

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF JUNE 25, 2024

Item 3, Report No. 24 of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on June 25, 2024.

3. WESTON 7 TRANSPORTATION MASTER PLAN

The Committee of the Whole (Working Session) recommends:

- 1) That the recommendations contained in the report of the Deputy City Manager, Infrastructure Development, dated June 5, 2024, be approved;**
- 2) That the presentation by Christopher Tam, Manager, Transportation Planning and Engineering, Infrastructure Planning and Corporate Asset Management, and Communication C7., presentation material, be received; and**
- 3) That Communication C10., from Christopher J. Tanzola, Partner, Overland LLP, Yonge Street, Toronto, dated June 4, 2024, be received.**

Recommendations

- 1. That Council approve in principle the May 2024 Weston 7 Transportation Master Plan;**
- 2. That the Weston 7 Transportation Master Plan study recommendations be used to inform transportation-related policy of the Weston 7 Secondary Plan; and**
- 3. That staff bring a report to Council to present the final Weston 7 Transportation Master Plan concurrently with the final Weston 7 Secondary Plan.**

Committee of the Whole (Working Session) Report

DATE: Wednesday, June 5, 2024

WARD: 3

TITLE: WESTON 7 TRANSPORTATION MASTER PLAN

FROM:

Vince Musacchio, Deputy City Manager, Infrastructure Development

ACTION: DECISION

Purpose

To provide an overview of the study process, findings, and summary of the recommendations of the Weston 7 Transportation Master Plan study.

Report Highlights

- The Weston 7 Transportation Master Plan (TMP) is a long-range transportation plan that identifies a multi-modal transportation network for the Weston 7 Secondary Plan area and an associated implementation plan as the area evolves over time.
- The Weston 7 TMP study, within the overall implementation strategy of the Weston 7 Secondary Plan, concludes that the required implementation of a comprehensive multi-modal transportation network as well as broader City and Regional improvements are necessary to accommodate a growth threshold of a combined 26,000 people and jobs within the Secondary Plan.

Recommendations

1. That Council approve in principle the May 2024 Weston 7 Transportation Master Plan;
2. That the Weston 7 Transportation Master Plan study recommendations be used to inform transportation-related policy of the Weston 7 Secondary Plan; and
3. That staff bring a report to Council to present the final Weston 7 Transportation Master Plan concurrently with the final Weston 7 Secondary Plan.

Background

The Weston 7 Transportation Master Plan (Weston 7 TMP) study was initiated and has proceeded in parallel with the Weston 7 Secondary Plan Study

The Weston 7 TMP study was initiated at the same time as the Weston 7 Secondary Plan Study, following Council's consideration of the Policy Planning and Special Programs Department report on June 5, 2019. The recommended next steps of this report were to proceed with Phases 2 and 3 of the Secondary Plan Study and to complete required additional studies including a Transportation Master Plan.

The City subsequently retained WSP in January 2020 to undertake and complete the Weston 7 TMP. The Weston 7 TMP has proceeded in parallel with the Weston 7 Secondary Plan study, and is a comprehensive study which integrates transportation with land-use planning to establish the required transportation network in support of the Weston 7 Secondary Plan, and to inform transportation related policy in the Secondary Plan.

The Weston 7 Secondary Plan area today, is largely characterized by retail and commercial uses primarily accessed by private automobiles

The current Weston 7 Secondary Plan (SP) area is auto oriented with the landscape occupied by large surface parking lots totalling approximately 10,000 parking spaces. Highway 7 and Weston Road are Regional arterial roads bisecting the area which have 45 metre and 43 metre right-of-ways, respectively. The area's proximity to Highway 400 immediately to the east and Highway 407 to the south are major attractors of trips through the study area. Currently the Weston 7 SP area lacks pedestrian facilities with not all streets having sidewalks on both sidewalks. Further, the existing cycling network is limited to facilities on Highway 7. The YRT Viva bus rapid transit system (BRT) operates in median designated lanes along Highway 7, with two stations within the study area, at Weston Road and Ansley Grove Road. North-south bus service also operates on Weston Road.

The Weston 7 TMP was conducted to meet the requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment process

The Weston 7 TMP was conducted to meet the requirements of Phases 1 and Phase 2 of the Municipal Class Environmental Assessment (EA) for Master Plans. The Weston 7 TMP process followed Phase 1 and Phase 2 of the five-phase EA process by first defining a problem and opportunity statement followed by identifying and evaluating a

range of alternative network solutions to select a preferred multi-modal network solution. The study was organized around the following phases:

- **Identify Problems and Opportunities:** identify transportation infrastructure constraints and needs to support planned growth in the Weston 7 Secondary Plan Area.
- **Assess Transportation Solutions:** develop, assess and evaluate transportation solutions based on a multi-modal approach which would provide network options for goods and people movement, as well as planning for complete streets, cycling routes, connections to transit, etc.
- **Identify the Preferred Transportation Plan:** select a preferred plan that reflects a multi-modal network that best integrates with and addresses the needs in support of future growth and transformation of the Secondary Plan area.

The Weston 7 Secondary Plan area, as analyzed in the Weston 7 TMP, is bounded by Highway 400 to the east, Chrislea Road and Blue Willow Drive to the north, Ansley Grove Road to the west and Winges Road and 407ETR to the south.

Consultation and engagement were key components of the Weston 7 TMP study

Formally marked by Notice of Commencement on November 5, 2020, the TMP proceeded through study phases that included public engagement through two formal Public Information Centres, early engagement with Indigenous Communities and establishment of stakeholder groups including a Technical Advisory Committee and Landowners Group. It is noted that where study milestones aligned, TMP Study consultation activities and communication were conducted jointly with the Weston 7 Secondary Plan project team. Consultation and engagement activities included:

- **Public Information Centres (PIC):** PIC 1 was held from November 4, 2021, to December 19, 2021, and PIC 2 was held June 21, 2023, to July 19, 2023. Both PICs were held with the intention of presenting information and seeking input and feedback from the public.
- **Indigenous Consultation:** The Weston 7 TMP project team together with the Secondary Plan project team undertook pre-engagement meetings with four First Nations and the Local Metis Council in Fall 2020. The meetings provided an introduction of both the Weston 7 SP and TMP. Supporting studies such as the Stage 1 Archaeological Assessment and the Cultural Heritage Review which were advanced and completed as part of Weston 7 TMP were subsequently shared with these groups for their feedback. The Weston 7 TMP project team

also provided formal communications advising of updates and consultation activities at key study milestones.

