

# East Hants Roads Assets – State of the Infrastructure Update

Corporate and Residential Services Committee

November 12<sup>th</sup> 2024



**EAST HANTS**



## Background

- East Hants Asset Management (AM) Program kicked off in November 2022 with Council's approval of the Asset Management Policy.
- Staff provided an AM Program information report to Council in May 2024 which provided updates on the program's AM Strategy and Roadmap development and the outcomes of the Roads Pilot project.
- From the Roads Pilot Project and Roads Asset Management Plan, it was recommended that staff collect up-to-date Visual Condition Assessment (VCA) data on Roads Assets to better inform planning and decision making in the future.



## Background

- Over Summer 2024, staff collected and compiled data on Municipally-owned Road Assets to help answer the following key Asset Management questions:
  - What do we have?
  - Where is it located?
  - What is its condition and expected remaining useful life?
- Since asset inventory and condition data is ever-changing, this is a **point-in-time** report, representing the state of the roads infrastructure as of August 1, 2024, following completion of Visual Condition Assessments.



## Discussion

### What do we have?

- The Municipality of East Hants owns **36.05 km** of roads
  - **28.34 km** are asphalt (paved) roads
  - **7.71 km** are gravel (unpaved) roads
- Municipal Roads are found within the boundaries of **nine** different communities in East Hants and across **eight** different polling districts.

# Discussion

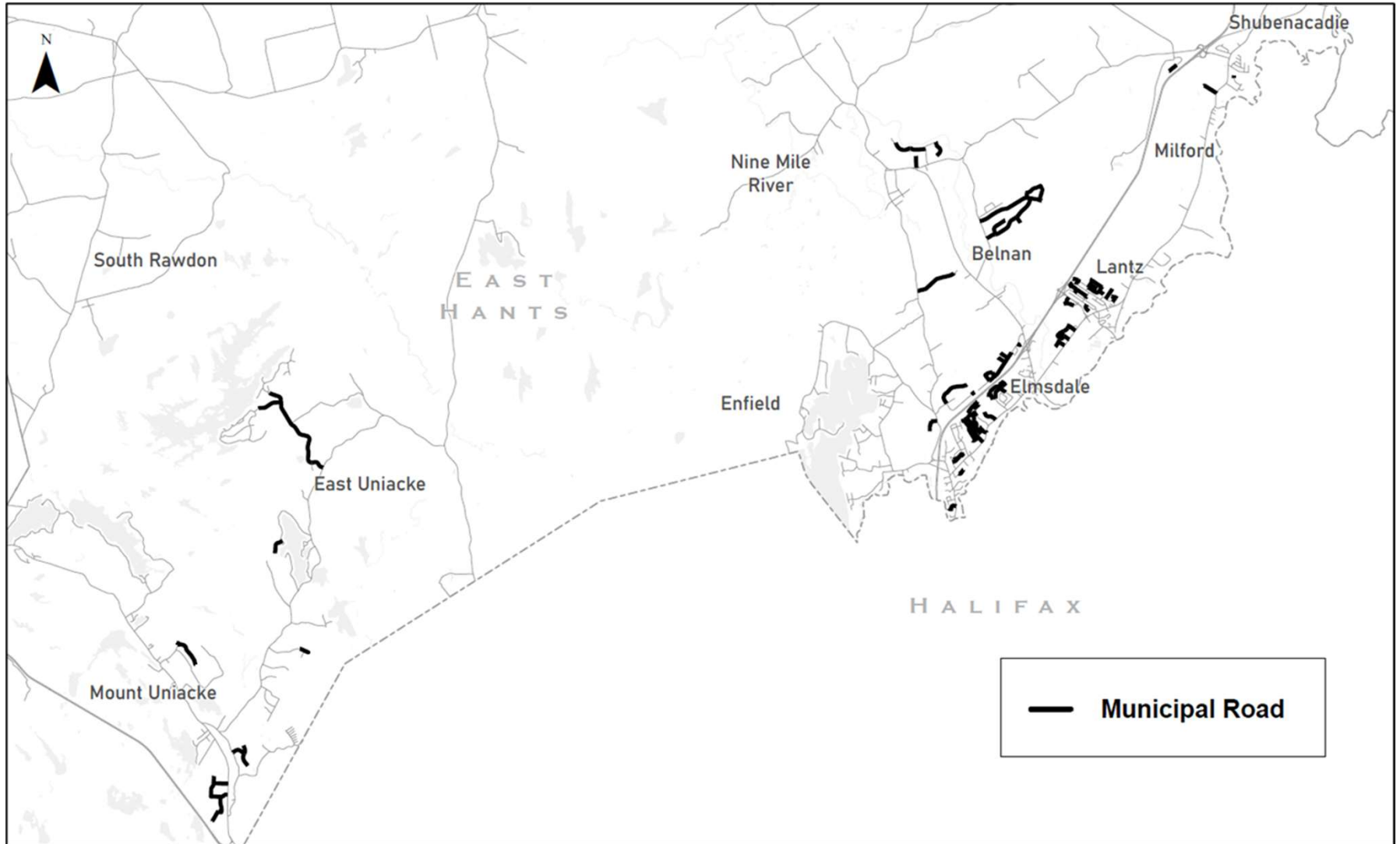
*Table 1. Municipal Road Lengths by East Hants Community*

