

# SLAM – Mobile Lidar for Pavement Preservation Projects

## Photogrammetry and Surveys Section

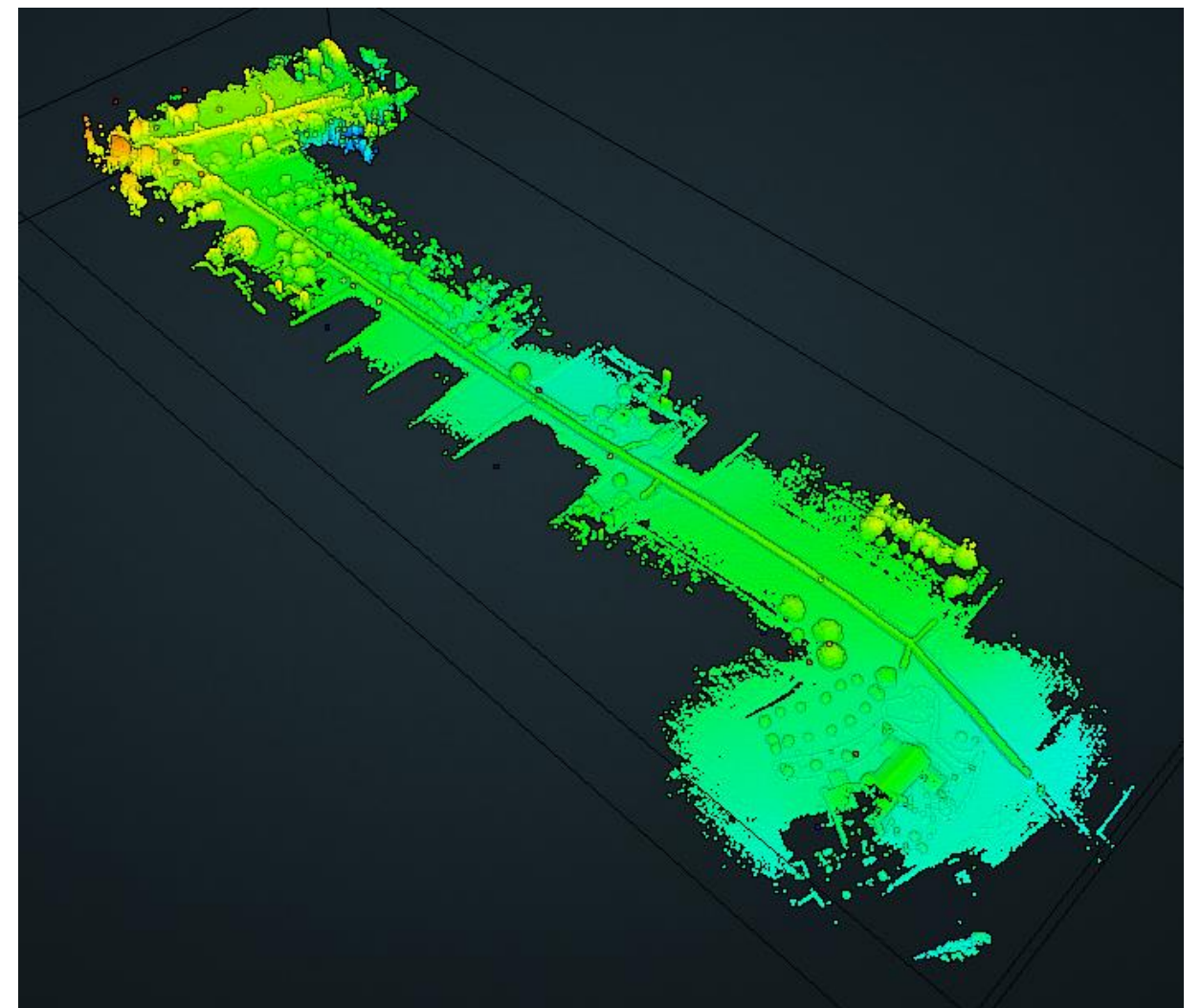
### Existing Condition Surveys for Pavement Preservation Projects

One of the goals of Digital Delivery 2025 is to encourage 3D design on as many projects as is practical. One challenge to that goal is small or low effort pavement preservation projects that may not warrant a large existing condition survey effort. These projects are often completed in 2D because of the lack of a suitable survey.



### SLAM - Simultaneous Location and Mapping

Our Section is evaluating the GeoSLAM lidar unit as a possible cost effective and quick solution for generating these needed surveys. The unit is a low cost device that can be mounted on a vehicle and driven at slow speeds along a corridor while collecting lidar data. This lidar data then serves as the base for a suitable existing conditions survey.



### Ten Projects Currently in Evaluation

Data has been collected on ten selected project sites throughout the Commonwealth.

- 1.) Data will be evaluated for quality and content.
- 2.) Some data will be thoroughly map tested to determine an overall accuracy confidence level.
- 3.) Data will be compared against existing topographic mapping when available.

Results available in December 2021.

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