

THE CORPORATION OF THE TOWN OF GEORGINA

REPORT NO. OI-2023-0020

**FOR THE CONSIDERATION OF
COUNCIL**

November 22, 2023

SUBJECT: Lake Drive Functional Assessment Study Update

1. RECOMMENDATION:

- 1. That Council receive report OI-2023-0020 prepared by the Operations & Infrastructure Department dated November 22, 2023 regarding the Lake Drive Functional Assessment Study update;**
- 2. That Council receive the attached report “Lake Drive Functional Assessment Study, Final Report”, dated November 13, 2023, prepared by WSP (“the LDFA Final Report”); and,**
- 3. That, given the associated potential budget requirements that would result from the recommended implementation plans, Council defer discussions relating to next steps and budget approval to 2024 budget deliberations on December 5th and December 6th, 2023.**

2. PURPOSE:

To update Council of the completion of the Lake Drive Functional Assessment Study and to outline the associated next steps.

3. BACKGROUND:

Council requested staff (Resolution C-2021-0176) to undertake a study of Lake Drive during the 2022 budget deliberations, documented as Capital Initiative 22-CI-OI-11. This study was to complete a comparative engineering assessment of options to improve the use of Lake Drive by all road users.

Lake Drive is a popular corridor in the Town of Georgina, attracting motorists, cyclists and pedestrians who use it for both leisure and commuting. Its stunning views of Lake Simcoe and access to various communities and public parks make it a popular choice for residents and tourists. However, with increasing development, more road users, cyclists and pedestrians, concerns about mixed road usage have become more common.

The function of Lake Drive is a key factor in the development of the full potential of the waterfront. By re-imagining the usage of this roadway, the Town can better serve its

residents and tourists by providing a safe mixed-use corridor that promotes active transportation, while not compromising on access or traffic operations.

The Town of Georgina retained the services of WSP consulting engineers to complete a road functional assessment of Lake Drive, including Hedge Road as an extension of the corridor.

A functional assessment is a process used to evaluate the operational and safety characteristics of a roadway based on its needs and opportunities. It is a comparative assessment of options which takes into consideration community, technical and financial considerations for all road users and defines long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles.

Given the known stakeholder interest, this study follows the Municipal Class Environmental Assessment (MCEA), Schedule B under the Environmental Assessment Act process including:

1. Problem and opportunity definition;
2. Consideration of alternative solutions, public consultation and the selection of a preferred solution;
3. Development of alternative concepts for the preferred solution along with public consultation;
4. Development of an environmental study report along with a 30-day public review process;
5. Implementation.

The Town and its consultants have followed this process to complete the project and prepare the final study report. Should Council choose to move forward with any or all of the recommended implementation plan, staff will file a Notice of Completion and submit the final study report for statutory 30-day public review, per the MCEA guidelines.

4. ANALYSIS:

The Request for Proposals to complete the Lake Drive Functional Assessment Study was released November 16, 2022 and closed on January 16, 2023. There were six (6) plan takers and two (2) bid submissions received. The proposal was evaluated using a two-envelope system consisting of the technical score and the cost proposal. The bids were evaluated and one was determined to be technically acceptable. WSP consulting engineers was retained to complete the Lake Drive Functional Assessment Study.

The goal of this Study was to identify and recommend preferred alternatives and conceptual design(s) that will permit the safe and comfortable travel of Lake Drive and Hedge Road for all road users, including cyclists, motorists, and pedestrians.

4.1 Project Phases

The project was organized into the following phases:

- Phase 1: Review of existing conditions and problem statement development through technical analysis, policy review, site visits, and engaging with Town staff and the Council.
- Phase 2: Public and stakeholder engagement to collect feedback on existing issues through public survey, virtual workshops, and beach pop-up sessions.
- Phase 3: Identification and evaluation of alternative solutions via a multi criteria analysis through assessing impacts and cost of each alternative and engage with residents and stakeholders through a Public Information Centre.
- Phase 4: Final evaluation including general cost estimates for design and construction of each preferred alternative and the association prioritized construction timelines.

