STREETSCAN intelligent pavement inspection/management

Why StreetScan? How is StreetScan different from/better than our current solution?

1. **Data Collection** – Cutting edge Bolt On sensing platform that now features full 360-imagery & 3D Cameras: [https://www.youtube.com/watch?v=P3eHteesEAY&feature=youtu.be](https://www.youtube.com/watch?v=P3eHteesEAY&feature=youtu.be).

2. **Data Processing** – Using Artificial Intelligence we process the data in an objective way to derive a PCI index which is the industry standard.

3. **Capital Planning & Data Editing** – You will have full access to the data within your custom portal of Streetlogix ([www.streetlogix.com](http://www.streetlogix.com)). Using AI and custom built decision trees, we provide you with recommendations on what treatments to apply, where and when. We also update this data over the year within the software to ensure your annual planning is kept up to date regardless of whether you scan your roads in subsequent years.

4. **Transparency** – We also provide you with a Storymap for the project, which is a web-based overview of the project and findings. This is a great tool to share with stakeholders and can be shared publicly online if you want to publicize certain data such as what roads will be tackled and why they were selected: [https://streetscan.maps.arcgis.com/apps/Cascade/index.html?appid=35876dbf0d534c1ca396617dd3c0e2b4](https://streetscan.maps.arcgis.com/apps/Cascade/index.html?appid=35876dbf0d534c1ca396617dd3c0e2b4)

5. **Flexible Payments** – We offer “TotalStreets” that allows you to spread the total payment over a three-year period, enabling you to include multiple Asset Management items such as traffic signs, streetlights, etc., and stretch payments over multiple years.

**StreetScan’s services:**

- Provide **100% survey mile coverage** via its patented automated data collection system
- Require **no manual field survey data collection**
- Include an **online-based GIS software app tool** that allows for unlimited users and software support (no servers required)
- Present **imagery of your entire road network** that you can click anywhere in the web app to visualize
- **Overlay data by type**, e.g., potholes, metal objects, cracks, etc.
- Provide a **built-in online decision/maintenance prioritization tool**

StreetScan is the one-stop toolbox for planning and executing a municipality’s entire road management program.

**Why did CCM partner with StreetScan?**

In Connecticut’s current economic climate, data-driven decisions continue to play a more prominent role in municipal budgeting. With StreetScan, CCM recognized:

- Better data means better planning
- Better planning means better decisions
- Better decisions mean lower costs
CASE STUDY – SOMERS, CT

The Challenge

Like many municipalities in North America, Somers was utilizing a visual assessment to gather information on the status of its road network. This subjective and labor-intensive approach motivated the Town to embrace a faster, objective, and transparent way to assess roadway conditions and determine which roads needed repair, along with how and in what order they needed to be repaired.

The Partner

Somers learned about StreetScan’s objective, data-driven approach through the Connecticut Conference of Municipalities (CCM)*. CCM and StreetScan have partnered to provide fast, affordable, Smart City pavement inspection and management services to CCM-member towns and cities. StreetScan uses vehicle-mounted sensing technology to assess road conditions in normal traffic flow and displays gathered information in a geographic information system (GIS) application: a web app with up-to-date data and a range of tools for decision-making.

The Solution

StreetScan’s mobile-sensing vehicle, ScanVan, is the physical heart of the asset management system, assessing pavement, traffic signs, pavement markings and more on every road it traverses. During a two-week period, the ScanVan travelled 90 miles of roads in normal traffic flow to gather data on the condition of the entire street network utilizing 3D imaging technology to measure road defects. The locations of road features such as potholes, manholes and cracks were also collected. Once scanned, a variety of technologies from StreetScan & Esri, such as ArcPy scripts, ArcGIS Desktop, and ArcGIS enterprise were leveraged to generate Streetlogix, a GIS web app with powerful visualization and budget-planning tools. This app provides road condition ratings on a scale of 0 to 100, with 0 being the worst and 100 being ideal, and prioritizes the areas to remediate.

The Results

Using Streetlogix, the Town can now see an enriched view of its street network with color-coded pavement conditions and other assets, along with images for every road and tools for data-driven budget and maintenance planning. StreetScan reported that Somers’ overall pavement condition index (PCI) was rated in ‘good’ condition at an average PCI of 72.4, with 92.8% of roads above a critical PCI of 55. Only 7.2% of roads were rated as ‘very poor’ or ‘poor’.

Somers now has a data-based structure to move forward with a road bonding package. An objective, data-driven scan performed by a third party has reduced criticism and helped justify repairs.”

Todd Rolland
Director of Public Works
Town of Somers

* Other CCM members using StreetScan include: Beacon Falls, Killingly, Montville, New Canaan, New Milford, Stafford, Westport, Wilton and Windsor Locks.