

PRIORITIES AND KEY INITIATIVES COMMITTEE – JUNE 13, 2011

CITY TRANSPORTATION MASTER PLAN CLASS ENVIRONMENTAL ASSESSMENT STUDY NOTICE OF STUDY COMPLETION

Recommendations

The Commissioner of Engineering and Public Works, in consultation with the Commissioner of Finance / City Treasurer, recommends:

1. THAT the presentation from AECOM Canada Ltd. on the Draft Transportation Master Plan be received;
2. That the Draft Transportation Master Plan study report be approved in principal;
3. That a copy of this report and the Draft Transportation Master Plan study report be forwarded to the Region of York for review together with a request for any comments to be returned by September 16th, 2011;
4. That staff be authorized to issue the notice of study completion for the Transportation Master Plan study report following receipt of comments from York Region and finalization of the study report; and
5. That staff report back to a future Council Committee meeting on the financial implications associated with the implementation of the Transportation Master Plan in a timely manner, so as to meet the timelines for the completion of the on-going Development Charges Update Study and financial forecasting exercises.

Contribution to Sustainability

The Transportation Master Plan, with its vision branded as Vaughan's "New Path", will serve to guide the City to a more sustainable future. In consultation with residents and key stakeholders, thirteen sustainability principles were identified and carried as the foundation to the conclusions and recommendations of the Transportation Master Plan. The City's "New Path" is about moving people – not cars, the "New Path" will:

- Provide safe, affordable, efficient transportation for everyone;
- Make Vaughan's neighbourhoods pedestrian and bicycle friendly;
- Integrate land use and transportation planning to encourage more sustainable lifestyles;
- Preserve and enhance environmental resources;
- Promote reliable, convenient and seamless transit;
- Promote economic vitality;
- Support diverse transportation system funding;
- Minimize use of fossil fuels;
- Avoid unnecessary capacity improvements;
- Minimize growth in travel demand;
- Encourage the efficient movement of freight and support the greater use of freight by rail;
- Develop parking strategies that reduce single occupant vehicle travel and auto trips; and
- Foster awareness of sustainable transportation.

The policies, decision making framework, conclusions and recommendations of the Transportation Master Plan will assist in advancing the following specific Green Directions Vaughan objectives to:

- Create a City with sustainable built form;
- Develop and sustain a network of sidewalks, paths and trails that supports all modes of non-vehicular transportation;
- Develop and sustain a network of roads that supports efficient and accessible public and private transit;
- Reduce single occupant vehicle trips by supporting active transportation, car pooling and public transit; and
- Encourage the establishment of green businesses and sustainable business practices.

The Transportation Master Plan objectives are consistent with the objectives of the City's Community Sustainability and Environmental Master Plan (Green Directions Vaughan, April 2009).

Economic Impact

There are no immediate budgetary impacts resulting from the adoption of this report. However, additional operating and capital funding will be required in future years to successfully implement the recommendations of the Transportation Master Plan (TMP).

The TMP identifies the need for capital improvements to the City's transportation system including the widening of existing roadways, construction of new Highway 400 mid-block crossings, expansions to the pedestrian and cycling facilities and potentially the establishment of new carpool / park-n-ride lots. For the most part, these transportation improvements are growth related projects and collectively they are estimated to cost approximately \$240 million. Some of these projects are already included in the current Development Charge Background Study. As part of the City's overall growth management strategy, the City is currently undertaking a comprehensive review of the Development Charge Background Study. Through this review process, the growth related projects that are already in the background study will be updated and any new projects will be added. The increase in operating and maintenance costs associated with this new transportation infrastructure will need to be considered through the long term financial forecasting exercise, which is being lead by the Finance Department. As the Development Charges update and financial forecasting exercises are currently underway, it is recommended that a further detailed report on the implications associated with the implementation of the Transportation Master Plan be brought forward to a future Council Committee meeting in a timely manner and to facilitate this work.

In the short-term, additional staff resources will be required within the Development / Transportation Engineering Department to effectively implement programs aimed at promoting travel demand management and achieving transit modal-split targets throughout the City. In addition, staff resources will be needed to proactively work with Regional and Provincial partners to advance rapid transit projects and strategic road improvements initiatives within Vaughan.

Communications Plan

The Transportation Master Plan Study Area encompasses the entire City limits. The Study included a comprehensive public consultation program involving affected stakeholders within and adjacent to the Study Area. The public consultation components completed throughout the duration of the Study included:

- Notice of Study Commencement;
- Project Website;
- Two Public Consultation Centre (PCC) Meetings;
- Three Stakeholder Workshops; and
- Project Bulletins and Newsletters.

All notification related to the Study was directly mailed to affected stakeholders on the project mailing list, advertised in local newspapers and posted on the project and City websites.

The initial phases of the public consultation program were completed concurrently with the City's Growth Management Strategy and City-Wide OP Review.

A final Notice of Study Completion will be issued this fall and will be mailed directly to all affected stakeholders on the project mailing list, relevant public agencies and authorities. In addition, the notice will be published in local newspapers and posted on the project and City websites.

Upon issuance of the final notice of completion, the Draft Transportation Master Plan study report will be placed on public record for a 30-day public review period in accordance with the requirements of the Municipal Class Environmental Assessment process.

Purpose

The purpose of this report is to inform Council of the findings and conclusions of the City's Transportation Master Plan Study and recommends that the Notice of Study Completion be issued after the draft report has been circulated to the Region for review and comment.

Background – Analysis and Options

The Transportation Master Plan (TMP) is the City's transportation 'blueprint'. It will assist with addressing growth in a sustainable manner through to 2031. It has been prepared in response to the Provincial Growth Plan for the Greater Golden Horseshoe Area and is a key component of the City's Growth Management Strategy (Vaughan Tomorrow) and new Official Plan.

The TMP is an essential part of Vaughan's transformation into a more sustainable community. It builds on the City's previously approved master planning document (and associated transportation studies), Official Plan Amendment 600, and provides for a transportation strategy within the context of York Region, Metrolinx and other neighbouring municipalities including Peel Region and the City of Toronto. These municipalities together with Vaughan must work in partnership to provide transportation services across the central portion of the Greater Toronto and Hamilton Area (GTHA).

Ultimately, population and employment growth, and the intensification of this growth, in Vaughan and York Region is set by the Provincial Growth Plan. It represents the broad planning vision and sets policies for managing growth and development, and for guiding planning decisions throughout the Greater Golden Horseshoe through to 2031. York Region, in consultation with its local municipalities, is responsible for planning and allocating growth within its boundary. In 2009, York Region revised its Official Plan to conform to the Provincial Growth Plan and as part of that process, also updated its Regional Transportation Master Plan.

Within the GTHA, Metrolinx has been established to develop and implement an integrated multi-modal and inter-regional transportation plan. This inter-regional transportation strategy will guide the long term planning for transportation across the GTHA. GO Transit is a division of Metrolinx, which provides inter-regional rail and bus transit services throughout the GTHA, including Vaughan. Regional and local transit services are provided by York Region (York Region Transit / VIVA). Accordingly, partnerships with Vaughan's neighbouring municipalities, as well as

provincial agencies, York Region and other stakeholders is critical to the success of the City's TMP.

