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## **Multi Use Trails - Safety Enhancements Staff Report to Council**

Report Number: 2021-11

Department(s): Public Works Services, Engineering Services

Author(s): Mark Agnoletto, Director of Public Works

Meeting Date: February 22, 2021

### **Recommendations**

1. That the report entitled Multi Use Trails Safety Enhancements dated February 22, 2021 be received; and,
2. That the trail safety enhancements on the Tom Taylor Trail be approved, which include:
  - i. Painting of a centre line.
  - ii. Increasing sight lines.
  - iii. Increasing signage for hazards and trail safety.
  - iv. Implement a public education program; and,
3. That staff be authorized to hire two (2) summer students as Parks and Trails Ambassadors; and,
4. That staff proceed with coordinating a Council Workshop to explore the future direction and priorities for developing multi use trails, by Q3 2021; and,
5. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

### **Executive Summary**

This report provides an overview of trail safety along the Tom Taylor Trail and looks at strategic ways to manage the ongoing growth and success of our trails in Newmarket. Various stakeholders were assembled to address these concerns and have compiled data and research to support both short and long term objectives. The recommendations put forward are intended to improve trail safety and improve

education of trail users with trail ambassadors. Furthermore there is a recommendation to undertake a Council workshop to explore and identify the future direction and priorities for multi use trails in Newmarket. Those concepts may include, but are not limited to, design and maintenance guidelines, public consultation and expanding trail capacity.

## **Purpose**

To provide a review of existing multi use trails, best practices and options for improving trail use and safety. The report outlines recommendations for trail modifications and enhancements, as well as recommendations on future development of the trail system. Considerations for education and enforcement are also addressed.

## **Background**

Newmarket has developed over 42 km of paved recreational trails throughout the Town. These amenities have become an integral part of our community for recreational and transportation purposes. The Tom Taylor Trail (TTT) is the most prevalent trail and runs through the centre of the Town, from the northern to southern boundaries. It has become a critical route connecting key Town destinations such as the historic Main St, the GO Station, Davis Drive, various Town facilities and other recreational amenities. In addition the TTT forms part of our multi use pathways (MUPs) network, the Nokiidaa Trail and the York Region Lake to Lake Trail.

The TTT has seen great success and has been embraced by the community and by the Region as a whole. This success has resulted in high levels of use as well as diverse types of use (cyclists, pedestrians, skateboards, mobility scooters etc.). Furthermore the trails are shared among various types of users, from dog walkers, joggers, families and even organized cycling groups. The combination of high volumes and diverse uses has raised some concerns around increased congestion, trail safety and the overall trail experience.

While overall trail use continues to be safe and enjoyable, there were two significant incidents in 2020 that required emergency services response along the trail. Both situations were serious in nature with significant injuries. The first was a head on collision between two cyclists, and the other involved a cyclist and a pedestrian. It is plausible that there have been other close calls or incidents that have occurred without being reported.

Throughout the years, ongoing improvements, modifications and public education measures have been implemented with the goal of improving trail safety while maintaining a positive user experience. Those enhancements would include initiatives such as minor trail modifications, regular inspections, improvement to sight lines, educational signage and ongoing public communication.

The overall growth of the Town and the increasing popularity of our trail systems, has uncovered the need to review our approach going forward. Newmarket's trail systems, and particularly the TTT have reached a point in their progression where changes may be necessary. As a result, a thorough and multi-layered approach is required to address these needs, in both the short and long term.

## **Discussion**

**Trail improvements are recommended to be addressed in two parts: (1) immediate safety improvements and education, (2) a Council workshop to identify the future direction and priorities for developing multi use trails.**

Staff analysed key data and information collected for this report. The information was compiled from a number of key areas. An on-site trail inspection, focusing on trail safety, was completed by our insurance broker's Risk Manager (BFL Canada) and reviewed by our legal council (PM Law). This was also layered with a jurisdictional scan of other municipal practices around trail use, as well as a formal trail count on the TTT. Upon review of the information, staff applied the three E's concept, similar to our traffic reviews, which includes education (signage and outreach), enforcement (how managed) and engineering (how constructed).

