



6.0 IMPLEMENTATION STRATEGY

The implementation of North Grenville’s Integrated Community Trails Strategy will be accomplished through both short and long-term actions. Short-term actions include Council adopting the Strategy. The key policies and network in the Strategy should then form a schedule in the next update to North Grenville’s Official Plan. The Municipality has already taken an important step by establishing a Steering Committee of community partners to guide the development of the Strategy. This Steering Committee could potentially act as an Advisory Committee of Council on all matters relating to the future planning and implementation of a system of linked recreational trails within North Grenville.

Other recommended actions include committing to annual funding to construct the Trails network generally in keeping with the phasing illustrated in Figures 6-1 and 6-2; implementing the education, promotion and enforcement strategies, and providing operational support, such as staff resources, management and administrative functions as outlined in this Chapter.

The Integrated Community Trails Strategy is a long-term strategy that consists of three phases. Phase 1 (short term) spans the initial 5 years of the plan. Phase 2 (mid-term) is a 5 year period from year 6 to 10. The third and final phase (long-term) is beyond the 10 year horizon. This Chapter discusses the Implementation Plan, and includes prioritized projects for initial development and program initiatives, as well as associated costs.

6.1 Priorities & Phasing

Chapter 4 identifies a comprehensive trails network consisting of existing and proposed multi-use trails within street rights-of-way and trails on lands outside of road rights-of-way. This section of the Trails Strategy recommends an implementation (phasing) plan for all new components of the trails network that is based on a logical build out of the network over time, field observations and the application of the following criteria:



1. Focus on developing a network of spines in the short-term that connect the Municipality through major east-west and north-south corridors;
2. Connect to existing trail facilities in North Grenville and beyond;
3. Where feasible provide grade separated or at-grade facilities at important crossings for pedestrian and cyclists, including railways, watercourses, major arterial roads, highways, and mid-block road crossings;
4. Focus on improved access to connect proposed Neighbourhood routes to the proposed Spine network. This will serve to build a web from which to draw residents to the system as it is implemented;
5. Schedule implementation with planned capital works and servicing projects where possible so that trail facilities are constructed as part of new capital projects and economies of scale can be realized;
6. Acquire additional land to expand trails and road rights-of-way for the sole purpose of implementing proposed pedestrian or cycling, which may be the only long term option if no other alternative emerges;
7. Provide access to key destinations (Parks, Schools, Community Centres, Plazas, Hospital, Ferguson Forest Centre, University of Guelph and commercial areas);
8. Create connections to regional trails. Notable examples include making priority connections to Dwyer Hill Road, the Osgoode Trail and South Grenville Bicycle Trail; and
9. Closing short gaps in the existing network with a focus on those short gaps that, when completed result in long and continuous routes (this is particularly true for sidewalk improvements in Kemptville).



6.1.1 Trail Facilities

The Facility Types Maps and Phasing and Implementation Map (see Appendix C) illustrate the implementation of trail facilities by phase: short-term (Phase 1: 0 to 5 years), mid-term (Phase 2: 6 to 10 years) and longer term (Phase 3: 10+ years). Each of the facility type and phases is distinguished according to colour and line type. The ultimate network (following build-out) would be represented by the combination of all of the colours and lines. A number of route segments and related facility types proposed for implementation in Phases 2 and 3 may not prove to be feasible because of other circumstances (e.g., funding constraints, outcome of an Environmental Assessment or detailed design, negotiations for easements and purchase of land). In these situations, an interim solution may be possible and should be investigated by Municipal staff.

The implementation of the sidewalk priority program described in Chapter 4 is shown below with costs for each project. Each project has been scheduled by each year to create connectivity and ensure that the safety of pedestrians is ensured.

6.2 How to Implement the Integrated Community Trails Strategy

A successful trails strategy requires champions and leadership to move from the plan and design stage to the funding and implementation stage. The formal relationships between individuals and organizations and their operational practices are important factors in determining whether trails initiatives will proceed and be successful. Maximizing participation and removing obstacles to the flow of information between participants are two of the main objectives in managing implementation.

The North Grenville Integrated Community Trail Strategy is more than just a proposed network of on and off road trail facilities. It is a Strategy that includes a set of recommendations to promote safe trail use and to recognize, realize and share in the economic, health, and quality of life benefits that trails can offer.

While Municipal staff led by the Planning and Development Department, will oversee the implementation of the Strategy, they will also require ongoing



support from and communication with the Steering Committee partners (Leeds Grenville Lanark District Health Unit, United Counties of Leeds and Grenville, Ferguson Forest Centre, Kemptville District Hospital, University of Guelph [Kempville Campus], Community Living North Grenville, Ministry of Natural Resources, St. Michael High School); adjacent local municipalities; conservation authorities; other organizations and advocacy groups. The successful implementation of the Integrated Community Trails strategy will require a strong working relationship between North Grenville staff, conservation authorities, developers and the public.

Recommendation:

The planning, design and development of trails in North Grenville are to be consistent with the North Grenville Integrated Community Trails Strategy, once approved by Municipal Council.

6.3 Trail Maintenance and Operations

Operations costs include on-going funding related to implementing the Strategy, preparing the annual progress report, delivering safety, educational outreach and promotional programs, and performing network and infrastructure maintenance to achieve a state of good repair and to ensure all season use. This also includes staff resources, as well as management and administration.

The incremental cost to maintain trails is relatively low. Generally speaking, most municipalities adjust maintenance budgets based on the number of kilometres of each facility and increase maintenance budgets relative to the length of new infrastructure added on an annual basis. Maintenance of mature off-road multi-use trails, particularly in greenways and parks can cost from \$4,000 to \$6,000 per linear kilometre of trail (3.5 m wide), depending on the level of service standard of a municipality. Annual maintenance can include drainage and storm channel maintenance, sweeping, clearing of debris, trash removal, weed control and vegetation management, mowing of grass along shoulders, minor surface repairs, repairs to trail fixtures (benches, signs) and other general repairs. Costs also can vary depending on whether the trail is in a road boulevard or in a linear greenway or park and whether it is paved or has a granular surface. New asphalt off-road trails also typically have lower maintenance costs in the first 10 years.



An absolute dollar value for maintenance costs was not calculated for trails network as the budget for maintenance will need to grow in an incremental fashion along with the incremental growth of the trails network. As each new network segment is added (either in boulevard or off-road), the impact to the operations budget should be calculated by Municipal staff so that it can be added into the annual maintenance budget request.