The Terms of Reference for the TMP were approved by Council on May 12, 2008. Based on the results of the City's Request for Proposal process (RFP08-041), Council endorsed the award of the consulting assignment to AECOM Canada Ltd. on December 8, 2008.

Growth Management Strategy (Vaughan Tomorrow)

Completion of the Draft Transportation Master Plan study was integrated with the City's Growth Management Strategy and Official Plan review process. The recommendations of the TMP are consistent with the new Official Plan (OP) policies. In particular, the transportation chapter within the City's new OP was developed jointly by the Official Plan review team and the TMP team. All transportation related policies within the new OP fully support the TMP's "New Path" vision.

The City's new Official Plan was adopted by Council in September of 2010 and is currently under review by York Region.

Accordingly, it is recommended that a copy of the Draft Transportation Master Plan study report be forwarded to the Region of York for review and comment in conjunction with their on-going review of the City's new Official Plan. It is expected that minor amendments to the new OP and/or the Draft TMP study report may be required to address Regional comments, and that this process will occur over the next several months, with the anticipation that final approval of the City's new Official Plan will be provided by York Region early next year.

Transportation Master Plan Study Approach

The overall TMP study approach has proceeded in three phases, with close integration of consultation activities and technical deliverables throughout the duration of the overall project.

Phase one included the identification of key issues and strategic direction options to set the stage for development of a long-range transportation vision. This process involved the preparation of four discussion papers on key transportation issues including:

- Existing Transportation Conditions, Trends and Future Plans;
- Transportation Demand Management;
- Role of Transit; and
- Safety and Traffic Calming.

These discussion papers were instrumental in defining a strategic transportation direction and vision for the City. Phase one also included the development of a City-wide travel forecasting model and methodology for network evaluation.

Phase two involved the completion of two policy papers on Transportation Vision / Policy Framework; and Key Transportation Issues / Alternative Strategic Directions. Based on these policy papers, an assessment of alternative transportation strategies and plans was completed to accommodate the City's preferred long-term growth plan. In addition, complementary plans and policies for individual secondary plan areas were also evaluated and completed.

Phase three finalized the City's overall long-range plan including all supportive policies and programs. It developed an implementation strategy and phasing plan. It also set out the City's short, medium and long-term action plan, and formulated a monitoring framework to verify the TMP's continued progress.

City-Wide Travel Demand Forecasting Computer Model

A key component of the TMP study process was the development of a City-wide travel demand model to forecast future conditions and serve as the primary analytical tool for evaluating future transportation network improvements. This model is based on GTA-wide data and on York Region's AM peak period model. It has been calibrated to simulate City of Vaughan conditions with multi-modal capability. A key addition to the model was the development of a PM peak period component. Representing the highest peak in traffic volumes during a typical weekday, the PM peak period was used for analysis in addition to the AM peak period. The City-wide analysis included assessment of all east-west and north-south travel corridors at key locations (referred to as screenlines). More detailed analysis was also conducted for specific secondary plan areas in order to assess finer road and transit networks.

Elements of the Transportation Master Plan

The result of the Transportation Master Plan process is a set of recommended elements which together comprise the Plan. These elements have been developed according to the sustainability principles and goals, and the overall "New Path" transportation vision discussed above.

The five key elements of the City's Transportation Master Plan and specific recommendations pertaining to each of the elements are summarized below.

TRAVEL DEMAND MANAGEMENT (TDM):

Travel Demand Management or TDM is essentially a series of specialized policies, targeted programs and innovative mobility services and products that work to influence travel behavior within a transportation system, with a focus on managing the movement of people rather than of motor vehicles. TDM policies and programs must become an integral part of the City's overall sustainable transportation vision.

TDM is an important support to the physical transportation network throughout the City. Future travel demands cannot be satisfied primarily through road improvements as had traditionally been the case. Thus, a meaningful TDM strategy with an overall goal of minimizing the growth in auto use, especially during peak travel periods, is an essential element of the TMP. Through the development of the TMP, it has been concluded that travel demand should be managed by focusing on the following four areas:

- i. Overall trip reduction (through initiatives to support flexible working programs such as telecommuting and four-day work weeks);
- ii. Mode of travel shifts (from auto to transit, walking and cycling);
- iii. Time of travel shifts for necessary auto trips (shifting trips out of the peak periods); and
- iv. Increase in vehicle occupancy for necessary auto trips, through car and van-pooling initiatives.

The TDM related recommendations recognize the strong TDM support by York Region and Metrolinx. York Region's TMP strongly supports TDM within the urbanized parts of the Region, including Vaughan. Regional recommended policies and physical infrastructure improvements in support of TDM include road widening for High Occupancy Vehicle (HOV) lanes and rapid transit initiatives.

Similarly, the recently completed Draft Western Vaughan Individual Environmental Assessment and Vaughan's new secondary plan studies also recommend strategies for these respective study areas. Accordingly, within this TDM-supportive context, the TMP sets out the following six initiatives for the City:

1. Support Transportation Management Associations (TMAs) and promote TDM by making residents and local businesses aware of its benefits;
2. Work with the City's largest employers to develop and implement trip reduction plans;
3. Support reduced on-site parking provisions for all new developments particularly within Centres, and along Rapid Transit and Transit Priority corridors, increasing on-street parking and establishing paid parking overtime;
4. Work with the Region of York and MTO to implement carpool lots within Vaughan along freeway and HOV corridors;
5. Support the integration of bicycle and public transit travel, including improved cycling access and bicycle storage at transit stops and stations, bike racks on buses and allowing bikes in subway trains; and
6. Monitor effective implementation of TDM measures in Vaughan.

The TMP recognizes the need for additional resources in the Development / Transportation Engineering Department in order to implement progressive corporate TDM programs, Travel Demand Model analysis, and rapid transit coordination.

TRANSIT:

As transit services are provided by York Region, the Toronto Transit Commission (City of Toronto) and Metrolinx, Vaughan's role is to support transit use within the City and create conditions for its success. Fundamentally, at the local level this includes the provision of facilities and supportive conditions for walking and cycling, access to transit stops and stations, maintenance of the local primary road network for effective bus service, and continued protection for future transit supportive primary road networks through the development review and approvals process.

While a number of transit services are currently provided within Vaughan, the City's existing population does not use transit to a large extent, with only approximately 9% of AM peak period trips made by all forms of transit. Its use is greatest for trips from Vaughan to Toronto.

Increasing transit's modal share is a critical element of the City's TMP. This shift, together with the reduction in auto-dependence, will require improved transit services. The City must continue to fully support and facilitate rapid transit expansion by all applicable authorities. In addition, this must be supplemented with the widespread application of surface transit priority measures, such as exclusive bus and/or HOV lanes, traffic signal priorities and transit queue jump lanes at signalized intersections, together with a general increase in the level of transit service in terms of coverage and frequency of service throughout the City.

