



TO: GENERAL COMMITTEE

SUBJECT: INVESTIGATION OF STRATEGIES TO ADVANCE THE ACTIVE TRANSPORTATION MODE SHARE AND ACTIVE TRANSPORTATION INFRASTRUCTURE FUNDING

WARD: ALL

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CHIEF ADMINISTRATIVE OFFICER APPROVAL: M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That Staff Report DEV032-20 concerning the investigation of strategies to increase the active transportation mode share and funding for active tractive transportation infrastructure, be received for information.

PURPOSE & BACKGROUND

2. On May 13, 2019, City Council adopted motion 19-G-134 related to the approval of the Infrastructure Master Plans with a sub-item regarding the advancement of the active transportation mode share and using Federal Gas Tax Funding for cycling infrastructure as follows:
 - “2. That staff report back on strategies and funding mechanisms to advance the active transportation portion of the modal share targets in the Transportation Master Plan, including the possibility of allocating a larger share of annual gas tax funding for active transportation. (ENG006-19) (File: D00)”
3. On December 9, 2019, City Council adopted motion 19-G-354 related to the 2020 Capital Budget and Plans with the following sub-item regarding active transportation funding:
 - “39. That as part of the report concerning the Active Transportation Implementation Strategies and Program Development to be presented to General Committee in 2020, consideration be given to re-establishing the “City Wide Cycling Network Program” Capital Project EN1265 at \$400,000 annually to be funded from the Tax Capital Reserve. (EMT007-19) (File: F05)”
4. In 2014, the City completed its first Multi-Modal Active Transportation Master Plan (MMATMP) to improve mobility and active transportation throughout the City. This represented a paradigm shift for transportation planning as the MMATMP included a comprehensive City-wide cycling and pedestrian infrastructure network that would be integrated into the planning, designing and implementation of the road network in the built boundary and the secondary planning areas.

5. Since the adoption of the 2014 MMATMP, several kilometres of new active transportation infrastructure have been implemented. In addition, new policies and plans have been developed by all levels of government that influence how active transportation infrastructure is planned, designed and maintained. The Transportation Master Plan completed in 2019 included an updated active transportation strategy to build upon the City's past successes and on-going work to shape the desired outcomes and prioritization of infrastructure and programming to support active transportation in Barrie over the next 20 years.

The proposed cycling network is 335 km in length and is estimated to cost \$120,000,000 to implement. The proposed network includes the following cycling infrastructure components:

- 64 kms of multi-use pathway
 - 36 km of in-boulevard pathways
 - 45 km of cycle tracks
 - 80 km of buffered bicycle lanes
 - 70 km of bicycle lanes
 - 41 km of signed routes
6. The City has been actively integrating cycling infrastructure as part of major road capital projects as well as implementing road diets (reallocation of road space from vehicles to cyclists to allow the provision of cycling lanes through pavement markings) and cycling routes with sharrows (on-road pavement markings indicating to drivers to share the road with cyclists). Over the past 6 years, an additional 36.7 km of cycling infrastructure has been established in the City of Barrie: 28 km has been implemented through road diets/on-road markings and 8.7 km through major capital road projects. A summary of built cycling infrastructure is included in Appendix "A".
7. In 2020, the City achieved its largest ever cycling network expansion with the implementation of 12.7 km (9.4 km completed, 3.3 km to be completed before the end of the year). Staff are proposing an additional 5.6 km of cycling projects for consideration by Council this fall for implementation in 2021.

ANALYSIS

Motion 19-G-134: Advancing the Active Transportation Mode Share

8. The existing modal shares within the City and modal share targets as identified in the Transportation Master Plan are as follows:

Mode	Current Modal Share (2016 travel survey)	2041 Mode Share Target
Automobile	88%	78%
Active Transportation	6%	12%
Transit	2%	7%
Other (motorcycle, school bus, taxi passenger, paid ride share, other trips)	4%	3%

9. The modal share targets have been set based on a scan of targets established in similar sized municipalities with consideration for demographics and climate. The established targets represent a 100% increase in the active transportation mode share and a 250% increase in the transit mode share.

