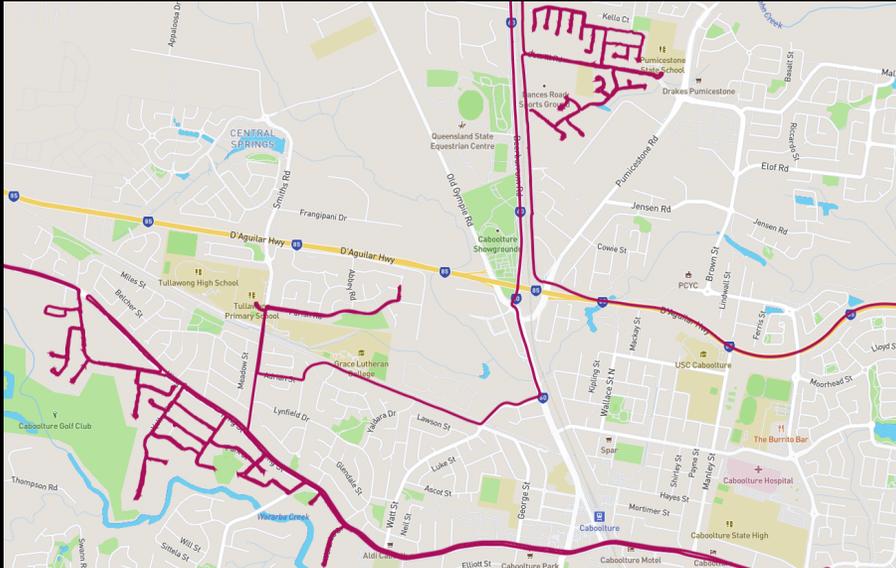


The Problem



Road Assessment



Time wasted inspecting individual defects



Manual data entry

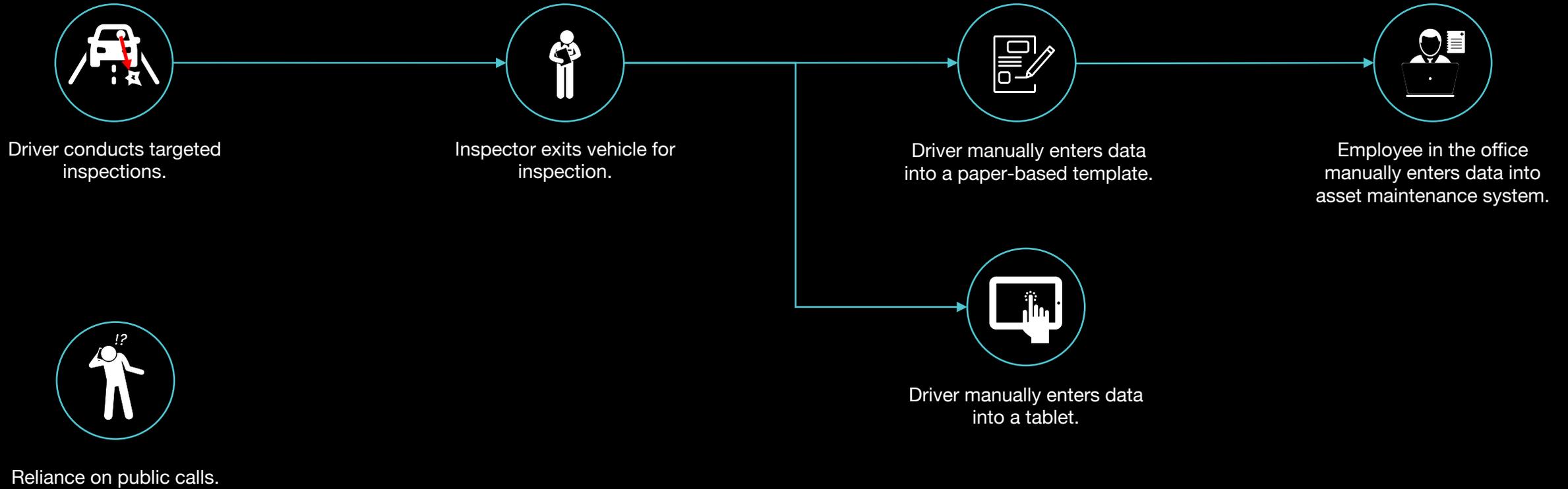


Low frequency / inspection coverage across network



Public complaints due to low coverage

Current Solution



Retina Visions' Solution



Camera is used to conduct road assessment every time the vehicle is driven.



Footage is automatically uploaded to servers where automated processing is conducted.



Output data is automatically sent to asset maintenance system or data lake via an API.

Proven Benefits

179%

More defects fixed.

1/4

Time required to capture defects.

30%

Reduction in public phone complaints.

x2

Defects captured.

x8

Efficiency improvement in footpath assessment.

