



# Town of Orangeville: Pavement Management Update

---

Derek Currie, Manager, Capital Works  
Infrastructure Services





# Goals and Objectives

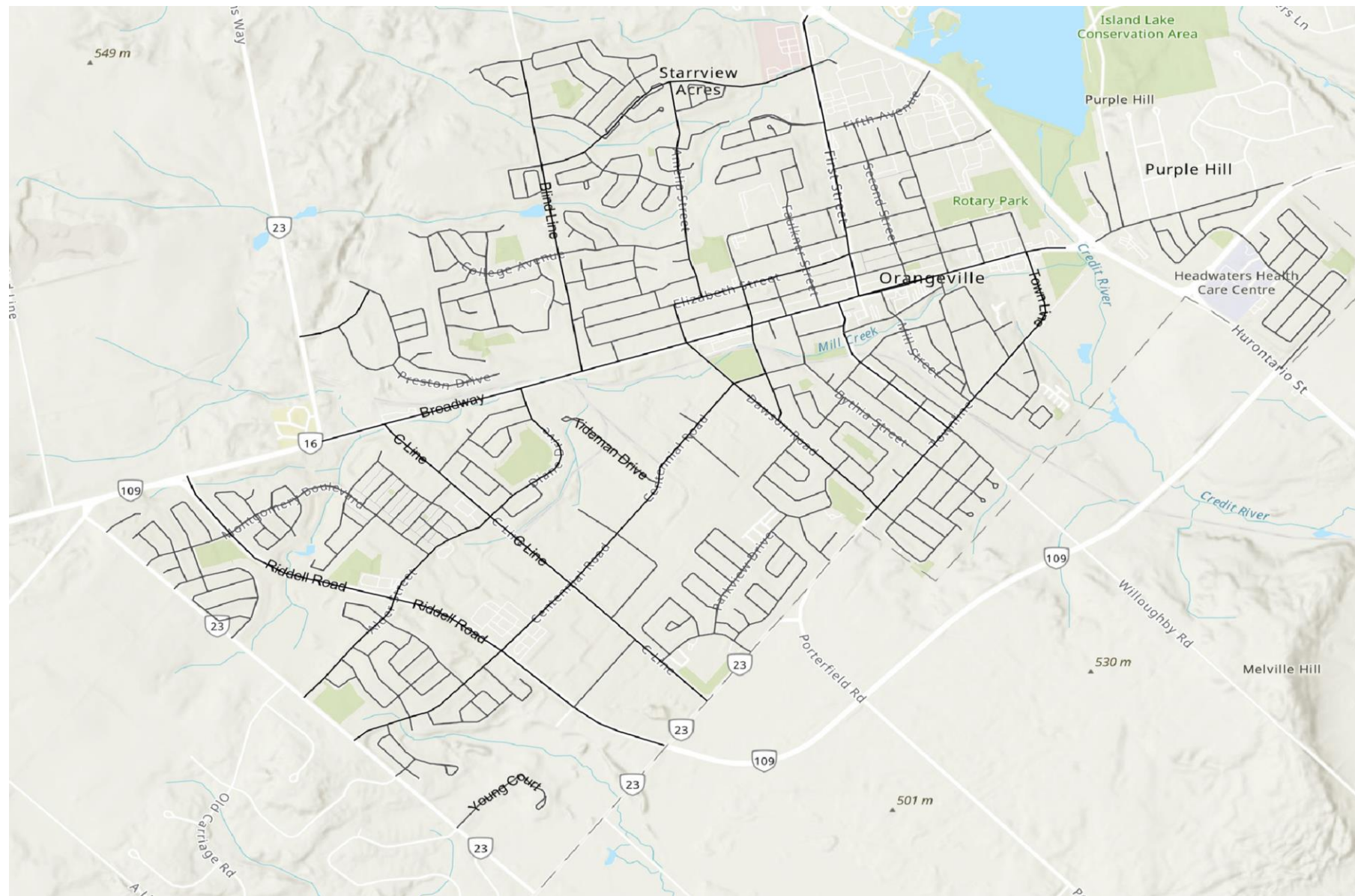
- Pavement Management
- Road Network Asset Management
- Present a funding investment opportunity to preserved and maintained the Town's Road Network

# Asset Management Principles

- What do we own?
- What condition is it in?
- What do we need to do to keep it in good condition?
- When do we need to do it?
- How much will it cost?



