## F

## **Appendix F: Summary of Key Recommendations**



Recommendation Number	Recommendation	Community Priority*
hapter 3. Imple	ementation of Pedestrian, Cycling and Multi-use Recreational Trail Infrastructure	
3-1	It is recommended that the City adopt a two-pronged implementation framework that utilizes routine accommodation and active transportation planning and implementation programs for an "all ages and abilities" network of physically separated pedestrian and cycling infrastructure and trail system.	Infrastructure
3-2	The design and implementation for all roadway reconstruction, state of good repair, and operational improvement projects should consider the inclusion or at minimum protect for implementation of protected intersections, pedestrian and cycling facilities on both sides of the roadway and consider crossings that will service the multi-use recreational trails system. This includes paving shoulders on rural / non-urbanized cross-sections for use by pedestrians and cyclists.	Infrastructure
3-3	A network program should be developed and updated annually as part of the budget approval process that reflects infrastructure being implemented through routine accommodation as well as standalone priorities identified through the PBMP Update.	Connectivity
3-4	The City should continue to identify annual planning and implementation program budgets for pedestrian, cycling and multi-use recreational trail projects.	Infrastructure
3-5	The City should continue to develop agreements with agencies and authorities where partnership would provide additional investment, synergies and support to implement pedestrian, cycling and multi-use recreational trail network segments.	Infrastructure
3-6	The Pedestrian and Bicycle Master Plan should inform the policy updates in the Transportation Master Plan and ultimately the Official Plan as well as other secondary plans and studies.	Awareness & Culture
3-7	It is recommended that the upcoming municipal comprehensive review also include an active transportation schedule(s) in the Official Plan that reflects the policies recommended below showing cycling facilities on all arterial and collector roadways as well as the Vaughan Super Trail and comprehensive multi-use recreational trails network. This is in line with local best practices as seven out of York Region's nine local municipalities currently have at least one active transportation related schedule in their Official Plans.	Awareness & Culture

	Appendix G: Summary of Pedestrian and Bicycle Master Plan Key Recommendat	ions
Recommendation Number	Recommendation	Community Priority*
3-8	For the next update the City should consider undertaking separate master plan studies for the walking, cycling and multi-use recreational trails.	Awareness & Culture
3-9	The City should update the City-wide Engineering Design Criteria and Standard Drawings to reflect current best practices for the design of pedestrian, cycling and multi-use recreational trails facilities and consolidate all existing standards and guidelines from various departments into one integrated document for use by all staff as a starting point for the planning, design and construction of all infrastructure projects.	Infrastructure
3-10	The City should review, develop and maintain by-laws for pedestrian, cycling and multi-use facilities (in-boulevard and open space), including but not limited to:  o Designation of facilities upon the erection of authorized signs; o Operation and stopping of motor vehicular restrictions; o Operation of bicycle restrictions; o E-bike / e-scooter usage; o Power to regulate by York Region Police; o Exemptions to any of the above; etc.	Awareness & Culture
Chapter 4. Pedes	strian Network and Policies	
4-1	Pedestrian facilities should be implemented based on road classification and the radius surrounding generators of pedestrian traffic in accordance with Table 4-1. For For urbanized cross-sections, sidewalks or multi-use pathways may be used to provide pedestrian facilities. For rural / non-urbanized cross-sections, pedestrian accessible paved shoulders are appropriate.	Infrastructure
4-2	In plans of subdivision, the owner/developer should be required to extend sidewalk beyond the limits of the subdivision in order to provide a connection with other pedestrian related facilities. Identified pedestrian facilities include but are not limited to other planned or existing sidewalks, walkways/mews, trails and bus stops.	Connectivity

