



Capital Trail

Assess Don't Guess When It Comes to Cyclist and Pedestrian Safety

PROBLEM

The Capital Trail is a 51-mile paved bicycle/pedestrian shared use path linking Richmond to Williamsburg. VDOT is responsible for keeping the trail usable and safe, but lacked a way to identify needed repairs.

SOLUTION

PILLAR inventoried assets over 11 different types of assets and performed a condition assessment on the Capital Trail. Then, we developed a comprehensive maintenance management plan that identified needed repairs accumulated since the trail's completion in 2015.

Our deliverables included the comprehensive maintenance plan document, GIS database of inventory items, the asset condition ratings on each evaluated asset, spherical photos and LiDAR point clouds.

APPROACH

PILLAR performed an asset inventory collection using Mobile LiDAR and our Automated Feature Extraction (AFES™), street level imagery, and georeferenced plans. We collected the following assets:

- benches
- bike stations
- bollards
- bridges
- culverts
- crosswalks
- mowing acreage
- pavements
- pipes
- signs
- trees

Once collected, we performed a condition assessment and used VDOT's Maintenance Rating Program (MRP) to rate each asset. Using the condition assessment, we created a short-range and long-range maintenance plan that included cyclical/routine maintenance and minor maintenance or repairs.

Our deliverables included the comprehensive maintenance plan document, GIS database of inventory items, the asset condition ratings on each evaluated asset, spherical photos and LiDAR point clouds.