Many jurisdictions have formalized programs to plan and construct trail systems, however the number that have formal programs for trail maintenance is lower. In 2004, telephone interviews were conducted with approximately a dozen southern Ontario municipalities to determine the overall scope of their trail maintenance, to learn about significant issues and priorities and to gain an understanding of basic costs for trail maintenance¹. The following are some highlights:

- Very few maintain their trails in winter. Of those that do, none reported maintaining all of their trails in winter. Generally winter maintained trails included only asphalt trails and those that are heavily used, or are main connections serving utilitarian purposes such as connections to schools and main bicycle/pedestrian commuter routes;
- Several reported having defined maintenance standards for trails, based on trail type. Many of those that did not currently have standards reported that they were working towards them;
- Most have a call in/hot line for areas requiring emergency repairs, or areas where garbage containers are heavily used. None of the hot lines were trail specific, most often they were included with a parks or even municipal-wide hotline for parks, roads, infrastructure etc.;
- In most cases, respondents felt that they could do a better job at trail maintenance, but were limited by resources (staff resources/budget and time);
- Most reported conducting an annual safety audit, in most cases this was included as part of their annual safety and security audit for parks, playgrounds and recreation facilities;
- Many noted that proactive or preventative maintenance, especially with regard to trail surface condition, signing, trash and vandalism was a key success factor;



- Most use trail patrols or supervisors to conduct a regular (i.e., as often as weekly) review to assess conditions, prioritize maintenance tasks and monitor known problem areas;
- Some use maintenance logbooks to set out a schedule of tasks, priorities, standards to be achieved and method of tracking that the work has been completed. This method of tracking was also noted as useful for being able to predict which locations would require the highest level of maintenance;
- In most cases, parks crews performed trail maintenance as part of their regular park maintenance role. Where extensive maintenance programs were reported, additional seasonal labour was added to the workforce (often summer students). Volunteer “**adopt-a-trail**” programs were also identified as useful for basic trail cleanup and monitoring;
- Trail maintenance is generally handled under Parks Operations budgets, sometimes tracked as a separate trail maintenance budget, but most often grouped in with other parks maintenance budgets;
- Trail maintenance costs range depending on the type of trail and location. Costs to maintain highly urbanized trails ranged from \$4000-\$6000/km per year, whereas costs to maintain rural trails (including rail trails) were significantly lower, ranging from less than \$100/km year to \$350/km per year. Tasks covered as part of these estimates included maintenance of trail drainage, storm channel and culvert maintenance, grading and minor topping up of trail surfaces, minor pothole repair, sweeping and clearing of debris, trash removal, mowing of clear zones, minor surface repairs and repairs to trail fixtures/furnishings;
- Many respondents reported that asphalt surfaces on trails have a life span of approximately 15-20 years, and trails that were installed in 1980’s and earlier now require reconstruction, and in the process are generally being widened to meet higher levels of use/demand experienced today. Wider trails are also better for preventing damage to trail edges by municipal service vehicles, as vehicle wheels are less likely to roll over and break trail edges and less likely to create ruts in the soil beside the trail;
- Trails that were properly constructed at initial installation had the fewest maintenance issues. Proper subgrade excavation, adequate base and proper drainage were noted as keys to trail longevity;



- Many reported that erosion is a big challenge and that “trail hardening” with asphalt on sloped trails is the best way to prevent further erosion. Some reported trying other soil binding compounds for trails on slopes and reported only moderate success with these alternative materials;
- Mowing grass along edges of trails is performed on a regular basis. Depending on trail location this may be weekly, biweekly, monthly or infrequently throughout the growing season. The width of the mown swath generally varies from 0.5m to 2.0m depending on the municipality and location. Mowing helps to keep clear zone open and can also help with the invasion of weeds into granular trail surfaces;
- Several have trained their mower operators to be more observant while mowing and to take note of problem areas along the trails;
- Garbage pickup is performed on a regular basis (i.e., 10 day cycle), with receptacles located at the ends of trail segments where they can be easily accessed by service vehicles;
- Tasks performed on a seasonal basis include culvert cleanout and pruning to maintain trail clear zones;
- Grading/grooming the surface of granular trails is generally performed once per year or as required after heavy storm events in areas prone to erosion;
- Tasks performed every 3 to 5 years cycle include refurbishment of signs, cleaning and refurbishment site furnishings;
- Tasks performed on an as-required basis include moving or marking obvious hazards within 24 hours of their identification, inspection/monitoring of trail areas prone to damage following heavy storms, repairs to vandalized items, minor repairs to structural elements such as bridges, trail surfaces, railings, benches, gates and signs; and
- Major renovation or replacement of large items such as bridges, kiosks, gates, parking lots, and asphalt trail surfaces was generally described as a 10-20 year replacement item.



6.3.1 Winter Maintenance of Off-Road Trails

As previously noted very few municipalities in Ontario maintain their off-road trails during winter months. For those municipalities that do offer winter maintenance services on trails, only certain routes are maintained and these tend to be primary routes that serve a commuter function to key destinations such as schools and community centres. The following are some general initiatives that are being used in other jurisdictions to identify candidates for winter trail maintenance and to develop priorities among those candidate routes.

a. Trail Function and Location

- The trail's role in the overall transportation network and community connectivity (primary vs. secondary function);
- The trail does not provide an alternate route to a nearby sidewalk or trail that is already being maintained in winter;
- Determine if the trail is integral to the overall network such that it provides a primary route to schools, public facilities such as recreational centres and to other pedestrian generators such as senior's homes, shopping and commercial establishments;
- The trail is not merely a convenient short cut. If the trail is not available for winter use, the length of the detour required should be explored further. Although these should be explored further on a case-by-case individual basis, 500m could be used as a threshold guideline;
- The trail connects dead end streets or cul-de-sacs where alternative routes do not exist;
- Consideration is given to neighbouring land use(s) and how this relates to pedestrian origins, destinations and pedestrian generators; and
- Consideration is given to trails that have historically received winter maintenance, but winter maintenance has not been formally adopted.

b. A Trail Design and Condition

- The trail should be constructed to a minimum standard including:
 - Adequate surface drainage to prevent ponding of water on the trail surface;
 - Minimum width (e.g., no less than 3.0m) and there is adequate access for maintenance equipment;



- The trail has an asphalt surface (this factor may not apply if a snowblower is used instead of a plow); and
- There should be no danger adjacent to the trail, such as a steep drop off that could be a hazard for equipment operators.

6.3.2 Trail Maintenance Plan

Based on the information in the previous sections, this section describes a potential trail maintenance program for North Grenville. The general objectives of a trail monitoring and maintenance plan are to:

- Provide safe, dependable and affordable levels of service;
- Preserve infrastructure assets;
- Protect the natural environment;
- Enhance the appearance and health of the community;
- Provide a reference framework against which to measure performance;
- Provide the basis of a peer review that is comparable with other municipalities; and
- Provide citizens and Council with a reference for expectations.

The first step in implementing a maintenance and management program is to determine its scope. Trail plans, maps, inventories, trail logs, traffic count information and condition surveys are all valuable sources of information for developing maintenance management systems.

Table 6-1 outlines typical trail maintenance activities that North Grenville should include as part of the development of a trail maintenance program that is tailored to suit the Municipality's needs. The maintenance plan below applies to trail corridors that are under the jurisdiction of the municipality. The trails that are owned or operated by other agencies or private interests are not required to adhere to this plan, but could take these guidelines under advisement. Tasks have been grouped according to the frequency with which they would typically be performed:

- Immediately (within 24 to 48 hours);
- Regularly (weekly/biweekly/monthly);
- Seasonally;



- Annually;
- Every 3 to 5 years; and
- Every 10 to 20 years.