The information and research clearly identified two particular needs. The first consists of short term needs, which recognize a requirement for enhanced education and trail safety. Following this, there are a number of long term actions that were considered. Considerations for formal trail guidelines or expanding trail capacity, as examples, illustrate the need for the Town to clarify their long term approach. Given the success, importance and complexity of multi use trails in Newmarket, the Town should establish a more strategic and formal long term plan.

**It is proposed that the Town proceed with trail safety improvements on the Tom Taylor Trail, which include line painting, improvement of sight lines, hazard warning signage and improved user education.**

A comprehensive trail inspection of the TTT was undertaken in August of 2020 by the Town's Insurance broker's Risk Manager (BFL Canada), see Appendix A – BFL Canada, Town of Newmarket Trail Inspection. This was further reviewed by staff and external legal council (PM Law). While the overall trail system is in good condition and well managed, there has been a noticeable change in the user volumes due to ongoing growth. There are a number of opportunities that have been recommended to improve trail safety and the overall trail experience.

There were a number of observations identified by BFL Canada, but a key observation during the review was the actions of cyclists. It specifically noted: "...many cyclists were riding at an unsafe speed and not taking into consideration others using the trails for different purposes. In general, cyclists did not appear to be overly cautious and in some cases rode in small groups taking over the entire trail." This observation illustrates the overall change in use that the TTT is experiencing and, as a result, the need for modifications.

The recommendations by the BFL Canada were also compared to other municipalities with high use trails. Town staff completed a jurisdictional scan that identified these key safety elements along similar and well developed trail systems. See Table 1.01 - Municipal Best Practices - Trail Safety Elements, below. Given the consistency between the report recommendations and municipal best practices, four (4) key recommendations are being made.

Key recommendations include:

1. ***Centre Line Painting*** – We need to establish a solid centre line through the entire length of the TTT. The intent is to create a better visual separation and defined lanes for users. This will be most effective for cyclists when navigating hills, corners and areas with limited sightlines. This will also help pedestrians, such as dog walkers, in keeping to a safe space. Users of all types will be expected to stay to the right side of their path of travel, particularly around corners and areas with limited sight lines. This follows traditional road traffic practices that trail users can easily understand.
2. ***Improved Sight Lines*** – While key sightlines are maintained along the trail, there is a recommendation to increase the visual line of sight even further, particularly given the speed and nature of use by cyclists. This would include selective and sensitive tree and shrub removal as well as increased grass cutting in specific areas, beyond the current 1m shoulder that is maintained.
3. ***Increased Signage*** – While varied signage occurs along the trails, it is recommended that additional hazard and educational signage be installed. Increased notification of hazards such as hills, curves, controlled intersections and overall improved trail information for users will allow users to better adapt their actions during trail use. This would be implemented to augment traditional signage and pavement symbols and markings.
4. ***Education*** – An education program and additional outreach is recommended to inform the public of alternate routes, trail etiquette and new rules. Areas of focus

would include, but not be limited to, cycling, dog walking and overall trail safety. Alternative routes for cyclists is another opportunity where education may improve overall trail use and reduce congestion.

<b>Table 1.01</b> <b>Municipal Best Practices - Trail Safety Elements</b>			
<b>Municipality</b>	<b>Centre Lines</b>	<b>Hazard Signage</b>	<b>Education Program</b>
Toronto	•	•	•
Ottawa	•	•	
Hamilton		•	
Burlington	•	•	•
London	•	•	•
Kitchener	•	•	
Vaughan	•	•	

**It is recommended that summer students be hired as educational ambassadors to support trail education on our trails as part of a comprehensive communications plan.**

Educating and communicating with residents out in the field has proven to be highly impactful. As always, staff would support an “education first” approach prior to enforcement, when appropriate. A strong communication strategy, combined with the concept of trail ambassadors, would likely yield significant improvements to trail safety and the overall user experience. This approach may also provide support to monitor trail use, collect additional trail data and provide improved customer service in our parks and on our trails.