4.2 Study Area

The study area corresponds to Lake Drive South, North, and East in addition to Hedge Road. Given variations in the street typology, character and the roadway conditions, the study area was divided into the following sections:

- Section 1: Lake Drive South between Ravenshoe Road and Bayview Avenue; Lake Drive North between Church Street and Metro Road North.
- Section 2: Lake Drive North and East between Coxwell Street and South Drive
- Section 3: Lake Drive East between South Drive and Hedge Road; Hedge Road between Lake Drive East and Park Road.

4.3 Proposed Alternative Lane Arrangement Considerations

Understanding the limitations of using only the existing paved surface (variable at 5.9m – 7.5m), the development of alternatives began with the identification of driving lane arrangements and consideration of potential active transportation features, which consisted of the following general concepts:

1. Do Nothing: Maintain a two-motor vehicle lane roadway with a signed route for cycling;
2. Two Lanes with Sharrows: A two-motor vehicle lane roadway with a signed route for cycling, and add pavement markings;
3. One Lane- Paved Shoulders: A two-motor vehicle lane roadway with delineated paint for dedicated cycling in the shoulders;
4. One Lane - Multi-Use Path: A one-way, one-motor vehicle lane roadway with an abutting buffered multi-use path for cycling and walking;
5. Advisory Lanes: A two-way, one-lane advisory lane, with shoulders for cyclists and pedestrians that can be used by motorists to yield for oncoming traffic;
6. Alternating One Lane - Multi-Use Path: A one-way, one-motor vehicle lane roadway, which alternates travel direction between Regional intersecting roads, and an abutting buffered multi-use path for cycling and walking; and
7. Partial Road Closures: Road closures to vehicular traffic at select locations along the Study Area at the Waterfront Parks, subject to the findings of the Waterfront Parks Master Plan.

Following this, functionally feasible alternative cross-sections were then developed for each section of the Study Area. This was completed by:

- Combining the appropriate and acceptable alternatives outlined above for motor vehicle lane arrangements, with the appropriate and acceptable alternatives for active transportation facilities; and,
- Carrying forward the cross-sections that could be functionally feasible and implemented within the existing pavement width of each respective section of the Study Area.

The evaluation of alternative cross-sections was then completed using a multi criteria analysis with associated weighting for each criterion; ranked based on the relative importance in addressing the problem statement and feedback received from the public. The findings of this resulted in the set of preferred alternatives which were then presented at the Public Information Centre for public comment and adjusted based on feedback.

4.4 Preferred cross section lane arrangements

Through the evaluation of alternative cross-sections, the technically preferred cross-section alternative for each Section of the Study Area was identified as follows:

4.4.1 Section 1: One-way travel lane with a multi-use path

These features provide safe and comfortable travel for all roadway users. This alternative would functionally fit within the pavement width of the study area. The one-vehicular lane arrangement allows for the development of safer active transportation facilities.

The envisioned basic road cross-section will consist of:

- 1) One general purpose lane at 3.25m in width
- 2) A buffer with bollards at 0.6m in width
- 3) One multi-use path (lake side) at 3.15m in width

Considerations and recommendations for these alternatives which can be made on their implementation, include the direction of vehicular travel; and/or, whether the direction of vehicular movement will alternate east to west, or north to south at intersecting Regional Roads and if seasonally implemented. It is recommended, given the general purpose lane is on the 'land' side, that the traffic flow remain Northbound, to benefit from existing driver behaviour (driving on the right side of the road), right-in, right-out turns, and limiting MUP crossings.. No Stopping needs to be considered for this section should it be implemented.



