

CAPITAL PROJECT CHARTER

YEAR:	2021 - 2030
CHARTER NUMBER:	ENGS-068
CHARTER NAME:	Active Transportation Plan
LEAD DEPARTMENT:	Engineering

TYPE:	C RMR • GROWTH				
	This project targets completion of engineering / design and construction of new sidewalk and trail structures to eliminate gaps within the existing active transportation network.				
ASSET CATEGORY:	Civic FacilitiesCivic FacilitiesMaster Plan. Studies. & OtherRoads & Other Engineered StructuresCivical/ Oultural	C Parks & Trails C Mobile & Other Equipment C Land & Land Improvements			
SCOPE STATEMENT:	This project will ensure Active Transportation is strategically addressed for appropriate planning, design and accommodation, with infrastructure in place to increase accessibility and connectivity throughout the network.				

PROJECT CHARTER JUSTIFICATION:

Current State

In 2018, an Active Transportation Development Strategy and Gaps Assessment Report was completed, that documented a strategy on how the City may develop an Active Transportation Plan and delivered a prioritized listing of gaps of sidewalk and trail locations.

To close existing gaps within the transportation network that limit or create barriers for active modes, the report identified:

- 99 km of recommended sidewalk placement
- 67.5 km of recommended trail placement

An overview of current gaps of sidewalk connectivity is as follows:

Priority	Number of Sections	Estimated Length (m)	Estimated "Low" Cost	Estimated "High" Cost
1	9	2,969	\$ 765,000	\$ 916,300
2	25	12,113	\$2,984,000	\$3,570,000
3	54	13,397	\$3,403,000	\$4,071,000
4	155	70,729	\$17,897,000	\$21,413,000
Total	243	99,208	\$25,049,000	\$29,970,300

- Priority 1 = locations within 400 m of a school site and within 10 m of transit stop.
- Priority 2 = locations not within 400 m of a school site and within 10 m of a transit stop.
- Priority 3 = locations within 400 m of a school site but not within 10 m of a transit stop.
- Priority 4 = locations not within 400 m of a school site and not within 10 m of a transit stop.
- Cost estimates are based off of cost estimates generated with a "low" value (\$124.95/m2) or a "high" value (\$149.50/m2)

Trail gaps, although identified in the report, have not been prioritized and due to the nature of the trail system running from a location to a location but able to take multiple potential layouts are slightly more difficult to estimate in accuracy at a conceptual level. For the trail network the following was identified:

- 232 sections were identified as gaps
- Approximate 67.5 km of length identified
- Low cost construction estimate = \$12,133,181
- High cost construction estimate = \$48,532,368

Issues

- Site inspections must be performed to confirm constructability of actual sidewalk or trail; no confirmation or further prioritization has been completed beyond the Report.
- 2) Road right of way restrictions: Some locations may be restricted in existing right of way space to accommodate the placement of sidewalk or trail. Such sites require engagement with private land owners to seek easement or land purchase, or adjustments to design to accommodate movement.
- 3) Accessibility: Infrastructure must be designed and constructed for accessibility for various levels of mobility capabilities.
- 4) Although through the development process it is identified that new development address active mode infrastructure immediately adjacent to the site, infrastructure may not be in place to accommodate full active mode travel to the location(s) from various areas of the city. This can create safety issues as the public attempt to use roadways in place for access which do not truly accommodate the active mode.
- 5) Program alignment delay: Infrastructure that may be aligned for completion with alternative capital programs or investment is best suited for efficiency and economical reasons to be completed with these programs; however, this may cause delay from the infrastructure being completed and result in further time frames of reduced connectivity of the network.
- 6) Limited active mode data: There limited data surrounding volumes or use of the trail network. The result is reduced capability of quantifying priority areas and monitoring the network for growth, demands, or impacts of capital investment.

Opportunities

- Communication / Transparency: The completion of a strategic document to identify, prioritize and schedule work surrounding construction of new sidewalk and trails results in proactive communicate for background information and scheduling that may be available for public to view throughout the program.
- 2) Network evaluation: Data is a critical component of performing evaluations of network operations, efficiency and safety. Through collection of data around active modes (pedestrian / cyclist volumes), an on-going analysis may be performed to evaluate results of completing network connection pieces, monitor any mode shift, identify priority areas of use and capture growth or demand changes to the network.
- 3) Project alignment: Complete sidewalk or trail connection components within alternative capital projects. When doing so, it may create efficiency for completion and economic benefit through efficiencies of construction, as well it reduces disruption and negative impacts of construction to road users.