- **A Technical Advisory Committee (TAC)** comprised of representatives of regulatory and review agencies was established at the outset of the TMP study and met at key study phases and ahead of Public Information Centres.
- **A Landowners Group** comprised of property owners, representatives of property owners and development applicants within the Secondary Plan area at the outset of the study and met at key study phases and ahead of Public Information Centres.

Methods of communication included both digital and print, supported by the City's Communications, Marketing and Engagement (CME) department. Examples included providing notification of Public Information Centres, direct mailing by postal code for residents and businesses within and adjacent to the study area, published advertisements in the Vaughan Citizen, mobile signs, City's social media avenues and a project website.

Previous Reports/Authority

[Item 1, Report No. 23, of the Committee of the Whole \(Working Session\), which was adopted without amendment by the Council of the City of Vaughan on June 12, 2019.](#)

Analysis and Options

A vision/problem and opportunity statement and alternatives to support the Weston 7 Secondary Plan area was identified in Phase 1

A review of existing conditions, constraints, and challenges informed several areas of opportunity for the Secondary Plan which was incorporated into the vision.

The vision consists of the following core pillars:

- Provide a grid network of complete streets throughout Weston 7
- Ensure the transportation network is designed for all users
- Improve safety for all modes of travel
- Leverage innovative smart mobility and Transportation Demand Management (TDM) measures
- Increase the share of non-auto trips

The identification of the problem and opportunity statement and key principles guided the development of the Weston 7 TMP.

The four key principles integrated in the vision of the TMP include:

- Promoting sustainability;
- Improving connectivity;
- Enhancing accessibility; and
- Supporting mobility for all modes of transportation.

The preferred multi-modal transportation network was determined based on a staged development and evaluation approach, and further refined by comprehensive analysis and assessment

The study developed three alternative transportation networks, then assessed and evaluated the alternatives against the “Do Nothing” Alternative. The alternatives were as follows:

- Alternative 0 – Baseline: only Regional and Provincial planned improvements, with no improvements to City streets within the Weston 7 Secondary Plan area.
- Alternative 1 – Colossus Drive: The Baseline plus the Colossus Drive extension.
- Alternative 2 – Demonstration Plan: The Baseline, Colossus Drive, plus initial road network concept for the Secondary Plan; and
- Alternative 3 – Network Plan: The Baseline, Colossus Drive, adjustments to the initial road network concept, and additional multi-modal improvements to enhance opportunities for residents and visitors to use sustainable modes of transportation.

Extensive technical analysis was undertaken to analyze future conditions of the alternatives. These analyses used the York Region 2041 travel demand forecasting model as a base and considered full build out of the study area, which at the time of analysis was estimated to be 64,900 people and jobs. This initial analysis indicated the planned improvements within the broader City and Region coupled with an improved transportation network within the Weston 7 Secondary Plan area would not be able to support full build-out. As a result, subsequent analysis was undertaken to determine the threshold that could be supported by the currently proposed transportation improvements.

This subsequent analysis of road links and intersections was conducted at a microsimulation level using the Aimsun software for an interim condition of about 40% of the above-noted full build out (about 26,000 people and jobs). Meetings were held with York Region to agree to parameters to better reflect future conditions, such as reducing the amount of parking provided for future residential units and increasing the cost of all day parking, plus adjusting the trip rates from different land uses to reflect trip rates seen in more urban conditions.

Overall, findings from the assessment identified Alternative 3 as the preferred alternative. Furthermore, the analysis showed that a measured approach to development would be necessary. For the interim conditions with 26,000 people and jobs, chronic congestion was observed in the micro-simulation model at intersections along Highway 7 and Weston Road during peak hours. The level of congestion could be accommodated, but numerous intersection movements with long delays were noted.

The recommended multi-modal transportation system is formed by an Active Transportation Network, a Transit Network, and a Street Network

Active Transportation (AT) Network

A highly accessible and dense Active Transportation (AT) Network (Figure ES 2 in Attachment 1) is recommended, formed by public on and off-road facilities, publicly accessible private links and grade separated connections of Highway 7, Weston Road, and Highway 400. This network will remove barriers and provide for a seamless grid of connected routes, enabling shorter distance trips for walking and cycling within Weston 7 and for connecting to and from transit, including the Weston BRT station and the VMC Subway Station.

The approach to developing network accommodations for active transportation in Weston 7 focuses on the ease of walking and cycling. This is particularly imperative for short-distance trips around the study area, to provide easy connectivity to public transit, and to reinforce the ideal that the entire Secondary Plan can be accessed by walking or cycling. Particular focus has been given to ensuring that walking and cycling infrastructure is comprehensively connected throughout the Secondary Plan, especially to cross barriers such as between different properties, and across Regional arterial roads and highways.

Transit Network

The preferred Weston 7 SP area multi-modal network builds from the existing transit network that includes Bus Rapid Transit (BRT) on Highway 7, BRT stations at Weston Road and Ansley Grove and conventional bus service on Weston Road. To the east, the VMC and 407 subway stations on Line 1 Yonge-University provide for service into Toronto, and through the VMC Bus Terminal, to other parts of Vaughan, York Region, and additional destinations such as Brampton.

The connections and service network enhancements identified below provide for increased and new service(s), bringing more service closer to new and future riders. The advancement and implementation of these enhancements fall under the jurisdiction of York Region.

- Transit priority lanes on Weston Road facilitating progression of transit services along the Weston Road corridor;
- Improved frequency of transit along Highway 7 and along Weston Road, with a five-minute frequency for Viva BRT bus service in peak hours; and
- A new transit circulator bus route, providing connections from Weston 7 to the VMC subway station and the 407/Jane subway station.