Community	Asphalt Road Length (km)	Gravel Road Length (km)	Total Road Length (km)
Belnan	2.97	2.68	5.65
East Uniacke	3.78	0.87	4.65
Elmsdale	5.52	0.0	5.52
Enfield	5.29	2.36	7.65
Hardwood Lands	0.29	0.0	0.29
Lantz	5.64	0.0	5.64
Milford	0.51	0.0	0.51
Mount Uniacke	4.34	0.0	4.34
Nine Mile River	0.0	1.80	1.80

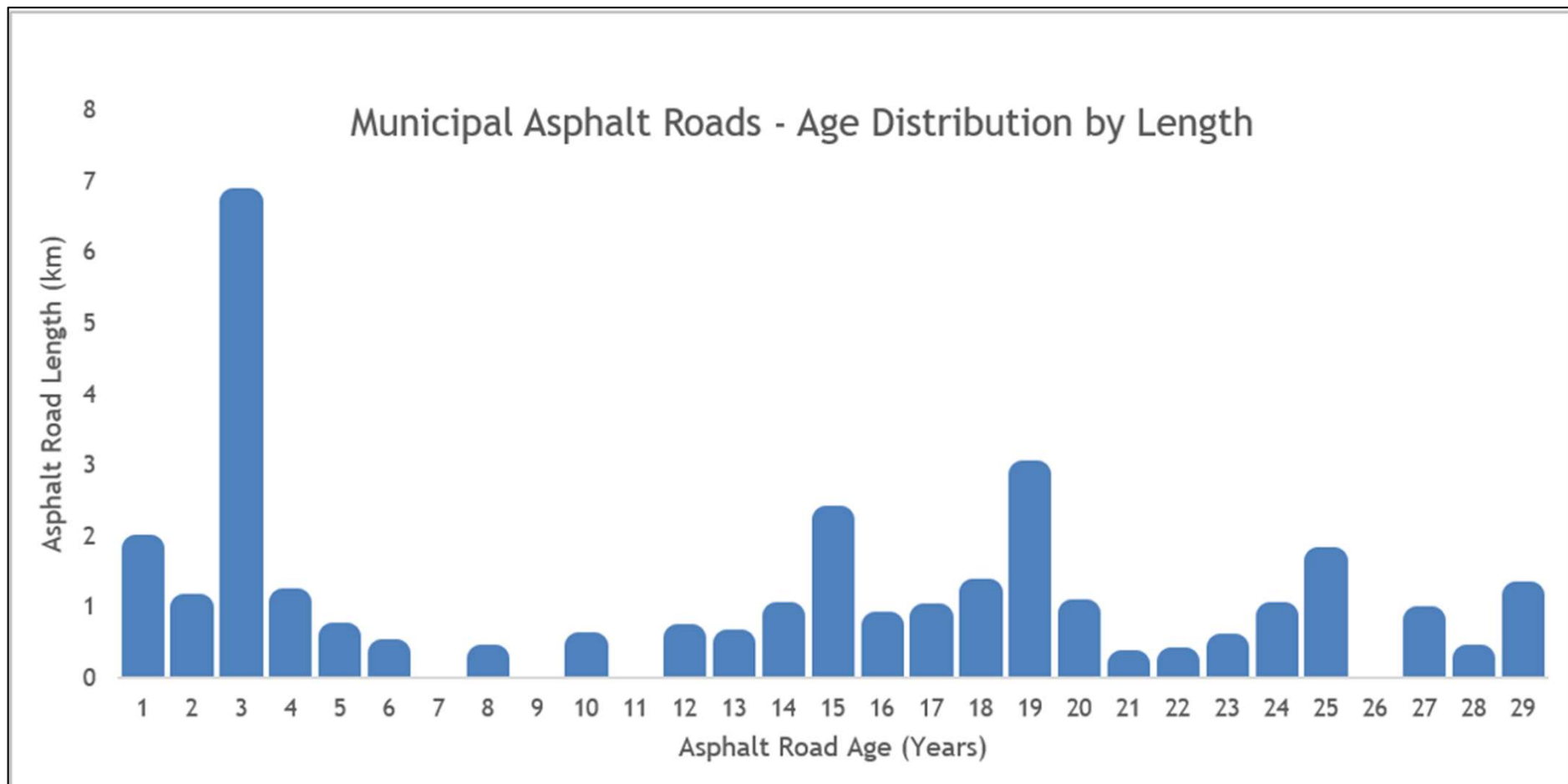
*Table 2. Municipal Road Lengths by East Hants Polling District*