Recommendation Number	Recommendation	Community Priority*
4-3	Mid-block pedestrian connections/mews should be located centrally in blocks that are longer than 200 metres in length and connect to sidewalks, trails or pathways on either end (UDG and OP 2010 Policy 4.2.3.3). To maximize the connectivity of the street network for pedestrians and cyclists by:  o Ensuring grid-like connectivity that minimizes trip distance; o Ensuring that gaps in the street network are minimized by the provision of strategically located sidewalk and pathway connections; o Ensuring convenient and direct connections to transit stops and stations; etc.	Connectivity
4-4	The City should also consider developing:  a) Pedestrian Design Guidelines in accordance with current best practices and AODA standards; b) Criteria for prioritization of sidewalk infill (formalize existing practice); c) Standard practice for responding to sidewalk inquiries; d) Standardize requirements under the development review process; and e) A more focussed pedestrian master plan.	Safety (a) Connectivity (b,c,d, e)
hapter 5. Cyclin	g Network and Policies	
5-1	The City should prioritize the buildout of the Vaughan Metropolitan Centre (VMC) Separated Cycling Network as well as intensification area separated cycling networks within the Highway 7 and Weston, Concord, Promenade, Vaughan Mills Centre as well as, Maple and Rutherford GO station areas, etc.	Connectivity
5-2	The City should revisit the active transportation plans for all intensification and secondary plan areas and corridors and aim to plan and implement an "all ages and abilities" cycling network in these key areas. This includes but is not limited to Highway 7 and Weston, Concord, Promenade, Vaughan Mills Centre as well as Maple and Rutherford GO station area, etc.	Connectivity

Recommendation Number	Recommendation	Community Priority*
5-3	The City should prioritize the development of localized mini-networks within existing Maple, Thornhill and Woodbridge communities and intensification area networks within the Vaughan Metropolitan Centre (VMC), Hwy 7/Weston, Promenade Mall as well as, Concord, Maple and Rutherford GO areas, etc.	Connectivity
5-4	All new and reconstructed arterial and collector roads (both major and minor) shall include protected intersections/driveways, separated in-boulevard linear cycling facilities on both sides of the roadway and consider crossings that will service the multi-use recreational trails system in order to provide the most direct and comfortable route for pedestrians and cyclists. For example:  o Road Reconstruction projects should include protected intersections, separated pedestrian and cycling facilities within the boulevard and consider crossings that will service the multi-use recreational trails system.  o Road Resurfacing projects should consider opportunities to include dedicated space for cyclists through the narrowing of vehicular travel lanes, narrowing or elimination of vehicular parking lanes, lane conversions (e.g. 4 lane cross-sections converted to a 2-lane cross-sections), paving shoulders on rural / non-urbanized cross-sections, etc.  o New and Upgraded Traffic Signal projects should not preclude the opportunity to implement cycling facilities. All new or upgraded traffic signal designs and implementation should comply with AODA standards and include appropriate crossing treatments for pedestrians and cyclists.	Safety
5-5	Staff should provide an annual report of priority projects as well as Planning and Infrastructure Capital Program to Council as an acknowledgement that the program is a living plan. The report will serve as an addendum to the Pedestrian and Bicycle Master Plan highlighting the previous year's accomplishments while providing updates to the plan and program based on up to date information such as new development, annual additions to the capital infrastructure programs (both City of Vaughan and York Region), easement negotiations and available funding/grant opportunities, etc.	Awareness & Culture