### ***Communications***

Corporate Communications will work with all stakeholders to develop a communications and public education plan that will target stakeholders by:

- Raising awareness of the public about the new enhancements for trail safety.
- Educating stakeholders on the new enhancements made on the trails and any new rules that should be followed on the trails.
- Reminding all stakeholders of safety tips for cyclists, walkers, trail users with pets etc.
  - Trail etiquette
  - Alternate routes
  - Importance of sharing the trails
  - General trail-related safety tips
  - Speed on trails

The Town's Corporate Communications Department will deploy a number of tactics that may include, but is not limited to, a media release, information on the website, social media, e-newsletters, ads in the Newmarket Era (Town Page), and an educational video. This could also be further supported and enhanced by the use of educational park and trail ambassadors. Future public engagement opportunities related to trail enhancements using HeyNewmarket and more tactics, can also be deployed.

### ***Education and Enforcement***

#### **Option #1 – Education-first approach via trail ambassadors (recommended)**

The Town traditionally practices an education first approach to enforcement, when appropriate. While trail use is controlled under the Parks By-Law, there are limited opportunities and resources to manage any negative behaviour and actions on trails. The concept of trail ambassadors has been considered, in which summer students are employed to walk, cycle and engage with users along the trail systems. These resources could be a combined effort for ambassadorship to fill other needs within the Town.

Town staff support the use of trail ambassadors as an alternative means to enforcement. The Town's Legislative Services Department adopted a similar approach in 2019 by utilizing summer students to promote the Town's new Smoking By-law and the regulations pertaining to smoking in parks and on trails. This campaign was extremely successful in using proactive education to mitigate and reduce complaint calls pertaining to newly implemented smoking laws.

In addition to the standard communication tactics, innovative approaches such as educational 'traps' for cyclists such as the strategic placement of mobile solar speed boards could be carried out by ambassadors in an effort to educate cyclists in particular. Trail ambassadors could be utilized as a first point of contact with residents and should matters escalate that require enforcement action, trail ambassadors would contact a municipal enforcement officer to provide assistance and confirm compliance with Town by-laws.

#### **Option # 2 – Increased enforcement on Town trails (not recommended)**

Alternatively, municipal enforcement officers could be tasked with increasing enforcement initiatives along the Town's trail system. While municipal enforcement officers will always take an education-first approach, this option presents a lower

threshold for tolerance by having enforcement officers proactively patrol Town trails to monitor for compliance with Town by-laws.

Under this option, there are impacts to both staff and financial resources that will require further consideration. For this reason, Town staff are recommending Option #1 to mitigate trail use concerns through proactive education by trail ambassadors and utilizing municipal enforcement officers for matters that escalate where voluntary compliance cannot be achieved or where “hot spot” locations have been identified as problematic and may require additional attention.

If speed limits along the trail system are adopted, which are not being recommended at this time, the Town will be legally responsible to ensure enforcement through Regulatory Services. Municipal enforcement officers will require photo radar equipment to monitor speed limits. Additional challenges may arise due to the intensive amount of resources required to monitor for compliance, as municipal enforcement officers will be required to conduct stationary blitzes at problematic locations along the trail system. While this option is feasible, there will be budget and resource impacts that will need to be carefully considered.

Staff support the combined approach of a strong communications plan and the deployment of trail ambassadors. This plan and education first approach, would be observed for the year as a pilot program to gauge its impact and value moving forward.

### **Undertake a Council workshop to explore the future direction and priorities for developing Multi Use Trails.**

The benefits of recreational trails within a community are numerous and well documented. Over the past few decades, Newmarket has consistently and significantly invested in recreational trails. Through long term plans and a strong visionary approach, the Town was able to establish key networks, such as the Tom Taylor Trail and North West Quadrant/Dave Kerwin trail systems. That approach may need to be replicated to ensure continued success of the trail systems as the Town continues to grow.