Polling District	Asphalt Road Length (km)	Gravel Road Length (km)	Total Road Length (km)
District 1	4.39	0.0	4.39
District 2	5.52	0.0	5.52
District 3	3.32	4.42	7.74
District 6	2.11	0.0	2.11
District 7	4.04	0.0	4.04
District 8	3.31	0.0	3.31
District 9	4.81	0.87	5.68
District 10	0.90	2.36	3.26

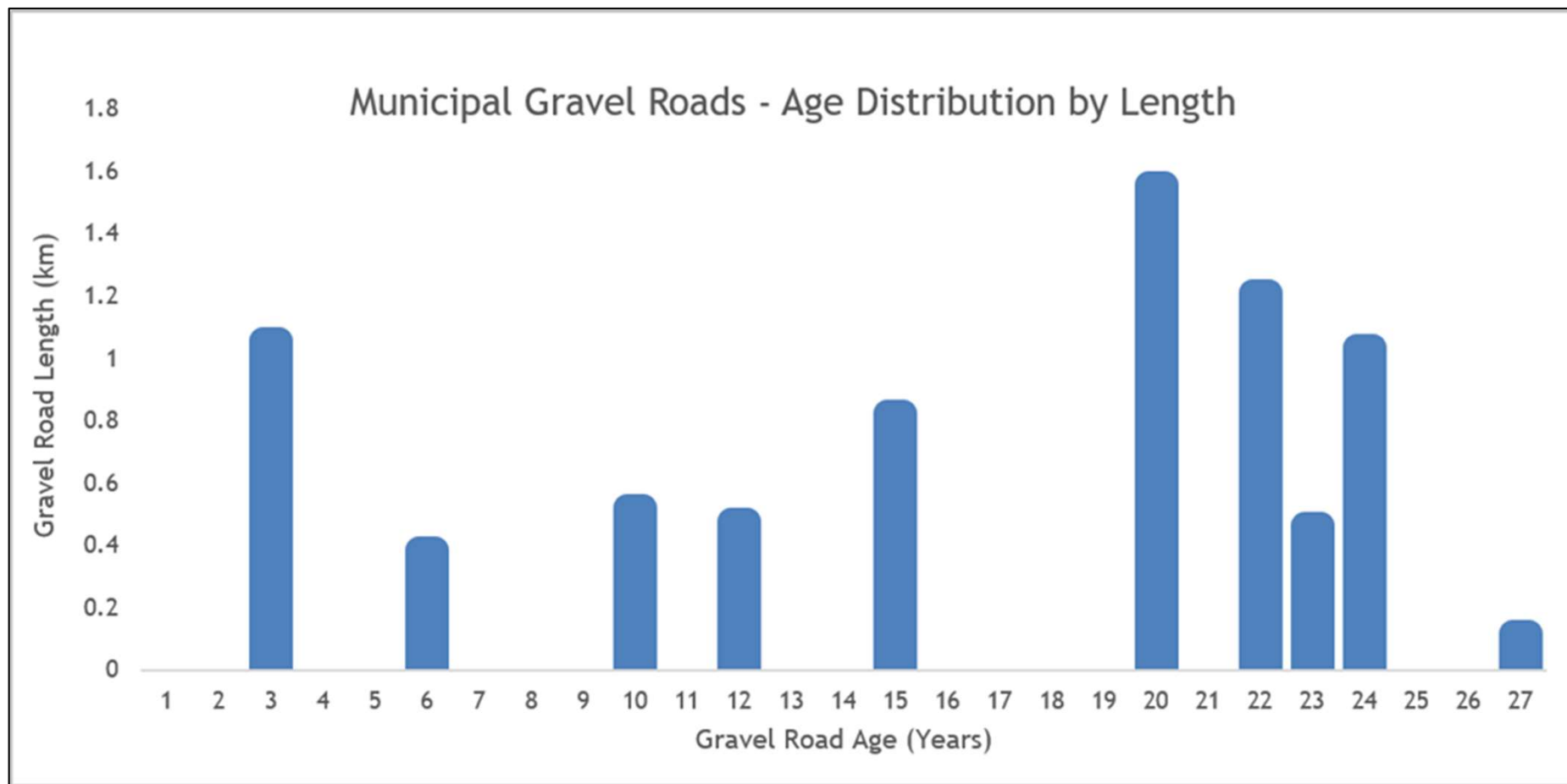
# Municipally-Owned Roads



## Discussion



## Discussion





## Discussion

- The average age of Municipal asphalt roads is **13 years**, and the average age of Municipal gravel roads is **14 years**.
- Industry standard estimates for ‘Expected Useful Life’ (EUL) have been developed

Asset Element Type	Expected Useful Life (Years)
Asphalt (Paved) Road	25
Gravel (Unpaved) Road	10

- EUL estimates are general guidelines. We know there are a number of factors aside from age that can influence the length of a road’s useful life including the amount of use or traffic, quality of construction, and climate or environmental factors.

