

VILLAGE TRIES TO PAVE THE WAY WITH A.I.

Car with camera monitors streets to find potholes

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Hempstead Village is rolling out a pavement plan to keep track of the condition of its road network in a bid to stay one step ahead of potholes.

It's one of the first such initiatives on Long Island that records and marks conditions for every village street to help prioritize needed maintenance and repairs, according to the Long Island Contractors' Association executive director, Marc Herbst. The association contributed a \$35,000 grant to the village.

The pilot program sends a vehicle equipped with cameras to record the state of each road, according to the company, the Pavement Management Group, headquartered in Heath, Ohio. Asphalt issues like potholes and cracks are first detected by artificial intelligence and later confirmed by human asphalt experts. Based on global standards, the roads are assigned one of five grades, from excellent to failed, as well as a numerical rating. The level of damage as well as the kind of repair and cost they need is also assessed.

The reports and information can also be available for public inspection, according to company officials, who expect the work to begin soon. Hempstead Village Mayor Waylyn Hobbs Jr. said it's unclear whether that information will be available on the village website.

Herbst said that pavement conditions were a recurring theme in meetings with town supervisors and highway superintendents, but they lacked the tools to determine which roads should get prioritized.

"Most of them did not have a comprehensive pavement management program where they identified where the prob-

WHAT TO KNOW

- **Hempstead Village is launching** a new pavement program that tracks and documents road conditions, including damage, repair type and cost.
- **Experts said that many municipalities** wait for complaints from motorists before tackling road issues.
- **This initiative is expected to help** officials become proactive about maintaining roads and to use the data to seek funding.

lems were, and they also complained about the lack of funding and where to put the money," Herbst said, adding this information could be used to obtain grants, or for long-range capital planning.

Hobbs said while officials will soon be repaving seven wide streets, this service will help pinpoint needs in other areas.

"We will definitely use this as a way to stay proactive, to know the conditions of our roads without waiting for complaints to come in. That is always helpful to any administration, when you know the conditions of all your streets," Hobbs said.

Experts said that many municipalities on and off Long Island wait for complaints from motorists before tackling road issues. Long Island's roads take a beating from extreme weather, as well as heavy car and truck traffic.

Michael Shenoda, assistant professor of civil engineering technology at Farmingdale State College, said these programs are important, but other factors like budgets and traffic counts have to be taken into account when determining repairs.

"In terms of maintaining the roads, you have to have a good set of data, you have to keep eyes on the road and, what's the ... best use of money," Shen-

oda said.

He added that while the emphasis might be on maintenance and preventing further degradation, repairs will "always be based strictly on people saying, 'Oh, the road stinks here.'"

The state Department of Transportation, which manages roads including the Long Island Expressway and Southern State Parkway, did not respond to questions regarding how it keeps pavement maintenance schedules. But spokesman Stephen Canzoneri said the agency "employs advanced asset management strategies, modern data collection technologies and sophisticated modeling techniques to assess and maintain its pavement network on an annual basis."

A spokesperson for Suffolk County said officials are exploring similar technology to the one used in Hempstead Village and last year utilized pavement software to evaluate roadways. It found that the results were similar to manual evaluations. The county currently utilizes the state Department of Transportation's pavement evaluation process. Nassau County did not respond to requests for comment.

Clariona Griffith, a Hempstead Village trustee, welcomed a road grading system that is open for the public to inspect. She said some village streets are great while others are "like dropping into a hole." Many residential roads still need fixing, she said.

"The residents would be able to get roads fixed, they'll hold people accountable" and state and federal agencies would be able to see the data, Griffith said.

James Golden, the founder and CEO of Pavement Management Group, said the program can help municipalities stay ahead of repairs.

"The reality is an ounce of preservation is worth a pound of cure, just like it is in the health care network, it's the same for our roadway health network."