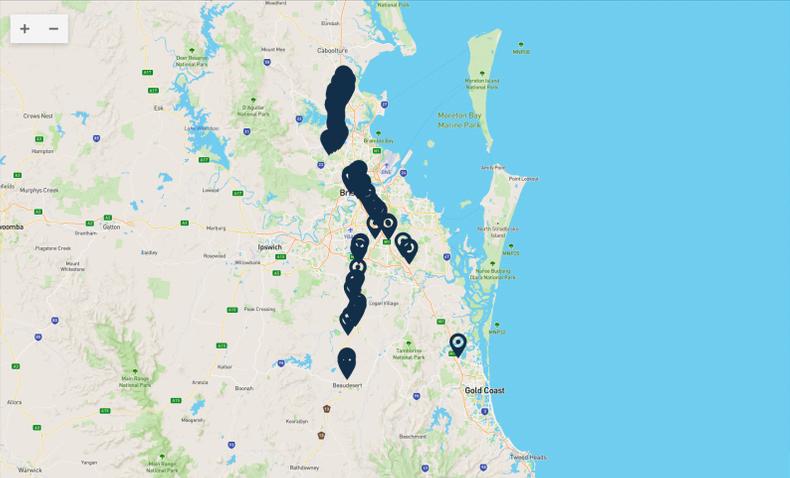
Example: Moreton Bay Regional Council

- Service commenced in 2018 with 1 camera conducting road assessment
- Integration with asset management system developed
- In 2019, 14 cameras fit to half of garbage fleet + 1 footpath camera
- In 2020, 28 cameras fit to garbage fleet + 1 council vehicle + 1 footpath camera
- Daily network assessment utilising council's garbage fleet, feeding defect data automatically, in real-time to their asset management system
- Entire network is updated on a weekly basis

Portal

Assets Defects Fleet Upload Admin michael Retina Visions

Period: Whole period Asset type: All asset types Defect type: All defect types Severity: All severities Detection type: All types Reload Reset View Export



	Crocodile Cracking	22/07/2021 1:42 PM
	Severity: 3 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:42 PM
	Severity: 4 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Severity: 5 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Severity: 6 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Severity: 3 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Cracking	22/07/2021 1:41 PM
	Severity: 4 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM

Items Count: 1804

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Defect Details



Asset Type	Roadway
Defect Type	Crocodile Cracking
Severity	5
Detection Type	New
Passed	1 Times
Last Update	22/07/2021 1:41 PM

	Crocodile Cracking	22/07/2021 1:42 PM
	Severity: 3 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:42 PM
	Severity: 4 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Severity: 5 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Severity: 6 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM
	Cracking	22/07/2021 1:41 PM
	Severity: 4 Asset: Roadway	
	Crocodile Cracking	22/07/2021 1:41 PM

Items Count: 1804

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Road Data Catalogue



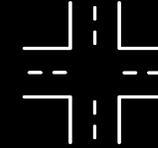
Roadway

- Kerb & Channel
- Litter / Debris
- Barriers / Guardrails
- Potholes
- Cracking
- Crocodile Cracking
- Shoving
- Rutting
- Raveling
- Flushing
- Vegetation
- Overhanging Branches
- Edge Damage
- Ponding Water
- Sweeping
- Roadkill
- Graffiti



Signage

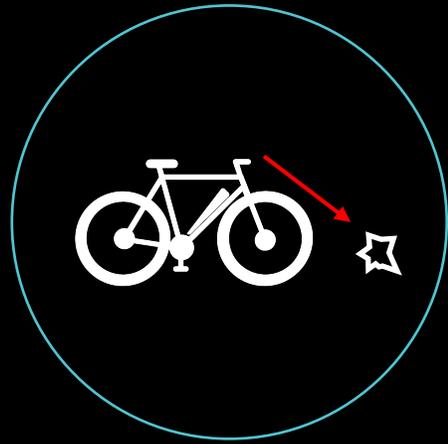
- Speed Signs
- Parking Signs
- Stop / Give Way Signs
- Roadwork
- School Zones
- Bent / Faded Signs
- Bent Guideposts



Linemarking

- Faded chevron paint
- Faded Messages (Speed, bike, bus)
- Faded Line Marking

Footpath Assessment



Camera is fit to e-bike or other footpath inspection vehicle.

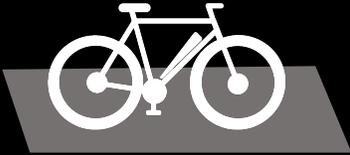


Footage is automatically uploaded to servers where automated processing is conducted.



Output data is automatically sent to asset maintenance system or data lake via an API.

Footpath Data Catalogue



Footpath

- Cracking
- Displacement
- Crocodile Cracking
- Damaged Tactiles
- Edge Damage
- Edge Drop
- Faded Linemarking
- Litter
- Overhanging Branches
- Ponding Water
- Pothole
- Sweeping
- Temporary Repair
- Vegetation

Existing footpath assessments involve walking or riding a vehicle across the footpath network and manually capturing defects. Through our work with councils to provide our automated assessment, feedback from the councils shows an 8 times increase in efficiency for defect assessment.

One example is a council that was previously conducting their footpath assessment with four inspectors, taking them 12 months. Since introducing Retina Visions' footpath assessment, they are completing their footpath assessment in 6 months and using only one inspector.