

Re: Item No. 6

TRANSPORTATION & PUBLIC WORKS

2022/23 Budget & Business Plan
Committee of the Whole on Budget
February 9, 2022

MISSION

We take pride in providing high-quality transportation and public works services to benefit our citizens. We make a difference.



SERVICE AREAS

Solid Waste Resources – Andrew Philopoulos, Director

Management of solid waste source separated collection and diversion programs

Parking Services – Victoria Horne, Director (Parking Authority)

Administration, implementation and enforcement of policies, By-laws and regulations related to parking and curbside management

Traffic Management – Vacant, Director (Deputy Traffic Authority)

Management of the municipality's transportation system with an emphasis on safety

Road Operations & Construction – Beverley Audet, Director

Maintenance of a safe, efficient and clean street, sidewalk, bridge and walkway system

Project Planning & Design – David Hubley, Director

Professional and technical services to support delivery of the road and active transportation capital programs

Cogswell District Project – John Spinelli, Project Director

Management of the project transforming land into a vibrant, mixed-use neighbourhood, reintegrating historic aspects of downtown and the waterfront

ABOUT US

ROADWAY LANES

3,900 km

SIDEWALKS

980 km

BIKE LANES (LINEAR)

77 km

MULTI-USE PATHS

201 km

BRIDGES

127

STREETLIGHTS

45,287

CURBS

2,214 km

WALKWAYS

75 km

WALKWAY LIGHTS

799

ABOUT US

CROSSWALKS

2,589

SIGNALIZED
INTERSECTIONS

280

40 KM/H SIGNS

311

PEDESTRIAN RAMPS
WITH TACTILES

1,321

LITTER BINS
(RIGHT OF WAY)

900

DESIGNATED SMOKING
AREAS (RIGHT OF WAY)

90

STORM WATER
CATCHBASINS

33,160

STREET
TREES

162,823

PARKING
PAY STATIONS

165

ABOUT US

SHORT-TERM PAID
PARKING SPACES

~1,500

ACCESSIBLE ON-STREET
PENINSULA PARKING SPACES

182

COMMUTER
PERMIT SPACES

610

GREEN CARTS

141,081

RURAL REFUSE
DEPOTS

2

HOUSEHOLD SPECIAL
WASTE DEPOT

1

MATERIAL RECOVERY
FACILITY

1

MUNICIPAL
LANDFILLS

2

ORGANICS MANAGEMENT
PLANTS

2

SUCCESSSES



Awarded Cogswell District Project construction tender ~\$96M



Tendered 96 per cent of \$95.3M roads, bridges, and active transportation budget



Installed traffic calming measures on 109 streets



Added traffic calming infrastructure and road safety countermeasures tracking to Open Data



Adopted new Winter Operations standards and implemented new parking ban process



Established Administrative Order for Active Transportation & Recreational Trails to provide grants and support planning, construction, operation & maintenance (IMP Action #80)

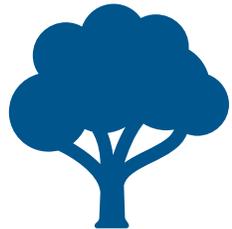
SUCSESSES



Supported COVID business recovery with parking initiatives



Developed and adopted accessible parking standards



Planted 3,100 street trees



Initiated new illegal dumping campaign and enhanced enforcement measures



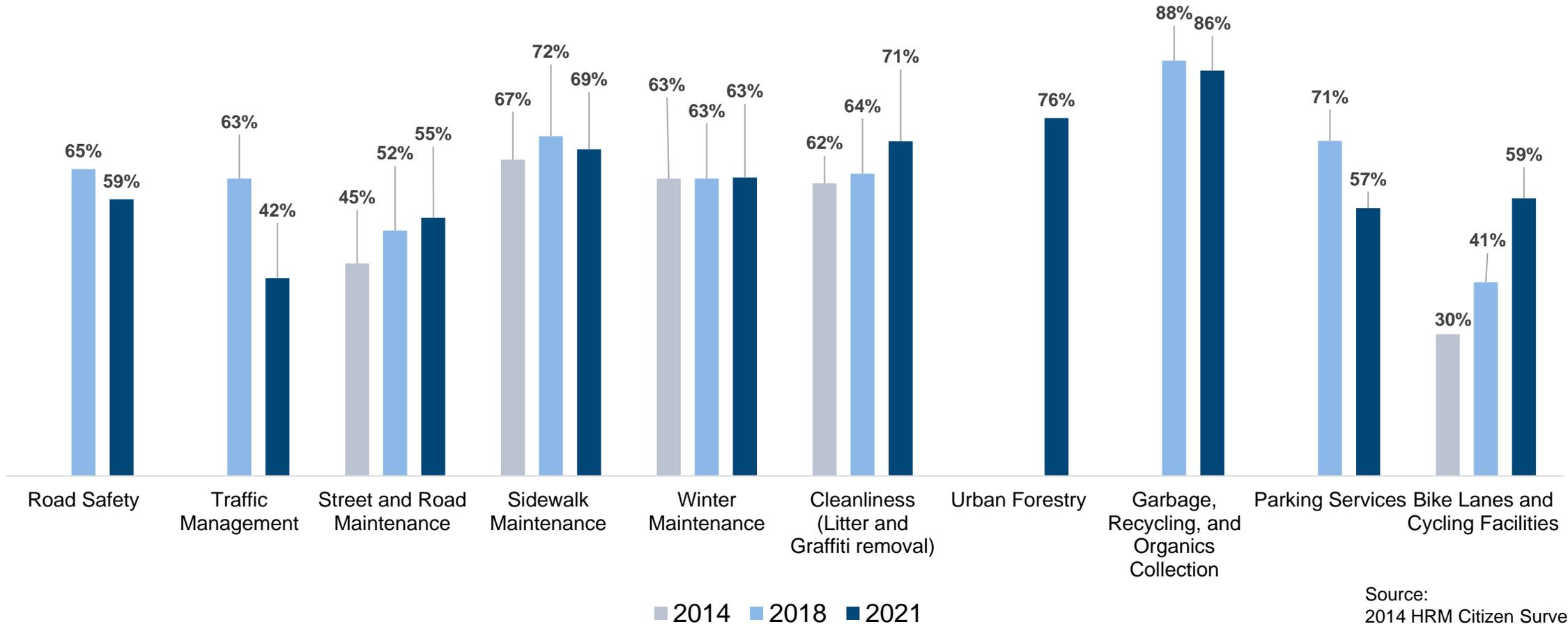
Commenced construction of the new 60,000 tonnes/year composting facility



