

August 2019

Agenda

- StreetScan Solution in Wilton
- Roads Condition Statistics
- Roads Management Plan/Projections
- Streetlogix Portal Demonstration

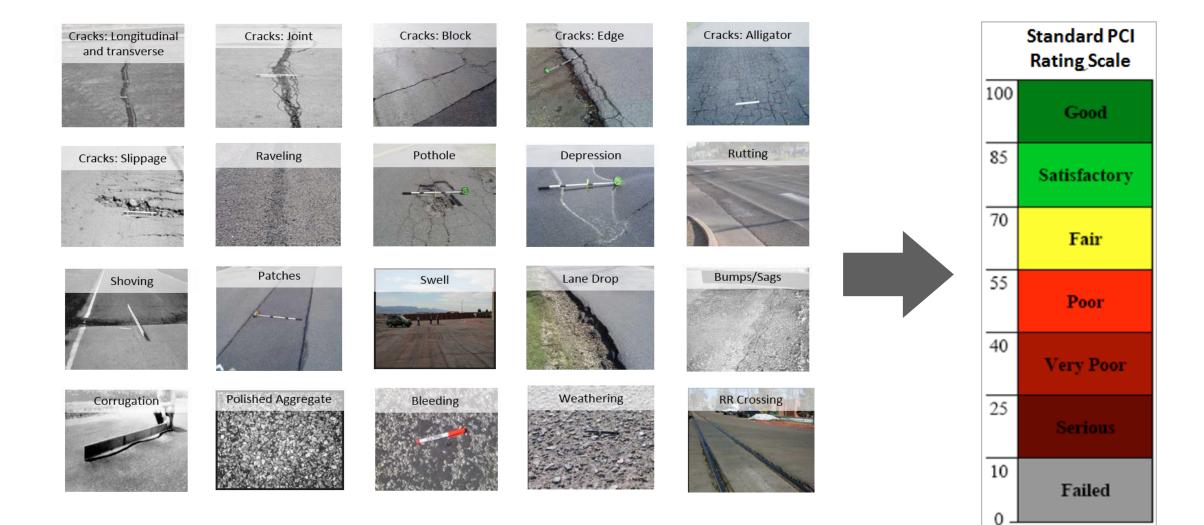
Questions at anytime!



Computer Vision • Machine Learning

Data Science • Sensing Expertise

ASTM Standard Road Distresses





Sample excellent road – (86-100) (Dark Green)





Sample fair road – (56-70) (Yellow)







Pavement Condition Statistics

Pavement Condition Index (PCI)

As of June 1, 2019

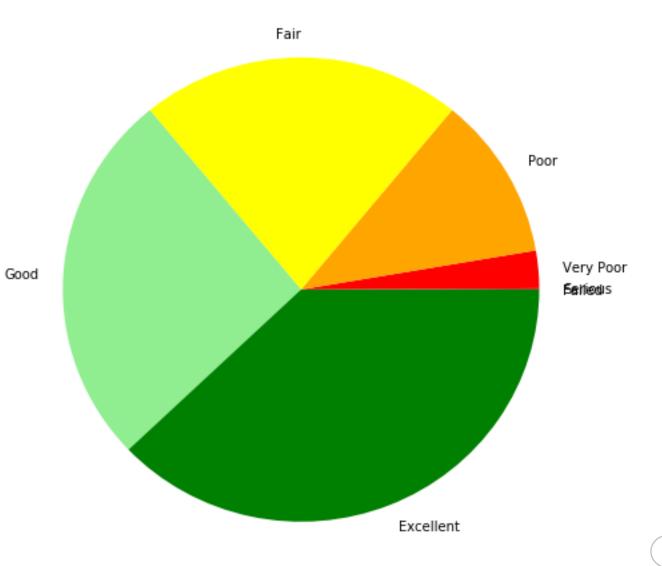


Roads Condition Statistics

Average Condition	77.0
% below Critical Condition (55)	14.1%
% above Critical Condition (55)	85.9%