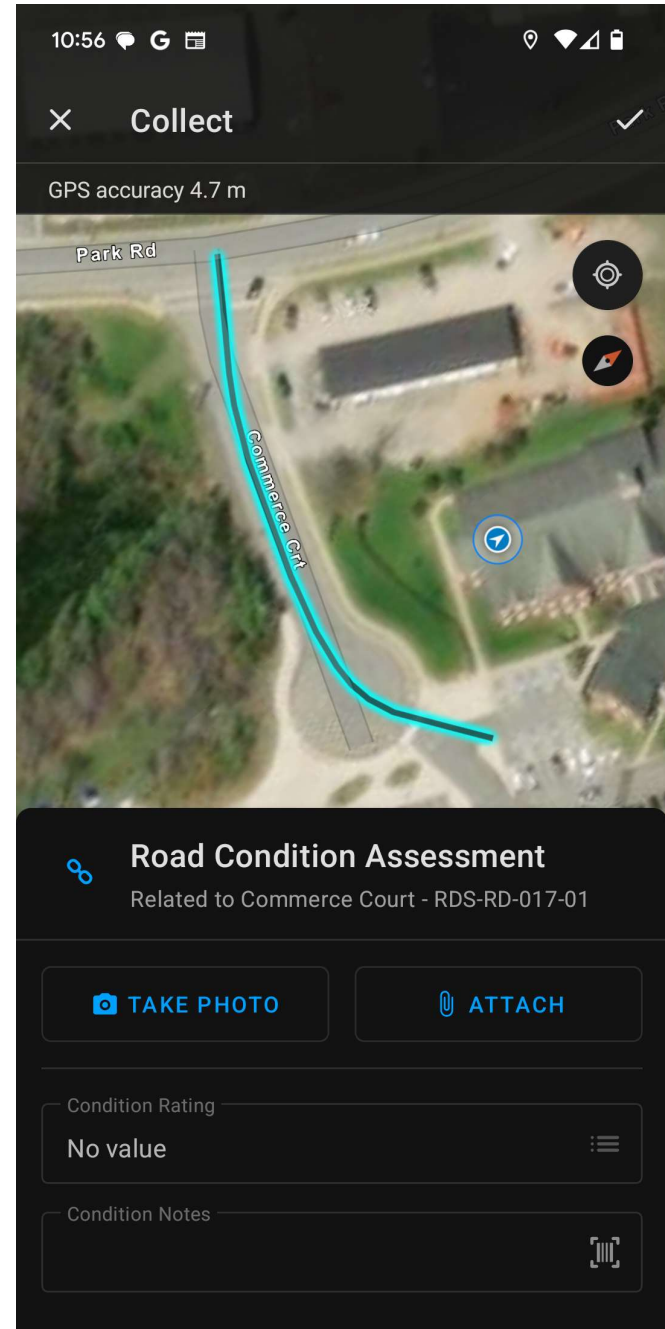
## Discussion

- Age alone may not be the most accurate tool for medium and long-term planning and decision-making. Regular and up-to-date condition data is best practice in Asset Management for all assets, and was the recommended next step for East Hants roads from the Roads Pilot Project.
- Staff have adopted a standard rating for Visual Condition Assessments (VCA)