Picture 1: Proposed lane arrangements – Section 2

4.4.2 Section 2: One-way travel lane with a multi-use path

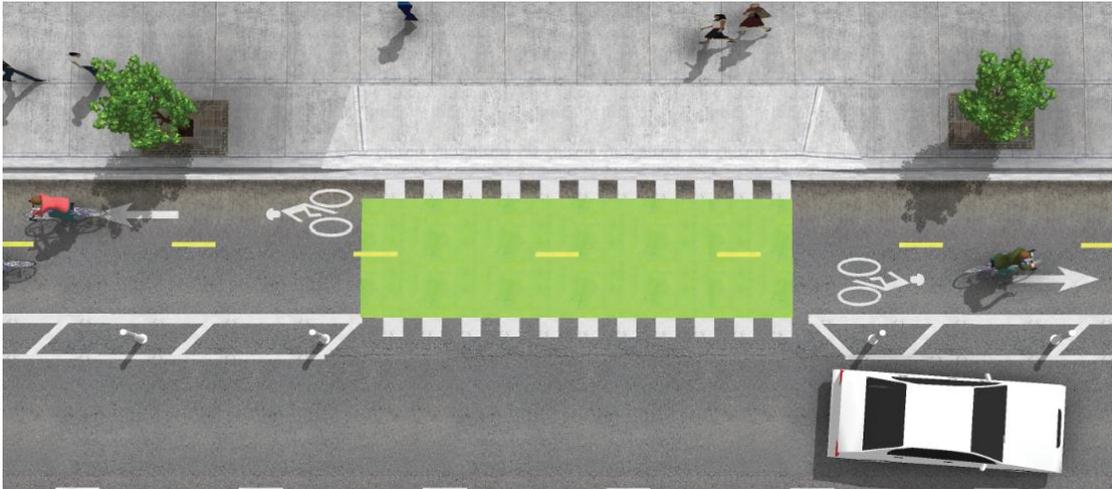
These features provide safe and comfortable travel for all roadway users. This alternative would functionally fit within the pavement width of the study area. The one-vehicular lane arrangement allows for the development of safer active transportation facilities.

The envisioned basic road cross-section will consist of:

- 4) One general purpose lane at 3.25m in width
- 5) A buffer with bollards at 0.6m in width
- 6) One multi-use path (lake side) at 3.15m in width

Considerations and recommendations for these alternatives which can be made on their implementation, include the direction of vehicular travel; and/or, whether the direction of vehicular movement will alternate east to west at intersecting Regional Roads and, if seasonally implemented.

It is recommended, given the general purpose lane is on the 'land' side, that the traffic flow remain Eastbound to benefit from existing driver behaviour (driving on the right side of the road), right-in, right-out turns, and limiting MUP crossings. This also supports traffic flow into Jackson's Point, helping to promote local business. No Stopping exists along the entire section and is important as part of this implementation.



Picture 2: Example of private entrance vehicular crossing MUP with buffer strip

4.4.3 Section 3

Section 3 has varying contexts. Continuing the residential landscape from Section 2, Section 3 then passes through urbanized Jackson's Point, and transitions back to residential along Hedge Road. There is also less adjacent connectivity with parallel streets, specifically along Hedge Road. Each of these portions of the road requires a unique approach so consequently Section 3 was subdivided and evaluated in three sub-segments, with the preferred alternatives identified as follows:

Section 3, Segment 1 (Lake Drive from South Drive to Ravenswood Drive): One-way travel lane with a multi-use path.

This section continues the residential context from Section 2. Although Lake Drive transitions to an urban road with a sidewalk on the north side, the land use, transportation, and active transportation are the same as in Section 2.

The envisioned basic road cross-section will consist of:

- One general purpose lane at 3.25m in width
- A buffer with bollards at 0.6m in width
- One multi-use path (lake side) at 3.15m in width

Considerations and recommendations for these alternatives which can be made on their implementation, include the direction of vehicular travel and if seasonally implemented. These should mimic Section 2 for consistency.

Section 3, Segment 2 (Lake Drive from Ravenswood Drive to Hedge Road): Two shared lanes with sharrows.

Jackson's Point is an urbanized section with several local businesses. Based on the context of the area, sharrows were determined to be the most preferred for Lake Drive in this area to best provide access to the existing businesses and existing on-street parking spaces.

The envisioned basic road cross-section will consist of maintaining 2 existing general purpose (1 eastbound and 1 westbound) shared lanes at 3.5 m in width, with added painted sharrows. A westbound terminus alignment and turn-around at the furthest western point must be implemented within the section.

***Section 3, Segment 3 (Hedge Road from Lake Drive to Park Drive):
Advisory Bike Lanes***

Advisory Bike Lanes alternative would functionally fit within the existing pavement width. Hedge Road does not have a parallel regional road or many local connecting streets, which makes it a good candidate for Advisory Lanes.