The TMP recommends that the City should continue to assume a strong transit-supportive role in facilitating an increase in transit use through the following measures:

1. Promote higher density and mixed-use development in Centres and along transit corridors;

2. Focus new office development in locations served by rapid transit or high frequency bus service;
3. Provide a multiple and contiguous system of mid-block collectors for increased penetration of local bus routes and a fine-grained street network overall;
4. Expand the pedestrian and cycling network to ensure improved transit access;
5. Focus TDM programs on the need for an increase in modal share to transit; and
6. Coordinate with York Region and Metrolinx to ensure seamless cross-regional boundary transit with Toronto Transit Commission and Brampton Transit services (in particular for the new West Vaughan Employment Area immediately east of the City's boundary with Peel Region).

It is further recommended that new and/or improved transit services be implemented as early as possible to serve newly developing areas, so that new travel patterns can be formed in the presence of high quality transit.

ACTIVE TRANSPORTATION:

In addition to serving travel by private vehicles and transit, the City must also provide for active transportation (walking, cycling, in-line skating and other forms of non-motorized travel).

The City's human powered or active transportation network can be described as a two-tier system. The primary system consists of pedestrian facilities along major roads and connections to major City destinations. The secondary tier includes provision of pedestrian facilities that are more local in nature, linking local parks, community centres, schools and shops. These secondary systems provide for internal connections within communities.

As part of the TMP process, the City's existing Pedestrian and Bicycle Master Plan (as adopted by Council in 2007) has been reviewed, updated and consolidated to form a key component of the City's overall TMP.

Active transportation will become an increasingly important element of the City's overall sustainable transportation system. The TMP supports the recommendations of the 2007 Pedestrian and Bicycle Master Plan Study with its vision to develop a comprehensive and connected network of pedestrian and cycling facilities. These facilities consist of off-road multi-use pathways, on-road bike lanes and routes, and boulevard pathways and sidewalks. This comprehensive network which builds on the creation of a fine-grained street network and improvements to the recreation system, will help to facilitate walking and cycling throughout the City for leisure, commuting and other purposes.

The updated Pedestrian and Bicycle Master Plan component of the TMP will assist staff in the development of new programs and facilities to make the City one of the most pedestrian and cycling-friendly cities in Canada. The plan has been designed to be flexible by calling for necessary refinement of recommended routes and facility types. Accordingly, the TMP includes recommendations to expand the proposed 2007 pedestrian and bicycle network, particularly for proposed development and new intensification areas including the West Vaughan Employment Area, the Vaughan Metropolitan Centre, the Woodbridge Core and the Kleinburg-Nashville area. The updated Pedestrian and Bicycle Network Plan is included as Attachment No. 1.

The TMP recommends adding approximately 78 kilometres of bicycle and pedestrian network facilities to the 613 kilometres previously recommended in the 2007 Study, an increase of approximately 13%. This increase is primarily due to the City's newly approved secondary plan areas.

In addition, on-going coordination with York Region and other neighbouring municipalities is critical to ensure seamless pedestrian and bicycle connectivity throughout.

In support of expanding the City's active transportation network, one of the recommended short term actions of the TMP includes the need to review and update the City's existing sidewalk policy based on the guiding principles established by the TMP.

PARKING:

In keeping with the City's vision of reducing auto dependence and promoting sustainability, the TMP recommends the adoption of parking strategies that provide lower parking requirements generally and particularly for new development in centres and corridors well served by transit, and promote shared parking facilities in an effort to reduce single-occupant vehicle travel. In addition, the City should assume the responsibility of constructing and managing off-street paid public parking in strategic locations and use the revenue generated to offset costs and fund TDM initiatives.

The parking standards recommendations within the TMP fully complement the 2010 Draft Parking Standards Review Study previously completed by the City.

In addition, the TMP recommends that the City work with the Region, MTO and Metrolinx to identify and provide a network of strategically located carpool lots to support a reduction in single occupant auto use. Shared parking with existing facilities such as recreational areas, shopping malls and large retail centres should be the first consideration in establishing carpool and/or Park-And-Ride lots.

The City should also consider relaxing on-street parking prohibitions in designated centres before establishing any large surface parking lots. On-street parking supports retail activities while acting as a traffic calming measure. Conversely surface parking, particularly in intensification areas, is an inefficient land use that can create gaps in the urban form.

Paid on-street parking and multi-level parking structures should be implemented within intensification areas such as the VMC. The establishment of a City Parking Authority (or other management mechanism) will ultimately be required to manage all paid public parking lots / facilities throughout the City.

STRATEGIC ROAD IMPROVEMENTS:

It is the recommendation of the TMP that road network improvements are largely limited to strategic initiatives that support transit and goods movement, improve network connectivity, or support intensification in designated areas. Some local improvements will also be needed to provide basic vehicle access to newly developing areas and in those locations where reasonable travel options do not exist.

Road improvements that could compete with transit should be deferred until enhanced transit services are operating and have an established ridership base. Road improvements to address future capacity deficiencies that cannot be addressed by TDM initiatives and enhanced transit should be identified when a facility is forecast to exceed its practical capacity.

The TMP process included a detailed review of proposed Provincial and Regional road improvements such that recommendations with respect to the local street network could be informed by these higher-order transportation plans.

Provincial Highway Improvements

Serving as the primary goods movement network, improvements to the provincial highways will benefit the trucking industry and help to alleviate truck traffic on Regional and City roads. Key provincial highway improvements currently planned within Vaughan include:

- Highway 427 Extension to Major Mackenzie Drive & new interchanges at Langstaff, Rutherford and Major Mackenzie;
- Highway 400 Widening (Major Mackenzie Drive to King-Vaughan Road);
- New / Improved interchanges along Hwy 400 and Hwy 407; and
- GTA West Corridor (Hwy 400 to Hwy 427 & extension of Hwy 427 from Major Mackenzie Drive to GTA West with connection to Hwy 427).

Regional Road Improvements

The majority of the planned Regional Road improvements comprise widening to 6 lanes to accommodate HOV and on-street bike lanes in order to support alternative modes of travel to single occupant vehicles. Some widenings from 2 to 4 lanes, mostly in the northern portion of the City, are recommended to support local development areas.

Other required key Regional road missing links include:

- Teston Road (Keele Street to Dufferin Street);
- Langstaff Road Extension (Jane Street to Keele Street);
- Highway 400 / Langstaff Road Interchange Improvements; and
- Highway 400 / Highway 7 Interchange Modifications.

City Road Improvements

Strategic City Road Improvements are identified in Attachment No. 2. A summary of the required key City road improvements is provided below:

- Portage Parkway Extension and Widening;
- Huntington Road Widening and Urbanization;
- Block 33 Highway 400 Overpass (North Maple Community Bridge);
- Creditstone Road Widening;
- Colossus Drive Extension and Improvements Easterly to Creditstone Rd;
- Kirby Road Extension (Dufferin Street to Bathurst Street); and
- King-Vaughan Road Widening.

As an important part of the strategic road improvements, the City should work with York Region to eliminate at-grade rail crossings and intersection jogs to improve public safety and reduce traffic delays. New collector roads to support planned intensification areas will be secured through the development review and approvals process.

