

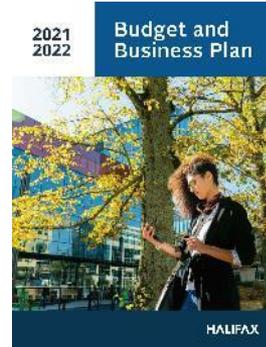
January 23, 2024

**HALIFAX**

**Level of Service - HRM Streets,  
Sidewalks and Curb Networks**  
Report to Halifax Regional Council

# Origin

**Strategic Priorities  
Plan 2021-25**



**Public Works 2021/22  
Budget and Business Plan**

## INTEGRATED MOBILITY

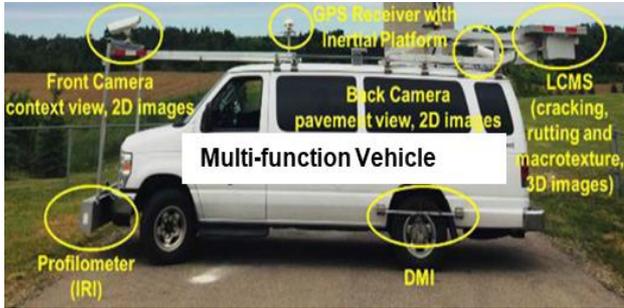
### TRANSPORTATION CAPITAL ASSET RENEWAL

Municipal staff will work with Regional Council to articulate what a "Well-Maintained Transportation Network" means for the municipality as part of the Transportation Capital Asset Renewal strategy. This includes defining levels of service and/or performance targets for transportation related assets (e.g. streets, sidewalks, walkways, etc.) and will help identify funding requirements to maintain assets at an acceptable level.

Level of Service (LOS) HRM  
Street, Sidewalk and Curb Networks

**HALIFAX**

# Background



## Between 2013 and 2021

- Procured and implemented a new Pavement Management System
- Introduced a new data collection methodology (multi-function vehicle).
- Collected condition data for roadway network (2016, 2018, 2020).
- Collected condition data for sidewalk and curb networks (2013, 2016, 2018, 2021).

## 2022

- Recommended a Level of Service (LOS) for the HRM roadway network (Presented to Council January 25, 2022).
- Collected new condition data including 2022 road transfer streets
- Conducted jurisdictional scans regarding sidewalk LOS.

## 2023

- Updated recommendation on street LOS
- Established recommendations for sidewalk and curb LOS