Established target level of service for road pavement network

KEY PERFORMANCE INDICATORS

Satisfaction with TPW Services: 2014 to 2021



Source:
 2014 HRM Citizen Survey
 2018 HRM Citizen Survey
 2021 HRM Resident Survey

KEY PERFORMANCE INDICATORS

Parking Service Requests

Parking Service Requests	2018/19	2019/20	2020/21	2021/22*
Total Service Requests	16,846	19,085	14,370	13,636
Total Service Requests Closed within Standard	16,803	18,086	13,872	13,414
% of Service Requests Closed within Standard	99.7%	94.8%	96.5%	98.4%

*As of January 7, 2022

Parking Session Data

Payment Type	Count	Share
Coin	65,310	9.8%
Card Tap (Debit or Credit)	235,713	35.3%
Card Insert (Credit)	19,245	2.9%
Mobile Payment (App)	347,793	52.1%
TOTAL	668,061	

*From April 1, 2021, to December 31, 2021

School Zone Proactive Patrols

Item	Total
Tickets	109
Warnings	360
Patrols	204

*From April 1, 2021, to December 31, 2021

KEY PERFORMANCE INDICATORS

Fatal & Injury Collisions

Year	Total Collisions	Total Collisions per 100,000 population	Fatal Collisions	Injury Collisions	Total Fatal + Injury Collisions	Total Fatal + Injury Collisions per 100,000 population	% Reduction Total Fatal + Injury Collisions	% Traffic Volume Reduction during COVID-19 Pandemic**
2018	6056	1408.7	17	750	767	178.4		-
BASELINE						184.9		-
2019	6222	1415.6	17	824	841	191.3	-3.50%	-
2020	4570	1018.9	8	634	642	143.1	22.6%	21.4%
2021*	4926	1071	9	704	713	155	16.1%	11.7%

- All collisions within provincial and municipal road right of way
- Based on closed collision files received from Halifax Regional Police and Royal Canadian Mounted Police as of January 5, 2022. Future reports may vary.

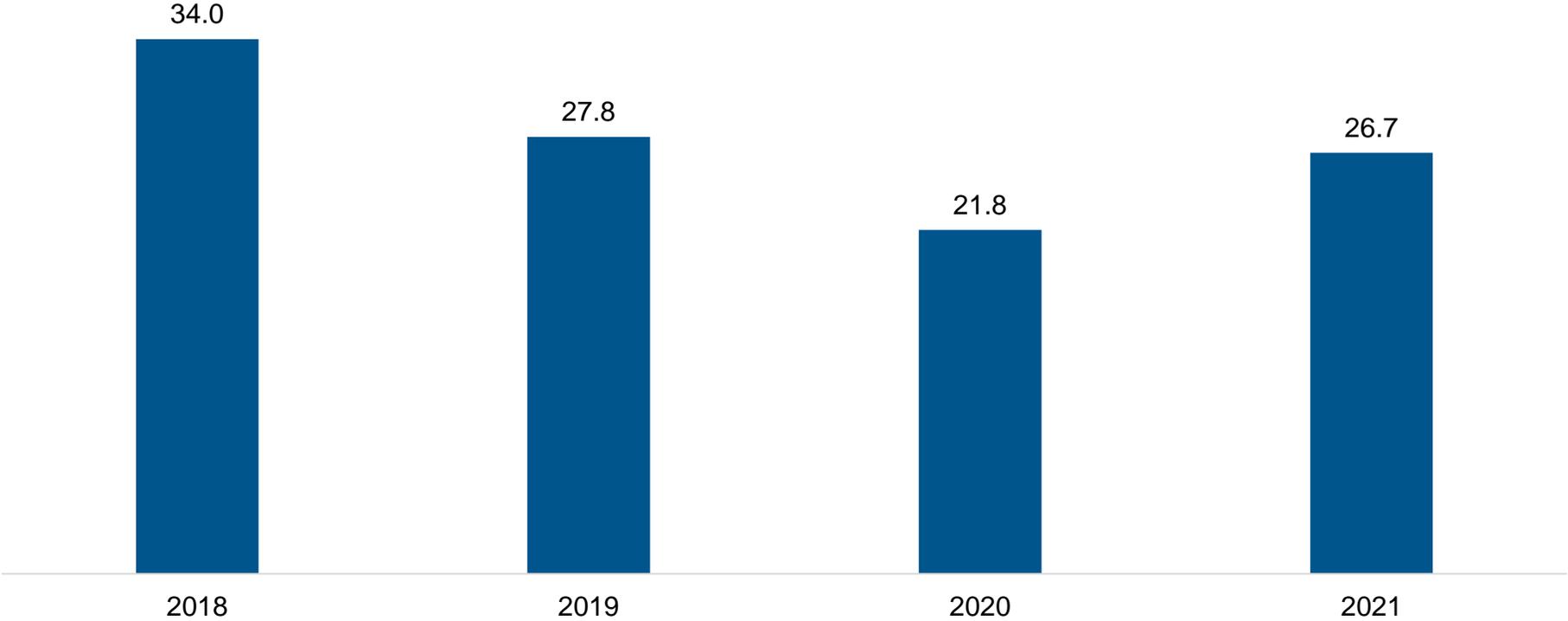
* As of January 17, 2022, there were 7 fatalities reported in 2021 with closed collision files, however 2 additional fatalities occurred in November 2021 that are still under investigation which are included in the above total.

** Annual traffic volume reduction in comparison to 2019 traffic volumes on the Halifax Harbour Bridges.

Regional Council's goal 'Toward Zero' is to reduce fatal and injury collisions by 20% by 2023

KEY PERFORMANCE INDICATORS

Pedestrian Fatal & Injury Collisions per 100,000



KEY PERFORMANCE INDICATORS

Traffic Safety Measures ⁽¹⁾	2018/2019	2019/2020	2020/2021	2021/2022	Total Completed	2022/2023 (Proposed)
Leading Pedestrian Intervals	8 (Pilot) ⁽²⁾	2	15	13	38	20
Rectangular Rapid Flashing Beacon	3	3	12	17	41 ⁽³⁾	27
Accessible Pedestrian Signal	4	5	5	6	99 ⁽⁴⁾	15
Speed Display Signs	-	3	13	0 ⁽⁵⁾	16	15
Traffic Calmed Streets	13	13	30	109	168 ⁽⁶⁾	92 ⁽⁷⁾
40 km/h Neighbourhoods	-	1	6	7	14	7
Advance Yield Lines at Crosswalks	-	-	7 (Pilot)	5	12	5

