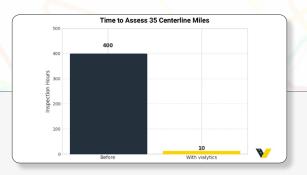
More efficency with less effort

Through this partnership, Elkton identified approximately **350 potholes** and **80 damaged signs**, while also learning which streets could be treated with lower-cost preventative maintenance instead of full reconstruction.

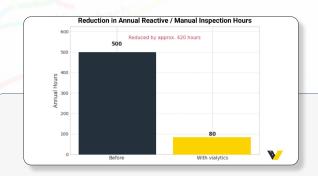
For the first time, Elkton could **align projected costs** with its available budget, helping leaders move away from assumptions toward confident, evidence-based decision-making.



More accurate damage detection



Faster results from condition assessments



Less time occupied for inspections

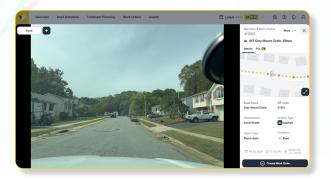
Data-Driven Results

The impact went beyond pavement data. Elkton's team reports saving hundreds of hours across departments thanks to improved organization and clearer communication. What was once managed through pen, paper, and word of mouth is now being tracked digitally, helping staff coordinate more efficiently and document progress in ways that strengthen accountability and transparency.

The data collected through vialytics—supported by Verdantas' engineering expertise—has also been incorporated into public discussions and budget hearings. Elkton can now confidently demonstrate needs, justify state funding requests, and prioritize work based on facts rather than perception. As



the town looks ahead, it plans to expand the use of vialytics to include stormwater, signage, and parks assets, building the foundation for a comprehensive, long-term capital improvement plan.



By embracing technology and partnership, Elkton has transformed how it manages its roads.

With vialytics providing continuous insights and Verdantas offering engineering guidance, the town now approaches infrastructure management with **clarity**, **confidence**, **and measurable results**—turning what was once reactive maintenance into a proactive strategy for the future.