# Background – Street Network

## Approved LOS (January 2022) – 67% of Network in Good Condition

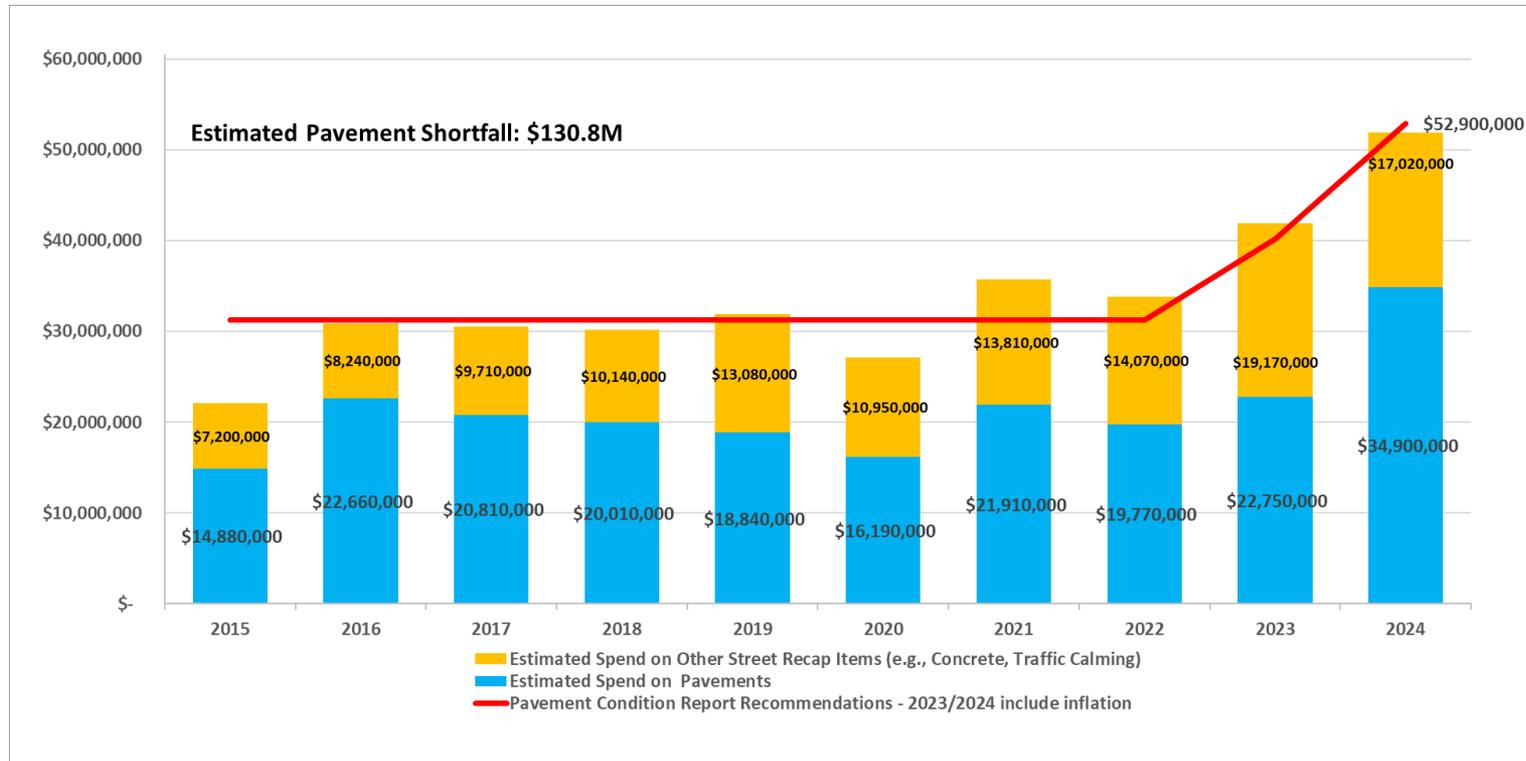
67% Good was selected to help stabilize the backlog (%Poor) near 15%, but also maximize number of good streets

- PQI can be classified as Good, Fair, or Poor
- Differ by functional class (higher thresholds for higher volume streets)

Condition Categories Established in HPMA and Approved in 2022

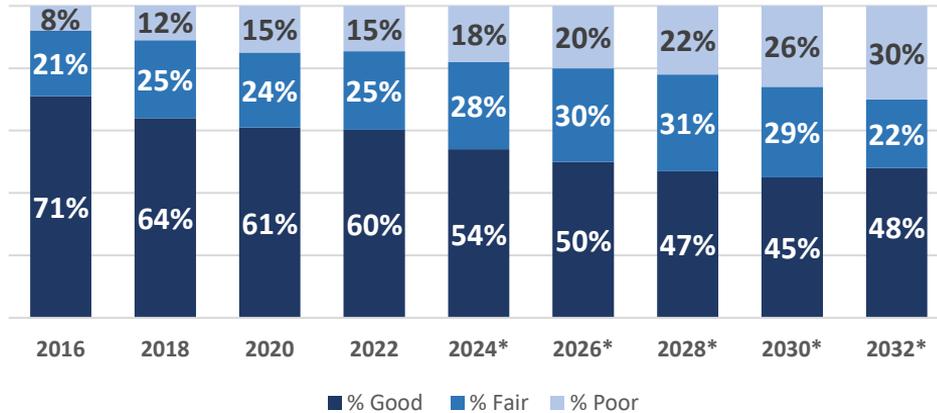
Functional Class	Good	Fair	Poor
Arterial	≥ 75	60-75	≤60
Major Collector	≥ 70	55-70	≤55
Minor Collector	≥ 65	50-65	≤50
Local	≥ 60	45-60	≤45

# Background – Street Network



# Discussion – Street Network

Road Network Level of Service Forecast Based on Budget Allocation



**Target Level of Service = 67% Good by 2032**

\*Projected based on 23/24 approved capital budget, increased network size due to road transfer, as well as inflationary cost estimates for construction