#### ***Formal Trail Guidelines***

Staff believe the Town has reached a point where a formal approach needs to be developed for the overall operation, design and maintenance of trails moving forward. See Table 1.02, Best Practices – Guidelines, Standards, Trail widths. This review of other municipalities has shown that other well developed and high use trail systems have detailed and formal design guidelines that set out clear standards for trail design, construction and maintenance.

<b>Table 1.02</b> <b>Best Practices - Guidelines, Standards, Trail Widths</b>			
<b>Municipality</b>	<b>Formal Design Guidelines</b>	<b>Maintenance Standards</b>	<b>Expanded Trail Widths, &gt;3m</b>
Toronto	•	•	•
Ottawa	•		•
Hamilton	•	•	•
Burlington	•		•
London	•	•	•
Kitchener	•	•	•
Vaughan	•	•	•

The Town currently utilizes some basic standards around trail development, design and maintenance. However, the establishment of a more formal approach will help in the long term development and ongoing operations of our multi-use trails. Newmarket also has a number of other transportation amenities that directly interrelate with the trails. Various multi use paths and other alternative transportation routes should be reviewed in conjunction with the trails to ensure consistency, efficiencies and to identify any other key opportunities to improve these systems.

Other well developed high use trail systems have established formal guidelines. Although Newmarket applies strict Engineering Standards in the design and construction of trails, there is no standard for consistency or differentiation of various trails where different standards would be beneficial. In keeping with best practices in other municipalities, Newmarket should consider such an approach. This approach would provide standards and direction on items such as, but not limited to:

- a. Trail categorizations and configurations based on volumes and types of users. (e.g., trail widening)
- b. Trail design standards for various site situations (e.g., topography, intersections, accessibility).
- c. Address special situations such as sensitive areas, constrained conditions and accessibility needs.
- d. Various design elements: Signage, lighting, security and site amenities.
- e. Construction, maintenance and inspection considerations.
- f. Enforcement and education.
- g. Special trail needs: (e.g., Opportunities for off leash dogs, trail Wi-Fi)



### ***Addressing Trail Volumes and User Types***

While there is a need to establish guidelines, there is also a need to address the volumes in the central portion of the TTT. The data collected and general observations have noted that the central section of TTT has significantly higher user volumes than the remainder of the trail. This illustrates the need to review the section of the TTT from Queen Street to Mulock Drive to accommodate increased trail capacity such as widening of the trails.

A brief but formal trail count analysis was completed in August of 2020 to provide data on trail use (see Appendix B – Holland River Trail Counts Analysis). While limited in its time frame, both a weekday and weekend count were completed. Five counters were installed along the TTT to collect trail user volume and their mode types. Please note that this data provides a brief and limited assessment, but is intended to gather some basic information around trail volumes and mode types used on the trail.

The data indicated that usage rates and mode types were varied depending on the location. The core section of the TTT (Fairy Lake) saw usage rates that were almost 3 times the volume seen in outer count TTT locations such as Bosworth Court and Bayview Parkway. User counts in Fairy Lake showed a total of 4,187 users over the three day study period. It is anticipated that user counts during peak seasons, such as the spring, are likely even higher.

Cycling was the primary mode of use, accounting for more than 52% of usage overall along the TTT. However, cycling and pedestrian use varied depending on location. Cycling was more prevalent outside of the core, and pedestrian and joggers accounted for the highest use within the core of the Town. Counts for pedestrians in the core reached almost 70%, with cyclists generally accounting for the remainder of users. On the north and south ends of the TTT, cyclists accounted for almost 60% and pedestrians generally accounted for the remainder of users. Less than 2% were other forms such as skateboards and mobility scooters.

The data collected through this trail count analysis confirms the high volumes in the central section of the TTT. While limited in scope, this information, combined with the practice of trail widening on high volume trails in other municipalities (as illustrated in Table 1.02) and the observed congestion in our Town's core, builds a strong case for exploring trail widening and expanding trail capacities.