Recommendation Number	Recommendation	Community Priority*
5-6	Acknowledging that intersections pose the greatest danger to vulnerable road users (VRU), pedestrians and cyclists, a "protected intersection" type design shall be the preferred intersection and driveway treatment for pedestrians and cyclists. This treatment has shown to improve street level interactions, making them a more comfortable and predictable experience for all users including motorists.	Safety
5-7	The City should provide active transportation infrastructure (pedestrian, cycling and multi-use recreational trail) that is suitable for all ages and abilities.	Safety
5-8	In the design of cycling facilities, the City should apply an "all ages and abilities" framework to assess the necessary quality of cycling facilities in accordance with O. Reg. 191/11 – Integrated Accessibility Standards and the contextual guidance of the National Association of City Transportation Officials and Ontario Traffic Manual (OTM) Book 18: Cycling Facilities and OTM Book 12A: Bicycle Signals.	Safety
5-9	The one-way travel portion of cycling facilities should be a minimum of 1.8 metres wide or in accordance with Ontario Traffic Manual (OTM) Book 18: Cycling Facilities. Wider facilities should be considered in urban areas. Appropriate buffers, separation or off-sets must be provided between cycling facilities and vehicular travel lanes, vehicular parking lanes/dooring zones, barrier curb (all measured from face of curb) as well as sidewalk, vertical obstructions such as raised planters/hydro poles, etc.	Safety
5-10	The use of minimum width cycling facilities should be limited to constrained corridors where desirable or preferred cycling facility widths cannot be achieved after all other vehicular travel lanes or parking lanes (if applicable) have been narrowed to minimum widths appropriate for the context of the roadway.	Safety
hapter 6. Multi	-Use Recreational Trail (MURT) Network and Policies	
6-1	The completion of the 100km Vaughan Super Trail loop will be prioritized in the implementation of the Multi-use Recreational Trails Network.	Connectivity
6-2	The proposed multi-use recreational trails network plan is conceptual and high-level in nature and will be further refined with appropriate consideration of secondary trail network connections through, including but not limited to, the Block, Subdivision and/or Site Planning processes.	Infrastructure

Recommendation Number	Recommendation	Community Priority*
6-3	The City will continue to implement stand-alone open space multi-use recreational trails in accordance with priority, as resources permit.	Infrastructure
6-4	Multi-use recreational trail priority will be determined by identifying missing linkages which provide direct access to major destinations and prioritize these routes as the first for winter maintenance.	Connectivity
6-5	Proposed multi-use recreational trail prioritization should not preclude implementation of local network through development, relevant capital infrastructure projects, or related environmental assessments put forward by other agencies or parties that may allow for key municipal connections.	Connectivity
6-6	The City should consider developing formal guidelines related to the timing of trail construction, specifically when they form part of a subdivision. It is recommended that trails be built prior to or at occupancy of residential units where feasible. Constructing trails after occupancy should be discouraged.	Infrastructure
6-7	The City should consider mid-block crossings per established guidelines where necessary to connect multi-use recreational trail networks across arterial, collector and/or local roads.	Connectivity
6-8	Grade separation infrastructure should be considered and evaluated through feasibility reviews when multi-use recreational trails intersect key barriers such as major highways and arterial roads, rail corridors to promote a seamless and integrated trail network.	Safety
6-9	In cases where multi-use recreational trails serve a dual purpose of both recreational and commuter in nature, the aim should be developing a seamless and integrated system.	Connectivity
6-10	Where a continuous trail system is not possible connections within the road allowance should be considered and where possible designed to match the trail facility (width, markings and material).	Connectivity
6-11	The City should continue to use the 2007 Pedestrian and Bicycle Master Plan Technical Appendix: Planning and Design Guidelines, as well as the Accessibility Design Guidelines for York Regional Forest Trails, TRCA Trail Planning and Design Guidelines, and the Toronto Multi-Use Trail Design Guidelines, until such a time that the City or Region develop their own standards and guidelines.	Safety

	Appendix G: Summary of Pedestrian and Bicycle Master Plan Key Recommendat	ions
Recommendation Number	Recommendation	Community Priority*
6-12	The City should develop a trails focussed master plan on providing a connected city-wide green space network, developing policies that facilitate the securement of land assembly, as well as reviewing and updating the 2007 Pedestrian and Bicycle Master Plan Technical Appendix: Planning and Design Guidelines for current best practices and standards of multi-use recreational trail planning and design.	Connectivity
6-13	Design multi-use recreational trails for maintenance, waste removal, and/or emergency access as required.	Safety
6-14	Design, construct, and maintain multi-use recreational trails consistently according to expected user volumes (e.g., as primary, and secondary trail classes).	Safety
6-15	Design, construct, and maintain multi-use recreational trails following best practices to minimize impacts to adjacent environments, especially those identified as environmentally sensitive sites, habitat corridors, floodplains, or ravines (e.g., concerns with lighting, trail-sizing, all-season use).	Safety
Chapter 7. Opera	ations and Maintenance	
7-1	The City should undertake a corporate-wide review and identify mechanisms to link operation and maintenance budget needs associated with capital infrastructure and development projects prior to project budget approval.	Safety
7-2	Maintenance and operations staff should be a key stakeholder during the design and approval process for any new active transportation facilities including sidewalks, cycling facilities and multi-use recreational trails as part of both projects being delivered through development and internally through capital programming and delivery.	Safety
7-3	Public works staff should include a level of service standard specifically related to active transportation facilities including sidewalks and on-road, in-boulevard cycling facilities and multi-use recreational trails. This should be used to inform service levels for active transportation facilities and associated financial requirements.	Safety