## Street Recapitalization (CR200006)

During 2023/24 Budget Process

- Council Cut \$8M from 23/24
- Staff cut \$5M in 24/25 to balance tax rate (pre-budget)
- Staff cut \$5M in 25/26 to balance tax rate (pre-budget)

# Discussion – Budget Scenarios

Year	2023/24 Approved Street Recap (CR200006)	Required to Achieve and Maintain 67% Good	Required to Target 60% Good	Required to Target 20% Poor
		Street Recap Cost	Street Recap Cost	Street Recap Cost
Average (Year)	\$67,725,300	\$106,869,844	\$94,117,200	\$85,188,100

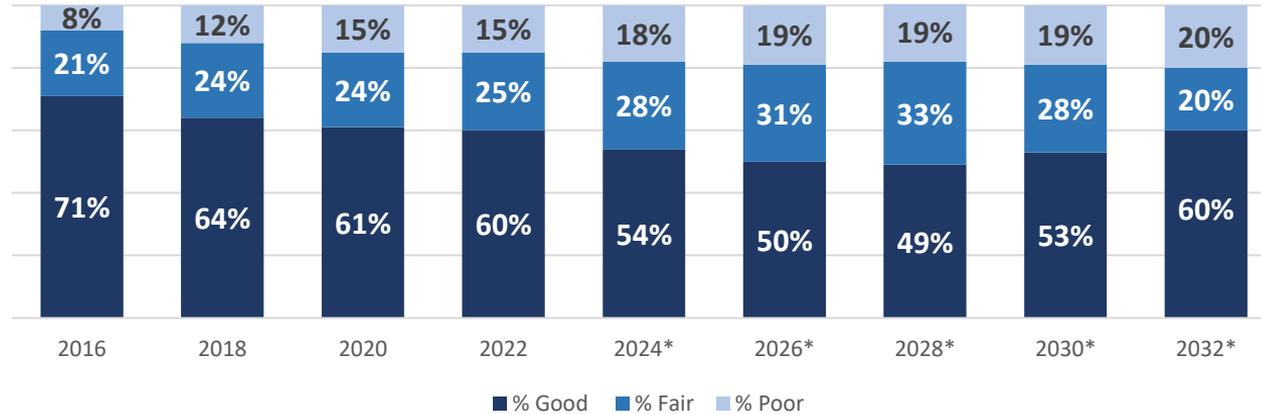
Estimated 30% of funds used for other elements (e.g., curb, traffic calming, etc.)

Includes 3.59% Yearly Growth (3.09% Inflation + 0.5% Network Growth)

All new scenarios include increased funding in 2025/26, 2026/27, and 2027/28 to minimize future year impacts.

# Results / Recommendation – Street Network

Road Network Level of Service Forecast  
Base on Proposed Funding Scenario (>60% Good)



- New recommendation is to reduce the target LOS from >67% Good to >60% Good
- New recommendations result in growing backlog (%Poor) from 15 to 20% - Industry standard suggests <10%
- Maintaining 23/24 approved funding results in nearly 30% backlog by 2032
- 60% Good scenario requires more funding, but more streets remain “good” as opposed to the 20% Poor scenario

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# Background – Sidewalk

## Sidewalk

- Classified as Good, Fair, or Poor based on % of defective panels in segment
- P1 Hazards are flagged during data collection and assigned to IMO to respond.
- Data now collected on a three-year cycle

Network wide by km	2013	2016	2018	2021
Good (0-20%)	66.3%	87.4%	83.8%	91.5%
Fair (21-40%)	25.6%	8.2%	11.0%	5.6%
Poor (>41%)	8.2%	4.4%	5.2%	2.9%

