Peoria Roadway Scanning



NEXCO analyzed over seven miles of GPR roadway in Peoria, IL to evaluate the depth, nature, and general condition of composite pavement layers.

From the data, we determined where significant transitions in the pavement construction history took place and what construction types were implemented in those sections. Newly paved sections could be identified on top of existing layers, and the subgrade level could also be mapped beneath. Some areas exhibited instances of layer sinking or large debonding. Additionally, the remains of a trolley rails and ties could be clearly visualized and mapped.

The data helped grasp the current condition of the roadway by being tied to other visual and LiDAR datasets.



Project Details

Client	[Agency in Illinois] iSee LLC
Reference	Mark Wolcott
	President, iSee, LLC
Road Length	7mi
Project Period	Oct 2022 - Jan 2023

Impression

With information from both visual/LiDAR and GPR datasets, spatial information about the current asset condition can be used for assessing costs for future rehabilitation. Knowing where potential problem areas as low as 4ft into the ground is useful when considering repaving projects because if top layers of a road are stripped to be repaved, there is an opportunity to address the sinks and breaks in base pavement layers found by GPR scanning.