



South Bend, Indiana

Challenges

Like many cities and towns in Indiana, public works officials at the City of South Bend historically deployed a windshield data collection process and a tablet-based application to capture Pavement Surface Evaluation Rating (PASER) ratings of its 550 mile road network. South Bend's key challenges included:

- **Time Consuming & Labor Intensive Data Collection Method**
Public Works employees' time is valuable. South Bend employees would spend 3 months driving the City's roads for the visual inspection, which meant that City employees' time would be consumed by this effort for an entire spring or summer.
- **Cumbersome Data Collection System**
While out on the road City employees would at times experience bugs with the tablet-based app used to mark the PASER ratings or they would have to slow their speed to ensure that the ratings for each road segment could be captured. Missed ratings meant incomplete data and slowed driving further delayed data collection.
- **Overall Slow Process**
Meticulously driving the City's roads and diligently collecting PASER ratings for 550 miles of roadway took 3 months. This slow process ultimately delayed the critical work of crafting the pavement plan and sending out the paving crew to conduct maintenance and construction on the roads.



CLIENT

City of South Bend, IN

CHALLENGE

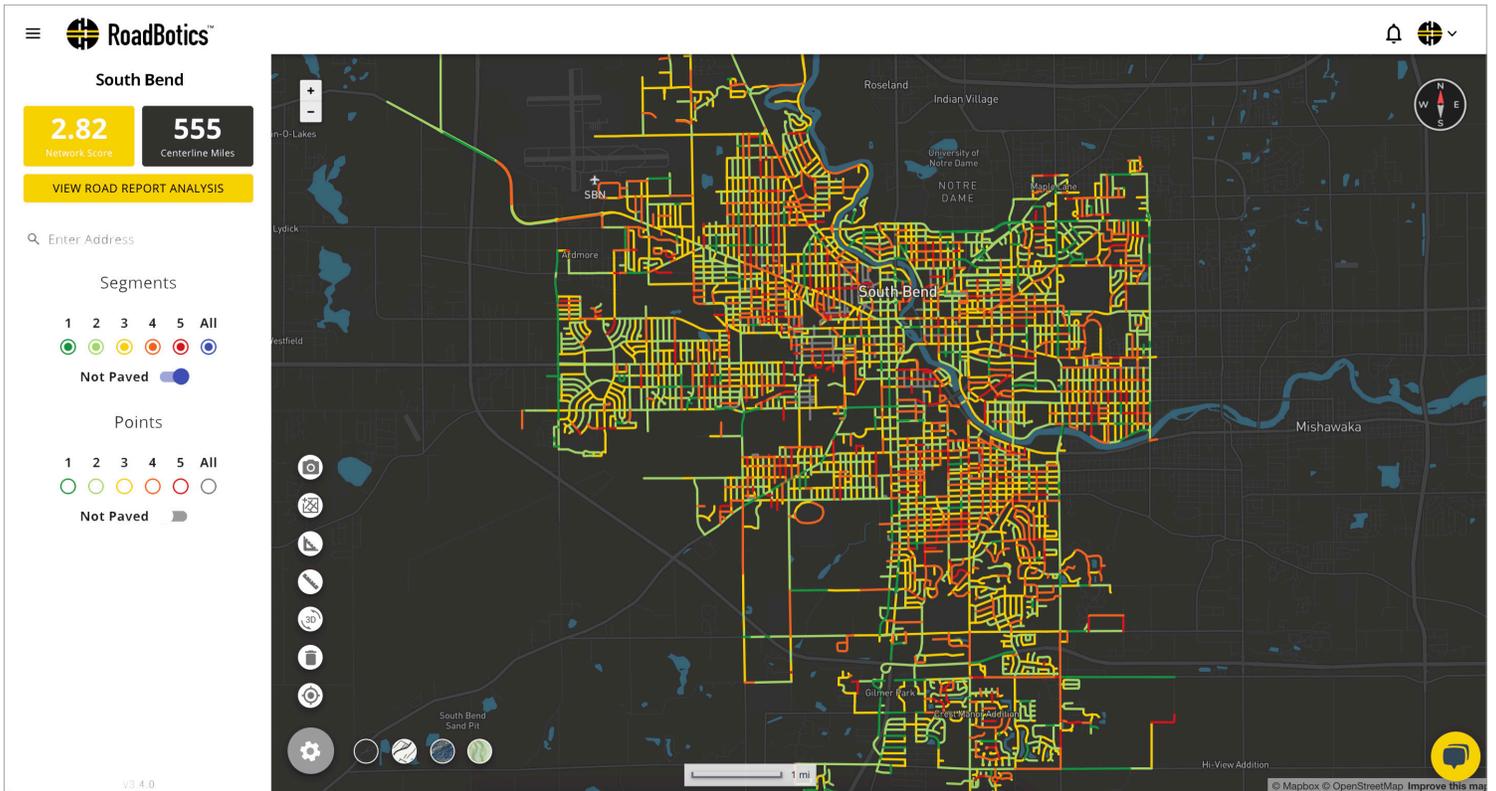
- Spending extensive labor hours to do costly and time-consuming data collection.