Advisory lanes are a shared roadway facility that visually delineates space for cycling on a narrow roadway by dashed outer lane lines. The roadway contains no centreline, and motor vehicles share the centre roadway space for two-way travel. The centre travel lane is narrower than two conventional travel lanes and may be as narrow as a single travel lane. Motor vehicles yield to oncoming traffic by entering the advisory bicycle lane. If a cyclist is present, motorist should slow and yield to the cyclist prior to entering the advisory bicycle lane. Motorists must always yield to cyclists and overtake with caution. The envisioned basic road cross-section will consist of 1 two-way general purpose driving lane at 3.5m in width and 2 dedicated cycling lanes at 1.75m in width on either side.

This section also includes a single lane alignment at the Mossington bridge. It should be noted, a thorough and exhaustive communication campaign must be a key consideration for implementing advisory bike lanes.

4.5 Does this solve the problem?

The preferred alternative solutions that have been identified address the problems and opportunities by:

1. Redistributing the car-centric design of a two-lane motor vehicle roadway to a roadway design that is safe and comfortable for all roadway users by dedicating the pavement space to one-lane motor vehicle lane roadway and an abutting dedicated active transportation supportive facility (i.e., multi-use path) for pedestrian and cyclists, that is buffered and separated from vehicular road travel;
2. Transforming Lake Drive and Hedge Road to be an inviting destination and corridor for all roadway users; and,
3. Redistributing roadway spaces to cycling and pedestrian travel to reduce congestion, promote active transportation in the community, encourage the slow and safe scenic travel on Lake Drive and Hedge Road, and improve traffic calming.

The recommended lane arrangements are supported by the survey results. Further, it provides consistent travel for all roadway users throughout the Study Area.

It must be noted that traffic calming alternatives are integral to implement in parallel with the preferred alternatives in the respective sections, in order for traffic speeds to be managed effectively in one-way sections. Options assessed include centre bollards, curb outs, stop signs/flashing lights, mirrors, speed humps, signage, education campaign, and increased enforcement. Each will be implemented in suitable locations during design, based upon available standards (Canadian Guide to Traffic Calming (2018)) and Town traffic calming policy.

Taking into consideration public feedback on the technically preferred alternatives, the recommended plan for sections 1,2 and 3 have been developed based on a balance of the weighted evaluation criteria.

The recommended plan aligns with the results of Phase 1 of the Waterfront Parks Masterplan, and specifically addresses key areas including:

- Creating a safe pedestrian/cycling connection between De La Salle park and Jacksons Point; from a continuity, safety, and economic perspective; highlighted as a next step as the WPMP moves forward.
- Proposed MUP/Lane arrangement aligns well with proposed realignment of roadways/pathways at Willow Beach and De La Salle Park, having cycling and pedestrian facilities continue adjacent to Lake Simcoe while vehicular traffic is re-routed (see Picture 3)
- Supports Active Transportation connections between North Gwillimbury Park, Willow Beach, De La Salle Park, and Jacksons Point (Bonnie Park/Lorne Park)



*Picture 3: Waterfront Parks Masterplan – Willow Beach Rendering
MUP continuation along beach front*

Further, the recommended plan aligns with both Regional plans and Municipal master plans, and overlays the Lake-to-Lake routing. Should Council move forward with design and construction of any portion of the recommendations, Staff will be applying for eligible provincial and regional grant programs to offset associated construction costs. Most notably, the pedestrian and cycling partnership program (PCPP) through York Region, which aims to offset 33% or 50% of project costs, based upon eligibility criteria, up to \$1 million.

4.6 Implementation

Given that the Study Area is lengthy at 24 kilometers, it is recommended that implementation be carried out in a phased approach, in the sequence as follows:

- Phase i: Section 2 and Section 3, Segments 1 and 2
- Phase ii: Section 1
- Phase iii: Section 3, Segment 3

Phase i was identified as the highest priority sections, offering the greatest near-term potential benefits to the community.

The next steps for Phase i implementation would include:

- Traffic, pedestrian and parking studies to fill existing information gaps and inform the design;
- Detailed design of any or all recommended alternatives; and,
- Public communication and education.