Review of Transportation Policies and Road Classification System

A review of the City's current road classification system was undertaken as a component of the TMP. This review has re-affirmed the road-network planning principles applied to date (throughout the City's existing urbanized areas and based on OPA 600). These principles include the following:

- circuitous patterns of local and collector streets should be avoided as they generally limit routing options and make longer distance trips on these streets impractical, thereby forcing local trips onto the arterial network;

- a continuous grid of primary roads with multiple local streets and pathways should be available throughout concession blocks and between adjacent blocks, thereby minimizing the need for local traffic to use the arterial network;
- long distance trips via the primary road network should be discouraged through design features that limit operating speeds;
- primary road networks within concession blocks should include multiple north-south and east-west primary roads such that the network may disperse traffic volumes over multiple primary roads so that no single primary within a block will be required to carry traffic volumes higher than appropriate for a street with residential frontage; and
- a maximum two-way primary road volume of 500 vehicles in the peak hour and 5,000 vehicles per day is recommended in order to maintain a “threshold of good environment” for local residents abutting a primary road.

Highway 400 Mid-Block Collectors

Highway 400 overpasses are important components of the City's primary road network. These crossings provide necessary east-west connectivity across Highway 400, promote a greater sense of community between neighbourhoods east and west of the highway, allow for sharing of community services and improve the efficiency of primary road transit services through concession blocks. They allow for more efficient pedestrian and cycling networks; and can decrease overall response times for emergency services within the neighbouring areas. Mid-block collectors can also improve operations of the adjacent arterial roads by allowing local traffic to avoid making turns on and off the arterials in the vicinity of the highway (excessive turning movement volumes compromise the through capacity of arterial road intersections).

The travel demand forecasting model indicates a deficiency in east-west capacity and connectivity throughout the City. To address this deficiency, the TMP recommends the following Highway 400 overpasses be constructed in order to provide adequate screenline capacity across Highway 400:

- Block 35 (OPA 637 – Highway 400 North Employment Lands);
- Block 33 (America Avenue – Canada Drive Bridge);
- Block 32 Overpass (see note below);
- Colussus Drive Overpass (Vaughan Metropolitan Centre); and
- Bass Pro Mills Drive Connection to Weston Road (to realize full benefits of the existing Highway 400 overpass).

Accordingly, rights-of-way to allow for the ultimate construction of these Highway 400 crossings should continue to be protected.

Although the need for the Block 32 overpass is technically supported and was identified as a needed east-west connectivity link in previous studies, it was eliminated from the City's Official Plan by Council resolution several years ago. However, it is important to note that it continues to be identified as a strategic requirement in the City's TMP, York Region's OP and York Region's 2009 Transportation Master Plan update.

Conformance with Regional and Provincial Plans / Policies

In completing the City's TMP, the following Regional and Provincial studies have been reviewed and considered in detail:

- 2008 Regional Transportation Plan (Metrolinx);
- 2009 York Region Transportation Master Plan Update;
- 2010 Highway 427 Individual Environmental Assessment (Ministry of Transportation);
- 2011 Draft Western Vaughan Individual Environmental Assessment (York Region); and
- 2011 GTA West Corridor Planning EA and Draft Development Transportation Strategy Report (Ministry of Transportation).

Accordingly, the Draft TMP study conclusions and recommendations are consistent with the policies and direction of the above noted studies.

Vaughan Metropolitan Centre (VMC) / Surrounding Area Transportation Study

A more detailed transportation analysis for the proposed VMC was completed as a component of the TMP and in conjunction with the development of the new VMC secondary plan. The proposed fine-grain grid of local streets within the VMC will be framed by commercial, residential and mixed use buildings. This layout will be fundamental to encouraging walking and other non-motorized modes of transportation, which in turn will promote transit use.

For the VMC to realize its full potential, transit, cycling and walking will need to be the preferred modes of daily travel for most people living and working there. Over time, Highway 7 should become an urbanized avenue that balances the movement of transit, pedestrians, cyclists and cars.

In order to fully understand the broader transportation related triggers / improvements associated with build-out of the VMC plan, staff are currently initiating a joint transportation study with the Region of York. It is anticipated that this VMC and Surrounding Area Transportation Study will be completed within the next 12 months.

Yonge Street Secondary Plan

York Region is currently undertaking a study of the transportation infrastructure improvements and triggers required to facilitate the planned intensification along the Yonge Street corridor. This study will comprehensively address the infrastructure needs and triggers associated with the planned intensification within Vaughan, Richmond Hill and Markham (Richmond Hill - Langstaff Urban Growth Centre).

Implementation Plan

A comprehensive action plan encompassing all TMP components recommended for implementation by the City has been included as Attachment No. 3. The action plan is divided into the following three implementation priority categories:

- 2011 to 2016 Short-Term (within 5 years)
- 2016 to 2021 Medium-Term (5 to 10 years)
- 2021 to 2031 Long-Term (10 years plus)

The overall cost to implement the TMP is estimated at over \$7 Billion of which Vaughan's share is approximately \$240 Million. This can not be achieved without the full support of senior levels of government, particularly the Province and the Region. Vaughan therefore not only needs to implement its portion of the TMP but also assume a leadership role in coordinating the actions of all levels of government.

The TMP study has addressed phases one and two of the five-phase Municipal Class Environmental Assessment (EA) Process. In order to proceed with implementation of individual infrastructure improvements, further EA Study may be required to complete phases three and four of the EA process depending on the complexity of issues and estimated project costs.

Monitoring and Review

It is anticipated that the TMP will be reviewed and updated every five years in conjunction with planned City-Wide OP reviews.

In addition, regular re-calibration of the City's Travel Demand Forecasting Model will be required. The development of the City-wide model was a key product of the study. It will serve as a critical tool for staff to improve the City's overall transportation planning capabilities and to effectively monitor implementation of the TMP.

Next Steps

In the coming weeks, the Draft Transportation Master Plan study report will be circulated to York Region for final review and comment in conjunction with the City's new Official Plan. The receipt of any Regional comments on the TMP by September 16, 2011 would allow time for minor revisions prior to the issuance of the final notice of study completion.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in:

- The pursuit of excellence in service delivery;
- Enhancing and ensuring community safety, health and wellness;
- Leading and promoting environmental and financial sustainability;
- Attracting, retaining and promoting skilled staff;
- Demonstrating leadership and promoting effective governance; and
- Planning and managing growth and economic vitality.

Further, the recommendations of this report will assist in advancing the following specific strategic plan initiatives to:

- Produce a strategy to continue to ensure a quality work environment and a wide array of staff benefits (lead by example, TDM Programs for Vaughan Employees);
- Create an inter-government relations strategy and advocacy plan ensuring that the City of Vaughan participates in provincial, national and international forums and collaborates with neighbouring municipalities;
- Implement the Growth Management Strategy;
- Work with other levels of government to continue to support the expansion of the Metrolinx / GO Transit system and other related Regional rapid transit initiatives;
- Continue to support the Highway 427 extension to Major Mackenzie Drive;
- Support and coordinate land use planning to support high capacity transit at strategic locations throughout the City; and
- Establish and coordinate a strategy for completing the Langstaff, Teston and Kirby Road links.