SOLUTION

- RoadBotics by Michelin: Fast, objective, affordable road assessment

RESULTS

- Received a full network assessment to determine their prioritization plan to start road maintenance.
- Update and communicate to South Bend citizens their 2018 and 2019 Road Program.
- Annual pavement evaluations to ensure their prioritization plan is on track.



View of RoadBotics by Michelin's RoadWay online dashboard

Solution

Recognizing their challenges, in 2017 South Bend public works officials adopted RoadBotics by Michelin's pavement assessment and management software. Through their RoadBotics by Michelin subscription, South Bend tackled their key challenges in the following ways:

- **Decreased Staffing Time Spent**

Using windshield-mounted smartphones and RoadBotics by Michelin data collection apps, City staff now expedite the entire process of data collection. Since data collection only requires one person driving the car, South Bend can triple their speed of collection by sending out all three employees in separate vehicles.

- **Seamless Collection Experience**

City employees no longer have to worry about simultaneously driving and rating the pavement condition. RoadBotics by Michelin data collection apps enable City employees to effortlessly capture high definition imagery (30 fps) and GPS information while driving their roads. After driving, the collected data is then uploaded by wifi to the cloud for analysis by RoadBotics by Michelin.

- **Accelerated Process**

RoadBotics by Michelin data collection software includes a navigation app that now guides City employees on optimized driving routes to capture 100% of the data for their road network. This routing speeds up the collection process and RoadBotics by Michelin's 30-day guarantee ensures that the City receives its pavement assessment in an accelerated timeline.

“ RoadWay enables all of our internal staff to view the current conditions of all our road segments, including high definition photographs and corresponding numerical ratings. RoadWay also displays an average rating of our overall road network, which quickly and accurately gives us the tools to portray the City's need for additional paving.

- Scott Kreeger
Project Engineer, City of South Bend

Additional Impacts

By adopting RoadBotics by Michelin, South Bend's public works team received accurate and reliable pavement condition data at a fraction of the labor and time. These efficiencies enabled City employees to spend more time on the critical responsibilities of pavement planning and construction. RoadBotics by Michelin also supported South Bend's important planning functions in the following ways:

- **Teamwide Online Access to Pavement Condition Data**

As RoadBotics by Michelin subscribers, South Bend employees can access their pavement assessment data, including imagery of their entire road network on RoadWay – an online, cloud-based pavement management tool. Now any South Bend team member with a secure login account to RoadWay can access the City's pavement condition data.

- **Visual-Based Communication Tools**

RoadWay is designed to communicate with engineers and non-engineers alike. Using the RoadWay's data visualization tools and overall pavement condition ratings, City employees can communicate with staff and the public to quickly and easily show where and why paving resources are being allocated across the City's 550 mile road network.

- **Seamless Integration with GIS Systems**

In addition to using RoadWay to make pavement management decisions, City employees can import the data into other GIS platforms (e.g. ArcGIS). As a RoadBotics by Michelin subscriber, the City of South Bend has unlimited access to the RoadBotics by Michelin customer experience team who can help with these kinds of imports at no extra cost.

Learn More

If you are a town, city or county in Indiana and would like to learn more about how RoadBotics by Michelin can help accelerate and improve your pavement management process or to get a quote, contact a RoadBotics by Michelin Specialist.

“ Our team spent a lot of time researching companies that could perform roadway evaluations. RoadBotics by Michelin had everything we were looking for. Between the quick evaluation process, easy integration with our GIS data and excellent customer support, RoadBotics by Michelin excelled at it all.

- Scott Kreeger



Empowering cities to assess roads objectively using artificial intelligence

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