In order to accurately and successfully implement phase i (at over 13.6 kms in length), the detailed design and communication strategy is of utmost importance.

It is further recommended that Phase i be seasonally implemented, beginning in the spring, and ending in the fall, to assist with winter maintenance operations. Additionally, pedestrian and cycling-focused tourism drops in the winter months. Should Council choose to adopt a seasonal implementation of Phase i, a pedestrian study should verify the legitimacy of seasonal implementation pre/post installation.

The implementation plan, should Council support the recommended outcomes within the WSP report, are as follows:

Year	Section	Details
2024	Section 2	Staff to deliver parking study offset, mid-block traffic study data, draft communications plan
2024	Section 2 Section 3 (segment 1&2)	Detailed Design incl traffic calming, signs, pavement markings + pedestrian counts
2025	Section 2 Section 3 (segment 1&2)	Implementation incl. traffic calming, signs, pavement markings
2026+	Section 1	Detailed Design incl traffic calming, signs, pavement markings + pedestrian counts

Year	Section	Details
2026+	Section 1	Implementation incl traffic calming, signs, pavement markings + pedestrian counts **Aligns with resurfacing plans for Lake Dr. S.
TBD	Section 3 (segment 3)	Design and implementation incl traffic calming, signs, pavement markings + pedestrian counts

Staff recommend that the studies, detailed design and public communication efforts be completed in 2024 with the Phase i corridor improvements planned for implementation in spring of 2025. Staff are able to off-set some of the “additional studies” as outlined in the WSP final report using existing programs/resources at no additional cost. Prior to future phases of implementation, staff will provide Council with an update on feedback and success of Phase i implementation.

4.7 Operations and Maintenance

Considerations should be made on the following topics of Operations and Maintenance:

- Regular sign replacement/maintenance: It is expected the net benefit of removing, replacing, and installing new signs within the phases will not result in any additional resources required for ongoing annual maintenance
- Seasonal implementation:
 - Installation and removal of bollards/curbs is estimated at \$20,000 annually. This figure can be definitively estimated once the design is complete and quantity of devices is known.
 - Sign tab changes can be absorbed within the existing operating budget
 - Winter maintenance remains unaffected. Seasonal implementation is required due to winter maintenance operations
- Pavement Marking replacement/refresh: Expansion of pavement markings will result in an annual operating expense, estimated at an additional \$15,000 based upon 2023 rates. This figure can be definitively estimated once the design is complete and quantity of pavement markings is known
- Garbage collection will be maintained, and will be addressed through detailed design

5. RELATIONSHIP TO STRATEGIC PLAN:

Delivering Service Excellence:

- Proactively manage infrastructure and assets to ensure service continuity.

Creating a Vibrant, Healthy and Safe Community for all:

- Support a safe, healthy and inclusive community.

This initiative also aligns well with the Economic Development and Tourism strategy’s objective to strengthen tourism, as well as the Town’s approach to increasing active transportation opportunities.

6. FINANCIAL AND BUDGETARY IMPACT:

None related to this report, however, the expected implementation and costs for completing the future corridor improvements in the phased implementation program, should Council choose to advance these, are summarized as follows:

Year	Section	Details	Estimated Budget
2024	Section 2	Staff to deliver parking study offset, mid-block traffic study data, draft communications plan	Included in OpEx
2024	Section 2 Section 3 (segment 1&2)	Detailed Design incl traffic calming, signs, pavement markings + pedestrian counts	\$100,000
2025	Section 2 Section 3 (segment 1&2)	Implementation incl. traffic calming, signs, pavement markings	\$275,000 + Contingency
2026+	Section 1	Detailed Design incl traffic calming, signs, pavement markings + pedestrian counts	\$50,000
2026+	Section 1	Implementation incl traffic calming, signs, pavement markings + pedestrian counts	\$130,000 + Contingency
TBD	Section 3 (segment 3)	Design and implementation incl traffic calming, signs, pavement markings + pedestrian counts	\$80,000
		Contingency: 10%-30%	\$100,000 across all phases and years
		Total:	\$735,000

It is recommended that should the phased implementation be advanced, that staff ensure the 10 year capital program is updated to reflect the impacts.

