There is a new way to inspect pavement at scale. Gone are the days of closing sites to perform lengthy inspections in a hazardous environment. It’s time to let smart technology do the hard labor so pavement professionals can focus on higher-value tasks.

The old way

**Operationally challenging**
Clearing out parking lots or closing roads for hours to perform the inspection.

**Time and labor-intensive**
Spending hours walking around and performing ocular inspections.

**Expensive**
Investing in vehicular cameras and sensors, laser scanners, or penetrating radar equipment.

**Prone to human error**
Relying on tribal knowledge to craft relevant reports.

**High insurance costs**
Operating in a hazardous and polluted work environment.

The new way

**Minimally disruptive**
Using UAVs to obtain images at a fraction of the time without clearing the site.

**Quick turnaround**
Using geospatial intelligence software to analyze images and apply machine learning models to automate identification & classification.

**Cost-effective**
Professional drones are more accessible now than a few years ago.

**Accurate and repeatable outputs**
Use hard data to standardize the analysis and report with consistency using digital records.

**Safe working conditions**
Conduct the inspection safely behind a desk.
1. **Assess asphalt conditions** by training machine learning models to detect different types of cracks, sealed defects, and higher-level structures.

2. **Segment area by material type** to deduce objective surface condition measurements and ratios.

3. **Produce reports** that comply with industry standards such as the paving condition index (PCI). See an example >>

**Objects you can detect**
- Fatigue/Alligator Cracking
- Edge Cracking
- Crack-filled Cracks
- Reflective Joint Cracking
- Linear Cracking
- Block Cracking
- Potholes
- Patches
- Asphalt Surface
- Concrete Surface
- Gravel Surface
- Grass/Vegetation Surface
- Mulch Surface
- Bollards
- Manholes
- Water Valves
- Drains
- Concrete Monolithic Curb
- Concrete Curb & Gutter
- Concrete Sidewalk
- Concrete Apron
- Concrete Pad
- Yellow Pavement Markings
- White Pavement Markings
- Blue Pavement Markings
- Green Pavement Markings
- Red Pavement Markings
- Handicap Stall Marking
- Stop bar
- Bike Lane Marker
- Crosswalk
- White Straight Arrow
- White Turning Arrow
- Yellow Straight Arrow
- Yellow Turning Arrow

**A recent paving analysis in Picterra revealed insights in 22 mins**

- **Assessed** 5 acres pavement property
- **Built** 35 Picterra detectors
- **Produced** pavement rating, asset inventory, treatment plan based on rating, materials list

View sample solution >>