



APRIL 10
2025

SHERATON HAMILTON HOTEL

116 King St W, Hamilton, ON L8P 4V3

SPRING OPERATIONS SEMINAR (SOPs) 2.0



asphalt

ontario rides on us

ORBA





- Ray Atrvash
- CEO of PavePal
- Proactive Road Monitoring & Assessment





SMART ROADWAY MANAGEMENT



STATS

- Area: 892,000 Sq Km
- Population: 16 million, projected 21million in 20yrs
- 401: 18 km costs 639 mil - 35m/km (IO)
- Bradford Bypass: + 1B for 16km - 15mil/lane km
- Multiple Hwy projects, + 80 mil for 7 to 10 kms
- 241,000 KM of Road Network (2 Lane eq)
- 20% of Canada's Road Network
- Carbon Footprint: Transportation 28% of Canada's GHG ems. (187Megatonnes)
- ON responsible for 22% of GHG emissions

- Assets ON: 2.4T Dollars (Conservative)
- Estimated 13.3 Billion Annual Budget (by 2030)
- Traffic Congestion 44 Billion Economic Loss
- QB to Spend 35 Billion on Road Network (25-26)



ARE WE MANAGING OUR ROADS SMART ENOUGH?

SMART ?

- Smart Technology
- Smart GOALS

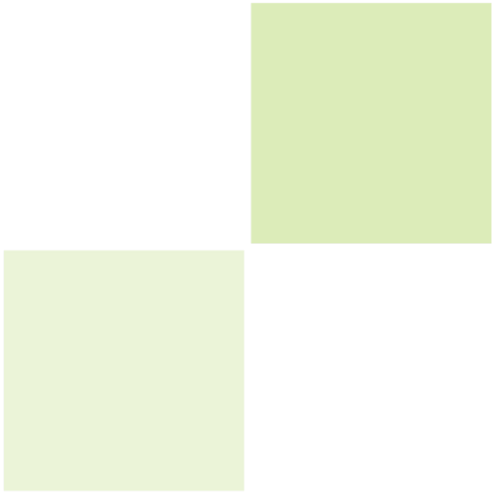
SMART



AI HYPE

- How AI is reshaping the world? (Since 2018, Chat GPT idea till today's craziness!)
- Impacting 40% to 60% of all jobs and businesses
- May displace 85 million jobs and create 97 million
- Transportation AI market to triple by 2030 (2B to 6B)
- Automation comes in the picture
- (Business Insider)





- We always want to know the future!
- How we see patterns?
- How we address a problem?
- Manually Planning and Visual Inspection
- How we map road flaws
- Find the need for a roadway, soon enough?



**OVERWHELMING DATA
BUT
REACTIVE SOLUTIONS**

MEASURABLES

- PCI: Pavement Condition Index: 17 Flaw Categories as per PCI



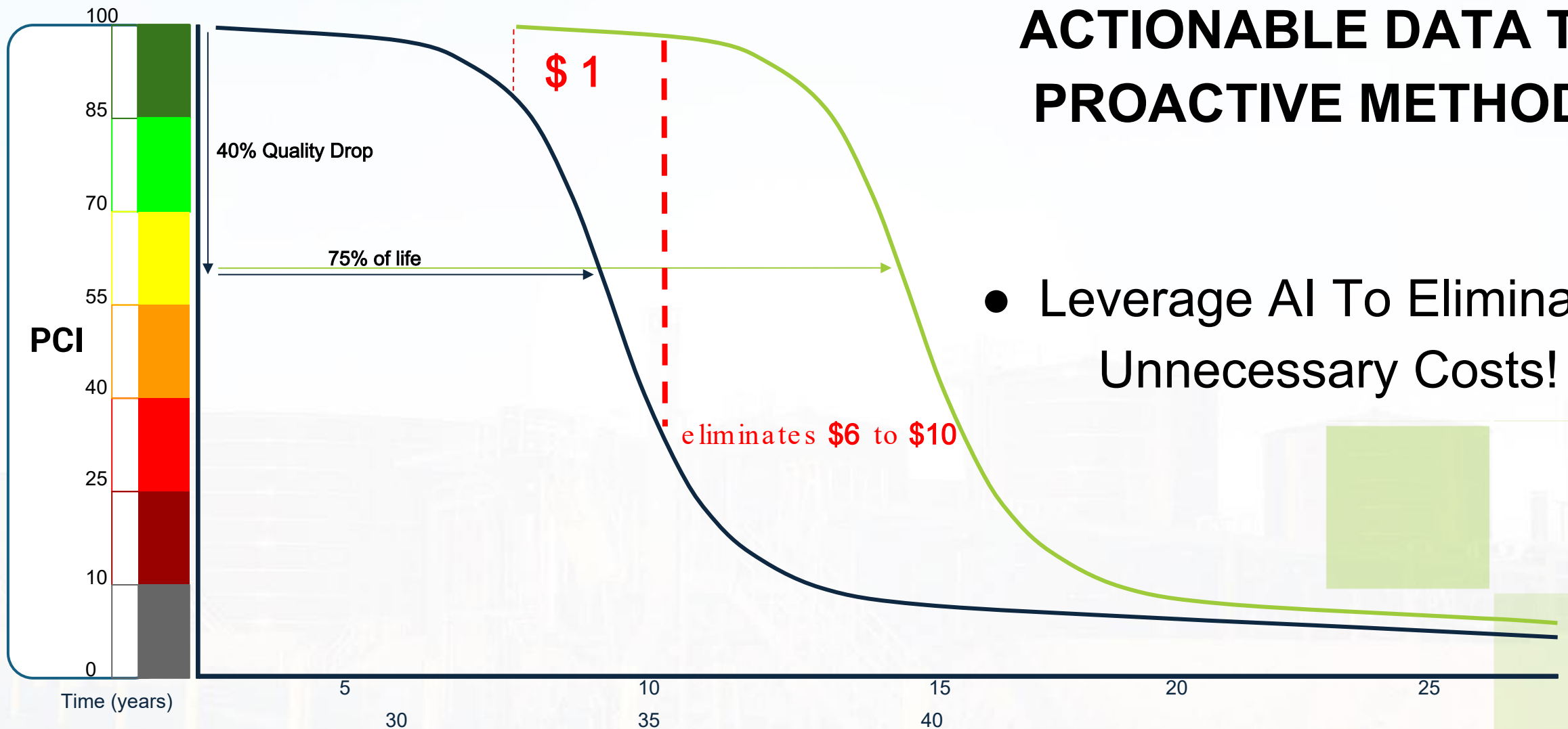
Excellent (PCI92)