(1) As of January 17, 2022

(2) IMP Action #6

(3) 6 installed prior to 2018/2019 as pilot (IMP Action #6)

(4) 79 completed prior to 2017

(5) No new signs, existing inventory relocated

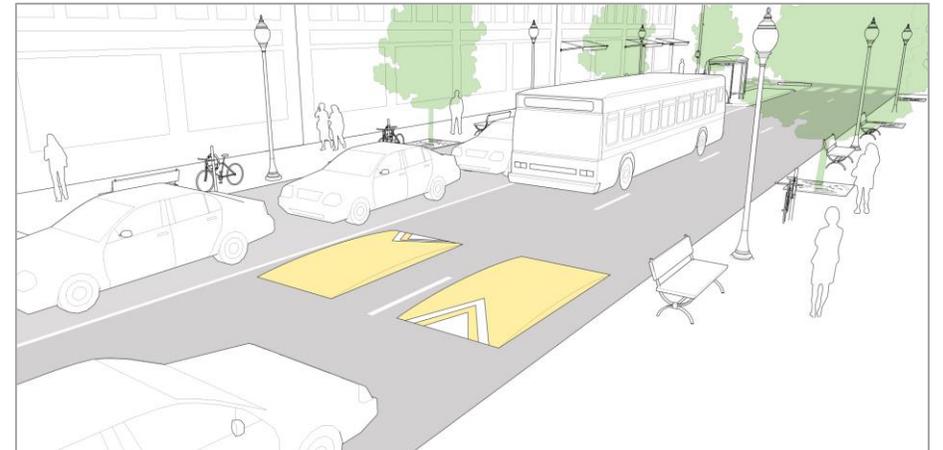
(6) 3 installed in 2017/2018

(7) Includes 8 carryover projects tendered in 2021/22

CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES INTEGRATED MOBILITY

- Improve Road Safety 'Towards Zero' (IMP Action #4)
 - Develop next Strategic Road Safety Plan 2024 - 2028
 - Implement traffic safety measures (as planned on slide 12)
 - Trial and evaluate speed cushions as potential traffic calming measures
 - Develop implementation plan for installation of traffic calming measures in remaining school zones
 - Establish dedicated parking enforcement unit for school zones and beaches



CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES

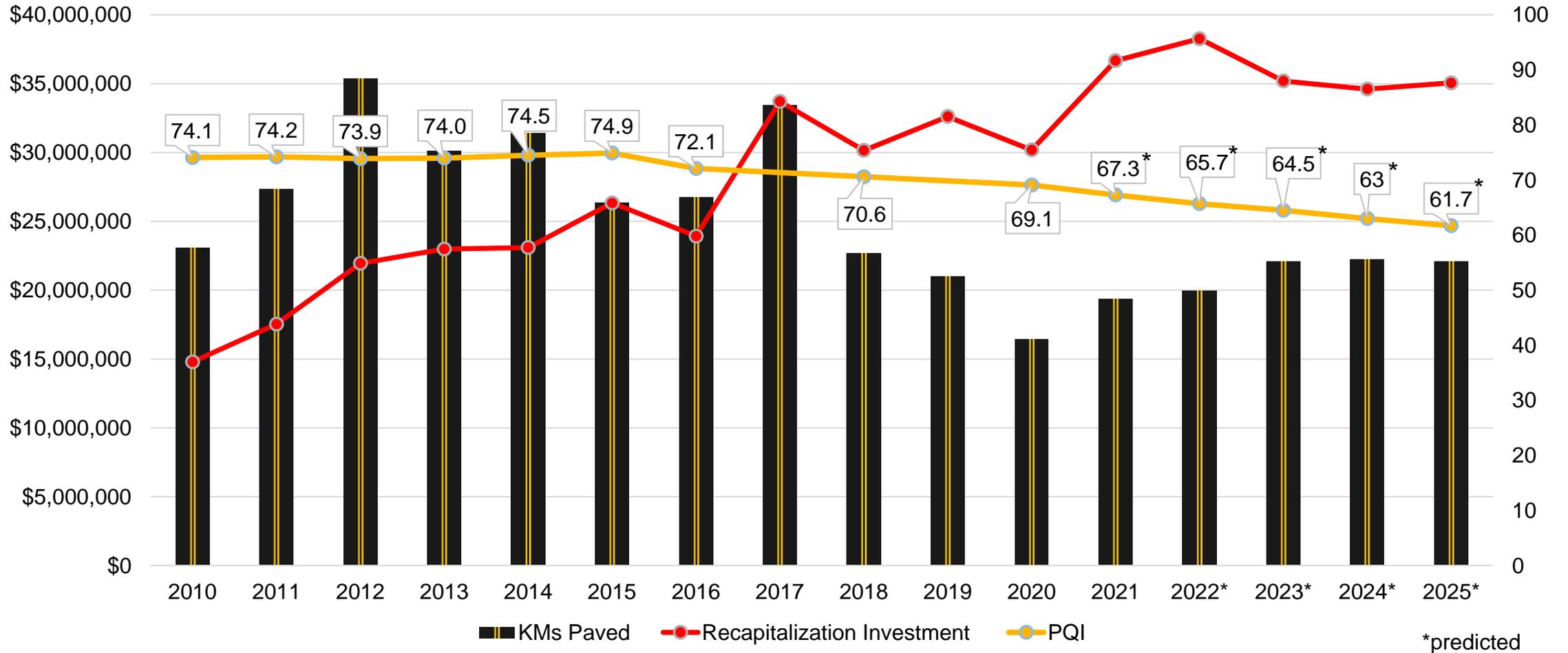
INTEGRATED MOBILITY

- Improve Road Safety 'Towards Zero' (IMP Action #4)
 - Implement semi-annual speed display sign program
 - Continue signalized intersection improvements from safety reviews and video analysis of near misses (IMP Action #7)
 - Commence implementation of recommendations from photo enforcement feasibility study
 - Implement Reactive Vegetation Management program