Frequency	Maintenance Opportunities for Off-Road Trails
<p>Immediate</p> <p>(within 24 hours of becoming aware of the situation through a “hotline”, email, other notification or observation)</p>	<ul style="list-style-type: none"> • As a minimum, mark, barricade and sign the subject area to warn trail users, or close the trail completely until the problem can be corrected. • Remove vegetation and/or windfalls, downed branches, etc., where traffic flow on the trail is being impaired or the obstruction is resulting in a sight line issue. Remove hazard trees that have been identified. • Repair or replace items that have been vandalized or stolen/removed. This is especially important for regulatory signs that provide important information about trail hazards such as road crossings, steep grades, and sharp curves. • Removal of trash in overflowing containers or material that has been illegally dumped. • Repair of obstructed drainage systems causing flooding that poses a hazard to trail users or that is resulting in deterioration that poses an immediate safety hazard. • Monitor trail areas and structures that are prone to erosion after severe summer storms and repair as required. • Repairs to structural elements on bridges such as beams, railings, access barriers and signs.
<p>Regularly</p> <p>(weekly/biweekly/monthly)</p>	<ul style="list-style-type: none"> • Trail patrols/inspections should review the trail conditions (as often as weekly in high-use areas), to assess conditions and prioritize maintenance tasks and monitor known problem areas. • Mow grass along edges of trails (in open settings only). Depending on trial location this may be done weekly, biweekly, or monthly and the



	<p>width can vary according to the location (typically 0.5 to 1.0m). This helps to keep the clear zone open and can slow the invasion of weeds into granular trail surfaces. Not all trails will have mown edges. In woodland and wetland areas, pruning and brushing is typically the only vegetation maintenance to be undertaken.</p> <ul style="list-style-type: none"> • Regular garbage pickup (10 day cycle or more frequent for heavily used areas). • Restock trailhead information kiosks with brochures as needed. • Repair within 30 days or less, partially obstructed drainage systems causing intermittent water backups that do not pose an immediate safety hazard, but that if left unchecked over time will adversely affect the integrity of the trail and/or any other trail infrastructure or the surrounding area.
Seasonally	<ul style="list-style-type: none"> • Patching/minor repair of trail surfaces and removal of loose rocks from the trail bed. • Culvert cleanout where required. • Top up approaches to bridges. • Planting, landscape rehabilitation, pruning/beautification. • Installation/removal of seasonal signage.
Annually	<ul style="list-style-type: none"> • Conduct an annual safety audit. This task is not necessarily specific to trails and may be included with general annual safety audits for parks, playgrounds and recreation facilities. • Evaluate support facilities/trailside amenities to determine repair and/or replacement needs. • Examine trail surface to determine the need for patching and grading. • Grading/grooming the surface of granular trails, and topping up of wood chip trails. • Pruning/vegetation management for straight sections of trail and areas where branches may be encroaching into the clear zone. This task is more of a preventative maintenance procedure. Cuttings may be chipped on site and placed



	<p>appropriately or used as mulch for new plantings. Remove branches from the site unless they can be used for habitat (i.e. brush piles in a woodlot setting), or used as part of the rehabilitation of closed trails. Where invasive species are being pruned and/or removed, branches and cuttings should be disposed of in an appropriate manner.</p> <ul style="list-style-type: none"> • Inspect and secure all loose side rails, bridge supports decking (ensure any structural repairs meet the original structural design criteria). • Aerate soils in severely compacted areas.
Every 3 to 5 years	<ul style="list-style-type: none"> • Cleaning and refurbishment of signs, benches and other trailside amenities.
Every 10 to 20 years	<ul style="list-style-type: none"> • Resurface asphalt trails (assume approximately every 15 years). • Replace or reconstruct granular trails (assume approximately every 15 years, but this may not be necessary if adjustments/repairs are made on an annual basis). • Major renovation or replacement of large items such as bridges, kiosks, gates, parking lots, benches, etc.

Recommendation 6-14 The Municipality should adopt the Trail Maintenance Plan as outlined in Table 6.1 in order for tasks to be carried out in the timely manner that they would typically be performed.



6.3.3 Managing Trails

6.3.3.1 A Trails Advisory Committee

The Steering Committee that has led the development of the Trails Strategy has played an important role in North Grenville in advancing trails initiatives. This includes promoting and advocating for trail use and development; construction of trails and related amenities and with trail maintenance. This role should continue and be expanded. In addition to areas where the Steering Committee has been involved, promoting cycling, equestrian, snow shoeing and other non-motorised options should be added to the traditional roles each member has played. This will also result in an expanded committee that could include members of the general public and some of the larger user groups. Sub-committees could be created to deal with specific topics such as on-road cycling, promotion and education, and motorised uses.

Recommendation 6.2:

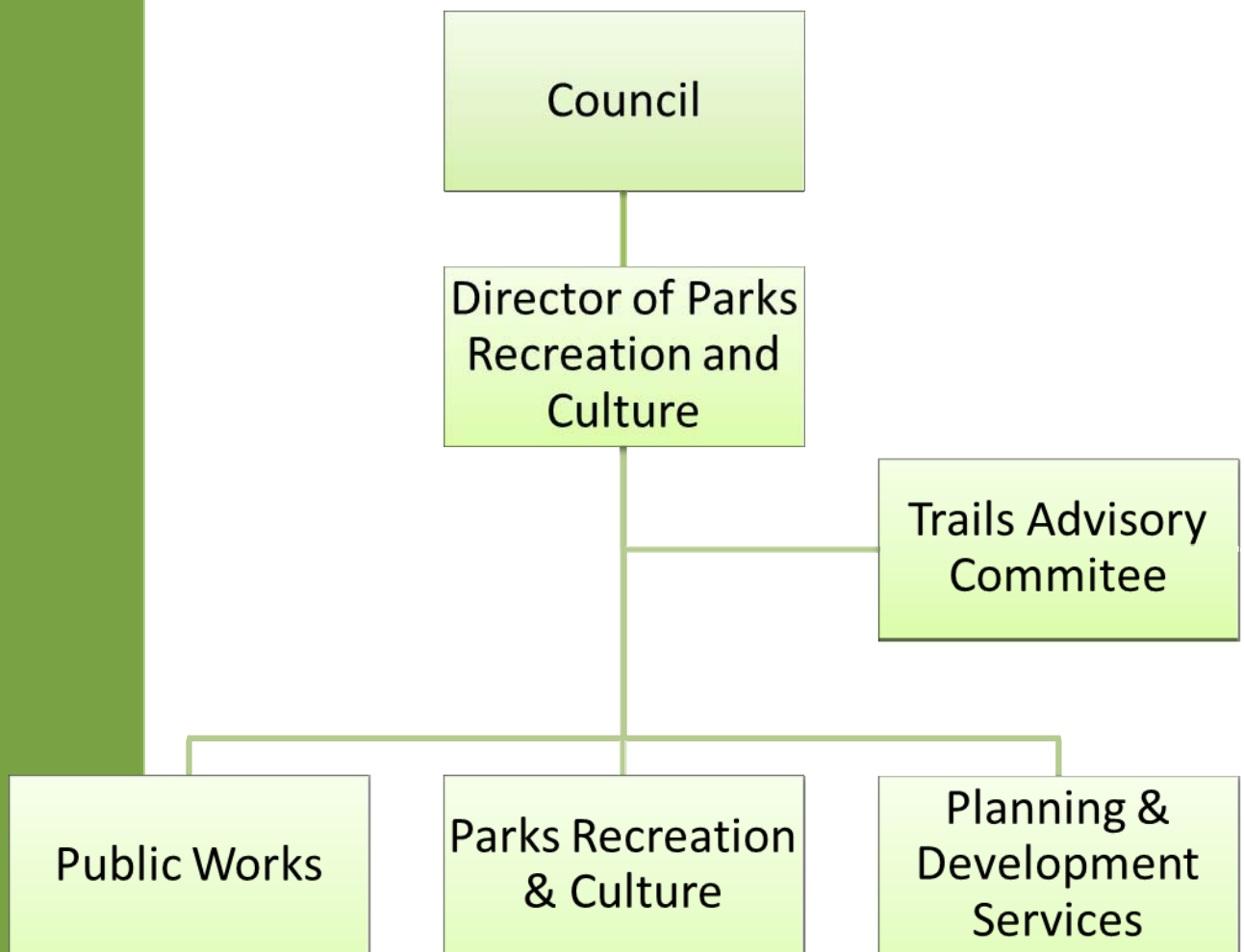
The Municipality should build upon the expertise of the Steering Committee established for the development of this Strategy to develop a Community-based Trail Advisory Committee.