Street Network

The recommended Street Network envisions a network focused around sustainable and multi-modal transportation, that prioritizes pedestrians, cyclists, and transit. Creating a multi-modal transportation network based on the implementation of a network of complete streets with forward looking rights-of-way ensures that space is prioritized for vulnerable road users and positioned to accommodate micromobility.

A main objective of the street network improvements has been to develop a finer grid network with new and improved collector and local streets across the four quadrants of the Weston 7 SP, providing connectivity within and to and from the area. A finer grid network improves connectivity for all modes of travel and supports reasonable walking and cycling distances which are further enhanced by the Active Transportation Network.

A collector network of new and improved street connections including major collectors, minor collectors, streets and local streets is illustrated in Figure ES 4 of Attachment 1.

Street cross-sections have been developed as part of the Weston 7 TMP which establishes the minimum mid-block right-of-way for major collector, minor collector, and local street classifications. These cross-sections have been developed at this early planning stage and are guided by the City of Vaughan's Complete Streets Design Guide. The cross-sections set out the required functional elements within the right-of-way and identify typical widths for each functional element. The minimum rights-of-way for each street classification is:

- Major Collector – minimum right-of-way at typical mid-block 30 metres.
- Minor Collector – minimum right-of-way at typical mid-block 24 metres.
- Local Street – minimum right-of way at typical mid-block of 23 metres.

Street and intersection specific cross-sections for improvements will be identified, assessed, and evaluated through project/road project specific Environmental Assessment studies (or suitable equivalent) and/or in association with development application processes. The design for all collector (major and minor) and local streets, both new and improved, in the Weston 7 Secondary Plan area should be consistent with the guidance of the Vaughan Complete Streets Guide.

Protecting for the Colossus Drive Extension across Highway 400

The Weston 7 TMP included identification of preliminary design alternatives as the basis of defining a minimum corridor protection area on west side of Highway 400 for the Colossus Drive Extension across Highway 400. The work advanced through the TMP is solely intended for the purposes of defining a minimum corridor protection area so as not to preclude the ability to identify reasonable range of alternatives and prejudice the outcome of subsequent Environmental Assessment.

A protection area (shown on Figure ES 4 in Attachment 1) has been identified through the TMP and recommended to inform the basis of policy protecting for the corridor in the Weston 7 Secondary Plan. Together with the existing policy protection area in the VMC Secondary Plan area, Policy 4.3.10 the identified area on the west side will continue to protect a minimum area from development for the Colossus Drive extension across Highway 400 to Interchange Way in the Vaughan Metropolitan Centre. The ultimate configuration of this new extension crossing is subject to a separate Environmental Assessment.

The Weston 7 TMP highlights several policy areas and brings to the forefront the role that managing parking supply can play in mitigating congestion

A review of parking in the City's current comprehensive zoning by-law was undertaken on the basis that a reduction in parking rates and the subsequent supply of parking would help achieve the desired and necessary travel behaviour shift to more sustainable, non-auto modes of travel. The ultimate recommendations of the TMP are to eliminate minimum parking requirements and implement parking maximums for residential units in the Weston 7 Secondary Plan.

With these recommendations in mind, significant parking reductions should be explored based on an understanding of the goals of the Weston 7 Secondary Plan, societal changes, and current trends in parking requirements in the GTA and a high level of the non-auto mode of travel planned for this area. Traffic modelling results indicate congested conditions under existing and future horizons. This drives a coordinated effect across multiple aspects of the TMP to enable travel using non-auto modes and to limit the availability of parking to discourage auto trip making where appropriate. Staff will continue to investigate the best methods to reduce auto trip making and congestion, including managing parking supply, as the Weston 7 area continues to transform.

The implementation framework proposed by the Weston 7 TMP is a structured approach to planning, protecting, and positioning the area to accommodate the expected people and jobs at full build out

Within the overall implementation strategy of the Weston 7 Secondary Plan, the implementation framework for the transportation network proposed by the Weston 7 TMP is a structured approach to planning, protecting and positioning the area to accommodate the expected people and jobs at full build out. It is structured around:

- Requiring implementation of broader City and Regional transportation improvements as identified in Table 1 below to provide the capacity to accommodate a growth threshold of 26,000 people and jobs, consistent with the findings of the transportation analysis.
- Provision of a Weston 7 Secondary Plan multi-modal transportation network of recommended transportation projects and improvements including:
 - A highly accessible and dense Active Transportation (AT) network that is formed by public on and off-road facilities, publicly accessible private links and grade separated connections of Highway 7, Weston Road, and Highway 400. This network will remove barriers and provide for a

seamless grid of connected routes, enabling shorter distance trips for walking and cycling within Weston 7 and for connecting to and from transit, including the Weston BRT station and the VMC Subway Station.

- A collector street network which provides connectivity for pedestrians, cyclists, transit and personal vehicles between the arterial roads and local or private streets.
- Proposed local street locations with forward looking minimum rights-of-way to ensure that space is prioritized for vulnerable road users, and to be positioned to accommodate micromobility.
- Protection of a corridor area identified by the Weston 7 TMP from development on the west side of Highway 400 for the Colossus Drive Extension, a multi-modal crossing of Highway 400. The ultimate configuration of this new extension/flyover of Highway 400 will be determined by a subsequent Municipal Class Environmental Assessment.

Table 1: Required City and Regional Improvements

Phase /Timing	Broader Area Road and Transit Improvements	Jurisdiction
2031	Colossus Dr Extension Crossing Highway 400 (4 lanes)	City of Vaughan
	Bass Pro Mills Rd Extension from Highway 400 to Weston Road	City of Vaughan
2041	Langstaff Rd widening between Weston Road and Creditstone Road (6 lanes)	York Region
	Langstaff Rd connection over CN McMillan Yard	York Region
	Langstaff Rd full Interchange at Highway 400	York Region
	Steeles Ave widening west of Jane St (6 lanes)	York Region
	Pine Valley Dr widening between Highway 7 and Steeles Ave (6 lanes)	York Region
	Weston Rd widening north of Steeles Ave (6 lanes)	York Region
	Keele St widening north of Steeles Ave (6 lanes)	York Region
	Steeles Ave Bus Rapid Transit Corridor between Jane Street and McCowan Road	York Region
	Jane St Bus Rapid Transit Corridor between Major Mackenzie Dr and Highway 7	York Region

Fundamental to positioning, the TMP proposes a phasing plan which identifies transportation infrastructure improvements which must be delivered prior to or during development

In order to inform transportation related implementation policy, the TMP proposes phasing plan which identifies transportation infrastructure improvements which must be delivered prior to or during redevelopment.