What do  
we own?










# Facts regarding Orangeville Roads

- The Town of Orangeville maintains approximately 125 centre lane km's of arterial, collector and local roads
- The replacement value of these roads is approximately \$305 million
- The Town has a robust road reconstruction program.
- Currently, the Town does not have a dedicated road resurfacing program.
- The road network is growing on an average of 3 - 5% per year.

# What Condition is it in?

- Roads are measured by Pavement Condition Index (PCI)
- 2020 Road Condition Survey identified 46% of the Town's roads were in need of repair. Only 31% of the Town's roads were in need of repair as of the 2015 survey.
- Updated Road Survey is currently being completed. Results are due in October

## Pavement Condition Index

Very Good		86 - 100
Good		71- 85
Fair		56 - 70
Poor		41 - 55
Very Poor		26 - 40
Serious		11 - 25
Failed		0 - 10

# Very Good PCI 80 and over

- Pavement is in very good condition with very smooth ride
- Slight surface deformation distresses
- No visible surface defects or cracking distresses







# Good

## PCI 70 – 80

- Pavement is in good condition with smooth ride
- Slight to moderate surface deformation distresses
- Slight to moderate intermittent surface defects and/or cracking distresses



# Fair

## PCI 60 – 70

- Pavement is in fair condition with acceptable ride
- Intermittent to frequent surface defects and/or cracking distresses
- Localized alligator cracking may be present





## Poor PCI 0 to 60

- Pavement is in poor condition with uncomfortable ride
- Frequent to extensive bumps with frequent to extensive surface defects and/or cracking distresses
- Frequent slight to moderate alligator cracking may be present



# What Condition is it in?

## Road Reconstruction Needs

- 24 road segments identified in 2020 Road Network Study still need work
- 5 segments not identified on 10-year Capital Plan
- 10.7-million dollar funding gap