6.3.3.2 Who Does What?

An efficient reporting and implementation structure is vital to ensure that the decision-making process associated with the implementation of the Trails Strategy is managed and all relevant municipal departments are engaged. A suggested structure for implementing and managing the Integrated Community Trails Strategy is illustrated in Figure 6-1.

Figure 6-1: Implementation Structure for the Integrated Community Trails Strategy





Led by North Grenville’s Director of Planning and Development (through the recommended Trails Advisory Committee) a core team would be formed with representation from Public Works; Parks, Recreation and Culture; Economic Development and Planning and Development. The core group would oversee and make recommendation regarding funding and priorities associated with the Integrated Community Trails Strategy, as well as other initiatives as required.

The proposed structure in Figure 6-1 is intended as a suggestion only. North Grenville staff should select the reporting model that is inclusive of affected departments and provides for the efficient implementation of the recommendations contained within this strategy.

6.3.3.3A Network Management Tool

The proposed Trails network was developed using the North Grenville’s Geographic Information System (GIS) base. This digital GIS based network map provided to the Municipality as part of the Trails Strategy can also be used as a pedestrian and cycling facility management tool. A database is associated with the map information and includes a number of different attributes. For example, the network has been divided into segments, each specifying a length of the segment and the trail facility type proposed, as well as the phase in which the route and facility is proposed to be implemented.

During the implementation process, Municipal staff can use this tool to assist in confirming the feasibility of pedestrian and cycling routes and facilities and the proposed schedule (Phases 1, 2 or 3) for implementation.

The GIS tool can also be used to track and document new segments as they are implemented. Updating the facilities component of the Integrated Community Trails Strategy on a regular basis will significantly reduce the effort and cost to update the entire Strategy, which is recommended to occur every five years. If the Municipality chooses, this GIS information, with some programming, could also be posted on North Grenville’s website in an interactive map format. This would be useful to the public and developers and would also serve as a ‘quick reference’.

Recognizing that not all staff will have access to GIS software, key components of the database and map provided in a KML format will allow anyone with access to Google Earth digital aerial photography over the internet (this is currently a free service) to overlay the network route and facility information on an aerial photo of North Grenville.



6.3.3.4A Five-Step Network Implementation Process

The North Grenville Integrated Community Trails Strategy is intended to be a dynamic document. The timing and details related to implementation, particularly the location of recommended routes and facility types should and will evolve through community consultation and technical review during the implementation. At the same time, however, the extensive effort that established the overall direction for the network should be respected when network modifications are being contemplated.

The following 5 step process is a step-by-step mechanism to confirm the feasibility of each route recommended in this report at the time implementation is proposed. It will assist municipal staff from affected departments to work together, to share information and to facilitate the implementation of the Strategy. Each part of the network implementation process is described in the following sections.

Part I: Preliminary Review

The first step in implementing segments of the network is to identify and communicate opportunities. As such, municipal infrastructure projects including the capital works forecast should be monitored. When a project identified in the Integrated Community Trails Strategy is advanced to the planning stage, or an opportunity to establish a new route not identified in the Strategy comes forward, staff responsible for the implementation of the Strategy network should undertake a preliminary review. This review should:

- Compare the timing of the project to the short, mid and long term implementation priorities identified in the North Grenville Integrated Community Trails Strategy;
- Assess whether the nature of the project may permit implementation of the recommended facility type in a cost effective manner; and
- Inform the project lead and affected departments whether or not a feasibility assessment should be undertaken to confirm the feasibility and costs for implementing the proposed route as part of the subject project.

The key aspect of this initial step is communication. Staff from various departments should report all upcoming projects that may involve or impact a trail route identified in the Strategy.



Part II: Feasibility Assessment

If a network route is confirmed through the preliminary review process (Part I), a brief feasibility assessment should be undertaken, which includes the following:

- Confirm the feasibility of the route based on a review of the Strategy to include:
 - supporting route selection;
 - planning and design criteria; and
 - conducting a field check for off-road trail segments to identify any other issues that should be explored in the future.
- Determine if further public consultation should be conducted and to what level it is required (i.e., Environmental Assessment in the case of watercourse crossings versus notification of neighbouring residents in the case of a local connection or upgrade);
- Undertake a functional design for the segment and estimate implementation costs, including construction and signing;
- Identify any less costly alternatives and how they may fit within the intent of the overall network plan, and this may include alternative parallel routes that meet the intent of the Strategy; and
- Provide a recommended course of action.

Part III: Detailed Design, Tender and Implementation

Once it has been determined that a project should proceed the necessary detailed design should be completed. The final step involves tendering the project (if not undertaken in-house) and then construction / implementation. It is also possible that following detailed design the decision is made not to proceed with the facility or preferred facility type because of the cost, other constraints that arise through the detailed design process or based on direction from Council. If this occurs, the network should be updated and an alternative route should be proposed.

Part IV: Monitoring Phase

Once facilities have been constructed, their design and use should be monitored to ensure they function in the manner intended. When necessary, the facilities should also be upgraded and maintained to ensure continued safe use. A set of performance measures to assist in monitoring and evaluating the implementation of the plan should be developed by the Trails/Advisory



Committee and Municipal staff. Examples of such measures are outlined further on in this Chapter.

Part V: Municipal Official Plan

The fifth part of the implementation process includes updating the Municipality's Official Plan to account for changes in policy and network routes.

6.3.3.5 Creating New Trails In Established Neighbourhoods

It is often challenging to implement trails in established neighbourhoods, even if the intent to do so has been clearly documented in strategic plans such as this Strategy. It is sometimes difficult to obtain public opinion related to specific trail segments at the master planning stage and it is not until a project reaches the implementation stage that residents who perceive themselves as being directly affected become more involved and vocal. Real and perceived concerns over increased neighbourhood traffic, access to their rear yards, invasion of privacy, a perception that there may be an increased potential for vandalism and theft are often cited as key concerns.

One aspect of a program to overcome this challenge is to engage residents in an open, public consultation process at the earliest possible stages of the project. In some cases, the most vocal opponent can become the greatest supporter if the process provides an effective avenue to address concerns. Some keys to successes include:

- Notifying adjacent landowners early in the process and taking the time to understand and respond to their concerns. Some successful techniques include:
 - Their participation in the design process through events such as local design workshops to determine trail layout, design materials and privacy features, as well as site meetings to examine and refine proposed layouts;
 - Emphasizing the benefits of trails for their neighbourhood and community, including themselves and their children; and
 - Emphasizing successful examples and effective solutions where similar problems were overcome.