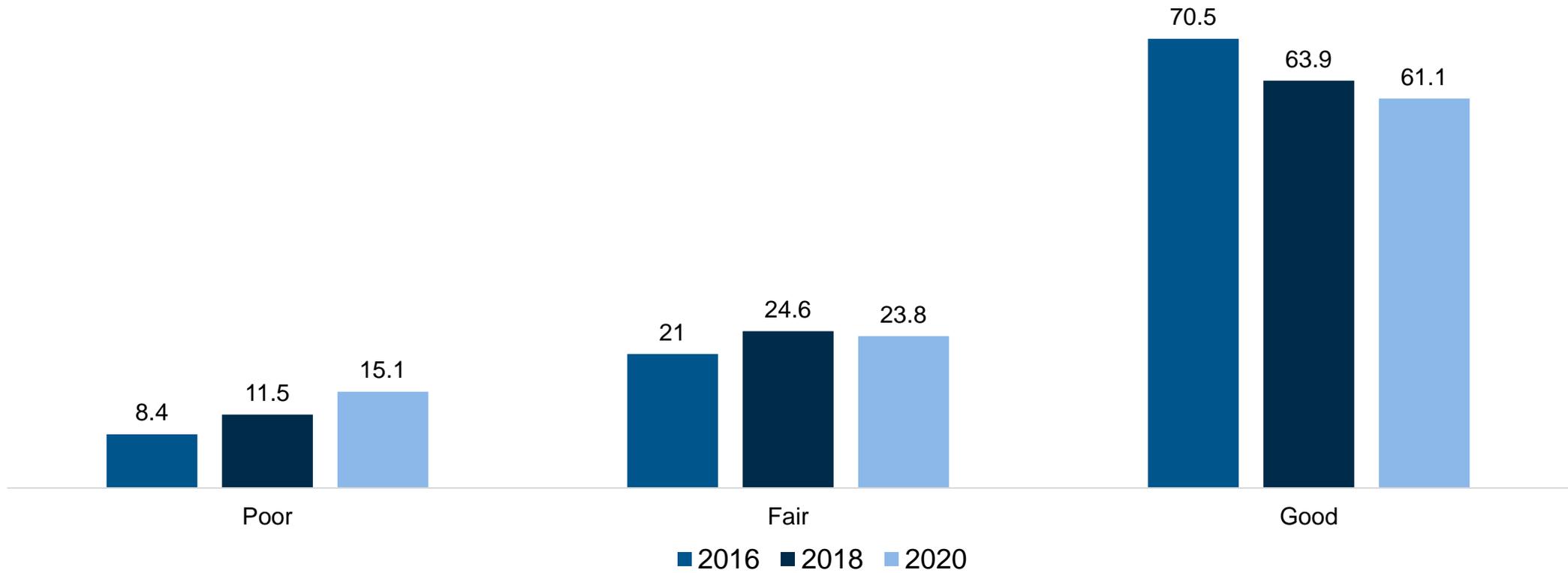
KEY PERFORMANCE INDICATORS

Recapitalization Investment vs. Kilometers Paved vs. Pavement Quality Index



KEY PERFORMANCE INDICATORS

Road Network Level of Service



Target Level of Service = 67% Good by 2030

KEY PERFORMANCE INDICATORS

Potholes

Potholes	2020 Identified	2020 Completed Within Standard	2021 Identified*	Projected 2021 Completed Within Standard
Priority 1	1,264	78.2%	779	84.3%
Priority 2	4,022	100%	3,125	100%
Total	5,286	-	3,904	-

* As of January 7, 2022

Priority 1 Pothole - 8 cm or greater in depth

Priority 2 Pothole - Less than 8 cm in depth



CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES

INTEGRATED MOBILITY

- Continue to prepare and implement processes for road transfer (310 lane km) from province
- Recommend target Level of Service for sidewalk maintenance
- Improve new sidewalk candidate selection process (IMP Action #39)
- Develop Level II Bridge maintenance and improvement recommendations
- Develop a program to replace zebra crosswalk markings with durable (thermoplastic) materials starting in 2023/24
- Continue title search and boundary review regarding ownership of non-accepted streets
- Complete review and update Streets and Encroachment By-law
- Revise Parking By-law to introduce minimum and maximum time of day pricing structures for paid parking (IMP Action #132 & #133)

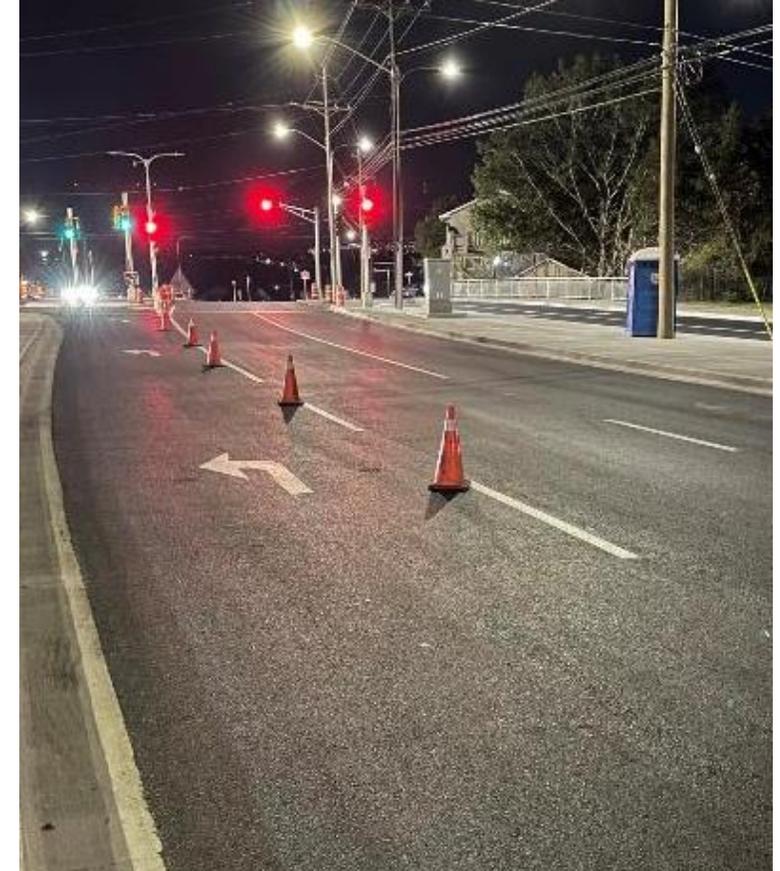


CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES

INTEGRATED MOBILITY

- Deliver Key Capital Projects
 - Cogswell District Project – commence construction of new street grid
 - Windsor Street Exchange – preliminary design
 - Burnside Business Park – construction phase 13-1
 - Dutch Village Road – tender 22/23, construct 23/24 (IMP Action #32)
 - Downtown Dartmouth Infrastructure Renewal – tender
 - Lady Hammond Road Bridge – rehabilitation
 - Jubilee Road CN Bridge – rehabilitation
 - Caldwell Road – rehabilitation and multi-use path (IMP Action #7)
 - Cain Street – recapitalization with traffic calming and sidewalk (IMP Action #7 & #38)
 - Raised crosswalks – school/playground locations to be determined (IMP Action #6 & #7)



CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES

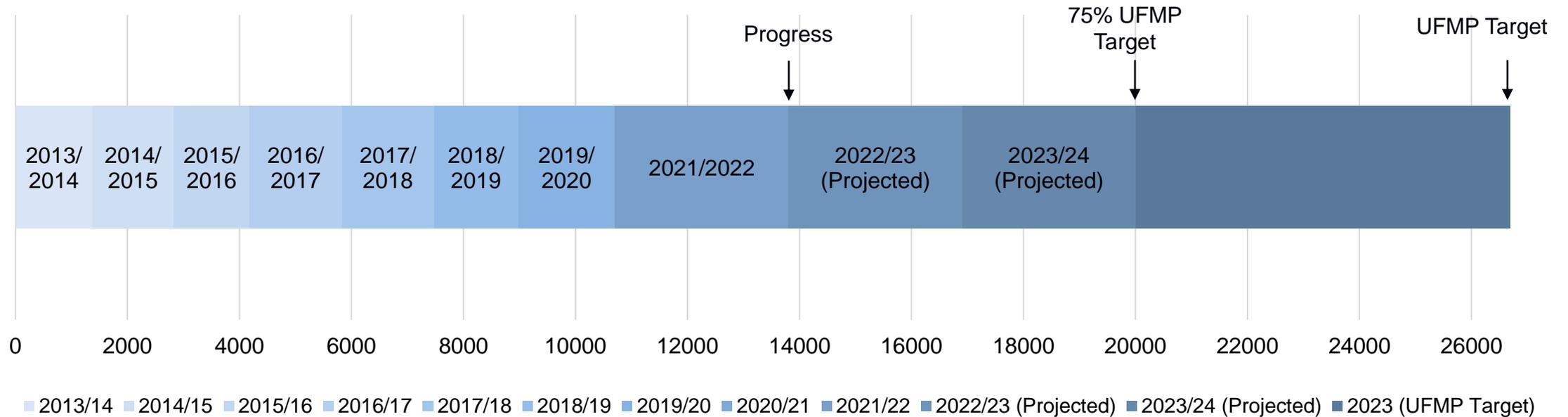
INTEGRATED MOBILITY

- Deliver Key Capital Projects
 - Regional Centre All Ages & Abilities Cycling Network – 40 per cent complete – 23 of 57 km (IMP Action #72)
 - Hollis Street Phase 2 – protected bike lane
 - Terminal Road – protected bike lane
 - Almon Street – protected bike lane
 - Joseph Howe Drive / Exit 0 – active transportation improvements and Peninsula Connection
 - Macdonald Bridge Bikeway Connections (Halifax side) – tender and initiate construction
 - AAA bikeways quick build / tactical
 - Get There by Bike – marketing campaign
 - Develop Rural Active Transportation / Sidewalk program for implementation in 2023/24



KEY PERFORMANCE INDICATORS

Progress on Urban Forest Master Plan Tree Planting Target



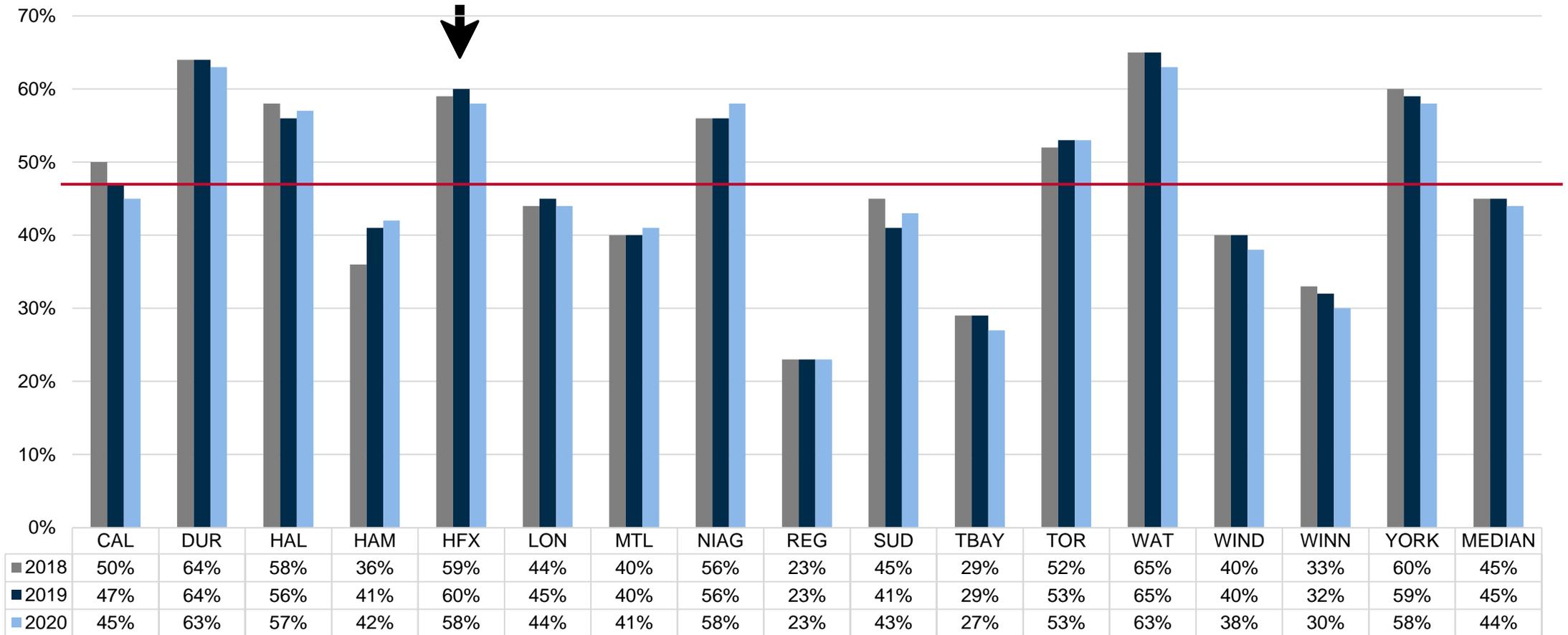
Urban Forest Measure	2021/22 Planned	2021/22 Actual	2021/22 Projected
Trees Planted	3,100	3,100	3,100

