

PASER Assessment for Garden City, Kansas

Scope: In a collaborative initiative between Transconomy, a division of iENGINEERING, and Professional Engineering Consultants (PEC), a thorough pavement condition study was completed in Garden City, Kansas.

This study employed the Pavement Surface Evaluation and Rating (PASER) protocol, representing a thorough examination of the entire street network, showcasing the commitment to precision in roadway infrastructure assessment.

The initial task of collecting pavement data spanned approximately 350 lane miles across the designated road network, featuring right-of-way imagery capture by PEC. These images, capturing the imagery of the roadway network, were processed through Transconomy's Hub. The images underwent a rigorous validation process, correlating them with the City's street centerline file to ensure accuracy in segment matching. The subsequent processing, driven by Transconomy's AI models tailored to the PASER protocol, became a cornerstone in deriving comprehensive pavement condition evaluations.

To ensure the reliability and precision of the data, Transconomy implemented a Stratified Quality Control Process, an essential step in the verification pipeline. Only after successfully passing through this stringent quality control was the data delivered to both PEC and the City. The presentation of the data in an ESRI-compatible geodatabase format adhered to project specifications, ensuring seamless integration into existing geospatial databases.

Recognizing the significance of user-friendly interaction with the data, Transconomy conducted stakeholder training on the utilization of Transconomy's Viewer. This tool proved instrumental in facilitating convenient access, exploration, and interaction with the information, fostering an inclusive approach to data utilization among all involved parties. The collaborative effort demonstrates Transconomy's dedication to delivering not just data but comprehensive solutions that empower stakeholders with actionable insights for pavement condition management.



Results: Transconomy provided information accessibility for PEC and Garden City by delivering a comprehensive PASER-based evaluation report.

In addition to this, Transconomy provided an extensive spatially referenced inventory detailing pothole distribution. This crucial dataset seamlessly integrated into the city's existing geodatabase template, enriching it with customized information such as overall ratings, pavement type, segment area details, and URLs to relevant photographs. The integration not only enhanced the city's pavement condition data but also the information available for decision-making processes. Transconomy's contribution underscores its commitment to working as a trusted partner in pavement and asset management.



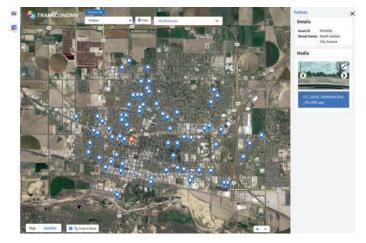
Benefits: The project delivered by Transconomy offered substantial value for both PEC and Garden City through a precisely executed pavement assessment.

Leveraging cutting-edge AI models, Transconomy ensured the delivery of precise and reliable evaluations of pavement conditions, supporting maintenance and rehabilitation prioritization for the City.

In addition, the project incorporated a pothole identification system and asset inventory components, augmenting its overall utility. This multifaceted approach not only provided a holistic view of existing conditions but also laid the groundwork for informed budgetary planning and decision-making for maintenance, preservation, and rehabilitation prioritization.



The deliverables, presented in multiple formats and accessible through the user-centric Transconomy Viewer, empower stakeholders with access to both aggregate and individual datasets. This accessibility proves instrumental in formulating short-term strategies for immediate action as well as long-term forecasts, fostering a sustainable and forward-thinking approach to pavement infrastructure management.





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