6.3.3.6 Trails In New Development Areas

Growth in North Grenville includes both the development of new land areas around the periphery of the urban areas as well as the redevelopment of under-utilized lands within the existing urban area. In both cases, the planning of the trail system is seen as a critical component of the land development process. Community trails are an integral part of the urban fabric and are a key recreation and transportation asset. Developers should be expected to work with municipal staff, beginning early in the planning stages to create as traffic free a trail network as possible within their development area that reflects the intent of the Integrated Community Trails Strategy. Many developers recognize the value of integrating trails into their projects and often use trails as a selling feature for their neighbourhoods. Providing the development community with information about the network, desired connections and design expectations will help to improve communication among all parties involved. It is expected that proposals for new development (both greenfield and infill) will contain a network of trails that reflect the density, variety, hierarchy and character that is consistent with the Integrated Community Trails Strategy. Proposed networks should provide:

- Trails that overcome physical barriers, make appropriate connections to important destinations and enhance connectivity with the existing or planned system of trails surrounding the development area; and
- Trails that are both sensitive to, and take advantage of, inherent qualities of the natural and cultural landscape features within the development area.

A careful examination of a variety of factors including topography and drainage, slopes, soil conditions, plant and animal communities, microclimate and human comfort, historic/cultural resources, public education opportunities, significant views and vistas should be part of the process to integrate trails in new developments.

Ideally, in new development areas trails should be constructed prior to or concurrently with the construction of other infrastructure and homes. When trail construction / implementation is deferred until homes are built there can be conflict when residents adjacent to a planned trail corridor claim that they were not aware of plans for trail construction even if this intention has been clearly indicated in municipal planning documents. Developers should be encouraged to be very proactive about notifying prospective buyers where trails are to be located at the time they are selling lots. Providing information at sales offices, including information in sales packages and erecting signs in



locations where trails are to be constructed may help to alleviate difficulties at a later date.

Recommendation 6.3: That the Municipality adopt the Five Step Network Implementation Process to incorporate trails into new development areas as well as established neighbourhoods and communities.

6.4.4 Trails and Development Charges By-Law (55-09)

By-Law 55-09 pertains to Development Charges in the Municipality of North Grenville. The Development Charges By-Law enables the municipality to collect a fee from a development proponent, based on a set amount per new development unit. These fees are used by North Grenville to offset the cost of providing public infrastructure to meet the needs of the community as it grows. By-Law 55-09 is not “area specific”, meaning that a portion of Development Charges collected for projects in a new neighbourhood can be used elsewhere in the Municipality under certain circumstances.

Development Charge funds can be applied to projects in other parts of the municipality provided that it can be clearly demonstrated that the project(s) are for new public infrastructure that is growth related.

In many instances the owner (Municipality) requires or negotiates with the developer to provide some of the infrastructure in their subdivision that would otherwise be implemented in the future by the Municipality using Development Charge funds. In these instances it is not uncommon for the developer to seek a Development Charge credit related to the infrastructure provided.

Section 1 (6) of By-Law 55-09 refers to Schedule “B” where the categories of services for which Development Charges are imposed can be found. Park Development, amenities and trails are listed in Schedule “B”.

6.4.5 Land Acquisition / Securement Strategies

Although the majority of the recommended trail network lies on lands that are currently in public ownership there are some areas of the Municipality where a



trail connection is desired, yet there is no public land available at the present time. Some of these connections are located along natural heritage corridors (i.e., water courses) in land that is presently rural. At some time in the future it is anticipated that some of these tracts may become part of the urban fabric and at that time these corridors would be set aside along with a suitable buffer because of their natural heritage. These corridors could accommodate trails at that time.

There are a number of other locations throughout the Municipality where the land has already been urbanized, yet a future trail connection is desired and no public land exists. To realize the full build out of the network and complete the connections across these lands may require permission for access or a strategy to secure ownership. A range of strategies are available to accomplish this, from “handshake” access agreements to purchase of these lands by the Municipality. Regarding the purchase option, as reported in Chapter 3, slightly over 83% of respondents to the online survey conducted as part of the study felt that it was a good idea for North Grenville to purchase lands needed to make key connections in the trail network.

Table 6-2 is a summary of some of the land securement techniques available to the Municipality of North Grenville for making key connections in the trail network over lands that are not currently in public ownership. The Municipality should review these potential strategies and use them as a starting point for developing an access/acquisition policy for key trail links.



Table 6-2 Land Securement Tools

Land Securement Tools					
Techniques	Description	Advantages/ Disadvantages	Legislative Basis	Who/How Administration	Type of Lands
<p>Purchase</p> <p>Includes “First Right of Refusal”</p> <p>Local Area Levies and Local Improvement Charges</p>	<p>Purchase of land at fair market value.</p>	<p>Municipality or other group directly acquires land. Permanent protection and public access. Options exist to recover costs through levies or charges on benefitting owners.</p>	<p>Municipal Act (right of municipality to acquire and dispose of own land) and right of municipality to levy local improvement charge on benefitting land.</p>	<p>Municipal government Land Trusts Non-Profit Groups (e.g., Nature Conservancy) Community Co-Operative Partnerships</p>	<p>Any green space, particularly those requiring environmental protection.</p>
<p>Land Exchange</p> <p>(Equivalent to Outright Purchase)</p>	<p>Lands or interest in land can be traded to achieve mutual interests, and net differences in values can then be settled.</p>	<p>Same cost as purchase; permanent protection; public access possible.</p> <p>Must be equitable for both parties.</p>	<p>Municipal Act</p>	<p>Municipal most common – public ownership.</p>	<p>Any land or land use green space or other type of use including housing.</p>
<p>Donation/Bequest,</p> <p>Including a Life Estate</p>	<p>Land or interests in land donated during an individual’s lifetime or by private corporation or as a bequest as part of an estate. The donor may opt to retain use of land until death.</p>	<p>Low cost/permanent protection and public access. Tax benefits for donor.</p> <p>Lands must meet Federal Tax rules for donation in order to qualify for tax exemptions.</p>	<p>Municipal Act Income Tax Act</p>	<p>All of the above Both public and private ownership</p>	<p>Any green space or other type of lands including housing.</p>
<p>Parkland Dedication</p>	<p>Lands dedicated to municipality for parkland purposes as a result of subdivision development.</p> <p>Usually relates to recreation land but may be used to acquire natural areas.</p>	<p>Provides parkland in growing communities: Can be converted to cash for more flexibility.</p> <p>Planning Act limits amount of land that can be required at no charge.</p>	<p>Planning Act</p>	<p>Municipal ownership</p>	<p>Any green space, but usually active parkland.</p>