## Road Resurfacing Needs

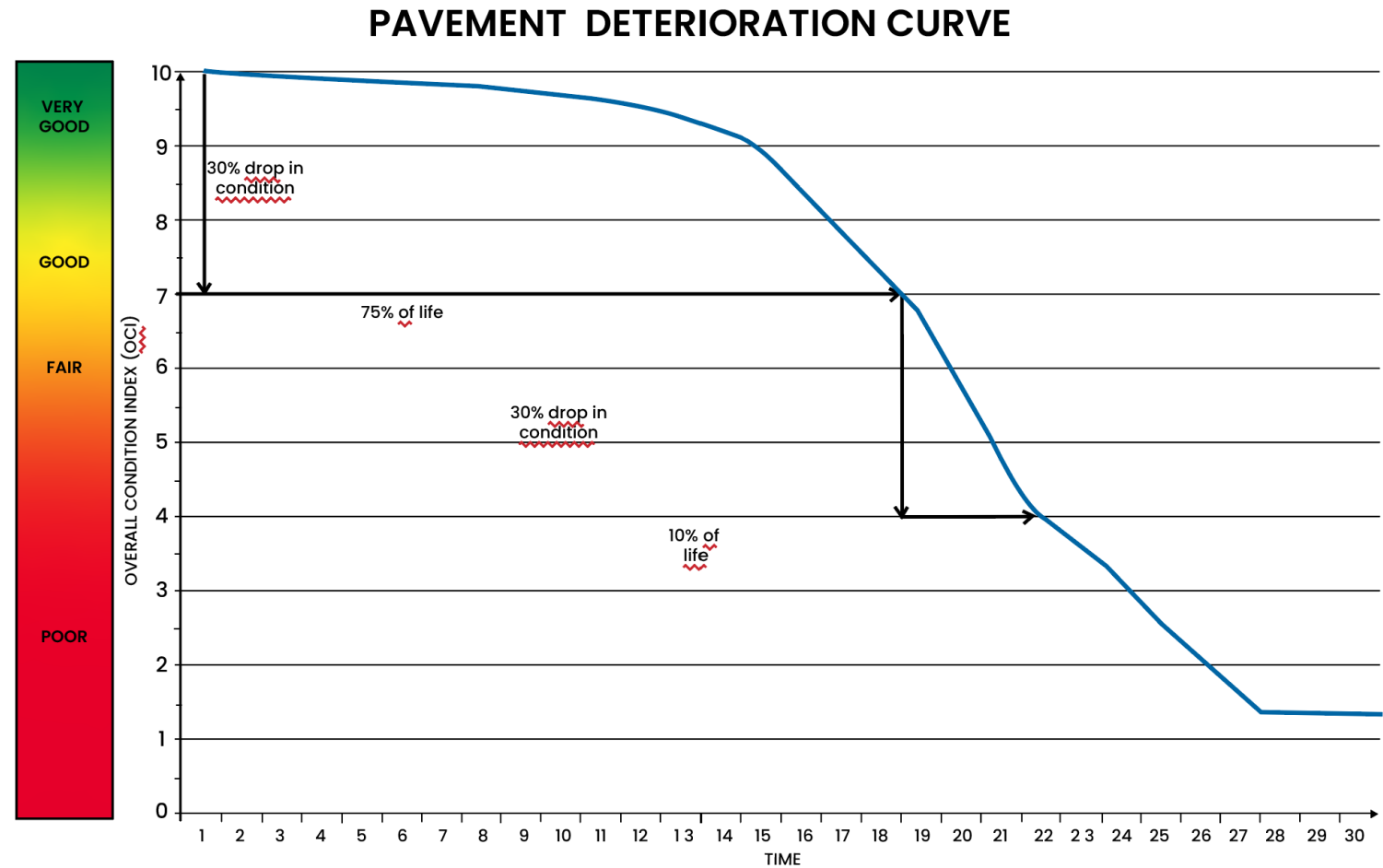
- 117 road segments identified in 2020 RNS still need work
- 99 segments not identified on 10-year Capital Plan Reduction
- 22.4-million dollar funding gap