### ***Public Consultation***

The high usage rates occurring on our trails and in particular the TTT, shows the strong connection our residents have with our trail systems. In 2020, our Customer Service CRM system received 14 formal complaints about trail issues. These were mostly associated with negative user experiences. However, staff suggest that the number of concerns may be much higher than those reported. As part of establishing a long term

plan for multi use trails, staff are suggesting that some form of public consultation be considered during the long term planning, in an effort to better understand the user experience and to gather public input on how we develop our trails moving forward.

### ***Council Workshop***

As already stated, there is a need for a more formalized and strategic approach to developing trails within Newmarket. Best practices in other municipalities (e.g.: trail guidelines, maintenance standards and expanded trail widths), combined with the data around user volumes, shows that there are a number of issues and opportunities for consideration. Staff are recommending a Council Workshop to explore the situation in further detail, to identify the opportunities and to establish a clear path in moving forward. This may provide the basis for the development of a scope of services for a RFP for trail consultation, a key list of action items for staff and a long term plan.

### ***Timeline***

Staff are recommending that the Town proceed with implementing the proposed safety enhancements, such as line painting, sight line clearing and signage, for the spring of 2021. In addition it is recommended that staff move forward with the enhanced communication and education plan, as well as recruiting the proposed trail ambassadors for deployment this spring. This would ensure quick action to improve the overall trail experience and improve safety on our trails.

Finally, staff are recommending that a Council workshop be targeted for Q3 of 2021.

## **Conclusion**

The Tom Taylor Trail has seen tremendous success and, as a result, high rates of use by cyclists and pedestrians have changed how our trails operate. These circumstances require both a short term solution and a long term strategy. Immediate improvements to trail safety, combined with an education program facilitated by trail ambassadors, will have an immediate impact on the overall trail experience. The long term approach to managing trails requires further conversation, exploration and clarity of priorities in the form of a Council Workshop. These discussions can set the foundation for the growth of trails within Newmarket and ensure continued success, enhanced public safety and enjoyment for all trail users.

## **Business Plan and Strategic Plan Linkages**

These recommendations influence and impact Council Strategic Priorities promoting extraordinary places and spaces and safe transportation.

## Community Vision

Living Well - Focusing on health, safety and the environment to promote activity, innovation and create a truly livable and engaged community means we are creating meaningful, engaging, accessible recreation experiences.

Well-Balanced - Encouraging a sense of community by interweaving small town charm and big city conveniences means we are providing green and open spaces, parks, trails and sports fields.

Well-Planned and Connected - Planning for a vibrant and sustainable community by connecting people through ideas, technology and neighbourhoods means we are creating walking and biking trails, paths and lanes.

## Consultation

A number of stakeholders were consulted during this review. Town staff developed an internal working group comprised of key departments and staff. They include Public Works Services, Engineering Services, Communications, Legal, Risk and By-Laws.

Furthermore, external stakeholders included BFL Canada, which is the Town's insurance adjustor, as well as PM Law, which is our external legal consultant regarding insurance litigation and risk management of recreational type amenities.

## Human Resource Considerations

The recommendation for trail educational ambassadors, will require two (2) part-time contract student positions.

## Budget Impact

The recommended capital costs are as follows:

Capital Costs	
Item	Budget
Trail Safety Enhancements - Line Painting, Signs, Site Lines	\$ 15,000.00
Education and Communication Plan	\$ 10,000.00
<b>Total:</b>	<b>\$ 25,000.00</b>
Operating Costs	
Item	Budget
Two (2) Student Trail Ambassadors for 2021	\$ 20,000.00
<b>Total:</b>	<b>\$ 20,000.00</b>

It is recommended that Council provide approval of the capital funds from the 2021 Capital Provisional Funds. Operating costs can be absorbed within the current 2021 PWS operating budget.

## **Attachments**

Appendix A – BFL Canada, Town of Newmarket Trail Inspection

Appendix B – Holland River Trail Counts Analysis

## **Approval**

Mark Agnoletto,  
Director, Public Works Services

Rachel Prudhomme, M.Sc., P.Eng.,  
Director, Engineering Services

Peter Noehammer, P.Eng.,  
Commissioner, Development & Infrastructure Services

## **Contact**

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