Traditional Land Use and Other Regulatory Controls	<p>Use of land use planning (Official Plan/Zoning/Subdivision Watershed and Sub-watershed Plans) and other regulatory controls.</p> <p>Land Ownership does not change.</p>	<p>Intent for the land is provided in the Official Plan. Permanent protection can be achieved. May not be popular and does not provide for public access. May trigger requests for financial compensation or purchase.</p>	<p>Planning Act Conservation Authorities Act Fisheries Act Aggregate Resources Act</p>	<p>Municipal, Province, Conservation Authorities. Usually private ownership or public ownership other than the Municipality.</p>	<p>Any green space if designation or zoning is not successfully challenged.</p>
Sale with Restrictions (including acquisition and resale)	<p>Land can be sold with restrictions in place to control future uses.</p>	<p>Generates revenue while maintaining green space; permanent protection; public access can be negotiated.</p> <p>Restricted land more difficult to sell, limited market and reduced value.</p>	<p>Municipal Act Conservation Land Act</p>	<p>Municipal/Provincial Government</p>	<p>Green spaces requiring environmental protection where public access may not be as critical.</p>
Land Trust	<p>Non-profit organizations dedicated to conserving open space, natural areas, etc.</p>	<p>High profile grass-roots organization. Provides permanent protection and public education.</p> <p>Limits public access. Needs high profile and independence to get funds.</p>		<p>Generally non-profit, incorporated community organization or a chapter with an existing organization.</p>	<p>Usually land needing environmental protection or recreation trails.</p>
Corporate Landowner Agreement/ Condominium Agreement	<p>Similar to Land Trust Conservation land can be owned by a shareholder's corporation or condominium devoted to the protection and management of the lands.</p>	<p>An alternative to government ownership and management; no cost; flexible; management costs borne by those directly benefiting. Protection not guaranteed.</p> <p>Little used; no guarantee of public access, needs a willing corporate entity.</p>	<p>Corporations Act Condominium Act</p>	<p>Private Landowners would not involve public ownership</p>	<p>Any green spaces</p>
Conservation Easement	<p>An agreement that restricts uses for conservation purposes, and when registered on title they bind both current and future land owners.</p>	<p>Low cost; may be more acceptable to landowner; can provide permanent protections.</p> <p>Cost of easements may be as great as purchase; public access may be limited; requires ongoing monitoring; not extensively used in Ontario.</p>	<p>Ontario Heritage Act Ministry of Government Services Act Ontario Conservation Land Act</p>	<p>Only Government agencies and registered charities including land trusts. Private ownership</p>	<p>Usually land needing environmental protection as well as heritage buildings.</p>
Restrictive Covenant	<p>A condition on title that restricts the landowner's use of land or assigns certain</p>	<p>Low cost; can provide permanent protection.</p> <p>Can only be used under certain conditions; unlikely</p>	<p>Common law</p>	<p>Any government or conservation authority. Private ownership</p>	<p>Usually land needing environmental protection.</p>



	rights or access to an adjacent landowner. Applicable where a government wishes to control land use but not own the land.	to be able to specify long-term management obligation. Public access not likely.			
Lease/License	A lease gives exclusive rights to use land for a specified term and cost. Licenses give permission to use a property for a purpose but not exclusive rights and does not bind future owner.	Public access can be negotiated. Agreement must be renewed periodically; may not protect land in perpetuity.		Legal lease or license agreement between parties. Private or public ownership	Any land
Incentives/Assistance i.e. Tax Rebates/ Credits/ Management Agreements/ Funding Assistance	Tax or management incentives to encourage retention/restoration of natural areas. Usually linked to land use restrictions such as provincial policy and zoning.	Lower cost and non-confrontational; willing landowner agreement. Difficult to monitor compliance; does not provide public access or permanent protection. Lost tax revenue.	Woodlands Improvement Act Games and Fish Act Conservation Authorities Act Conservation Land Act	Ministry of Natural Resources Conservation Authorities Private ownership	Usually land needing environmental protection.
Stewardship Support/ Education	Private land owner care and protection of land. Can be linked to incentives.	Voluntary. Least costly; non-threatening; builds rapport. Not permanent. No public access or protection.		Private although all levels of government publicize and provide support.	Usually land needing environmental protection.



Recommendation 6.3:

That North Grenville develops a land securement strategy for trail development for routes that are identified on lands under private ownership. This may include property acquisition if the land is donated by the owner or is for public sale. The acquisition could also take the form of an easement agreement with the property owner for the purposes of a trail connection.

6.3.6 Public Outreach and Trail Promotion

Interpretive programs and signs, brochures, either self-guided or as part of a wider natural and cultural heritage education program (such as the walking tour pamphlets), offer endless opportunities to raise awareness about the privilege of using trails. More importantly, the need to educate users about their obligations as responsible trail users is an integral part of managing the network. Posting signs is a useful way to get messages out to trail users and can be a good tool for building positive relations where neighbours have raised concerns about trail use. Public Service campaigns, information signs and interpretive signs are also useful ways to send messages to trail users and neighbours that the municipality is aware of particular concerns, that situations are being monitored and actions are being taken.

Trail heads are excellent locations to offer information about the trail system as well as trail etiquette. As part of the Signage Strategy discussed in Section 5.10.1, signs will be provided at trail heads to display information for all trail users.

The Communications and Marketing Plan, which is outlined in Section 4.2.4, provides the basis for the promoting the trail network in North Grenville. The plan includes the building upon existing information and message sites as well as the development of maps, marketing materials and branding. The Municipality should look to develop the Communications and Marketing Plan in the short term in order to **“get the word out”** on the trail system and amenities available in North Grenville.



Recommendation 6-5:

The Municipality develop/update its trail map by 2012 to include educational information about trail etiquette and safety as well as promote the benefits of trail use as an active and healthy lifestyle choice.

Recommendation 6-6

The Municipality should look to develop the Communications and Marketing Plan in the short term in order to **“get the word out”** on the trail system and amenities available in North Greenville.

Trail Ambassadors

Many municipalities have successfully implemented trail ambassador programs. These often involve teaming a staff leader with summer students who attend events and functions organized by private businesses and agencies, camps and related recreation programs, where they promote the use of the trails and in some cases teach certain skills such as cycling. In addition, ambassadors ride the routes and trails, hand out trail brochures, provide assistance to users, and monitor the condition of facilities.

Trail patrols travel the entire trail system on a regular basis and can be trained to take note of, and report observations related to trail surface conditions, vandalism, user-conflicts, environmental degradation and overgrown vegetation to Parks Operations staff. In addition, the ambassadors are available to the public and can gather important data on user satisfaction, and can educate trail users about proper trail etiquette.

A trail ambassador program is more typical of a mature, urban trail system. As the trail system in North Greenville continues to grow and mature, the Municipality should explore the merits of a trail ambassador program. In the interim, training park maintenance staff (including seasonal staff) to carefully observe and take note of trail conditions as part of their day-to-day maintenance role is an effective way to assist Parks Operations in keeping track of trail conditions. Members of the proposed Trails Advisory Committee can serve initially as informal trail ambassadors and should be included in future formal initiatives related to a trail ambassador program.



Recommendation 6-7:

That the Municipality of North Grenville develop a volunteer trail ambassador or trail patrol program as a stewardship and public engagement initiative.

Partnering with Others

Opportunities exist for the Municipality to develop partnerships with businesses and other agencies that provide services to a large sector of the population. In many municipalities there is a strong interest in partnering with other agencies in promoting trails and trail use as a healthy lifestyle choice. Partnerships with agencies can include jointly produced promotional or educational literature in magazines, materials distributed through offices, materials on or linked to corporate/agency websites. The local Health Unit delivers important messages on healthy living choices and active living and is one such organization where there is a great opportunity for the Municipality to continue with the strong and mutually beneficial partnership for the purposes of promoting and educating the public about trails in North Grenville.

Partnerships with agencies can also include co-participation in annual events related to trail use. Events such as Earth Day are natural matches. Allowing time for key staff to contribute to the organization of these events that use the trails is a simple, cost effective way to spread the word about using the trail system. The Manulife Ride for Heart in Waterloo and the Tour de Grand in Cambridge for example, attract thousands of cyclists to one-day fundraisers that use trails extensively, providing visibility through extensive media coverage at essentially no cost to the owners of the trail.