Urban Forest Measure	2019/20* Actual	2020/21 Actual	2021/22 Actual**
Trees Removed / Lost	1,176	993	835

*Hurricane Dorian year
 **As of December 2, 2021

KEY PERFORMANCE INDICATORS

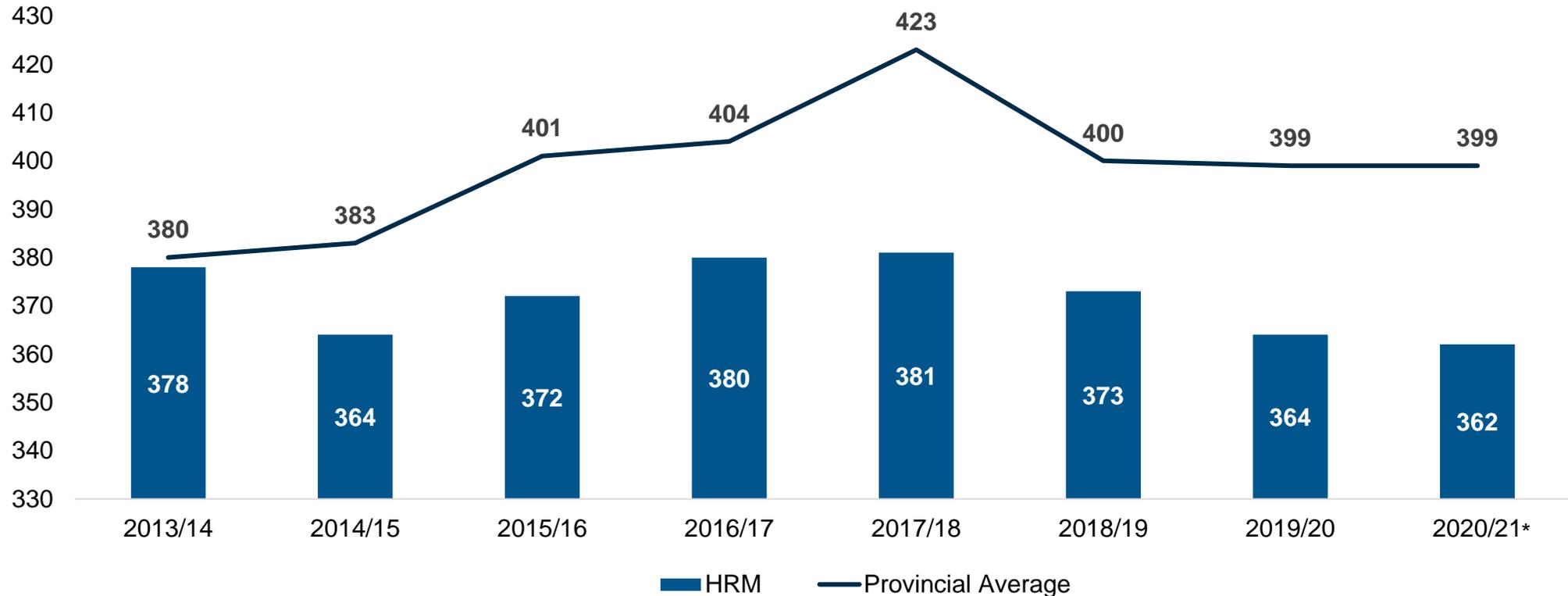
Percent of Residential Solid Waste Diverted



Source: Halifax compared to 2020 MBNCanada Performance Measurement Report

KEY PERFORMANCE INDICATORS

HRM Disposal Rate (kg/capita)



* Estimate

New provincial objective per the Environmental Goals and Climate Change Reduction Act : Reduce solid waste disposal rates to no more than 300 kilograms per person per year by 2030

CURRENT & PLANNED INITIATIVES

COUNCIL PRIORITIES ENVIRONMENT

Continue Illegal Dumping & Litter By-law improvements

- Advertising campaign
- Litter awareness education & outreach for students
- Litter application implementation
- Continue enhanced enforcement
- Evaluate pet waste pilot project in municipal parks

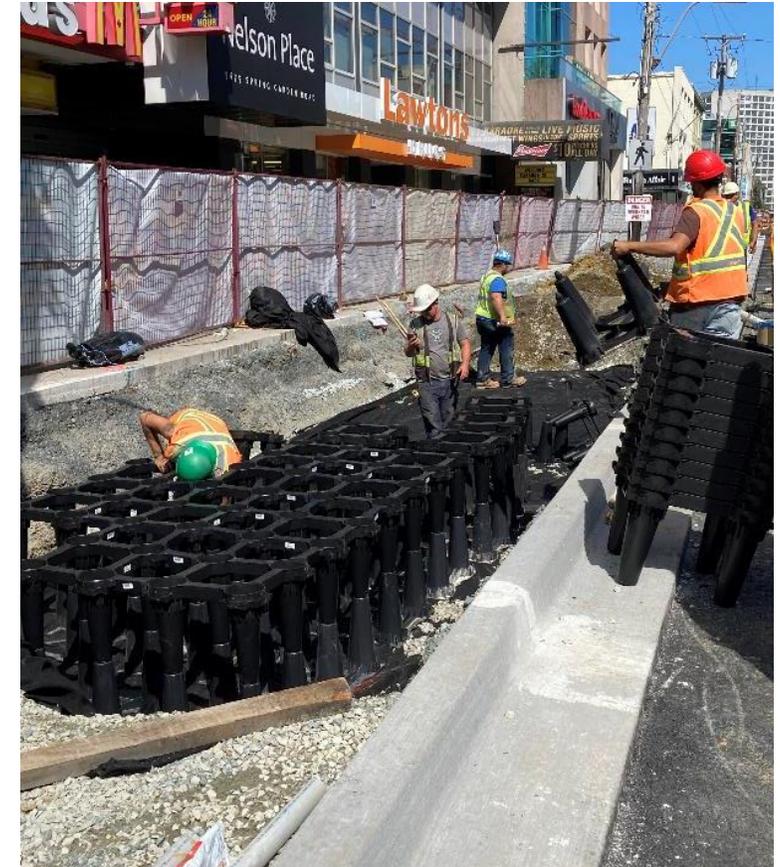


CURRENT & PLANNED INITIATIVES

ADMINISTRATIVE PRIORITIES

SERVICE EXCELLENCE

- Explore opportunities to develop multi-year capital program integrated with utilities for road and active transportation assets
- Develop curbside management policy
- Implement enhanced maintenance processes – Spring Garden Road
- Review / improve / document right of way ditch maintenance roles, responsibilities and communication requirements