Recommendation Number	Recommendation	Community Priority*
7-4	The City's existing City-Wide Streetscape Implementation Manual and Financial Strategy is a comprehensive design, construction and financial framework used to manage the design, construction and costing of streetscapes in Intensification Areas and Heritage Conservation Districts in the City. The manual aims to develop streetscapes for all modes of transportation. The next update of the City-Wide Streetscape Implementation Manual and Financial Strategy should consider including cycling as one of the streetscape zones in the Level of Service definitions and financial model for both capital and operating/maintenance costs. The City should review the potential to apply a similar model city-wide (i.e. in areas outside of Intensification Areas and Heritage Conservation Districts) for all city-owned infrastructure, with consideration for appropriate Level of Service reviews through the Corporate Asset Management Strategy.	Awareness & Culture
7-5	Asset management staff should continue to engage applicable departments in their effort to develop a comprehensive inventory of all pedestrian, cycling, shared-use and multi-use recreational trails (official and unofficial) infrastructure including key attributes such as wayfinding and directional signage to understand the full life cycle costs of an active transportation facility.	Infrastructure
7-6	Using the best practices review undertaken as part of the PBMP study, Service Level Review and other information as it emerges, maintenance and operations staff should develop a formal maintenance program and Standard Operation Procedures (SOPs) for the pedestrian, cycling, shared-use and multi-use recreational trail networks and assess the impact to operating budgets, equipment needs and resources.	Safety
7-7	The City should adjust, and review maintenance costs and impacts to operating budgets, equipment needs and resources on an annual basis. There may be opportunity to do this through the City-Wide Streetscape and Implementation Manual and Financial Strategy in the interim and through the Corporate Asset Management Strategy in the future. The formal maintenance program and SOPs should be used to inform addendums to the Master Plan.	Safety
7-8	The City should integrate facility maintenance access requirements into open space systems which may dually serve as local trail connections.	Safety

Recommendation Number	Recommendation	Community Priority*
7-9	In the interim, maintenance and operations staff should continue to regularly review the O. Reg. 239/02 Minimum Maintenance Standards for Municipal Highways, O. Reg. 191/11: Integrated Accessibility Standards and other applicable regulations standards to ensure City practices are consistent with them as they pertain to pedestrian facilities, bicycle facilities and multi-use recreational trails. Noting that as these standards evolve, and level of service requirements increase through these regulations, additional financial commitment will be required for operations and maintenance.	Safety
hapter 8. Outre	each, Education and Awareness	
8-1	The City should continue to use these annual events as a means of reaching, educating and informing residents about walking, cycling and multi-use recreational trails. The following events should be considered:  o February – Winterfest o March – Earth Hour o April – Environmental Days (one in each Ward) o May – Public Works Day o June – Bike Month o July/August – Concerts in the Park / Annual Canada Day Celebration o December – Tree Lighting / Menorah Lighting Ceremonies o Year-round – New Pedestrian, Cycling, Multiuse Recreational Trail and Park Openings Additional events or special one-time events may also be identified where it would be prudent to have the education and outreach booth attend and have a presence at a city event once a month.	Awareness & Culture
8-2	In June of 2014, Council proclaimed the month of June as Recreation and Parks Month as well as Bike Month. The City should promote Bike Month in conjunction with Recreation and Parks Month and include more activities and events around walking and cycling as part of the Recreation's annual promotion of free activities and events during the month of June.	Awareness & Culture