Active Transportation Network

To refine the requirements of the Active Transportation Network, the TMP recommends the completion of an AT Network Implementation study which will advance the design of these elements. Where possible, the key AT network infrastructure improvements identified in Table 16 in the TMP should be established ahead of development to influence travel choice from the outset to walking and cycling.

Collector Street Network

A quadrant-based approach is proposed for the orderly and contiguous implementation of the multi-modal transportation network collector infrastructure improvements. Generally, the completion of an Environmental Assessment study (or suitable equivalent) and the securing of land requirements of the collector street network in a quadrant will be required prior to development proceeding within that quadrant, while local streets will be delivered when adjacent development proceeds. As with all future City roads, design of new or improved streets should be consistent with the guidance of the Vaughan Complete Streets Guide.

Preliminary capital growth related construction costs for the collector network transportation improvements is estimated at approximately \$36 M. The multi-modal transportation collector street network infrastructure and improvements preliminary costs are included in Table ES 1 in Attachment 1.

Financial Impact

There are no immediate budgetary impacts resulting from the adoption of this report. Additional capital and operating funding will be required in future years as reviewed and updated as part of the City's annual budget process.

Operational Impact

There are no immediate operational impacts resulting from the adoption of this report. A Technical Advisory Committee including staff from appropriate City departments was consulted throughout the phases of the Weston 7 TMP Study. Comments from the Technical Advisory Committee on the Final Draft Weston 7 TMP are pending, and the appropriate modifications will be made to the Final Weston 7 TMP and presented to Council at a later date concurrently with the final Weston 7 Secondary Plan.

Broader Regional Impacts/Considerations

York Region has been actively involved and engaged as part of the Technical Advisory Committee through duration of the study. Recommendations of the Weston 7 TMP identify that broader area Regional transportation infrastructure improvements, in the YRTMP 2016 and 2022 are necessary to provide capacity to accommodate growth anticipated to 2041. Key considerations impacting the timing of these transportation infrastructure projects, as they are subject to the availability and commitment to funding. It is noted that the York Region Development Charges By-law 2022 currently identifies the Langstaff Road crossing of the CN McMillan Yard (Jane Street-Keele Street) on the list of contingent projects.

Conclusion

The Weston 7 TMP is a culmination of a 4-year study that combined comprehensive transportation analysis, consultation and engagement in the development of long-range transportation plan for the Weston 7 Secondary Plan area. The Weston 7 TMP study proceeded in parallel with the Weston 7 Secondary Plan study, and it identifies a multi-modal transportation network to support up to 26,000 people and jobs, and an implementation plan to reach this threshold.

Upon Council approval in principle, the next steps include finalizing the Weston 7 TMP documentation, continuing consultation and dialogue with the Weston 7 Landowners Group and the Technical Advisory Committee, issuing Notice of Completion initiating the formal 30-day public review period and address any final comments. Staff will bring an update to Council, at the same time as the final Secondary Plan, to present the modifications made as a result of comments and the final Weston 7 TMP.

For more information, please contact Selma Hubjer, Director, Infrastructure Planning and Corporate Asset Management, ext. 8674.

Attachment

1. Weston 7 Final Draft TMP Executive Summary, May 2024.

Prepared by

Marta Roias, Project Manager, Transportation Planning, Ext. 8026.

Christopher Tam, Manager, Transportation Planning and Engineering, Ext. 8702.

