



# Oregon City, OR

## Case Study

### Overview

- 1** Oregon City began a pilot program in partnership with CITYROVER to improve the efficiency of the City's road infrastructure maintenance procedures.
- 2** Through use of the CITYROVER system, the City is equipped to collect accurate data regarding the quantity and severity of deficiencies on the City's road network and plan their repairs accordingly.
- 3** After a noticeable improvement with respect to repair productivity and efficiency (i.e. being able to make more repairs in a given day), Oregon City decided to permanently integrate CITYROVER into the City's road maintenance operations.

### Limitations of Previous Methods

The previous method of tracking and inventorying Oregon City's road infrastructure issues consisted of City staff members taking note of any deficiencies encountered, including potholes, while completing daily tasks. Compiled incident reports were then submitted for processing before being distributed as work orders to repair crews. Additionally, members of the public reported any deficiencies missed by staff.

### Challenges

A survey conducted by Oregon City revealed that road infrastructure maintenance and the City's responsiveness to pavement issue repairs were of significant interest to its 37,500 residents. In an effort to provide elevated levels of public service, the City began searching for solutions that would help to create new efficiencies in road operations processes.

- > Oregon City relied heavily on the information collected through public reports of road deficiencies to prepare work orders for repair crews.
- > Work orders contained vague incident details, resulting in crews spending unnecessary time searching the area for the hazards that they were deployed to address.
- > The repair process had various inefficiencies, leading to long repair times and extended exposure to pavement hazards for all road users.

However, with vague report details causing crews to waste time searching for each reported deficiency, as well as the lack of dedicated regular inspections of Oregon City's entire road network, the City was unable to plan well-structured repair routes to address identified hazards, which led to longer repair times. As a result, all road users had prolonged exposure to safety risks associated with road damage.



## Solution

After hearing about CITYROVER and learning about its capabilities, Oregon City started a pilot project with the system. CITYROVER is an AI-enabled technology that helps local governments to streamline road operations and asset management.

A CITYROVER detection device was installed on a City street sweeper's interior windshield using the provided, easy-to-use mounting kit. Once in place, the sweepers, now equipped with powerful AI cameras, simply completed their day-to-day routes.

CITYROVER collected pavement hazard data for the City in a fully automated manner. In a sense, it granted them a dedicated pair of eyes, focused solely on the task of identifying, detecting and reporting road infrastructure issues encountered by City staff. The data collected by CITYROVER was used to generate detailed incident reports, which were then accessible to City staff in near real time through the CITYROVER web interface.

Through use of the incident reports, City staff were able to accurately determine the quantity of deficiencies in a given area and make informed decisions that assisted in making efficient repair plans based on severity.

## Results

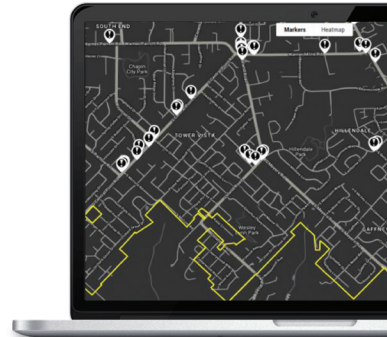
While using CITYROVER, Oregon City noticed an increase in productivity with respect to hazard detection and maintenance. Previously, City staff were limited to the repair of approximately 50-100 potholes daily. However, after integrating the technology, the City reports that crews can now complete more repairs within the same timeframe.

With the device mounted on the City's street sweeper, it is able to scan the entirety of Oregon City's road network, providing City staff with the necessary details to determine high priority areas based on deficiency quantity and severity. Using this information, staff can prepare efficient repair routes and work orders to distribute to crews in order to address more hazards in less time. In turn, this leads to consistently high road quality, less exposure to safety risks and an increase in public service and satisfaction levels.



## Implementation Results

Oregon City initiated a pilot program for the CITYROVER technology in 2022. The City determined that the most effective manner to implement the solution was to mount the device onto street sweepers, as they cover up to 100% of the City's road network while completing their daily routes. The results of the pilot proved to be overwhelmingly effective, so the City made the decision to implement CITYROVER in their Road Maintenance Operations Department on a permanent basis.



**John Lewis,**  
Public Works Director,  
Oregon City



"It's really great because it helps us package all that information up into a form that the crews can then take. We can target a particular neighborhood or a particular corridor. So, it turned out to be an effective tool for us."