CURRENT & PLANNED INITIATIVES

NET-ZERO MUNICIPAL OPERATIONS (NET-ZERO EMISSIONS)

- Construct new 60,000 tonnes/year composting facility
- Develop approach to mitigate greenhouse gas emissions – Highway 101 landfill
- Develop greenhouse gas models of existing solid waste systems
- Support business units to improve waste diversion at municipal facilities

NET-ZERO MUNICIPAL OPERATIONS (PROTECTED & SUSTAINABLE ENVIRONMENT)

- Review best practice 'green' recycling technologies for asphalt and concrete

ELECTRIFICATION OF TRANSPORTATION (NET-ZERO EMISSIONS)

- Revise Parking By-laws to introduce Electric Vehicle Charging permits

NOTE: Does not include relevant capital expenditures / projects

CURRENT & PLANNED INITIATIVES

GREENING GOVERNMENT OPERATIONS (PROTECTED & SUSTAINABLE ENVIRONMENT)

- Continue developing Solid Waste Strategy Review Terms of Reference

NATURAL AREAS AND GREEN INFRASTRUCTURE (PROTECTED & SUSTAINABLE ENVIRONMENT)

- Develop Urban Forest Master Plan 2.0
- Explore Private Tree Pilot Program (IMP Action #53)
- Street Tree Inventory (Districts 5 & 6)

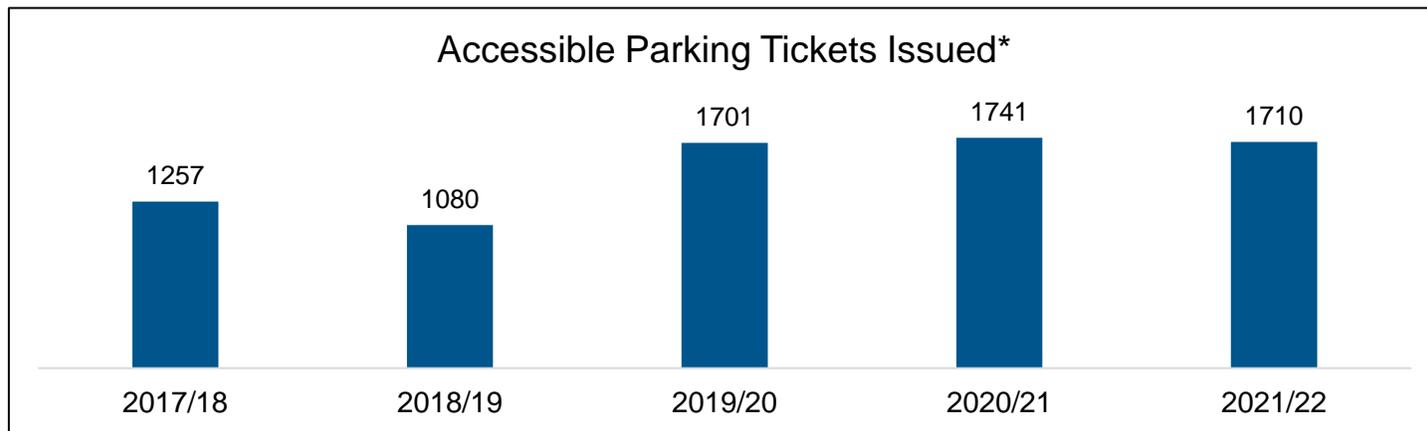
NOTE: Does not include relevant capital expenditures / projects



CURRENT & PLANNED INITIATIVES

DIVERSITY & INCLUSION

- Develop enforcement program for temporary workplace traffic control sign compliance
- Implement Pan-African crosswalk art pilot (IMP Action #46)
- Complete audit of existing on-street accessible parking spaces
- Upgrade 15 signalized intersections with Accessible Pedestrian Signals (IMP Action #39)



* as of January 7, 2022

OPERATING BUDGET

OVERVIEW

Expenditures	2020/21	2021/22	2021/22	2022/23		
	Actual	Budget	Projections	Budget	Δ 21/22 Budget	Δ %
Compensation and Benefits	\$ 24,078,355	\$ 27,144,500	\$ 27,086,800	\$ 29,282,700	\$ 2,138,200	7.9
Office	113,083	159,900	201,500	197,650	37,750	23.6
External Services	62,387,030	69,725,400	71,773,900	80,709,500	10,984,100	15.8
Supplies	381,236	364,500	390,400	385,750	21,250	5.8
Materials	1,761,521	2,649,200	2,621,800	2,563,500	(85,700)	(3.2)
Building Costs	3,739,746	3,376,800	3,366,800	3,393,500	16,700	0.5
Equipment & Communications	356,596	309,600	353,800	347,200	37,600	12.1
Vehicle Expense	69,956	96,500	89,800	116,500	20,000	20.7
Other Goods & Services	1,837,210	1,874,300	2,140,600	1,758,800	(115,500)	(6.2)
Interdepartmental	222,455	42,000	45,200	31,000	(11,000)	(26.2)
Debt Service	3,762	-	-	-	-	-
Other Fiscal	3,514,652	4,323,100	4,323,100	(22,000)	(4,345,100)	(100.5)
Total Expenditures	98,465,602	110,065,800	112,393,700	118,764,100	8,698,300	7.9

Revenues	2020/21	2021/22	2021/22	2022/23		
	Actual	Budget	Projections	Budget	Δ 21/22 Budget	Δ %
Transfers from other Govts	\$ (4,641,086)	\$ (3,983,000)	\$ (3,983,000)	\$ (3,283,000)	\$ 700,000	(17.6)
Fee Revenues	(6,835,904)	(12,162,200)	(11,848,600)	(12,491,600)	(329,400)	2.7
Other Revenue	(1,953,787)	(1,535,000)	(1,740,000)	(1,857,000)	(322,000)	21.0
Total Revenues	(13,430,777)	(17,680,200)	(17,571,600)	(17,631,600)	48,600	(0.3)
Net Total	\$ 85,034,825	\$ 92,385,600	\$ 94,822,100	\$ 101,132,500	\$ 8,746,900	9.5