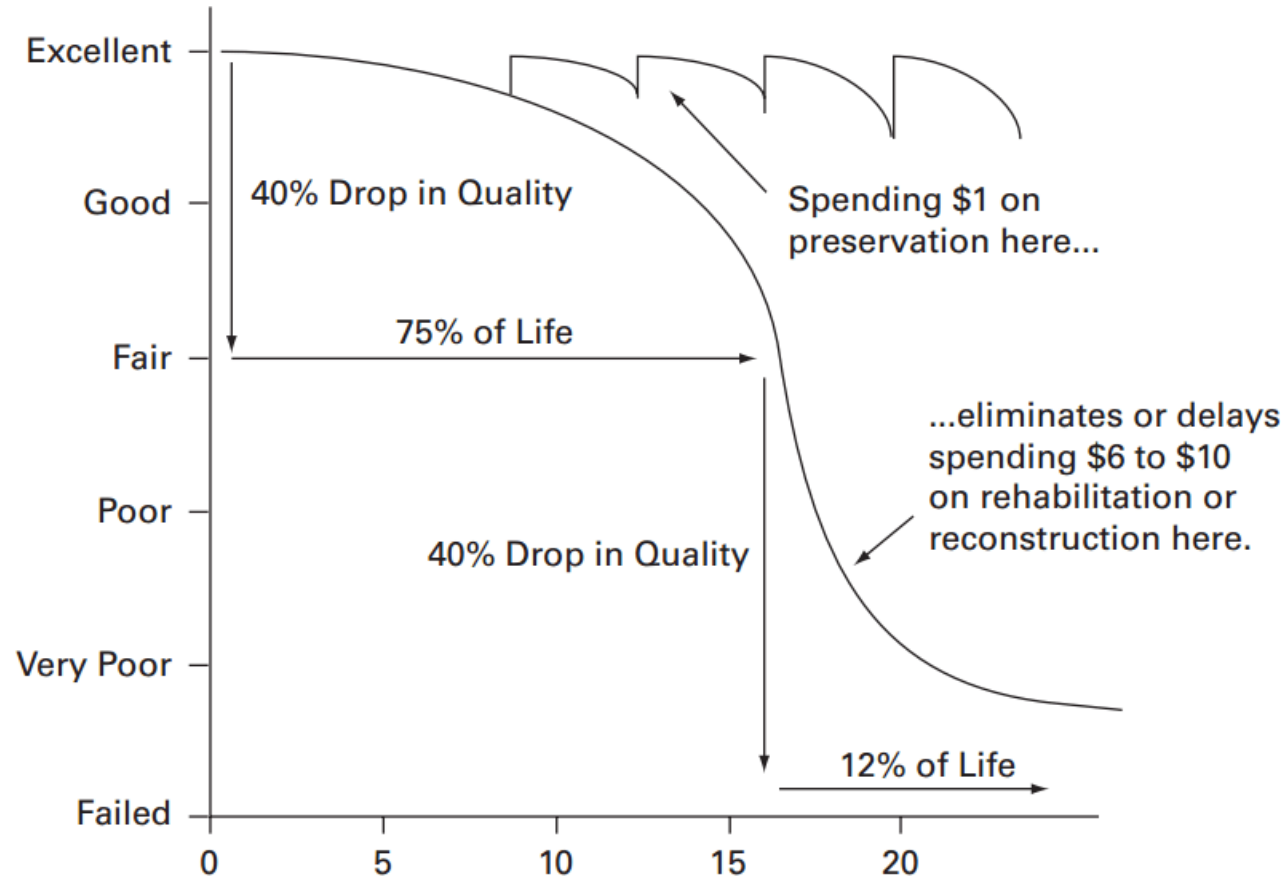
# How do we maintain our roads?

- Pavement typically deteriorates non-linearly; depends on age, maintenance, unique conditions and use



# How do we maintain our roads?

The key is to do the right treatment at the right time



# How should we maintain our roads?

- Year 1 – 20: General maintenance, such as patching, curb replacement and catch basin repairs
- Year 20 – 40: single or double lift resurfacing
- Year 40 – 60: Double lift resurfacing and/or structural repairs
- Year 60 and on: Full Road reconstruction



# How much funding to we need?

- Current needs analysis has identified, in 2023 dollars, a funding gap of 10.7 million for road reconstructions and 22.4 million for road resurfacing.
- At \$70 per square meter for resurfacing as opposed to \$575 for road reconstruction.
- The best value for the Towns dollars is to invest in road resurfacing, rather than road reconstruction.
- Current funding initiatives for road reconstructions should remain the same.

# How much funding to we need?

- The proposed funding for a dedicated road resurfacing program

Year	Funding
2024	\$1,500,000.00
2025	\$1,500,000.00
2026	\$1,500,000.00
2027	\$1,500,000.00
2028	\$1,750,000.00
2029	\$1,750,000.00
2030	\$1,750,000.00
2031	\$1,750,000.00
2032	\$1,750,000.00
2033	\$2,000,000.00

# Broadway — Before Resurfacing

---





# Broadway – After Resurfacing

---



What happens when  
our roads are not  
invested in?



# Thank you!

---

Derek Currie, Manager, Capital Works  
dcurrie@orangeville.ca  
519-941-0440 ext. 2222