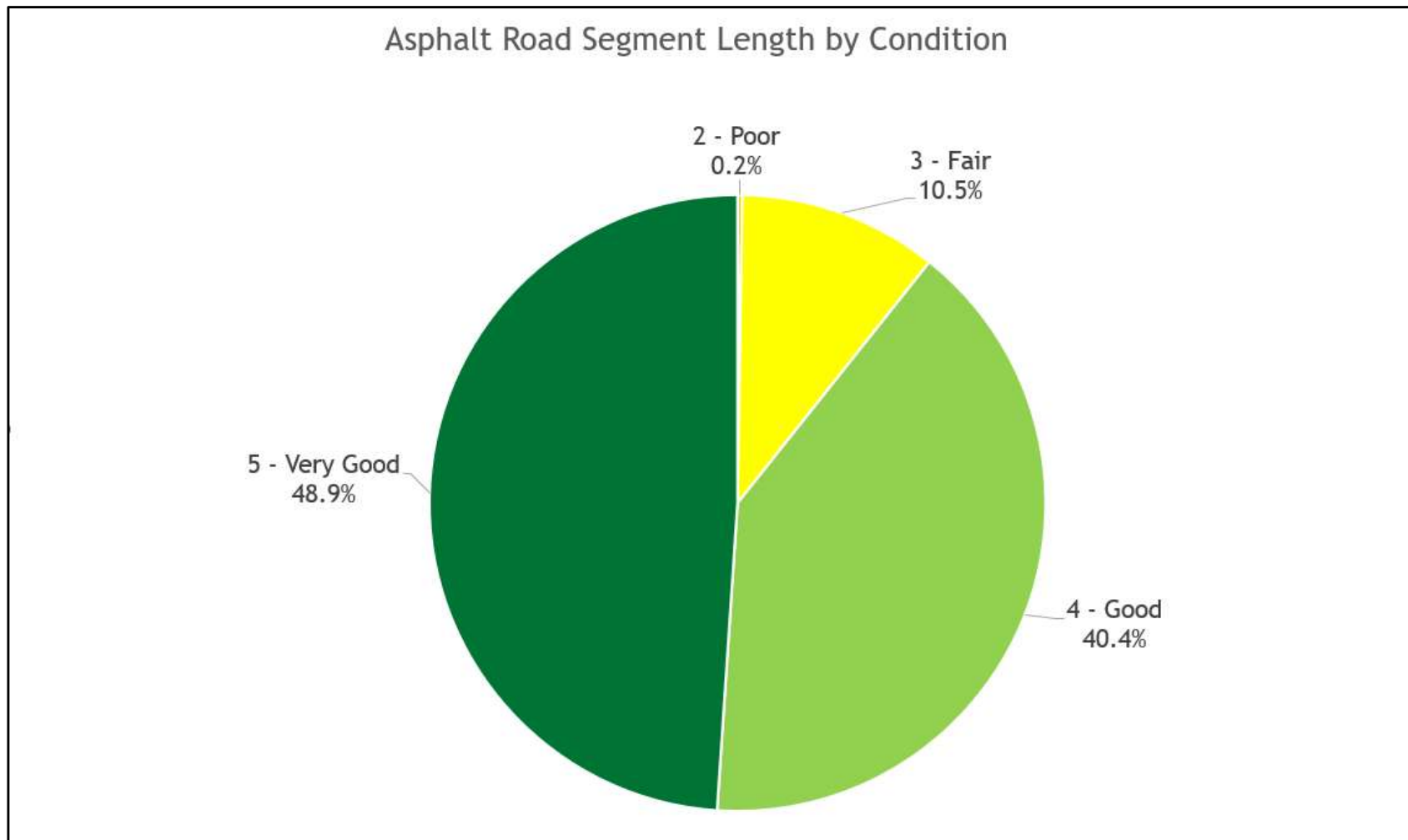
Grade	Condition	Description
5	Very Good	Asset (or asset element) is physically sound, performing as intended and resembles “like-new” condition.
4	Good	Asset (or asset element) is physically sound and performing as intended. Needs to be re-inspected in the medium term.
3	Fair	Showing deterioration, with some elements physically deficient. Early stages of decay or dereliction are becoming evident.
2	Poor	Major portion of asset (or asset element) is physically deficient. It is not functioning properly due to significant deterioration and is a candidate for replacement in the short term.
1	Very Poor	Asset (or asset element) is physically unsound. There is a high probability it will fail, or it already has. Immediate replacement is required.