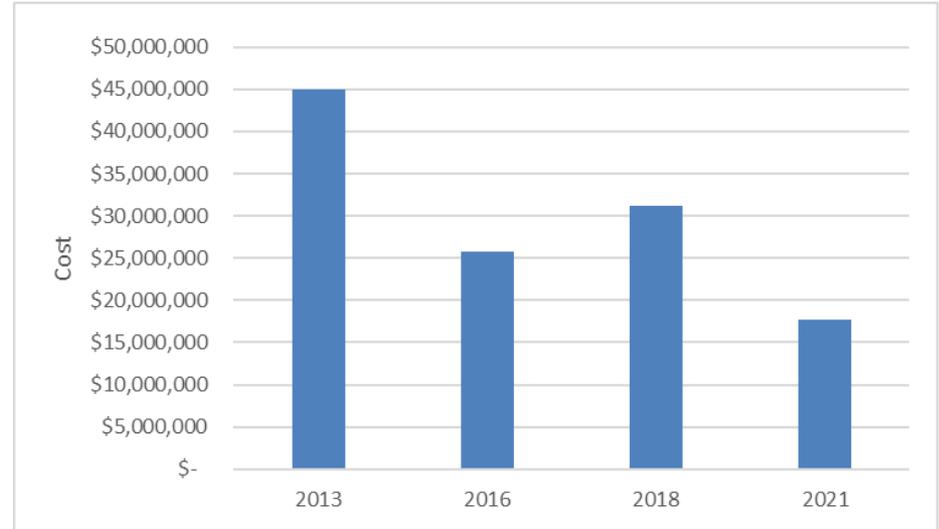
# Discussion – Sidewalk

Existing sidewalk needs backlog decreasing

In 2022, staff worked with consultant to conduct a jurisdictional scan other agencies

- No industry norm regarding LOS targets for sidewalk

IMO State of good repair work for sidewalk remains critical part of HRMs network to resolve safety issues



**Sidewalk Rehabilitation Needs Backlog**

Funds required to bring all sidewalk segments above “Poor” threshold

# Recommendation – Sidewalk

Adopt a target LOS of <1% of the sidewalk network in Poor condition and <5% in Fair condition.

No increase to current 4-year capital budget for Sidewalk Renewal account

Provide update to council following 2024 data collection

Year	Sidewalk Renewal (CR200002)
2024	\$ 2,000,000
2025	\$ 2,500,000
2026	\$ 2,500,000
2027	\$ 3,000,000
2028	\$ 3,100,000
2029	\$ 3,200,000
2030	\$ 3,300,000
2031	\$ 3,400,000
2032	\$ 3,500,000
2033	\$ 3,600,000

Ten-Year funding scenario to Achieve Target LOS

# Background – Curb

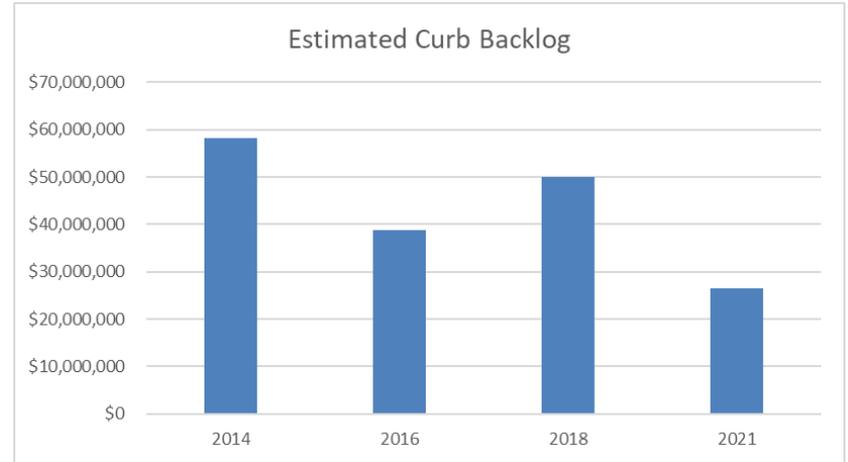
## Curb

- Rated on a 1 - 5 system (Critical – Very Good) starting in 2018.
- Data now collected on a three-year cycle
- Data collection is currently done manually which can lead to year-to-year variability

Condition	2013	2016	2018	2021
Very Good	N/A	N/A	25.7%	15.3%
Good	71.8%	81.2%	40.9%	61.0%
Fair	20.3%	13.7%	26.8%	20.3%
Poor	7.9%	5.1%	4.6%	3.0%
Critical	N/A	N/A	1.9%	0.4%

# Discussion/Recommendation – Curb

- Curb condition has gradually improved
- In 2021, approximately 3.0% of the curb network was in Poor condition and 0.4% in Critical
- Additional risk due to the known presence of Alkali Silica Reaction (ASR)



# Recommendation – Curb

Target <0.5% of the existing network in Critical Condition

Continue to fund from Street Recap account

No additional funding required at this time

Provide update to council following 2024 data collection