It is mutually beneficial to recognize the efforts of private business when they partner with the municipality on initiatives related to the development and use of the trail system. Recognition through the media for efforts that encourage more trail use is a very positive way of showing partners that their contribution is appreciated. Furthermore, media recognition is a simple and cost-effective way to raise awareness and encourage use. Where contributions are made that improve conditions of the trail, such as the provision of trail amenities, creation of links across private properties, the Municipality should recognize the effort which has been displayed for these contributions. This can be done with donor signs and plaques that are tastefully designed and carefully located. Many trails across the country have been built this way.



In addition to recognizing those individuals and businesses that make a contribution to the development of actual trail routes, some municipalities have developed incentive programs to recognize businesses that, through their actions indirectly encourage more user participation on trails. For example, the City of Toronto hosts an annual **“Bicycle Friendly Business Awards”** program, which recognizes businesses that have made considerable effort to improve their facilities for cyclists through things that may be as simple as providing high quality and conveniently located bicycle parking. Winners are presented with a plaque and are recognized in the local media for their participation.

Recommendation 6-8

The Municipality explores opportunities to develop partnerships with the United Counties of Leeds and Grenville; local partners and other public and community agencies to promote the health and recreational benefits of trail use.

Recommendation 6-9

That the Municipality establishes a formal recognition program for individuals, businesses and organizations who contribute to the development of trails.

6.4 Proposed Trail Policies for Inclusion In The Official Plan

The Municipality of North Grenville has recently updated its Official Plan and was approved by the Ministry of Municipal Affairs and Housing on February 19, 2010 (by order of the OMB). A number of trail-related policies were incorporated into the Official Plan as previously discussed in Chapter 2, section 2.1 which lists the policies that relate to trail implementation and development in North Grenville. The following recommended policies should be considered when the Official Plan is next updated.

Parks/Open Space

The following should be added to the end of the first sentence in Section 10.7 Parks/Open Space:

“The Parks and Open Space designation of land shall mean that the predominant use of land in the areas so designated shall be for conservation, parkland and recreation, and similar public uses including off-road trails.



The following can be inserted under the policies of Section 10.7.3:

Where possible, open space dedications shall be integrated into the open space system, especially the pedestrian/bicycle paths system.

Land Acquisition

The following should be added to Section 14.9 Land Acquisition to ensure that the community trail network will not have any missing links:

14.9.1 Council may, where possible, acquire easements over private property to enable the construction and maintenance of off-road trails to provide access to other public lands or public road.

14.9.2 Where consistent with the Trails Master Plan and deemed appropriate, the Municipality should acquire private land for the purpose of eliminating missing links in the trail network if no public land exists.

In addition to the modifications proposed above, the following are a number of new policies which should be further explored and integrated into Section 10.7 Parks/Open Spaces when North Grenville next updates its Official Plan:

1. The Municipality of North Grenville shall require the development of passive and linear open spaces and trails within new developments and redevelopments within the Municipality consistent with the Municipality's Trails Master Plan.
2. The Municipality shall work in collaboration with local stakeholders and members of the public to implement and maintain the network and facilities as proposed in the Municipality of North Grenville Trails Master Plan.
3. The Municipality shall pursue grant and partnership opportunities to fund the implementation and future maintenance of trails in North Grenville.

Other Policies Related to Trails

As part of the overall inclusion of trails within the development process, the following additional policies should also be incorporated into the Official Plan when it is next updated. They should be placed in the appropriate location in the updated Official Plan.

The Municipality of North Grenville shall, routinely consider and wherever possible accommodate the needs of trail users in the design and construction



of all infrastructure undertakings such as roadways, linear utilities such as hydro and pipeline corridors, bridges and underpasses, and crossings of physical barriers such as waterways, railways, existing and future highways.

All development applications, including, but not limited to, plans of subdivision, severances, plans of condominium, Official Plan Amendments, Zoning By-Law Amendments, site plans shall be reviewed by staff to ensure that they are consistent with the Integrated Community Trails Strategy.

The planning, design and development of trails in North Grenville shall be consistent with the Integrated Community Trails Strategy, once approved by Council.

These final policy suggestions relate to the creation of trails as part of the land development process:

- Prior to Draft Plan of Subdivision/Condominium approval the Developer shall be required to prepare and submit a trail concept plan and typical details for any trails within the boundaries of the plan of subdivision, to the satisfaction of the Municipality. The trail concept plan shall be consistent with the approved North Grenville Integrated Community Trails Strategy.
- Prior to Final Plan of Subdivision/Condominium approval and the registration of the applicable stage of the subdivision, the Developer shall be required to prepare and submit detailed design drawings, specifications and a detailed cost estimate for trail construction, to the satisfaction of the municipality.

The Development Agreement shall outline the requirements of the Developer relating to trail construction, including the following:

- The Developer shall agree to construct trails within the boundaries of the applicable stage of the subdivision/condominium to a base condition, to the satisfaction of the Municipality, prior to building permits being issued;
- The Developer shall agree to complete the finishing of trails within the boundaries of the applicable stage of the subdivision/condominium in accordance with the approved plans, to the satisfaction of the Municipality, prior to assumption;
- Notice to purchasers of the existence of the municipal trail, including identification of the trail on plans displayed in a sales office and a warning clause in all agreements of purchase and sale and/or lease



agreements and registered on title, to the satisfaction of the Municipality.

In addition, the following definition is suggested and should be defined and included in Section 15.1 Definitions when the Official Plan is next updated. The following definition is proposed:

Trails - Infrastructure that enables the use of human-powered modes of transportation and permitted motorized uses that link communities, businesses, and recreation areas.

Recommendation 6.10

The Municipality incorporate the recommended policies above into North Grenville's Official Plan when it is next updated.



6.5 Funding Strategy

North Grenville's Integrated Community Trail Strategy can only be successful if funding and staff resources are committed by Council on an annual basis. The annual implementation budget for implementing the Integrated Community Trail Strategy should be identified in an annual report prepared by Municipal staff and based on implementation objectives and opportunities for the coming year. This report could also comment on projects and trail related initiatives completed from the following year.

The Integrated Community Trails Strategy is an integrated body of components, and requires a strategic approach for implementation and a funding commitment. Focusing efforts on individual elements of the Strategy in isolation of the others will not result in the level of success that it has been designed to achieve. For example, funding a paved/stonedust trail in the short-term but not the development and delivery of programming or promotional campaigns, is not an efficient or recommended strategy.

The public and stakeholder input received during the preparation of the strategy indicate that both residents and visitors to North Grenville support improving trail facilities and programs to promote trail usage in the Municipality.

6.5.1 What is the Investment?

The Integrated Community Trails Strategy is both an infrastructure and operations plan. Therefore, it requires infrastructure, program development and operations (maintenance) funding to ensure successful implementation and monitoring. These types of improvements should be included in the Municipality's capital budget and forecasts.

6.5.2 Capital

Unit prices are summarized in **Appendix B Cost Schedule** for the subject facility types specific to North Grenville Trails Strategy. Unit prices will assist the *municipal, public, and community organizations* in planning for, and budgeting specific facility improvements for trails. For example, price-per-metre is provided for converting an existing It is assumed that in-boulevard right-of-way components of the network will typically be included as part of the same tender for a road resurfacing, reconstruction or widening project. Therefore, through economies of scale, the construction cost charged to the Municipality by a contractor may be lower. The distances for multi-use trails in Municipal



road rights-of-way have been assigned to the Municipality because multi-use trails, like sidewalks, are the responsibility of local municipalities.