This report is therefore consistent with the priorities previously set by Council. It is noted however, that additional operating and capital funding will be required to successfully implement the recommendations of the Transportation Master Plan. This will be addressed through future annual budget deliberations.

Regional Implications

As one of the key stakeholders, Regional staff was involved in the Study consultant selection process and participated on the Technical Advisory Committee throughout the duration of the Study.

In addition, the City's TMP has been closely coordinated with the Region's latest Transportation Master Plan update, the Western Vaughan Individual Class EA and the Metrolinx Regional Transportation Plan for the Greater Toronto and Hamilton Area.

Conclusion

The Transportation Master Plan study report encompasses the culmination of over two years of extensive public and stakeholder consultation, coordination, research and technical analysis. It is a key component of the City's overall consolidated Growth Management Strategy to the year 2031 and is the first comprehensive review of the City's transportation system since approval of Official Plan Amendment 400 in the early nineties.

It is widely recognized that road improvements alone will not accommodate the anticipated increase in travel demands throughout the Greater Toronto and Hamilton Area (GTHA). Both Regional and local travel demand models project that traffic congestion will not improve significantly over time. As a result, Vaughan residents (like all residents within the GTHA) will need to accept higher levels of congestion and change their travel behavior. This includes the greater use of sustainable modes of travel.

The TMP provides a comprehensive framework for accommodating the City's projected travel demands in a sustainable and progressive manner. Active transportation and travel demand management policies and programs must become an integral part of the City's overall sustainable transportation system. However, the underlying framework for achieving the TMP goals and modal share targets is a significantly expanded public transit system. The City must therefore continue to proactively work with Regional and Provincial partners to advance rapid transit related projects and initiatives within Vaughan and advocate for early implementation of transit services to support new development.

Local road network improvements should be limited to strategic initiatives that support transit and goods movement, improve network connectivity or support intensification in designated areas. Updated parking strategies are required to reduce parking requirements for new development in centres and corridors well served by transit, and promote shared parking facilities in an effort to reduce single-occupant vehicle travel.

Given that over 45% of the City's planned growth by 2031 will be in the form of intensification within the current built boundary, the City's "New Path" must be sustainable and about moving people – not cars. The Draft Transportation Master Plan study report sets out how this objective can be achieved in the City. Accordingly, it is recommended that the master plan be approved in principal by Council.

Attachments

1. Pedestrian and Bicycle Network: Facility Types
2. Future Street Network & Right of Way Requirements - 2031
3. Action Plan

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Respectfully submitted,

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ATTACHMENT NO. 1

Legend

- Class 1 Multi-use Freeway or Boulevard Pathway
- Community Multi-use Recreational Pathway
- Neighbourhood Multi-use Recreational Pathway
- Community Multi-use Boulevard Pathway
- Class 2 Bike Lane/Track Shoulder/Sidewalk
- Community Bike Lane - Formal pavement markings and signing (CL - NO WIDENING)
- Community Bike Lane - Formal pavement markings and signing (CL - WIDENING)
- Neighbourhood Bike Lane - Formal pavement markings and signing (NL - NO WIDENING)
- Neighbourhood Bike Lane - Formal pavement markings and signing (NL - WIDENING)
- Community Paved Shoulder Bikeway - Signed as Bike Route
- Class 3 Bicycle Signed Pavement/Sidewalk
- Neighbourhood Signed Bike Route - No formal facility or pavement markings
- Community Signed Bike Route - No formal facility or pavement markings
- Class 4 Trail Facility
- Foot Establishing Trail

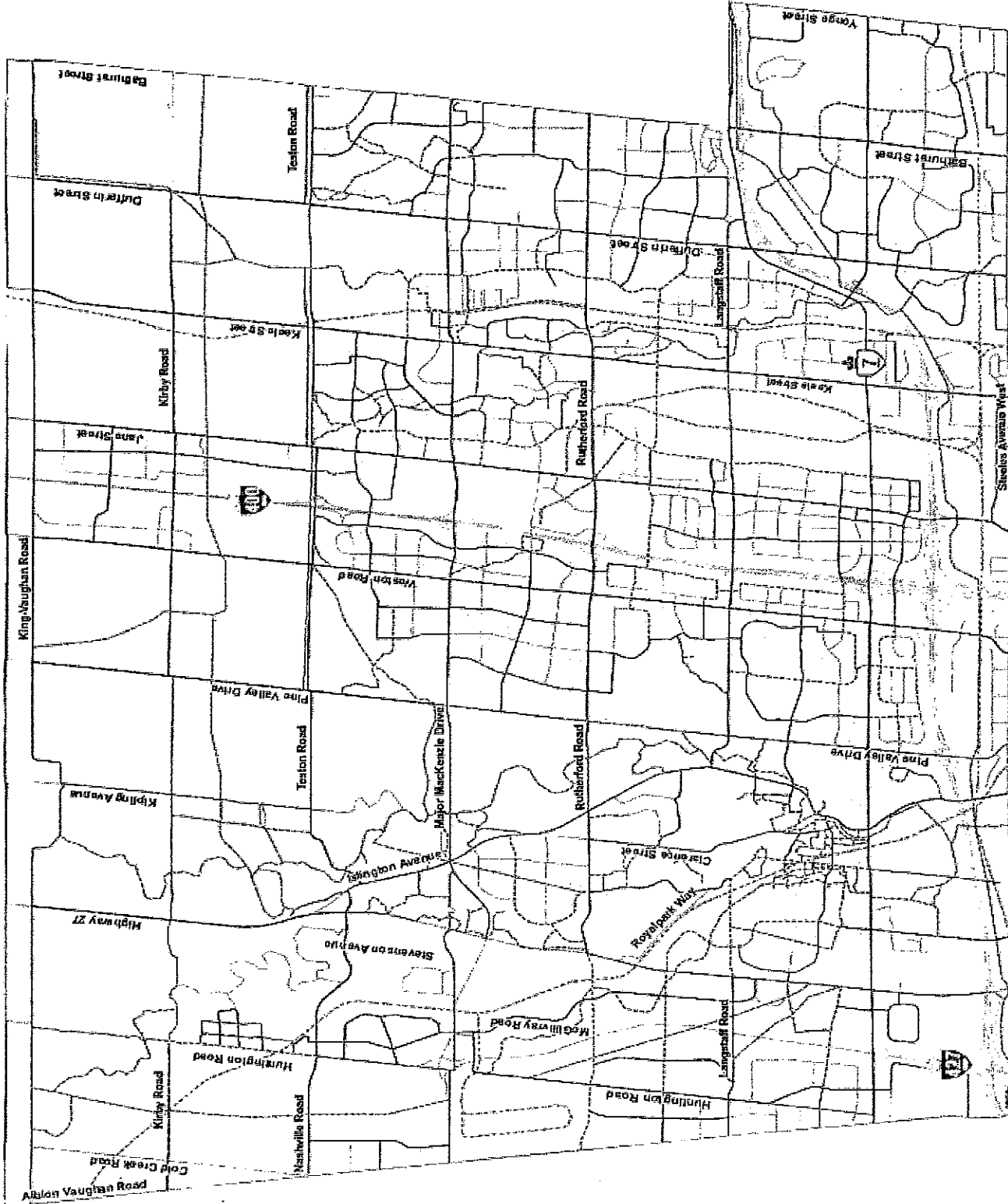
Reimagining from Osheski Realty of Metro of Resources