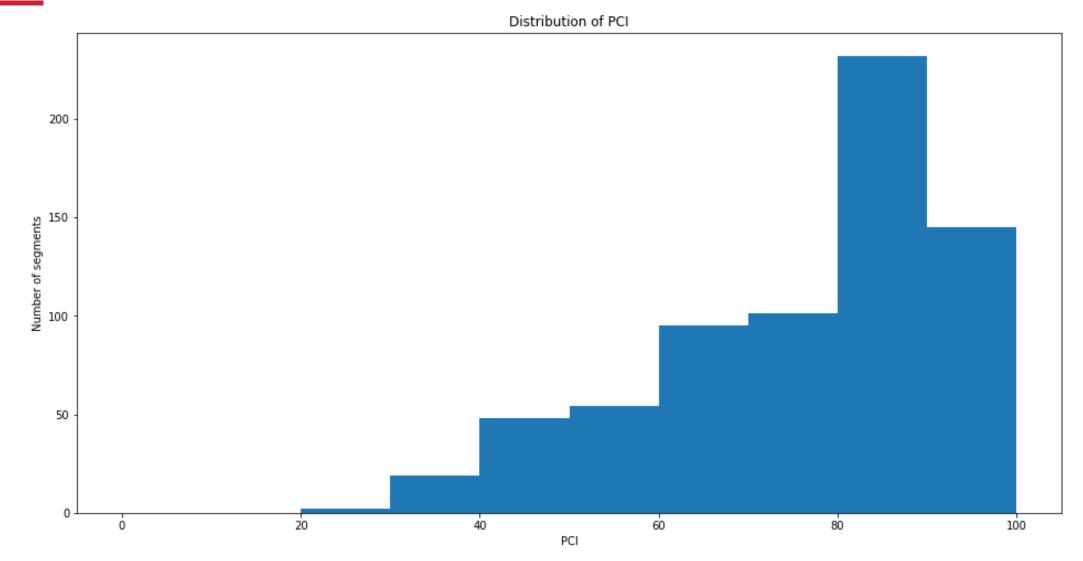
As of June 1, 2019

PCI Distribution by category



Distribution of Pavement Condition Index

As of June 1, 2019



STREETSCANZ

Breakdown by Miles and Number of Segments

As of June 1, 2019

PCI Range	0 – 10 (Gray)	11 – 25 (Dark Red)	26 – 40 (Red)	41 – 55 (Orange)	56 – 70 (Yellow)	71 – 85 (Green)	86 – 100 (Dark Green)	TOTAL
Centerline Miles	0	0.1	3.4	14.8	28.5	34.1	49.4	130.3
Segments	0	1	20	70	127	185	293	696
Percentage	0%	0.1%	2.6%	11.4%	21.9%	26.2%	37.9%	100%

Roads completed after June 1, 2019:

1.64 miles

2.51 miles 0.95 miles

- Average PCI for City-owned road is **77.0**
- The estimated maintenance backlog is **\$13,433,112.** This value represents the cost to repair the entire road network at once to an average PCI of 85.

Cost Estimates Used

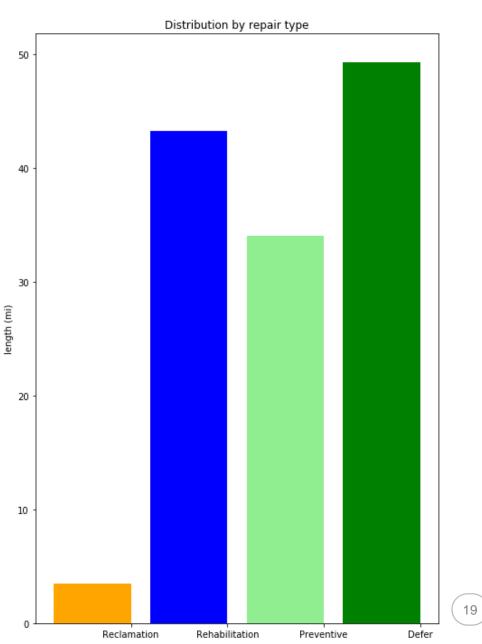
- Preventive (Crack Seal): \$1/SY
- Rehabilitation (Mill & 2" Overlay): \$20/SY
- Reclamation (Full-Depth w/ 4" Overlay): \$40/SY

Pavement Maintenance and Repair



Maintenance and Repair Statistics

PCI Range	Category	Description	Examples
< 40	Reconstruction	Significant structural damage	Reclamation, Major Mill and Overlay > 4"
40 – 70	Rehabilitation	Resurfacing required to mitigate the effects of rutting, cracking and other distresses	Hot-mix overlay, Mill & Overlay, Hot-in-place Rescycling
70 – 85	Preventive Repair	Minor distresses in early stages of pavements' life- cycle	Crack Seal, Microsurfacing, Chip Seal
> 85	Defer Maintenance	Pavement in a great condition	NA

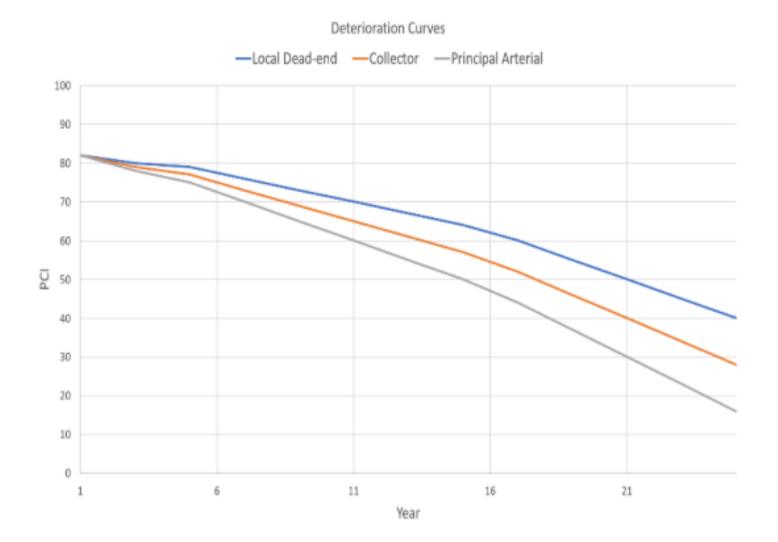


STREETSCANZ

Prioritization Factors

- Functional Class
- Condition
 - PCI
- Benefit (condition change, life extension) to Cost (repair Cost) Ratio
- Available Budget

Deterioration Models



STREET<mark>SCAN</mark>