10. Staff are undertaking the following actions to support the advancement of the active transportation modal share:
- a) Cycling network expansion: continued implementation of cycling infrastructure helps to encourage more residents to cycle as the provision of dedicated space for cyclists increases the level of comfortability and safety. A multi-year cycling infrastructure program is being proposed as part of the 2021-2030 capital plan and is outlined in paragraphs 12-16.
 - b) Sidewalk network expansion: the City's sidewalk network is well established and features very good connectivity; however, gaps still exist that may create a barrier for pedestrians. The Infrastructure Department operates a sidewalk infill program that is intended to address existing network gaps on an annual basis. This program was paused in 2020 but is being proposed for continuation as part of the 2021-2030 capital plan.
 - c) Official Plan update: establishing land use policies that support high density and mixed-use development in strategic locations and along designated corridors supports the implementation of higher order active transportation infrastructure. Staff are presently updating the Official Plan and have focused on enhancing these policies to encourage increased active transportation.
 - d) Development review process: as part of the development approval process, staff undertake a review of development proposals to ensure they align with active transportation policies contained within the Transportation Master Plan. In addition, a new Transportation Impact Study Guideline is in development that will require transportation demand management elements for residential and non-residential developments.
 - e) Outreach: staff are participating in the Active School Travel Project which is led by the Simcoe Muskoka District Health Unit (SMDHU). The focus of this project is to encourage students to travel to school by walking or biking through the examination of existing barriers and identification of improvement opportunities through field visits to schools throughout the City. Staff and the SMDHU are planning to explore additional community outreach strategies and partnership opportunities; however, due to the COVID-19 pandemic, this effort was put on hold in 2020. Staff hope to restart this effort in 2021 pending SMDHU resourcing.

Motion 19-G-134: Utilizing Federal Gas Tax Funding for Cycling Infrastructure

11. Cycling infrastructure is generally funded through the tax capital reserve and development charges. Utilizing a portion or larger share of the City's allotment from the Federal Gas Tax Fund will not necessarily result in additional funding for cycling infrastructure as the City's allotment is fully utilized. Any proposed increase would result in a corresponding reduction in tax capital reserves available to fund cycling infrastructure as that portion would be required to offset the reduction of the Federal Gas Tax Fund to impacted services. As part of the multi-year cycling infrastructure program being proposed as part of the 2021-2030 capital plan; annual expenditure requirements will be developed and recommended for consideration by Council. Funding sources for these projects will include the tax capital reserve, development charges, grants and the federal gas tax (both subject to availability).

Motion 19-G-354: Active Transportation Implementation / City Wide Cycling Network Program

12. As part of the 2021-2030 capital plan, staff are proposing a multi-year cycling infrastructure program referred to as the "Cycle Barrie Infrastructure Program". The Cycle Barrie Infrastructure Program

is a multi-year program focused on the implementation of cycling infrastructure over a 10-year period in the City's built boundary. This program replaces the "City Wide Cycling Network Program".

13. The impetus for this program is to ensure cycling network expansion continues as there are diminishing opportunities to implement road diets and there are constraints associated with implementing cycling infrastructure through large capital road widening projects (which occur at a slower pace within areas of the City that could benefit most from cycling infrastructure). The program will specifically examine opportunities to implement standalone capital cycling projects apart from large capital road widening projects.
14. The intent of the program is to identify and implement cycling infrastructure in areas with the highest population densities and greatest active transportation mode share (current) to obtain the highest return on investment in terms of potential cycling mode share increases.
15. The program consists of two phases, the first project phase is two years in duration and includes conceptual design and addresses requirements of the *Environmental Assessment Act*. This phase includes public consultation with directly impacted residents (e.g. loss of property, loss of parking, tree/vegetation removal, etc.) as well broader public consultation. This phase also includes an assessment of remaining road diet implementation opportunities to ensure that the expansion of the City's cycling network continues during this two-year period. The second project phase is 10 years in duration and includes detailed design, property acquisition, utility relocations and construction.
16. Cycling infrastructure in the Hewitt's and Salem Secondary Plan areas will continue to be implemented as development occurs; however, due to development occurring at a slightly slower rate than initially anticipated, several capital projects have been deferred to better align the timing of infrastructure that is required to support development. To help move active transportation elements forward in the interim, paved shoulders are being recommended to be included with pavement holding strategies for roads located in the Secondary Plan areas.

ENVIRONMENTAL AND CLIMATE CHANGE IMPACT MATTERS

17. There are no environmental matters related to the recommendation; however, the City's continued investment in active transportation infrastructure helps to increase the active transportation mode share resulting in improved air quality and a reduction in harmful greenhouse gas emissions due to reduced vehicle trips.