0 0.5 1 2
Kilometers

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Transportation Master Plan
Pedestrian and Bicycle Network
Facility Types
June 2016
DRAFT



ATTACHMENT NO. 2

- Legend**
- New/improved Interchanges
 - Interchange Improvements
 - New Interchanges
 - Grade Separation
 - Jog Elimination
 - Railway
 - Hwy 403 Road Crossings
 - Secondary Plan Areas
- Road Classification**
- Freeway (Provincial)
 - Major Arterial (Regional)
 - Minor Arterial (35m)
 - Minor Collector (28m)
 - Minor Collector (23m)
 - Special Classification (33m)
 - Proposed New Road Link

Illustrating the Concept of Major Interchange

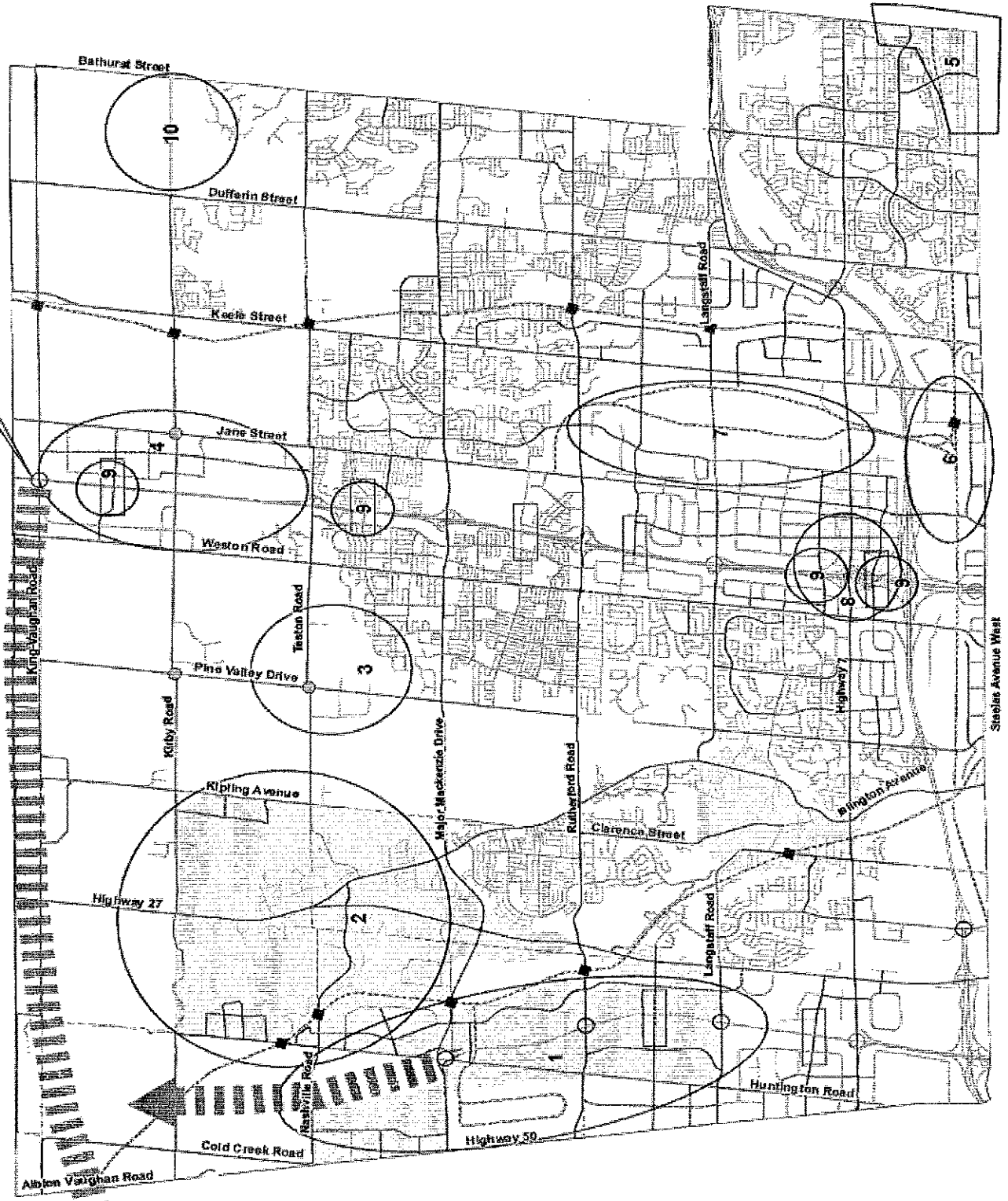


UTM Zone 17N, UTM 48Q
 130000
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Transportation Master Plan
 Future Street Network
 and Right of Way
 Requirements - 2031
 June 2011
 DRAFT