Recommendation 6.11

That the Municipality review and update its annual maintenance budget for trails based on the recommended design guidelines in the Integrated Community Trails Strategy, and increases this budget as additional kilometres of trails are added to the network.

6.5.3 Where Will the Money Come From?

The annual implementation budget for the Strategy should be identified in an annual report and be based on implementation objectives and opportunities for the coming year. It is expected that the majority of Community Trails Strategy capital costs related to proposed in-boulevard right-of-way facilities will be identified and included as component costs within a planned right of way widening, reconstruction, resurfacing, new development, or other North Grenville and United Counties of Leeds and Grenville projects.

To assist in reducing taxpayer costs, North Grenville should pursue outside funding opportunities. Over the last few years funding sources made available for cycling, pedestrian and trail related projects is at or near an all-time high, likely due to the enormous popularity of trails today. It is expected that this trend will continue. Outside funding opportunities may include:

- Federal / Provincial Gas Tax;
- Federation of Canadian Municipalities Green Municipal Fund
- Ontario Ministry of Health Promotion grant programs;
- Ontario Ministry of Environment Community Go Green Fund (CGGF);
- Ontario Ministry of Transportation Demand Management Municipal Grant program;
- The Communities in Action Fund available through the Ontario Ministry of Health Promotion for programming and promotional initiatives related to health/active living/active transportation;



- The Canada-Ontario Infrastructure Program;
- Ontario Trillium Foundation that was recently expanded in response to the money collected throughout the Province by casinos;
- Human Resources Development Canada program that enables personnel positions to be made available to various groups and organizations. For example, the Ontario Trails Council has been able to hire two people under this program;
- Corporate Environmental Funds such as Shell and Mountain Equipment Co-op that tend to fund small, labour-intensive projects where materials or logistical support is required;
- Corporate donations which may consist of money or services in-kind, and have been contributed by a number of large and small corporations over the years;
- Potential future funding that might emerge from the Province in rolling out the Ontario Trails Strategy;
- Service Clubs such as the Lions, Rotary and Optimists have assisted with a number of high visibility projects at the community level; and
- Private citizen donations/bequeaths.

If the Municipality has monies set aside for the development of trails, it should use this to leverage more money from the sources listed above.

Recommendation 6.12

That the Municipality evaluate the use of any resources available to them to leverage more funds to develop the trail network. Any monies received, such as rent from the Ferguson Forest Centre, or monies earmarked for trail development, should be used, when possible, as the basis for leveraging more funding from federal, provincial or private sources.

6.5.4 Why Should the Municipality Make the Investment?

There are numerous benefits that emphasize why North Grenville’s commitment to implement the Integrated Community Trails Strategy is so



important. Chapter 2 of this report details the various benefits of walking and cycling in terms of recreation, health and fitness benefits; transportation benefits; environmental benefits; and economic benefits. The municipality's investment in the Integrated Community Trails Strategy can be expected to yield benefits in all of these areas.

In addition to these important benefits, the costs of the Strategy can be justified as part of the cost of providing a more sustainable, balanced and efficient recreation and transportation system in the Municipality. Finally, as the consultations conducted as part of this study confirmed, Municipal residents want governments to invest in making North Grenville more walkable and bike-able. The Municipality should make the investment in trail implementation because residents are requesting it and it will support Council's efforts to make NG one of the most desirable communities in Ontario to live and work.



6.6 Managing the Plan

6.6.1 Insurance, Liability and Risk Management

Exposures to potential and concerns from private landowners who grant easements or who are located adjacent to in-boulevard right-of-way and multi-use trail facilities are liability concerns for the Trails Master Plan.

Even though multi-use trails are separated from the roadway, they still may legally fall under the definition of a “highway”, since bicycles are legally defined as vehicles. This is an important point because it means that cycling facilities are covered under many of the same basic immunities as other highways. It also illustrates the importance of adhering to design and construction guidelines, as this will provide the greatest legal protection. Aside from proper design and operation of multi-use trail facilities, the Municipality should address potential hazards associated with these facilities including accidents, theft, vandalism, and other problems. This becomes much more acute when these facilities are located along waterways and residential backyard fences.

The following methods of reducing risk are proposed for North Grenville to help minimize the liability associated with providing designated multi-use trail facilities:

Improve the physical environment, increase public awareness of the rights and obligations of pedestrians and cyclists and improve access to educational programs in order to demonstrate that efforts are being taken to reduce the likelihood of accidents occurring and lawsuits being initiated by injured parties;

- Select, design and designate facilities in compliance with the highest prevailing standards;
- Design concept(s) should comply with all applicable laws and regulations;
- Maintenance operations should conform to acceptable standards. If a hazard cannot be removed, it must be isolated with barriers or notified by clear warning signage;
- Monitor on a regular basis the physical conditions and operations of trail facilities. All reports of hazardous conditions received from pedestrians, cyclists, police or others should be promptly and thoroughly investigated;



- Keep written records of monitoring and maintenance activities;
- Avoid describing or promoting routes or pathways as “safe” or “safer” than alternatives. It is preferable for facility users to assess their capabilities themselves and govern their choices accordingly, which is the prevailing situation; and
- Maintain proper insurance coverage as a safeguard against having to draw payment for damages from the public treasury.

Recommendation 6-13

Establish and document, in association with the Municipality’s legal advisors, recommended procedures for risk management as it relates to the design, maintenance and operation of trail facilities in North Grenville.

6.6.2 Monitoring Implementation and Performance Measures

Implementation of the Integrated Community Trail Strategy is expected to begin in 2011. It is proposed that the Municipality implement the municipality-wide trail network infrastructure plan on an annual basis in accordance with the proposed phasing and available capital funding, and as authorized by Municipal Council.

Collecting data to evaluate the different and changing aspects of trail users’ behaviour will assist in evaluating the effectiveness and overall contribution of various activities to achieve the stated vision and goals of this Plan. This data collection should begin in 2011 and build upon the various initiatives, and may include public attitude surveys. The data will establish a benchmark with which to compare later data as the Integrated Community Trail Strategy is implemented.

The data collection will be used to:

- Confirm the overall direction and implementation of the Integrated Community Trail Strategy;
- Confirm statistics on the number and type of trail users; and
- Verify the route selection process.

Over time, the evaluation system should identify changes in route preference to assist in determining where to implement changes to “hard and soft” trail



infrastructure. The results of this assessment may be used to determine the success of implementing various types of trail facilities. However, caution must be used in relying on an immediate response to a given improvement. An extended timeframe should be established to ensure that trail use awareness initiatives are in place to assist in changing travel patterns and habits.

Assessing the impact and costs of the implementation program might be based on information such as:

- Origin/destination counts;
- Screen line counts on a finer scale that are appropriate to trail use patterns;
- Intersection counts to coincide with routes on which improvements are proposed, and also on parallel routes; and
- User counts on major trail systems.

This information should be collected every two years and during the peak trail use season.

Data collected through evaluation/monitoring programs along with information collected through on-going public consultation exercises, such as user surveys and public attitude surveys conducted every five years, will inform and assist in preparing the list of annual priorities and measuring the performance of the Plan.

A component of measuring the implementation of the Plan and its success in meeting objectives is to establish performance measures and targets.