Good: (PCI62)



Poor: (PCI41)



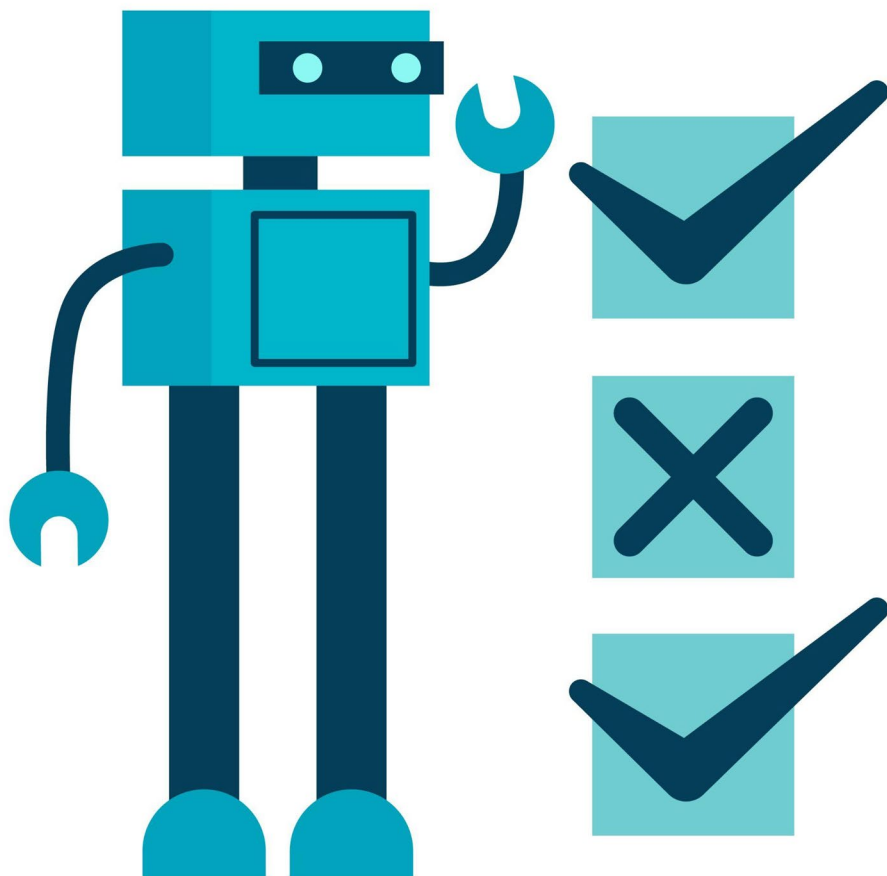
ACTIONABLE DATA TO PROACTIVE METHOD!

- Leverage AI To Eliminate Unnecessary Costs!

What if . . . Improving 1%

- Make Aging Slower
- Expanding Infrastructure
- Every 1 % Improvement Could Be Huge :
 - New Roads (Need 300,000 Only in ON)
 - 40% of Canada Roads - Poor Condition (400,000 Km approx)
 - Carbon Footprint





APPLY AI TO ROAD MAINTENANCE

=

REACTIVE TO PROACTIVE

- Create more project opportunities
- Saving costs and more jobs to create
- Powerful Processing Powers = Better Road Quality
- Better Resource Allocation
- Provide Accurate Surveys - Minimizing Errors
- Take Advantage of Gov. Grants (Scale AI, SR&ED)
- Many More!



Don't Wait.

The Train Is Speeding Away!

Thank You!





- Ray Atrvash
- CEO of PavePal
- Proactive Road Monitoring & Assessment



References

- <https://www.dentons.com/en/insights/articles/2025/march/27/quebec-budget-2025-infrastructure-spending-takes-center>
- [Québec Finance Minister budget announcement](#)
- <https://www.link2build.ca/news/articles/2024/december/congestion-costs-ontario-56b-annually-report-finds/>
- <https://thenarwhal.ca/ontario-climate-change-roads-cost/>
- <http://ontario.ca/page/official-road-map-ontario>
- [Infrastructureontario.ca](https://infrastructureontario.ca)