Subject to GTA West Corridor Needs
 Re: Location of Future Interchange



ATTACHMENT No. 3

Plan Element		Short Term (2011-2016) Action Plan	Medium Term (2016-2021) Action Plan	Long Term (2021-2031) Action Plan
A. Active Transportation (Cycling & Walking)				
1. Update City Sidewalk Policy	Update in context of new OP, TMP and PBMP policies and directions Prepare report and submit to Council	Review sidewalk policy and revise if necessary	Review sidewalk policy and revise if necessary	Review sidewalk policy and revise if necessary
2. Update Pedestrian and Bike Master Plan (PBMP)	Analyze pedestrian and cycling access issues/needs as they relate to York Region Pedestrian and Cycling Master Plan and planned YRT/VIVA projects Update Pedestrian and Bicycle Master Plan if required	Based on monitoring results and additional improvements identified, assess need to update PBMP	Based on monitoring results and additional improvements identified, assess need to update PBMP	Based on monitoring results and additional improvements identified, assess need to update PBMP
3. Accelerate Implementation of PBMP Network	Increase annual capital budgets for 2012-2016 Synchronize PBMP phasing with TMP phasing, and identify projects that can be advanced Implement initial phase improvements Increase annual operating budgets for 2012-2016 Identify projects that can be advanced Implement	Implement next phases of the PBMP	Implement next phases of the PBMP	Budget for and implement the remaining elements of the updated PBMP
4. Accelerate Construction of Missing Sidewalk Links on Regional Roads and other Key Pedestrian Community Linkages (with focus on access to YRT Bus Stops)				
5. Implement Access Improvements at VIVA Rapid Transit Stations and new GO Rail Stations		Incorporate project and funding needs into City budgets Implement in logical and coordinated manner Analyze pedestrian and cycling issues/needs as they relate to VIVA projects	Incorporate project and funding needs into City budgets Implement in logical and coordinated manner Analyze pedestrian and cycling issues/needs as they relate to VIVA projects	Incorporate project and funding needs into City budgets Implement in logical and coordinated manner Analyze pedestrian and cycling issues/needs as they relate to stations along future BRT corridors (e.g. Major Mackenzie, Jane)
6. Assess Need for Access Improvements to Stations along New BRT Routes				
B. Transit Support Initiatives				
7. Support Early Extension of Spadina Subway	Work with York Region and TTC to expedite design and ensure early implementation of the Spadina subway extension to Highway 7			
8. Advocate New GO Rail Service to Bolton	Work with Metrolinx and York Region to pursue additional local (smaller scale) stations in Woodbridge Core and Nashville, and advocate for early service implementation.	Work with York Region and Metrolinx to secure funding commitments from Provincial Government for early implementation	Work with York Region and Metrolinx to secure funding commitments from Provincial Government for early implementation	Work with York Region and Metrolinx to secure funding commitments from Provincial Government for early implementation
9. Support Improved GO Rail Service to Barrie	Work with Metrolinx and York Region to expedite improved service and to support new stations at Highway 7 and Kirby Road	Ensure that new development in Centres and Corridors is transit oriented	Ensure that new development in Centres and Corridors is transit oriented	Ensure that new development in Centres and Corridors is transit oriented
10. Support New Development and Redevelopment in Centres and Transit Corridors	Expedite new secondary plan for West/Hwy 7 Primary Centre Ensure that new development in Centres and Corridors is transit oriented In cooperation with York Region, establish appropriate level of traffic service standard to support new development in Centres and Corridors			
11. Develop New Traffic Level of Service Standard for Centres				
12. Advocate Early Implementation of Transit Service to New Development Areas	Work with York Region, Metrolinx and YRT to provide new/improved transit service to all recently occupied subdivisions and employment areas	Continue to work with York Region, Metrolinx and YRT	Continue to work with York Region, Metrolinx and YRT	Continue to work with York Region, Metrolinx and YRT
13. Advocate and Support Yonge Subway Extension and New BRT Lines	Work with York Region to articulate the benefits and promote transit supportive development in the Yonge corridor	Work with York Region, TTC and Metrolinx to secure funding commitments from Federal and Provincial Governments for early implementation and design for Yonge Subway Extension and New BRT Lines	Work with York Region, TTC and Metrolinx to secure funding commitments from Federal and Provincial Governments for early implementation and design for Yonge Subway Extension and New BRT Lines	Work with York Region, TTC and Metrolinx to expedite design and ensure early implementation of the Yonge Subway Extension and New BRT Lines
14. Advocate for Fare Integration and Service Coordination	Work with York Region and various transit operators to promote the seamless integration of transit services across Regional boundaries			
C. Travel Demand Management (TDM)				
15. Confirm City Role in TDM	Meet with Metrolinx and York Region to agree respective roles and responsibilities within a strengthened 3-way partnership			
16. Develop City-wide TDM Plan	Develop a comprehensive TDM Plan to look at areas such as promotion, the community, schools, institutions and workplaces Prepare plan and submit to Council	Update City-wide TDM Plan if necessary	Update City-wide TDM Plan if necessary	Update City-wide TDM Plan if necessary
17. Develop TDM Program for City Employees	Conduct an internal review of existing programs/services Survey staff Review programs from other municipalities Develop state-of-the-art program for consideration by Council	Update TDM Program if necessary	Update TDM Program if necessary	Update TDM Program if necessary
18. Support New and Existing Vaughan Employers in Initiating TDM Programs	Create guidelines document including a menu of employer based programs/services Promote menu with new and existing large City employers, in co-operation with Vaughan Chamber of Commerce	Provide staff assistance in promoting, planning and implementing employer specific plans	Provide staff assistance in promoting, planning and implementing employer specific plans	Provide staff assistance in promoting, planning and implementing employer specific plans
19. Develop and Implement Pilot School TDM Program	Provide staff assistance in promoting, planning and implementing a pilot school TDM program, and begin roll-out across Vaughan Elementary and High Schools	Develop and implement TDM programs for Elementary and High Schools and provide staff assistance in promoting, planning and implementing school specific plans	Develop and implement TDM programs for Elementary and High Schools and provide staff assistance in promoting, planning and implementing school specific plans	Develop and implement TDM programs for Elementary and High Schools and provide staff assistance in promoting, planning and implementing school specific plans

Plan Element	Short Term (2011-2016) Action Plan	Medium Term (2016-2021) Action Plan	Long Term (2021-2031) Action Plan
20. Require TDM Plans as a Condition of Development Approvals	<ul style="list-style-type: none"> Require that TDM plans be prepared in conjunction with traffic impact studies for all significant new developments Adopt size thresholds for TDM plans by development type (land use) 		
21. Consider Need for Additional Transportation Management Associations (TMAs)			<ul style="list-style-type: none"> Based on the demand in concentrated employment areas, and the benefits of cross-pollination among employers, assess the need for additional area specific TMAs with Metrolinx and York Region
D. Parking			
22. Finalize 2010 Draft Parking Report and Prepare a Revised Parking Zoning By-law	<ul style="list-style-type: none"> Finalize 2010 parking report for Council adoption Prepare revised zoning by-law that supports the report 		
23. Develop City Mandate for Parking Management	<ul style="list-style-type: none"> Prepare report to Council recommending elements of a parking management mandate and associated staff responsibilities 		
24. Develop Network of Carpool Lots for Vaughan	<ul style="list-style-type: none"> Work with the Region and the Province to define general locations for carpool lots in the City Amend the Regional and City TMPs accordingly 		
25. Implement a Park-and-Ride Lot North of the Vaughan Metropolitan Centre (VMC)	<ul style="list-style-type: none"> Work with the Region and YRT to identify and assess alternative sites for commuter parking oriented to the Spadina subway Report to Council with results and recommendations 		
26. Establish a Vaughan Parking Authority		<ul style="list-style-type: none"> Assess experience elsewhere and relate to Vaughan situation Prepare a report to Council on costs/benefits and mandate/role of a parking authority (or separate unit of the City administration) 	
27. Plan for and Implement a Municipal Parking Facility in the Vaughan Metropolitan Centre		<ul style="list-style-type: none"> Assess demand, identify and evaluate alternative sites, prepare cost estimate, and report to Council 	<ul style="list-style-type: none"> Confirm street segments, assess fee collection options and implement
28. Implement Paid On-Street Parking in the VMC		<ul style="list-style-type: none"> Assist the senior levels of government in selecting and acquiring (possibly through the development approvals process) suitable sites 	<ul style="list-style-type: none"> Confirm street segments, acquire equipment and install
29. Assist York Region and MTO in implementing Carpool and Park-n-Ride Lots		<ul style="list-style-type: none"> Assist the senior levels of government in selecting and acquiring (possibly through the development approvals process) suitable sites 	<ul style="list-style-type: none"> Assist the senior levels of government in selecting and acquiring (possibly through the development approvals process) suitable sites
30. Implement New Municipal Parking Facilities in Vaughan Centres		<ul style="list-style-type: none"> Assess demand, identify and evaluate alternative sites, prepare cost estimate, and report to Council 	<ul style="list-style-type: none"> Assess demands, identify and evaluate alternative sites, prepare cost estimates, and report to Council
E. Strategic Road Initiatives			
31. Conduct Joint VMC and Surrounding Area Transportation Study with York Region	<ul style="list-style-type: none"> Partner with Region to complete the study in early 2012 Report to Council with Study recommendations 		
32. Develop Comprehensive VMC Truck Strategy and Implementation Plan	<ul style="list-style-type: none"> Develop Terms of Reference jointly with York Region and retain consultant 	<ul style="list-style-type: none"> Work with York Region and MTO to implement various components of the Plan 	
33. Complete and Implement Class EA for North Maple Community Bridge (Block 33)	<ul style="list-style-type: none"> Work with consultants and Council to address outstanding issues Report to Council with Study recommendations 	<ul style="list-style-type: none"> Following EA approval, secure funding for implementation Implement 	
34. Initiate Class EA Studies (Phases 3 & 4) for Priority Road Improvements a) Portage Parkway Extension & Widening b) Huntington Widening and Urbanization	<ul style="list-style-type: none"> Develop Terms of Reference Retain consultants to conduct the studies 	<ul style="list-style-type: none"> Following EA approval for Huntington Road widening and Portage Parkway extension, secure funding for implementation Implement 	
35. Implement New Collector Roads through the Development Approvals Process	<ul style="list-style-type: none"> Work with developers to complete EA studies, if required, and implement collectors needed to support new development 	<ul style="list-style-type: none"> Continue to work with developers to secure necessary approvals and phased implementation, in conjunction with new development 	<ul style="list-style-type: none"> Continue to work with developers to secure necessary approvals and phased implementation, in conjunction with new development
36. Develop a Program for Evaluation and Implementation of Railway Grade Separations	<ul style="list-style-type: none"> Based on the recommended TMP road network, develop a program for evaluation and implementation of 5 railway grade separations with Vaughan roads Work with York Region to expedite the completion of 6 railway grade separations with Regional roads 	<ul style="list-style-type: none"> Secure funding commitments from Federal and Provincial Governments for high priority railway grade separations Design and construct high priority railway grade separations As warrants are met, initiate Class EA studies for medium priority Vaughan projects 	<ul style="list-style-type: none"> Secure funding commitments from Federal and Provincial Governments for medium railway grade separations Design and construct medium priority railway grade separations As warrants are met, initiate Class EA studies for low priority Vaughan projects
37. Implement Railway Grade Separations	<ul style="list-style-type: none"> As warrants are met, initiate Class EA studies for high priority Vaughan projects 	<ul style="list-style-type: none"> Secure funding commitments from Federal and Provincial Governments for high priority railway grade separations Design and construct high priority railway grade separations As warrants are met, initiate Class EA studies for medium priority Vaughan projects 	<ul style="list-style-type: none"> Secure funding commitments from Federal and Provincial Governments for medium railway grade separations Design and construct medium priority railway grade separations As warrants are met, initiate Class EA studies for low priority Vaughan projects

