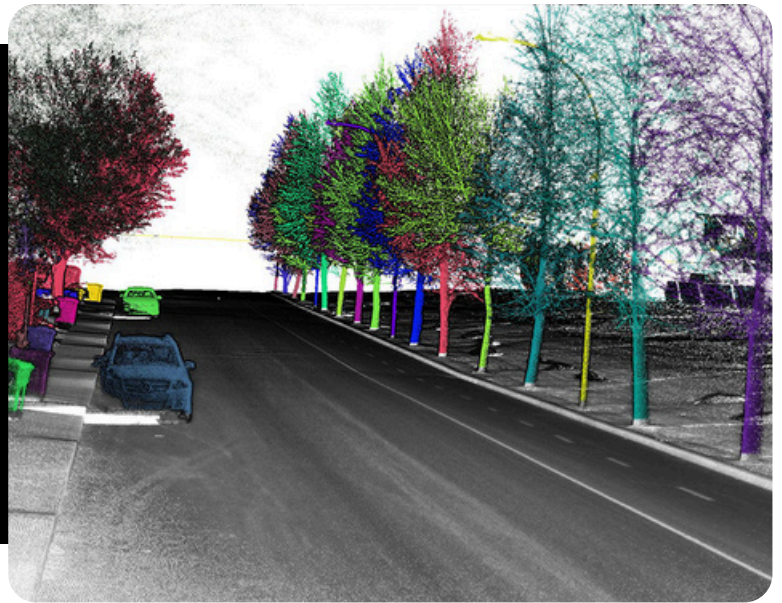


Mobile LiDAR Mapping

FOR YOUR URBAN FOREST



What is mobile LiDAR?

Mobile or terrestrial LiDAR is an advanced mapping technology that uses vehicles equipped with laser scanners and high-resolution 360 degree cameras to rapidly capture precise 3D data of urban streetscapes. This method generates detailed digital twins of both green (trees, vegetation) and grey (roads, infrastructure) assets, making it possible to efficiently produce citywide inventories that inform better planning and maintenance.

With mobile LiDAR, cities obtain accurate measurements and geolocations for each tree—including trunk diameter, height, and canopy area—while integrating data into TreePlotter Inventory and immersive viewers for real-time analysis and decision-making. The technology enhances efficiency, visualization, and operational safety, supporting proactive asset management for healthier, more resilient cities.

Why use it?

Overcomes Resource Constraints

Collects and analyzes asset inventories in weeks, not months. Cost-share data capture with other city departments.

Manages Urban Assets Holistically

Assesses conflicts and relationships between green and grey infrastructure.

Empowers Human Expertise

Targets arborists for on-site field assessments to the highest priority issues.

Easy to Implement

Seamlessly integrates into GIS and powerful visualization platforms for stakeholders to leverage.

How does it work?

1

Collection

Vehicle mounted with capture unit drives through city's streets

2

Feature Extraction & Analysis

Advanced algorithms distinguish trees from poles, signs, and other assets with a rich set of attributes

3

TreePlotter Software Integration

Our arborists review automation and enter additional data attributes.

4

In-Field Arborist Assessments

Prioritized tree inspections, work plans, and risk assessments.



MOBILE LiDAR MAPPING FOR YOUR URBAN FOREST

A Citywide Asset Management Solution

Green assets impact every department — from urban forestry to public works, transportation, and emergency management. **Cities need a smarter, integrated approach.**

We offer the precision and analytics to collect detailed digital twins of cities across **both green and grey infrastructure – all at once.**



Albuquerque: Remote Tree Inventory

From January to March 2025, the City of Albuquerque partnered with PlanIT Geo to conduct a remote tree inventory powered by mobile LiDAR mapping. Selected city streets were driven and scanned to capture rich 3D data and high-resolution imagery of approximately 4,000 city-owned trees and planting sites. Coupled with the skills of our ISA Certified Arborists, this advanced approach enabled rapid identification and measurement of tree features—including location, diameter at breast height, crown height, genus, and live crown ratio—using a hybrid approach of automation and expert arborist review.

Albuquerque's experience demonstrates how cities can leverage mobile LiDAR for rapid, precise urban forestry data—and use the results for smarter, integrated infrastructure planning where cost can be spread across multiple departments.



Expansion Planning for Future Canopy

Over 2,000 suitable planting sites were also mapped, supporting future canopy expansion and proactive planning.



Real-Time Decision Support with TreePlotter

All data was seamlessly integrated into Albuquerque's TreePlotter application, enhancing the city's ability to track tree health, mitigate hazards, and optimize management decisions in real time.



Collaborative, Data-Driven Urban Asset Management

This collaborative effort highlights holistic asset management, fostering cross-departmental teamwork and budget efficiency while empowering ongoing stewardship.

Unlock smarter urban forest management with mobile LiDAR mapping —partner with PlanIT Geo to boost efficiency, strengthen collaboration, and gain real-time insights for a healthier, more resilient city.