ALTERNATIVES

18. There are no available alternatives for consideration by General Committee.

FINANCIAL

19. There are no financial implications for the Corporation resulting from the proposed recommendation.

LINKAGE TO 2018-2022 STRATEGIC PLAN

20. The recommendation(s) included in this Staff Report support the following goals identified in the 2018-2022 Strategic Plan:
 - ☒ Fostering a Safe & Healthy City

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- ☒ Building Strong Neighbourhoods
 - ☒ Improving the Ability to Get Around

21. The City's continued actions and investment to support the implementation of active transportation infrastructure is critical to support planned growth as well as benefiting residents by providing an alternative mode of transportation that benefits health, is socially equitable, fosters economic activity and reduces greenhouse gas emissions responsible for climate change.

APPENDIX "A"

2015 to 2020 Cycling Infrastructure Implementation Summary¹

Project Limit	Infrastructure Type	Implementation Type	Implementation Year	Length (km)
Prince William Way - Mapleview Drive to Big Bay Point Road	bicycle lanes	road diet	2015	1.4
Hurst Drive - Big Bay Point Road to Bay Lane	bicycle lanes	road diet	2015	2
Livingstone Street - Kozlov Street to Anne Street	bicycle lanes	road diet	2015	1.5
Essa Road - Ferndale Drive to Coughlin Road	multi-use path	reconstruction	2015	1.2
Grove Street - Toronto Street to Penetanguishene Road	sharrow	on-road markings	2016	4.5
Duckworth Street/Cundles Road - Bell Farm Road to Livingstone Street	buffered / bicycle lanes	reconstruction	2016	1.5
Ardagh Road - CR 27 to Patterson Road	bicycle lanes	road diet	2016	3
Ferndale Drive - Tiffin Street to Dunlop Street	bicycle lanes	reconstruction	2016	0.9
Ferndale Drive - Dunlop Street to Benson Drive	sharrow	on-road markings	2016	2.2
Ferndale Drive - Benson Drive to City Limits	bicycle lanes	road diet	2016	0.5
Mapleview Drive - Huronia Road to County Lane	multi-use path	reconstruction	2017	0.8
Cundles Road - Leacock Drive to Anne Street	bicycle lanes	road diet	2017	0.5
Big Bay Point Road - Hurst Drive to Prince William Way	sharrow	on-road markings	2018	1.4

Project Limit	Infrastructure Type	Implementation Type	Implementation Year	Length (km)
Huronia Road - Yonge Street to Huronia Road	paved shoulders	road rehabilitation	2018	0.5
Huronia Road - Mapleview Drive to Lockhart Road	paved shoulders	road rehabilitation	2018	1.3
Mapleview Drive - Country Lane to Madelaine Drive	multi-use path	reconstruction	2019	0.8
Livingston Street - Stanley Street to Cundles Road	bicycle lanes	road diet	2020	2.2
St. Vincent Street - Hanmer Street to Livingston Street	bicycle lanes	road diet	2020	0.5
Dean Avenue - Big Bay Point Road to Mapleview Drive	bicycle lanes	road diet	2020	1.6
Marsellus Drive - Mapleton Avenue to Mapleview Drive	urban shoulders	road diet	2020	1.7
Mapleton Avenue - Ardagh Road to Essa Road	urban shoulders	road diet	2020	2.9
Tiffin Street - Ferndale Drive to Essa Road	buffered bicycle lanes	road diet	2020 (fall implementation)	2
Georgian Drive - Johnson Street to Penetanguishene Road	bicycle lanes	road diet	2020	0.5
Hurst Drive - Brennan Avenue to Minet's Point Road	multi-use path	reconstruction	2020 (fall implementation)	0.5
Hurst Drive - Bay Lane to Minet's Point Road	bicycle lanes	reconstruction	2020 (fall implementation)	0.8

¹ – cycling infrastructure within the municipal ROW

Cycling Infrastructure Implementation Summary to 2014¹

Project Limit	Infrastructure Type	Implementation Type	Implementation Year	Length (km)
Kempfenfelt Drive – Duckworth Street to Vancouver Street	multi-use path	reconstruction	1994	1.2
Mapleview Drive - CR 27 to Mapleview Drive	multi-use path	reconstruction	1996	1.7
Georgian Drive – Johnson Street to Duckworth Street	multi-use path	reconstruction	1998-2001	1.7
Veterans Drive - Harvie Road to Salem Road	bicycle lanes	reconstruction	2004	2.8
Ferndale Drive – Summerset Drive to Tiffin Street	bicycle lanes	new road	2005	1.0
Mapleview Drive - Yonge Street to east of Prince William Way	bicycle lanes	reconstruction	2009	1.9

¹ – cycling infrastructure within the municipal ROW