OPERATING BUDGET

SERVICE AREA OVERVIEW

Service Area	2020/21	2021/22	2021/22	2022/23		
	Actual	Budget	Projections	Budget	Δ 21/22 Budget	Δ %
Cogswell District Project	\$ -	\$ -	\$ -	\$ -	\$ -	-
Director's Office	523,155	487,400	496,100	495,700	8,300	1.7
Parking Services	(722,000)	(6,445,800)	(4,731,900)	(5,526,300)	919,500	(14.3)
Project Planning & Design	3,650,095	3,894,400	3,945,700	4,375,500	481,100	12.4
Road Operations & Construction	40,095,573	47,526,600	47,962,700	57,142,700	9,616,100	20.2
Solid Waste Resources	29,571,550	32,987,400	33,213,900	34,332,900	1,345,500	4.1
Traffic Management	11,916,452	13,935,600	13,935,600	10,312,000	(3,623,600)	(26.0)
Net Total	\$ 85,034,825	\$ 92,385,600	\$ 94,822,100	\$ 101,132,500	\$ 8,746,900	9.5

OPERATING BUDGET

STAFF COUNTS

Full Time Equivalent	2021/22 Budget FTE	Transfers (+/-)	Changes (+/-)	2022/23 Budget FTE	\$ Budget Change
Operating	352.3	5.7	20.4	378.4	\$ 2,237,600
Capital	19.0		3.0	22.0	N/A
Total	371.3	5.7	23.4	400.4	\$ 2,237,600

Full Time Equivalent – Includes full-time, part-time, and permanent positions. Calculated value based on the normal working hours of each position.

Summary of Changes

- Transfers:
 - 5 FTE positions in the Resource Plan and a 0.7 temp (intern) position.

- Operating: 20.4 FTE positions
 - Net 14 FTE positions to support the Provincial Road Transfer. Eliminated 10 Winter Seasonal positions (4 FTE).
 - 6.4 FTE positions to support parking services, address leadership span of control issues, support capital project planning / integration and to provide enhanced maintenance to Spring Garden Road.

- Capital: 3 FTE to support an increase in Active Transportation projects and major capital project delivery (volume & complexity). This FTE request relates to the current draft capital budget. Additional capital funding directed by Regional Council will require additional staff resources.

OPERATING BUDGET

SUMMARY OF CHANGES

Change Description / Service Impact	Amount
Approved 2021/22 Budget	\$ 92,385,600
Compensation Changes:	
New positions	2,087,100
Collective agreement increases, individual salary adjustments & compensation changes	240,900
Position conversions	125,500
Net decrease in overtime	(315,300)
Revenue Adjustments:	
Increase in sale of recyclables / marketable materials / bottle fund recovery	(1,300,000)
Net increase in parking revenue	(977,700)
Decrease in Solid Waste Diversion Credits	700,000
Decrease in Solid Waste tipping fees collected	180,000
Decrease in miscellaneous revenue	41,300
Other Budget Adjustments:	
Increase in State of Good Repair transferred from Capital	4,000,000
Increase in contracted services	3,197,100
Increase in costs related to Provincial Road Transfer	3,033,100
Increase in costs related to Operating Cost of Capital	728,900
Net decrease in materials, supplies, other goods and services	(169,200)
Increase in Sign Shop and insurance recoveries	(29,700)
Business Unit Transfers	
Transfer of Summary Offense Ticket Revenue to Fiscal Services	1,500,000
Transfer of LED Reserve contribution to Fiscal Services	(4,295,100)
Total Changes	\$ 8,746,900
2022/23 Budget	\$ 101,132,500

OPERATING BUDGET

OPTIONS UNDER BUDGET

Options Description / Service Impact	One-time / On-going	2022/23 Amount
Weekly Organics Collection <i>Service Impact: Reduce to bi-weekly service</i>	On-going	900,000
Tip Fee Increase Commercial Compost <i>Service Impact: Increase from \$75 to \$90</i>	On-going	220,000
Household Special Waste Program <i>Service Impact: Eliminate 6 events added in 21/22 - 17 to 11 events</i>	On-going	138,000
Tip Fee Increase Commercial Recyclables <i>Service Impact: Increase from \$30 to \$45</i>	On-going	95,000
Parking Ticket Fee Increase <i>Service Impact: Increase from \$35 (\$30 if paid within 7 days) to \$45 (\$40 if paid within 7 days)</i>	On-going	300,000 – 450,000
Weekend Parking <i>Service Impact: Charge for weekend parking</i>	On-going	150,000
Overnight Street Sweeping Enforcement <i>Service Impact: Reduce service</i>	On-going	60,000
Winter Parking Ban Enforcement <i>Service Impact: Reduce from 12 to 6 officers during events</i>	On-going	30,000
All Parking Violations except Paid Parking <i>Service Impact: Increased fines</i>	Outstanding Request to Province	700,000 – 1,000,000
Total Proposed Decreases / Revenue Increases		\$ 2,593,000 – 3,043,000

OPERATING BUDGET

OPTIONS OVER BUDGET

Options Description / Service Impact	One-time / On-going	2022/23 Amount	2023/24 Amount
New Sidewalks Municipal Roads (Capital)	On-going	200,000	7,500,000
Street Recapitalization Shortfall (Capital)*	On-going	TBD	8,000,000
Basic Crosswalks Upgrade Program	One-time	200,000	-
Proactive Vegetation Management Program	On-going	1,300,000	1,300,000
Road Safety Strategy (2024 – 2028) - Third party review / development	One-time	150,000	-
Photo Enforcement Project Lead	On-going	100,000	100,000
Parking initiatives to support Business Recovery (COVID)	One-time	TBD	-
Total Proposed Increases / Revenue Decreases		\$ 1,950,000	\$ 8,900,000

*Assumes Regional Council ultimately approves an increase to the 4-year Street Recapitalization capital plan of \$9M annually leaving an estimated \$36M investment shortfall over the next 4 years.

OPERATING BUDGET

FINANCIAL RISKS

Risk Details	One-time / On-going	2022/23 Amount
Otter Lake - Notice of Early Termination	On-going	550,000
Solid Waste Marketing Revenue	On-going	500,000
Parking Revenue	One-time	TBD
Contract Inflation	On-going	TBD
Supply Chain Issues	On-going	TBD
Road Transfer - Asset Conditions	One-time	TBD
Total Risk		\$ 1,050,000

