Detecting potholes with AI for better citizen experiences

City of Memphis
U.S.

Challenge
City governments struggle to efficiently identify and remove potholes, making streets less safe and costing US drivers $26.5 billion per year. Memphis, Tennessee is one of the largest cities in the country by land area, making street maintenance an especially daunting task

Solution and partner
The City of Memphis worked with Google to use AI-enabled cameras mounted on city vehicles to identify potholes and to train object detection models to find potholes along the routes and classify them for filling.

Impact
Together with other data-powered methods, the effort helped identify 75% more potholes than manual processes. This led to smoother and safer roads for Memphis residents and simplified a task that typically takes 32,000 hours of city employee time each year.

Making AI Helpful for Everyone: publicpolicy.google