Risks

- Reduced safety: If not appropriately accommodated, road users may opt to attempt to use infrastructure that currently exists (roadway, boulevards) that can result in immediate and highrisk conflicts between road users.
- 2) Reduced quality of life: For some road users that are dealing with limited or restricted mobility capability, areas of the city to which appropriate infrastructure is not installed to accommodate movement reduce or completely inhibit accessibility and thus creates a barrier.
- 3) Construction costs: Construction costs may vary annually based simply on the industry, or be impacted directly by the actual scope of work required to accommodate infrastructure within an area due to scope increase related to addressing grading, utility conflicts, land requirements, tree conflicts, etc.
- 4) Public Perception versus Priority Levels: There are instances to which residents may have an opinion on where the City should be investing and what improvements need to be completed. Although these may often be inline for areas of improvement, scheduling may vary, and communication is required to share the evidence of "why" and "how" improvements are made.
- 5) Poor weather conditions to allow for construction completion.
- 6) Missed collaborative efforts between departments for construction activity
- Disruption to road users and services (transit / Fire and EMS / PW/ Waste Management) during construction activity.
- 8) Collaboration with land owners adjacent to intersections to acquire necessary easements for any required asset construction that impacts current private land.

STRATEGIC PLAN &	Council Priority: 3. Building a Transportation Network					
CORPORATE BUSINESS PLAN ALIGNMENT:	Activity: 3.8 Integrate active transportation into the planning process for the Transportation					
STAKEHOLDER IDENTIFICATION:	 City Council Residents / Businesses City Departments: Transit, Public Works, Fire and Emergency Services, Municipal Enforcement, Recreation & Parks, Planning and Development, Community and Social Development, Economic Development, Smart City, Capital Projects Office, Corporate Communications, 					
TIMELINE:	Previous year: site in	spections / confirmation of				
		n work for following year c	onstruction.			
	Q1: tender and awardQ2/Q3: Construction					
FINANCIAL INFORMATION:	Investment Year 2021	\$	1,100,000			
	2022	\$	400,000			
	2023	\$	400,000			
	2024	\$	400,000			
	2025	\$	400,000			
	2026 \$ 400,000					
	2027 \$ 500,000					
	2028	\$	500,000			
	2029	\$	500,000			
	2030	\$	500,000			
	\$ 5,100,000					
	Total	See Capital Project Work	sheet for details.			
OPERATIONAL IMPACTS:		• Yes • No				
		If yes, refer to Operating Worksheet for details.	Impacts			

Author: Dean Schick, Transportation Manager Project Charter Developer Date Dawny George Director: Director Director Deputy Chief Administrative Officer/Chief People Officer Deputy Chief Administrative Date

CAPITAL PROJECT WORKSHEET

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Land Determined Costs										
Concept Planning										
Detailed Planning and Design	\$140,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Site Servicing										
Strucure/Building Construction	\$750,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$350,000	\$350,000	\$350,000	\$350,000
Landscaping	\$60,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Construction Management	\$80,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Commissioning and QA/QC										
Contingency	\$70,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Public Participation Activities										
Equipment										
TOTAL	\$1,100,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$500,000	\$500,000	\$500,000	\$500,000

Please note Public Art is budgeted separately on the Ten-Year Capital Plan.

Comments

- 1) The 2021 funding request accounts for financial request changes and increased scope for the year's delivery to utilize ICIP funding increasing 2021 funding to include projected 2022 original scope.
- 2) 2022 2026 funding was then reduced by \$100K, to adjust the City's overall 10-year capital investment to be aligned to previous "original" values.
- 3) Due to multiple and substantial transportation network improvements, from new road construction to existing roadway widening projects over the next 10-years; Administration is recommending the Active Transportation project be programed off of a "cap" funding value with prioritized sites completed within a budget value of \$350,000 for construction.
 - a. Additional program funding would be allocated to:
 - i. Design of sites for the next year's program delivery. Note 2020 and 2021 have additional funds towards the design work so as to complete a larger number of site designs in preparation of future program delivery.
 - ii. Construction project management
 - iii. Landscaping would be required for completion with any sidewalk / trail construction.
 - iv. Contingency is valued at 10% of estimated construction value.
- 4) Based from the \$350,000 construction value; it is estimated that approximately 2,341 square meters of sidewalk could be placed per year; or approximately 1.2 km of linear sidewalk, based from the "high" cost estimates from construction.
- 5) Objectively, the Active Transportation Plan would target completion of a combination of both trail and sidewalk, however, this would incorporate consideration of benefits of placement and larger network demands which may trigger a priority of one versus the other for a time period.

OPERATING IMPACTS WORKSHEET

Seasonal winter maintenance (snow and ice clearing) along with sidewalk maintenance road maintenance. Estimated maintenance costs are based on \$2013.76 / km for trails \$1,382 / km for sidewalk and a unit rate of \$147 / tree. Based off of an estimated 1.2 km of sidewalk placement per year for the first 3 years And under an assumption that trees exist in the current boulevard location.
And under an assumption that trees exist in the current boulevard location.

OPERATING IMPACTS	2021	2022	2023
Sidewalk & Trail (snow / ice and sweeping maintenance) - Public Works	\$ 1,658.00	\$ 1,658.00	\$ 1,658.00
TOTAL	1,658	1,658	1,658