# Mobile Data Collection

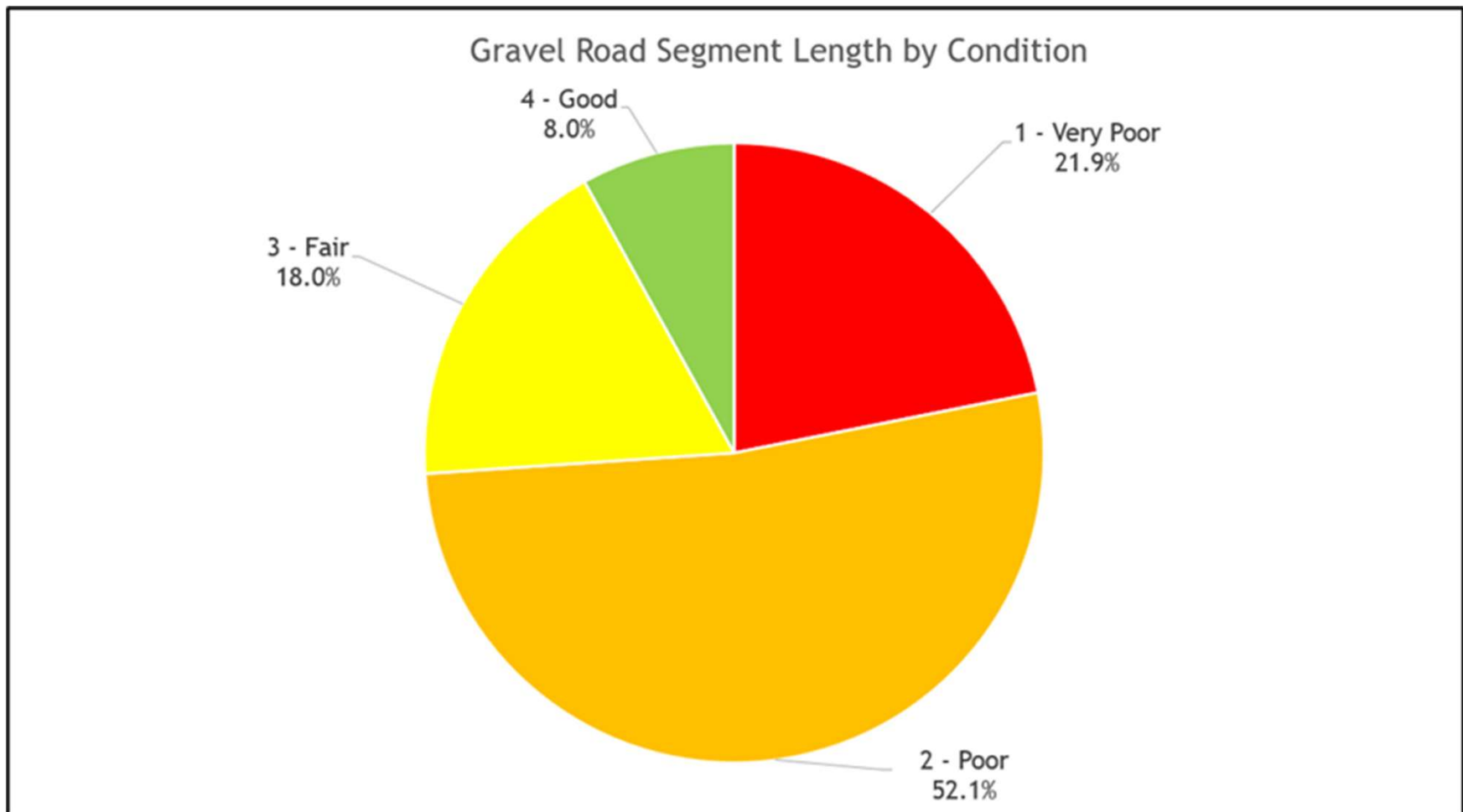
- Staff made use of available mobile GIS tools to perform Visual Condition Assessments for Municipal Roads