Recommendation Number	Recommendation	Community Priority*
8-3	The City should develop an annual communications plan and calendar for on-going annual messaging. For example, safety tips, bike month promotion, active and safe routes to school, trail etiquette, etc.	Awareness & Culture
8-4	The City should develop a consistent and recognizable public "identity" for active transportation and use it to create a display and associated materials that can be used in the format of a booth at City events, etc. This "identity" will help to raise awareness of active transportation within the City and indicate its importance as a Term of Council priority.	Awareness & Culture
8-5	The City should establish an annual education, outreach and awareness plan and program budget should be identified for outreach related to active transportation. Grant opportunities related to education, outreach and awareness may supplement the annual budget.	Awareness & Culture
8-6	In 2011 the City of Vaughan established the Vaughan Cycling Forum. The City should consider reestablishing the Vaughan Cycling Forum (or similar) as a means of continually exchanging information with residents and building capacity.	Awareness & Culture
8-7	The City should consider enhancing the trail experience by partnering with organizations and independent groups to develop educational, cultural and other similar engagement programs, to promote the trail network as a platform for special events and encourage active lifestyles.	Awareness & Culture
8-8	The City should facilitate the development of community stewardship programs to support trail building programs, monitoring and maintenance. This may be achieved by partnering with local or regional trail exploration groups, expanding the Park Ambassador Program to include trails, expanding the Tree and Bench Sponsorship program to include trails, expanding the Adopt a Park program to include tails, partnering with children and youth organizations such as the Scouts Canada and Girl Guides, and exploring the creation of a children and youth oriented 'Trail Blazer' program through Recreation.	Awareness & Culture

Recommendation Number	Recommendation	Community Priority*
8-9	As a means of building internal capacity and improving coordination of initiatives related to active transportation, the City should consider establishing an internal active transportation working group that meets at a minimum, quarterly. To facilitate discussion and focus meetings, consideration should be given to focus meetings by topic such as hard infrastructure versus soft education and outreach, acknowledging that some overlap will occur.	Awareness & Culture
8-10	To succeed, the Vaughan Super Trail requires the collaboration of leadership and teams across the City. The initiative must have a clear structure, and line of authority in order to expedite decision-making, promote, conduct projects, and utilize funds effectively. As such a working group specific to the Vaughan Super Trail should be established to provide strategic advice and general oversight to the Vaughan Super Trail initiative. The governance structure could consider topics such as strategic direction, implementation and construction, policy development, grants and funding, capital projects, studies and operations and maintenance.	Awareness & Culture
8-11	Educate internal staff on the key themes and recommendations of the PBMP as it relates to their role and department. Active transportation and trails subject matter expert staff should do focused presentations to Council, Senior Management Team and internal staff/departments.	Awareness & Culture
8-12	Expand internal knowledge base as it relates to active transportation by organizing learning sessions or webinars on a regular basis on active transportation or consultation related topics. Organizations such as the Transportation Association of Canada (TAC), Ontario Traffic Council (OTC), Institute of Transportation Engineers (ITE), Association of Pedestrian and Bicycle Professionals (APBP), National Association of City Transportation Officials (NACTO), Ontario Trails Association (OTA) etc. offer valuable learning opportunities that the City could utilize.	Awareness & Culture