7. PUBLIC CONSULTATION AND NOTICE REQUIREMENTS:

Extensive public consultation and engagement has been completed for this study to ensure residents and stakeholders were afforded multiple opportunities to provide input. All public communications noted that the study focused exclusively on the existing edge-to-edge pavement configuration and will not recommend any widening or additional infrastructure beyond the existing paved surface of the roadway.

In addition to the public consultation, the Chippewas of Georgina Island have been consulted during this process including provision of the Notice of Public Information Centre. The MECP was also contacted to confirm whether additional Indigenous Communities have an interest in the study area for this project. Further, consultation was extended to the Lake Simcoe Region Conservation Authority, York Region Public Health Services, York Region Transit, York Region Emergency Services, York Region, the public and Catholic school boards and utility providers as part of the Technical Advisory Committee consultation.

Key public consultation components consisted of the following:

Webpage: A dedicated project webpage (Georgina.ca/Study) was created and regularly updated at key points in the project.

Survey: A public survey was posted on the Town's project webpage to collect feedback about the preferred priorities for each section of the study area from August 3 to August 27, 2023. Letters were mailed out to all residents that front on Lake Drive East, North, South, and Hedge Road with access to the survey via a QR code and the webpage link. Advertisement for the survey was completed via the Town's website and social media channels in addition to being posted on the project's webpage and the direct mailout. 558 people responded to the online survey on the Study webpage, including: 86 residents front facing in Section 1, 121 residents front facing in Section 2, and 53 residents front facing in Section 3.

Virtual Workshops: The project team completed two virtual presentation workshop on August 15th and August 17th, starting at 6pm. Registration for the sessions was posted on the Town's website. Advertisement for this presentation was completed via the Town's website, project's webpage, and social media channels. 14 and 8 people attended the workshop sessions on August 15th and August 17th respectively. The sessions were recorded and posted on Town's YouTube channel, with 56 views on the video as of November 1st, 2023.

Beach Pop-up Sessions: In-person information sessions were held at Willow Park and De La Salle Park on August 20, 2023. These sessions provided a high-level overview of the project via board displays and handouts including a link to the public survey and engage discussions with stakeholders regarding their challenges and opportunities with Lake Drive and Hedge Road. Advertisement and further information for these sessions was provided via the Town's website and social media channels as deemed appropriate.

Public Information Centre (PIC): A PIC illustrating the background review, alternative options, evaluation criteria and the assessment of potential solutions for Lake Drive and Hedge Road was held on September 26, 2023 at the Chapel at De La Salle Park. The Notice of the Public Information Centre was advertised through the Town's website, project webpage, Town Council agenda, advertisement in local newspaper, and through the Town's social media platforms. Residents were encouraged to provide their comments on the preferred options. Feedback

opportunities included provision of written comments during the PIC meeting as well as sending comments electronically prior to the comment deadline of October 10, 2023. 42 people attended and registered at the in-person event.

Notice of Completion: Subject to Council's endorsement of the Study Report included with this staff report, staff will complete the final Study Report and file a Notice of Completion. The final Study Report will then be placed on a 30-day public review period as per the requirements of the MCEA process.

Resident feedback throughout the project has been compiled and logged. The feedback was analyzed and incorporated into the preferred alternatives where feasible.

Public communication initiatives will be incorporated into the next steps of the project to keep the members of the community informed as to progress and timing.

8. CONCLUSION:

This report provides a summarized update of the key findings from the LDFA study, which was commissioned to consider and recommend options to improve portions of the Lake Drive and Hedge Road corridors for the benefit of all road users. The study recommends pre-cursor studies and design be carried out in 2024.

By implementing the pre-cursor studies and design recommended by the LDFA Study, the Town will be in position to proceed with phased implementation of corridor improvements commencing in 2025.

APPROVALS

Prepared By: Ryan Post, Project Manager
Reviewed By: Neil MacDonald, Manager, Capital Delivery
Recommended By: Michael Vos, Director, Operations & Infrastructure
Approved By: Ryan Cronsberry, Chief Administrative Officer

Attachments:
Attachment #1- Lake Drive Functional Assessment Study Final Report + Appendices