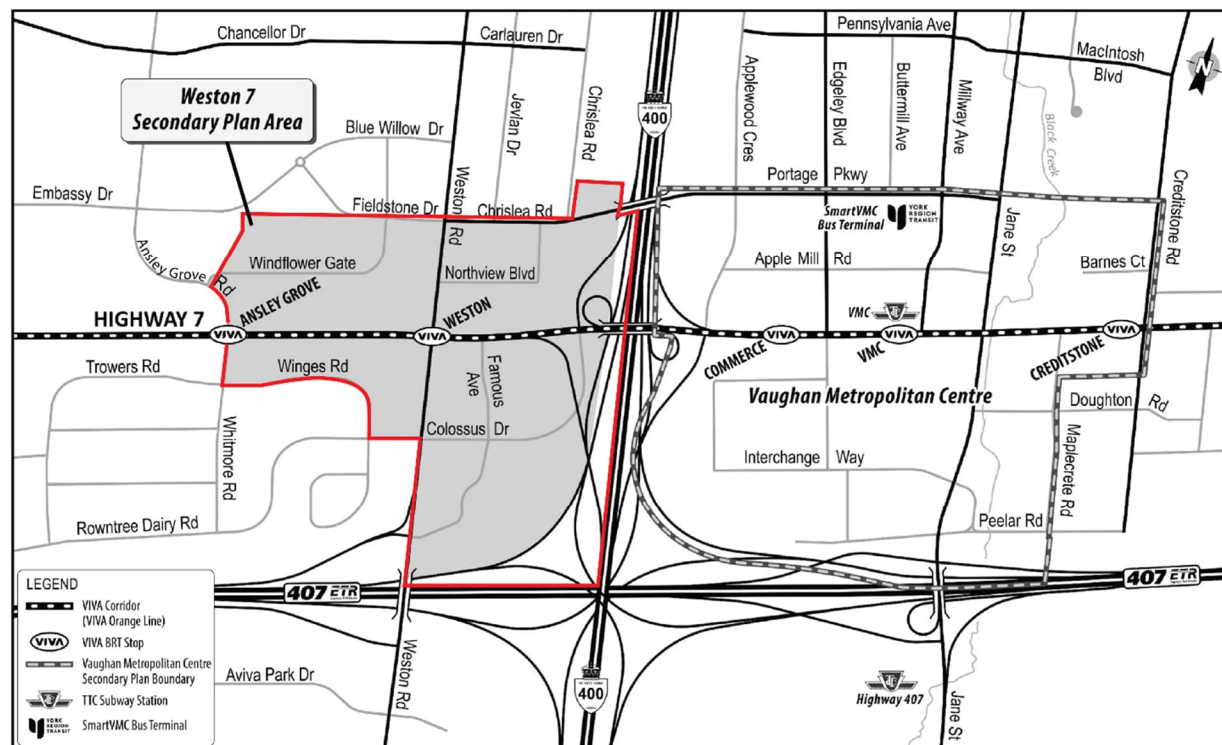
Executive Summary

Introduction

The Weston Road and Highway 7 (Weston 7) Transportation Master Plan (TMP) is a long range transportation plan that analyzes and identifies a multi-modal transportation network to help facilitate intensification and redevelopment of the Weston 7 Secondary Plan area into a mixed-use community that focuses on sustainable travel to meet mobility needs. The Weston 7 TMP has proceeded in parallel with the Weston 7 Secondary Plan study process. In order to inform the Secondary Plan, this TMP proposes a phasing plan which identifies transportation infrastructure improvements which must be delivered prior to or during redevelopment.

The Weston 7 Secondary Plan area, as analyzed in the Weston 7 TMP, is bounded by Highway 400 to the east, Chrislea Road and Blue Willow Drive to the north, Ansley Grove Road to the west and Wings Road and 407 ETR to the south, as presented in Figure ES 1.

Figure ES 1: Weston 7 TMP Study Area



The Weston 7 TMP meets the requirements for the Municipal Class Environmental Assessment Master Plan process, specifically addressing Phase 1 – identification of problems and opportunities and Phase 2 – assessment of alternatives and selection of preferred solution.

Stakeholder, Public Engagement and Consultation

Public and stakeholder engagement was held throughout the TMP study process, with two rounds of engagement held with technical agencies, a landowners' group, and the public. The first round of consultation focused on existing challenges and the identification of opportunities to meet future travel demands of the forecast growth. Comments received were mixed between concerns regarding existing congestion and potential worsening of conditions in the future, to support for intensification of land uses.

The second round of consultation presented the assessment of alternatives and preliminary preferred plan. Comments on the preliminary preferred plan were considered in refining the multi-modal transportation network that is presented in this TMP. Comments on the phasing of improvements were noted and addressed through the TMP's phasing plan.

Setting the Stage: Existing Conditions

The Weston 7 study area already is a busy area today with numerous retail, restaurant, and entertainment options and a growing residential community as high-rise residential buildings are being constructed. Many of the streets have sidewalks, some on both sides of the street and others only on one side. The cycling network is limited to facilities on Highway 7 and the existing community is predominantly auto-oriented. Bus rapid transit (BRT) operates in designated lanes on Highway 7, with two stops in the study area, at Weston Road and Ansley Grove Road. North-south bus service also operates on Weston Road.

Traffic operations analysis of existing conditions shows congestion at select intersections on Highway 7 and select intersections on Weston Road during peak travel hours. A portion of those travelling on these major arterials are through traffic with origins and destinations outside of the study area. Highway 400 immediately to the east and Highway 407 immediately to the south are major attractors of trips through the study area.

A Stage 1 archaeological assessment was conducted for the study area. The study area was found to have been significantly previously disturbed. Based on these findings, no further archaeological assessment is recommended. A cultural heritage assessment also was conducted. No built heritage

resources or cultural heritage landscapes with known or potential cultural value or interest were identified within the Weston 7 TMP study area.

Developing the Vision Statement

The analysis of existing conditions revealed a number of transportation needs and opportunities to address in the TMP, including:

- Provide a grid network of complete streets throughout Weston 7;
- Ensure the transportation network is designed all users;
- Improve safety for all modes of travel;
- Leverage new innovative smart mobility and Transportation Demand Management (TDM) measures; and
- Increase the share of non-auto trips.

These existing needs and opportunities, combined with the goal of accommodating over 50,000 residents and jobs in the study area provide a significant challenge, or opportunity, for the TMP to address.

The study area is compact and there are relatively limited opportunities to provide considerable additional vehicle capacity. The focus of the TMP has been to emphasize more sustainable travel options and provide strategic road network improvements where possible.

The TMP vision statement reads:

The vision of the Weston 7 Secondary Plan transportation network is to accommodate future growth that includes commercial, cultural, and entertainment destinations, along with housing and employment opportunities. The TMP will enhance the sustainable and multi-modal transportation system for the City with a network that supports all users and all modes of transportation. The City's transportation system will be accessible and promote connectivity, leveraging existing rapid transit infrastructure and service within and to and from the broader area.

The four key principles integrated into the vision are:

- Promoting sustainability;
- Improving connectivity;
- Enhancing accessibility; and
- Supporting mobility for all modes of transportation.

Alternative Network Development and Assessment

Extensive technical analysis was undertaken to analyze future conditions of multiple alternatives. These analyses used the York Region 2041 travel demand forecasting model as a basis and considered full build out of the study area, which at the time of analysis was estimated to be 64,900 people and jobs. Analysis of road links and intersections at a microsimulation level using the Aimsun software was conducted for an interim condition of about 40% of the above-noted full build out (about 26,000 people and jobs). Meetings were held with York Region to agree to parameters to use in the travel demand model to better reflect future conditions, such as reducing the amount of parking provided for future residential units and increasing the cost of all day parking, plus adjusting the trip rates from different land uses to reflect trip rates seen in more urban conditions.

The assessed alternatives are described below:

- Alternative 0 – Baseline: only Regional and Provincial planned improvements, with no City improvements;
- Alternative 1 – Colossus Drive: The Baseline plus the Colossus Drive extension;
- Alternative 2 – Demonstration Plan: The Baseline, Colossus Drive, plus initial road network concept for the Secondary Plan; and
- Alternative 3 – Network Plan: The Baseline, Colossus Drive, adjustments to the initial road network concept, and additional multi-modal improvements to enhance opportunities for residents and visitors to use sustainable modes of transportation.

Through the assessment detailed in the TMP, Alternative 3 was identified as the preferred alternative.