## Discussion



## Discussion



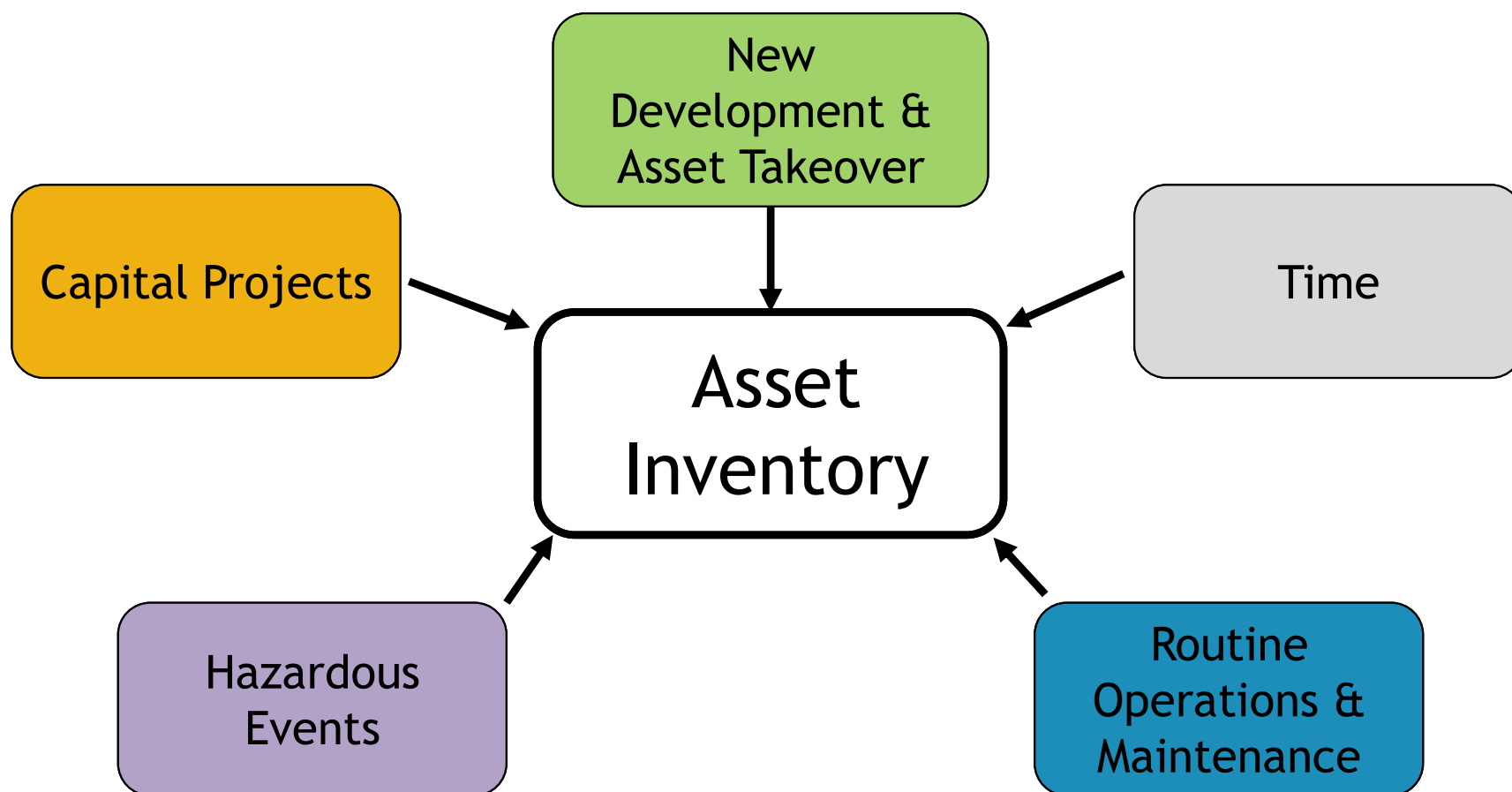
## Discussion

Asset Element Type	Expected Useful Life (Years)	Average Aged-Based Remaining Useful Life (Years)	Average Overall Summer 2024 Condition Rating
Asphalt (Paved) Road	25	12	4.41 (Good)
Gravel (Unpaved) Road	10	-4	2.29 (Poor)



## Discussion

- Inventory and condition data is living, and always changing.





## Discussion

- Visual Condition Data collected in summer 2024 will be used to support upcoming capital budget recommendations. Additionally, the data helps to re-affirm the need of some existing capital projects in the 5-year capital budget.
- Visual Condition Assessments were also performed for Municipally-owned sidewalks in summer 2024, and a similar report can be brought forward at the request of Council.
- As East Hants continues through the AM journey, as much detailed age and condition data as possible will be collected for other service areas and asset classes as well.





## Recommended Motion

- ***Corporate and Residential Services Committee recommends to Council that they receive and file the East Hants Roads Assets - State of the Infrastructure Update report dated September 11, 2024.***