ATTACHMENT No. 3

Plan Element	Short Term (2011-2016) Action Plan	Medium Term (2016-2021) Action Plan	Long Term (2021-2031) Action Plan
38. Initiate Class EA Studies (Phases 3 and 4) for Jog Eliminations	<ul style="list-style-type: none"> Concurrent with the travel needs of new development, initiate EA studies for jog eliminations along Pine Valley Drive at Teson Road and Kirby Road. 	<ul style="list-style-type: none"> Following EA approval, secure funding for implementation Implement 	
39. Support York Region Goal to Eliminate Jog at Jane Street and Kirby Road	<ul style="list-style-type: none"> Work with Region to expedite the jog elimination at Jane Street and Kirby Road 		
40. Connect New Collector Road to Bass Pro Mills Drive Crossing of (and interchange with) Highway 400	<ul style="list-style-type: none"> Concurrent with new development on the west side of Highway 400, extend collector road to the existing Bass Pro Mills Drive overpass 		
41. Support Completion of Stage 1 of the GTA West Corridor EA Study and Advocate Initiation for Stage 2 of the EA Study for New Corridor	<ul style="list-style-type: none"> Following completion of Stage 1 of the GTA West Corridor EA Study, work York Region and MTO to expedite the determination of the routing for the GTA West Corridor. Work With MTO and York Region through Stage 2 of the EA Study to secure OPA 637 interchange connection(s) with Highway 400 together with a Regional arterial connection 		
42. Initiate Class EA (Phases 3 and 4) Studies a) Creditstone Widening b) Colossus Road Extension across Highway 400 and Improvements easterly to Creditstone Road		<ul style="list-style-type: none"> Develop Terms of Reference Retain consultants to conduct the studies Following EA approval, secure funding for implementation Implement 	
43. Reassess Need for and, if confirmed, Initiate Class EA (Phases 3 and 4) Studies for King-Vaughan Road Widening		<ul style="list-style-type: none"> Retain consultants to conduct the studies Following EA approval, secure funding for implementation Initiate class EA for Kirby Road 	<ul style="list-style-type: none"> Implement King- Vaughan Road Widening
44. Reassess Need for and, if confirmed, Initiate Class EA (Phases 3 and 4) Studies for Kirby Road Extension		<ul style="list-style-type: none"> Initiate class EA for Kirby Road 	<ul style="list-style-type: none"> Following EA approval, secure funding for implementation Implement Kirby Road extension (Baird Street to Dufferin Street)
F. Monitoring & Review			
45. Initiate Travel Monitoring (including City Cordon Count Program)	<ul style="list-style-type: none"> Undertake detailed planning in consultation with the Region Assemble and analyze data from TTS and other sources Prepare first City Travel Monitoring Report for Council 	<ul style="list-style-type: none"> Conduct City Cordon Count Program in appropriate years in cooperation with York Region, and assess results Prepare travel monitoring report and submit to Council 	<ul style="list-style-type: none"> Conduct City Cordon Count Program in appropriate years in cooperation with Region, and assess results Prepare travel monitoring report and submit to Council
46. Update the City Travel Demand Model	<ul style="list-style-type: none"> Recalibrate model based on 2011 Census, GTA-wide Transportation Tomorrow Survey (TTS), 2011 cordon counts, and 2011 travel time surveys Update land use, road and transit networks and other model inputs 	<ul style="list-style-type: none"> Recalibrate Model (Based on 2016 Census and TTS) Update land use, road and transit networks, and other model inputs 	<ul style="list-style-type: none"> Recalibrate Model (Based on 2021 and 2026 Census and TTS) Update land use, road and transit networks, and other model inputs
47. Establish Mechanisms for Inter-Jurisdictional Transportation Coordination	<ul style="list-style-type: none"> Meet with senior officials of the Province, Metrolinx and York Region to agree on mechanisms for on-going liaison regarding planning and implementation of transportation infrastructure and programs 		
48. Strengthen Transportation Engineering Staff Capability	<ul style="list-style-type: none"> Secure additional staffing resources as required to reach minimum strength by 2014 (as outlined in Chapter 7 of the TMP report) 		
49. Determine Need for TMP Update		<ul style="list-style-type: none"> Based on monitoring and assessment of TMP progress, policy changes, and GTA context, determine need for update 	<ul style="list-style-type: none"> Based on monitoring and assessment of TMP progress, policy changes, and GTA context, determine need for update