The analysis showed that a measured approach to development would be necessary. For the interim conditions with 26,000 people and jobs, chronic congestion was observed in the micro-simulation model at intersections along Highway 7 and Weston Road during peak hours. The level of congestion could be accommodated, but numerous intersections with movements with long delay were noted.

An analysis of the full build-out scenario noted above (64,900 people and jobs) was analyzed in the travel demand model only because the expected road congestion resulted in capacity constraints throughout the micro-simulation, precluding the ability to collect analytical results.

Future Multi-modal Network

The preferred multi-modal network of the future is described in more detail in this chapter. Improvements for active transportation (human-powered walking, rolling, and cycling), transit, and

the street network were defined. Sidewalks will be provided on both sides of all streets. Dedicated cycling facilities will be provided on all collector and arterial streets. A transit circulator services the Weston 7 study area and is planned to connect to the Vaughan Metropolitan Centre subway station and the Highway 407 / Jane Street subway station. The Colossus Drive extension east across Highway 400 is the main road improvement, along with a finer grain street network to facilitate multi-modal access to properties.

Figures showing the individual active transportation improvements (Figure ES 2), transit improvements (Figure ES 3), and street network improvements (Figure ES 4) are provided.

Supportive transportation policy work is included as part of the preferred alternative and is designed to leverage the infrastructure investments. For example, an extensive parking management plan was developed to provide parking in strategic locations and in limited supply to encourage the use of non-auto modes of travel. Transportation demand management measures further support sustainable travel options.

