Electronics City is an information technology hub located in Bangalore, India. It is one of the largest IT parks spread over 800 acres. It houses more than a hundred industries, including IT industry.

Electronics City was the brainchild of R.K. Baliga, the first Chairman and Managing Director of Keonics, Karnataka Electronics.

Before RoadMetrics

- Majority of the road maintenance operations depends on manual inspection by the ground team and customer feedback or request.

- The maximum time for each manual inspection to be performed is 15 days, by then road defects need to be worked upon.

- Asset inventory management including identification and repair of broken signages, poles, etc. are performed manually.

ELCITA

CLIENT

Electronics City (ELCITA)

CHALLENGES

- Inspection of road network performed manually
- Identification of road defects with GPS location
- Digitization of road and street asset inventory

SOLUTION

- RoadMetrics Enterprise: web-based road assessment and asset inventory visualization platform
- RoadMetrics Utilities: mobile application to navigate and upload completed road work image

Data Collection

- RoadMetrics was formally invited to perform a pilot road assessment by ELCITA to get a better understanding of the powerful capabilities of RoadMetrics' AI based road assessment technology.

- The survey was completed on the 24th of August, 2021, with RoadMetrics providing the necessary smartphone infrastructure and suction mount.

- The data collection was performed by ELCITA's operations car with RoadMetrics' standard operating procedures (SOP), and a total of 25 km was covered in just over 1 hour of driving time.

Distress Definition

1. Alligator Crack
1.1 Minor Alligator Crack

1.2 Moderate Alligator Crack

1.3 Severe Alligator Crack

2. Horizontal Crack
2.1 Minor Horizontal Crack

2.2 Moderate Horizontal Crack

2.3 Severe Horizontal Crack

3. Vertical Crack
3.1 Minor Vertical Crack

3.2 Moderate Vertical Crack

3.3 Severe Vertical Crack

4. Raveling

5. Sealing Horizontal Crack
6. Sealing Vertical Crack
7. Pothole
7.1 Minor Pothole

7.2 Moderate Pothole

7.3 Severe Pothole

8. Area Patch
9. Spot Patch
10. Manhole
11. Zebra Crossing
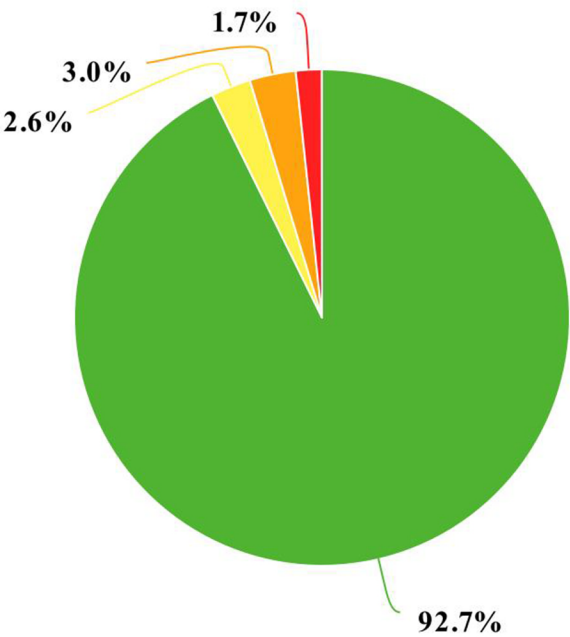## 12. Sealing Vertical Crack

Level 0	Level 1	Level 2	Level 3	Level 4

Using RoadMetrics

- A complete road condition assessment for ELCITA's road network of 25 km was received in just 1 day.

- Using RoadMetrics Enterprise, ELCITA can now visualize their road network's assessment and asset inventory.

- Using RoadMetrics Utilities, our proprietary mobile application, ELCITA can navigate to the particular road defect by GPS coordinates and upload an image after road work is completed.

Road Classification Statistics
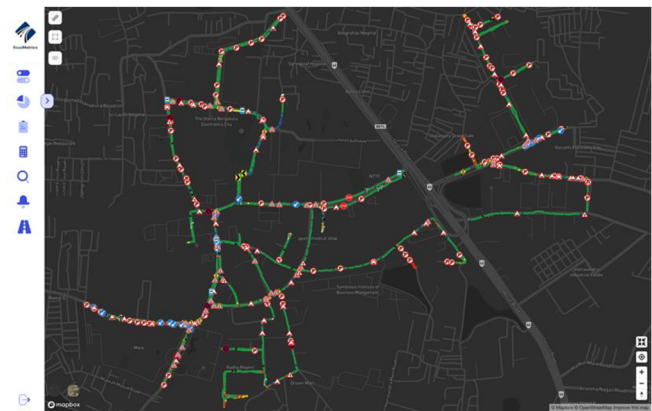

1.7%
3.0%
2.6%
92.7%

Advantage of RoadMetrics

- Early detection of road defects

- Prioritize maintenance efforts

- Utility tool for road maintenance teams

- Budget calculation tool

- Analytics and road maintenance support

"RoadMetrics helps us with an end-to-end solution for our road maintenance operations"

Parashuram – Operations Manager, ELCITA

Conclusion

Electronics City Industrial Township Authority (ELCITA) was able to see the improvement in efficiency and cost-savings that can be realized by using RoadMetrics' AI based road assessments for their road maintenance operations.

Road Metrics

Data driven road assessments for road maintenance and asset management

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