Recommendation Number	Recommendation	Community Priority*
8-13	The City should continually monitor and update the School Crossing Guard Program to improve the safety of children and youth as they make their way between home, school, and out-of-school-time programs. The program provides an opportunity to educate children and parents on school crossing procedures, road safety and rules of the road on an ongoing basis and work with schools to develop active school travel plans for the surrounding community. The City should promote and build awareness of the program through various media and communication channels.	Awareness & Culture
8-14	The City should provide and promote bicycle skills training for people of all ages and abilities interested in riding a bike. Training could be provided in the form of workshops, programs and/or summer camps through the Recreational Services similar to neighbouring municipalities such as Richmond Hill and Markham. Some programs for consideration could include, how to ride a bike, rules of the road, bike mechanics 101, etc.	Awareness & Culture
8-15	The City should celebrate and promote the opening of new active transportation facilities and educate the local community on use. It is recommended that these "grand opening" events should form part of the short-term education and outreach program. In addition, education on use should be incorporated into the events and complimented by communications through social media and the City's digital platforms.	Awareness & Culture
8-16	The City should develop a resident facing Vaughan specific city-wide cycling and multi-use recreational trails map or guide to complement and build upon the Great Walks of Vaughan Trail Guide, York Region Cycling Map, and York Region Trails Guide. These maps or guides should be updated every other year and distributed at minimum at local community centres, libraries, municipal buildings and City events. These maps or guides should be provided both in hard copy and online.	Awareness & Culture
8-17	The City should develop a branding and wayfinding signage strategy for citywide trail networks such as the Vaughan Super Trail, identifiable systems such as Bartley Smith Greenway, or local and neighbourhood loops. Branding and wayfinding should also complement, update, and build upon existing initiatives, such as the Great Walks of Vaughan. The City should explore engaging active transportation and recreational users with online interactive experiences.	Awareness & Culture

Recommendation Number	Recommendation	Community Priority*
8-18	The City should provide free bike valet services at large City-wide events such as Canada Day Celebration. The City could also purchase temporary bicycle racks to set up at City of Vaughan events if bike racks are not available to encourage people to cycle. In addition, event permitting should require events of certain size to provide bike valet services.	Awareness & Culture
hapter 9. Imple	ementation Approach	
9-1	The City should identify and leverage larger capital projects and development to improve active transportation infrastructure (i.e. routine accommodation).	Infrastructure
9-2	The City should identify, prioritize and incorporate infrastructure gaps not addressed through routine accommodation into the annual active transportation planning and implementation programs.	Infrastructure
9-3	The City should develop a prioritization matrix that builds on the Pedestrian Implementation Criteria (Figure 4-2) and Priority Cycling and Multi-use Recreational Trail Network (Figure 9-1) developed as part of the Pedestrian and Bicycle Master Plan study and incorporates new opportunities as they arise to create a dynamic program that responds to emerging needs. The prioritization matrix should be tweaked on an annual basis through the budget approval and capital programming process.	Infrastructure
9-4	Establish and expand dedicated coordination teams with expertise in strategic policy and network planning, infrastructure feasibility, design and implementation, education, outreach and communication, operations and maintenance, by-law and enforcement, data collection, monitoring and analysis.	Awareness & Culture
Chapter 10. Oth	er Considerations	
10-1	The City should continue to research new and emerging trends and technologies such as bike share, e-bikes and e-scooters.	Awareness & Culture
10-2	Through the comprehensive by-law update, the City should include provisions for bicycle parking Citywide in line with current best practices.	Infrastructure

Appendix G: Summary of Pedestrian and Bicycle Master Plan Key Recommendations		
Recommendation Number	Recommendation	Community Priority*
10-3	All new development should require short and long-term bicycle parking. Short-term bicycle parking should be visible from the destination for security and should be located in a high-traffic area with passive surveillance but located in such a way as not to unnecessarily impede pedestrian movement. Short-term bicycle parking should be provided with medium-high security bike racks with two points of contact such as the inverted 'U' rack permanently anchored to the ground (i.e. with an in-ground mount) preferably sheltered by an awning or equivalent. Long-term bicycle parking should be located on the ground floor or first parking level (P1) of a building if accessible via an elevator or ramp to provide convenient access to users. Parking garage ramps should include bike lanes and wayfinding signage to long-term bicycle parking.	Infrastructure
10-4	The City should undertake a review of existing bicycle parking (both short and long term) at all municipal buildings. Short-term bicycle parking should be provided or upgraded in accordance with the above recommendation for new develops. Long-term bike parking should be implemented at City Hall and the Joint Operations Centre.	Infrastructure
10-5	The City should develop an annual city-wide bicycle parking program. The program should be supported by a plan that outlines location, justification, purchase and installation of bike racks citywide.	Infrastructure