Figure ES 2: Active Transportation Network Improvements

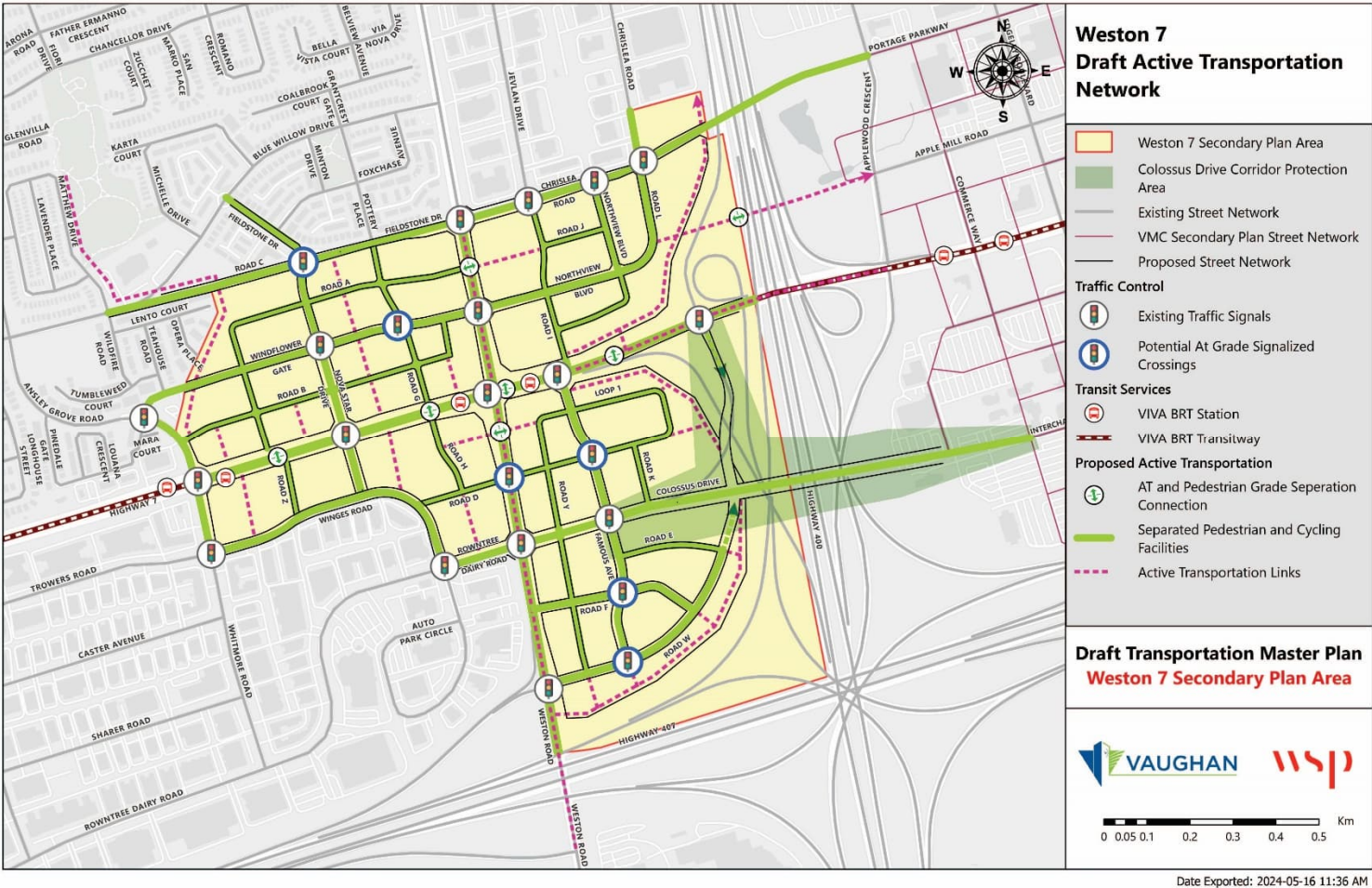


Figure ES 3: Transit Network Improvements

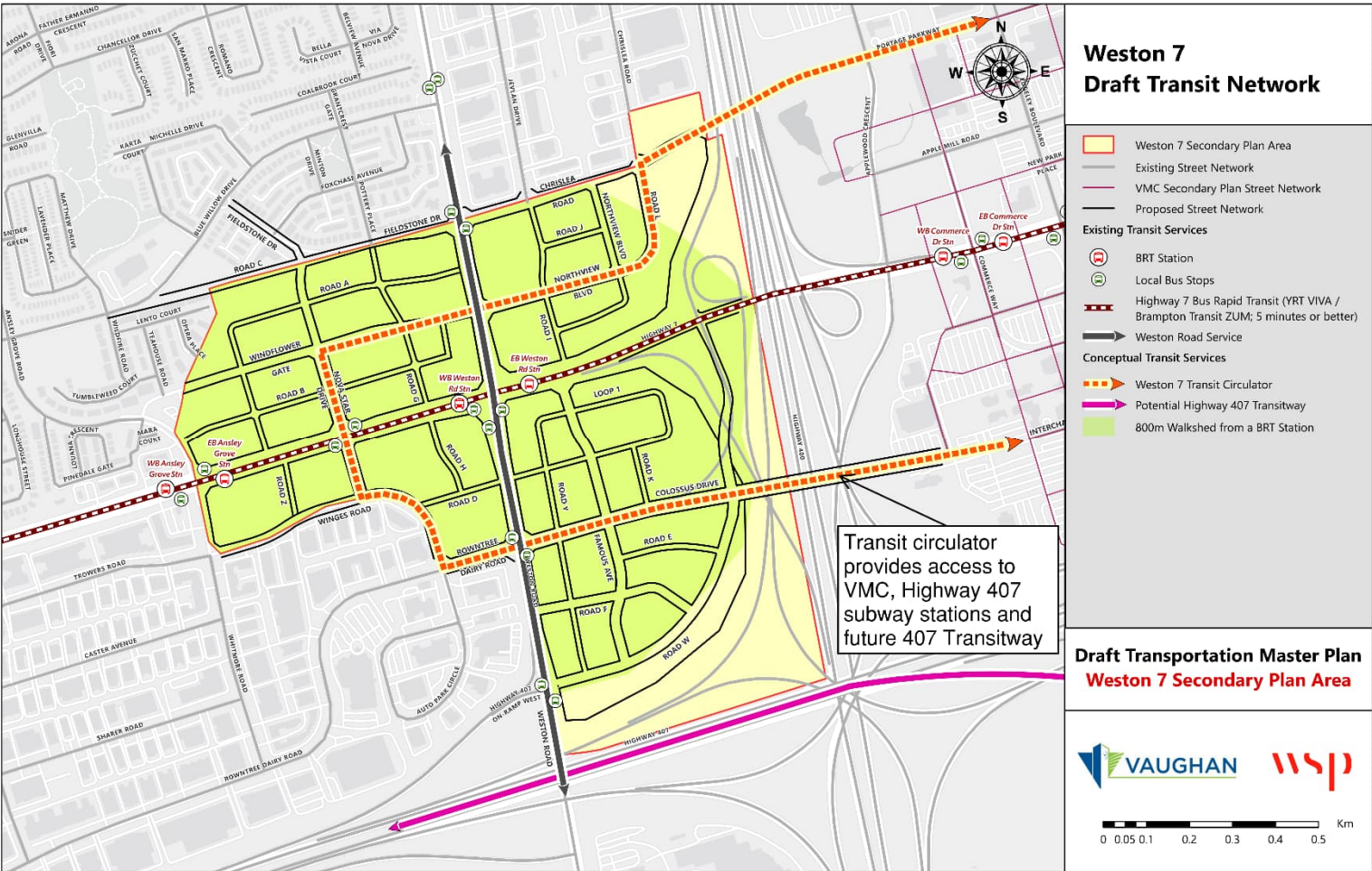
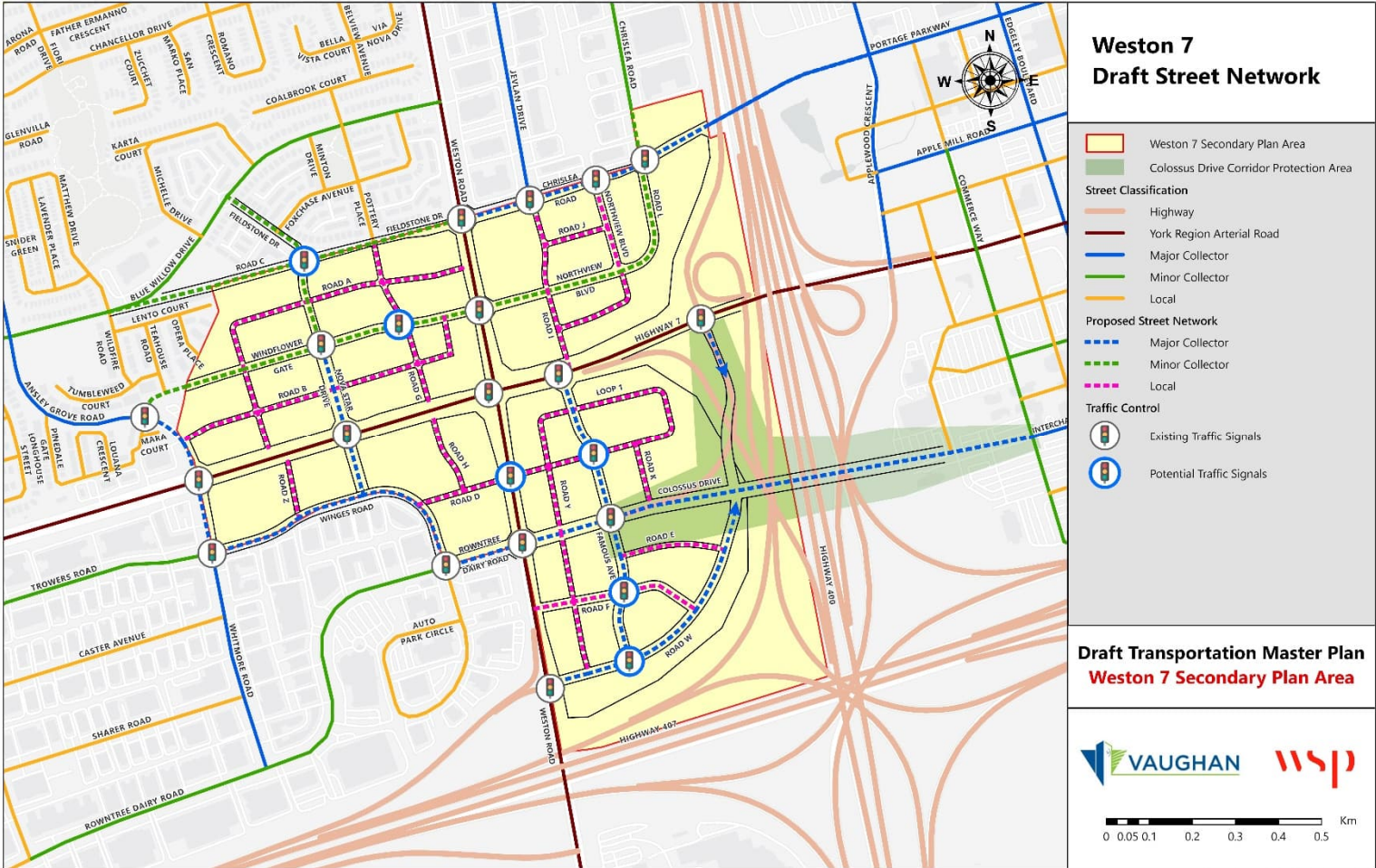


Figure ES 4: Street Network Improvements



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Implementing the Plan

The implementation framework of the multi-modal transportation network proposed for the Weston 7 Secondary Plan will be imperative for planning, protecting, and positioning the area to accommodate additional population and jobs. The framework is structured around both required implementation of broader City and Regional Transportation improvements as well as the multi-modal transportation network projects recommended for the Weston 7 Secondary Plan.

City and Regional transportation infrastructure will be necessary to provide the capacity to accommodate growth up to the 2041 interim horizon (15,840 people and 10,051 jobs). The necessary broader area City and Regional improvements are as follows:

- Colossus Drive extension over Highway 400;
- Bass Pro Mills extension from Highway 400 to Weston Road;
- Langstaff Road widening between Weston Road and Creditstone Road (4 to 6 lanes);
- Langstaff Road connection over CN Yard;
- Langstaff Road full interchange at Highway 400;
- Steeles Avenue widening west of Jane Street (4 to 6 lanes);
- Pine Valley Drive widening between Highway 7 and Steeles Avenue (4 to 6 lanes);
- Weston Road widening north of Steeles Avenue (4 to 6 lanes);
- Keele Street widening north of Steeles Avenue (4 to 6 lanes);
- Highway 7 rapid transit corridor (Viva headway 10 minutes);
- Steeles Avenue Transit Corridor (4 general purpose lanes plus dedicated transitway east of Jane St); and
- Jane St Transit Corridor (4 general purpose lanes plus dedicated transitway between Major Mackenzie Dr and Highway 7 (Viva headway 10 mins))

A quadrant-based approach is proposed for the orderly and contiguous implementation of the internal multi-modal transportation network. Generally, the collector street network in a quadrant will be secured prior to development proceeding within that quadrant, while local streets will be delivered when adjacent development proceeds. Identification of phasing of projects and improvements for local streets should also consider existing parcel fabric and built form.

The following street (ST) and active transportation (AT) projects have area-wide implications and should be secured prior to the development within a quadrant:

- ST-34, ST-36 and ST-31: Colossus Drive Extension and connecting roadways;
- ST-35 and ST-10: All ages and abilities cycling infrastructure along Chrislea Road and Portage Parkway (Weston Road to VMC);
- ST-5, ST-1.1, and ST-1.2: Fieldstone Drive extension and related improvements (Weston Road to Blue Willow Drive);
- AT-12: New pedestrian / cycling overpass connecting Weston 7 with VMC over Highway 400, located between Highway 7 and Portage Parkway existing structures;
- ST-23, ST-24.1, ST- 24.2 and ST-18: Rowntree Dairy Road, Wings Road and Whitmore Road improvements;
- AT-15: Weather protection along the existing Highway 7 median multi-use path over Highway 400;
- AT-24 Weston Road between Highway 407 ETR EB Ramp to Chrislea Road/ Fieldstone Drive – Improved AT Separated in-boulevard cycling facilities;
- Five-minute all-day bus frequencies along the Highway 7 Viva Rapidway; and
- Transit circulator connecting Weston 7 to VMC and Highway 407 Subway stations.

Preliminary capital construction cost estimates were developed at a project level for major and minor collector road projects and some of the major active transportation infrastructure and are displayed in Table ES 1. It should be recognized that the AT Network Implementation Study will advance the designs and refine cost estimates for new major active transportation infrastructure. Internal active transportation links will be implemented in conjunction with development.

Capital construction costs are preliminary and subject to adjustment and refinement through future studies and processes for detailed design and engineering.

Table ES 1: Summary of Major Infrastructure Costs

ID#	Street	From	To	Cost (\$)
ST-10 ST-35	Chrislea Road	Weston Road	Applewood Crescent / Portage Pkwy	\$6,600,000
ST-12.1 ST-12.2	Northview Blvd	Weston Road	Chrislea Road	\$2,600,000
ST-2.1 ST-2.2 ST-2.3	Windflower Gate	Ansley Grove	Weston Road	\$3,600,000
ST-1.2 ST-5	Fieldstone Drive Road C (Fieldstone Drive Extension)	Blue Willow Drive Fieldstone Drive	Weston Road Blue Willow	\$4,500,000

ID#	Street		From	To	Cost (\$)
ST-7 ST-8	Nova Star Drive		Fieldstone Drive	Highway 7	\$2,200,000
ST-19	Nova Star Drive		Highway 7	Winges Road	\$800,000
ST-31	Road W		Weston Rd. @ 407 ETR EB Ramp	Colossus Drive	\$5,600,000
ST-26 ST-33	Famous Avenue		Highway 7	Road W	\$4,600,000
ST-23 ST-24.1 ST-24.2	Winges Road - Rowntree Dairy Rd- Whitmore		Highway 7	Weston Road	\$5,700,000
ID#	AT Link	From	To	Improvement	Cost (\$)
AT-12	Crossing Highway 400	Road L	Applemill Road (VMC)	Grade separated AT Overpass over Highway 400	\$31,500,000
AT-15	Along Highway 7	Famous Avenue	Applewood Crescent	Enhance existing median multi- use path - Weather Protection	\$9,000,000
AT-19	Crossing Highway 7	SE quadrant east of Weston Road	NE quadrant east of Weston Road	Grade separated crossing of Highway 7	\$8,400,000