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Spadina Subway Extension Study:

Development Forecast for Proposed City of Vaughan Subway Stations

Photo courtesy the Toronto Transit Commission
Artist Conception

Prepared for: The Regional Municipality of York

Date: March 30, 2007

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March 30, 2007

Heather Konefat
Director of Community Planning
The Regional Municipality of York
17250 Yonge Street
Newmarket, Ontario L3Y 6Z1
Canada

Dear Ms. Konefat:

Re: Spadina Subway Extension – Development Potential Around Proposed Vaughan Subway Stations

urbanMetrics inc. is pleased to provide the Regional Municipality of York with our analysis of to the development potential adjacent to the three proposed stations on the portion of the Spadina subway that would extend into York Region.

The findings provided in our report indicate that there is market opportunity to achieve transit supportive densities adjacent to two of the three proposed Vaughan stations, namely the Vaughan Corporate Centre and Steeles Avenue West Stations. The Vaughan Corporate Centre has been defined in the Province's 2006 Places to Grow Plan for the Greater Golden Horseshoe. It is one of 25 Urban Growth Centres, intended to absorb a significant amount of population and job growth in the Toronto-centred region over the next 30 years. In addition to its prominent position within the Provincial Growth Plan, the Vaughan Corporate Centre has also been identified and designated by both York Region and the City of Vaughan as a key development area. The area is intended to evolve into a transit-supported node which will attract a broad range of urban uses at densities higher than currently realized elsewhere in the region. The Vaughan Corporate Centre is intended to function as the City's downtown.

The Steeles Avenue corridor has also been identified by the City of Vaughan as an important future development area owing to its location adjacent to York University and its proximity to several public transit routes. The third station near Highway 407 and Jane Street is not expected to receive additional development due to an adjacent cemetery and future transit uses.

At present time, provincial and municipal funding contributions to the subway project have been agreed to in principle; however the Federal Government is still deliberating on its role in the project.

In advance of a final funding agreement, urbanMetrics has been asked by the Region of York to provide independent, market-based estimates of the physical development potential around the three proposed stations north of Steeles Avenue West (i.e within York Region and the City of Vaughan).

In total, our long range forecasts suggest that the introduction of subway services into Vaughan could result in the formation of a mixed-use node accommodating an estimated 16,000 employees and 18,000 to 20,000 residents by 2036. This represents a net increase of approximately 7,200 to 9,500 new jobs in the area, and an estimated 8,500 to 9,500 new housing units built within easy walking distance of the proposed stations. On a comparative basis, the subway option will attract some 4,000 to 4,500 more jobs to the study area compared to the no subway option. On the residential side, the subway will both stimulate and accelerate demand for housing in the area, attracting an estimated 6,000 to 7,000 more units compared to the no subway scenario.

Finally, from on overall density perspective (expressed in terms of jobs and residents per hectare), the subway options will result in approximately 2 times more residential and employment activity compared to what would likely emerge under the no subway option.

It has been a pleasure undertaking this work on behalf of the Region. Should you have any questions or comments, please do not hesitate to contact the undersigned at 416.351.8585.

Yours truly,
*urban*Metrics inc.

Rowan Faludi
Partner

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Key Findings

urbanMetrics inc. was retained by the Regional Municipality of York to provide independent, market-based forecasts related to land development opportunities around the proposed subway stations in the City of Vaughan (Vaughan Corporate Centre Station and Steeles West Station). These stations form part of the 8.6 kilometre Spadina Subway Extension planned from the existing Downsview Station to the future Vaughan Corporate Centre at Highway 7 and Highway 400. A third station in Vaughan, the Highway 407 Transitway Station, has not been evaluated in our analysis because of planning, environmental and physical constraints on lands surrounding the station site.

This report addresses the potential for land development within approximately 500 metres of each station during the period 2007 to 2036. The underlying assumption is that the subway will be fully operational by January 1, 2014. A forecast of "status quo" conditions has also been prepared in the event that the subway project does not receive the required funding to proceed.

The **key findings** of our analysis are summarized as follows:

- The **Vaughan Corporate Centre** has the potential grow from 6,810 employees, into a mixed use district comprising some 11,000 employees and 15,000 to 17,000 residents. While the subway would attract marginally more jobs than under the status quo No Subway scenario, the biggest gain would be in the residential dimension of the area, which could yield as much as three times the population-base compared to No Subway scenario.

- The north side of Steeles Avenue will accommodate the **Steeles West Station,** which will include a regional bus terminal as well as a large commuter parking facility. Development along the Vaughan portion of Steeles (between Jane and Keele), is anticipated to be significant. In total, we have estimated that the north side of the street will experience a reasonably strong pattern of growth, increasing from an estimated 1,800 jobs in 2006 to almost 5,000 jobs by 2036. The subway is anticipated to accelerate growth and stimulate significantly more residential development than would otherwise be developed under the No Subway scenario. If the subway is built as planned, we have estimated that the north side of Steeles could support a residential base of approximately 3,000 persons all within a short walk of the subway station.

- In terms of total square footage, our market forecasts suggest that the subway would stimulate the formation of a regional office sub-market ranging between 3.5 and 4.0 million square feet of space by 2036. This is significantly greater than the estimated 1.4 million square feet that would be anticipated in the absence of a subway in Vaughan.

Executive Summary

Executive Summary

Purpose of the Study

urbanMetrics inc. was retained in August 2006 by York Region:

- **To establish a Study Area around the Vaughan portion of the 8.6 kilometre Spadina-York Subway Extension from Downsview Station to Highway 7,**
- **To Establish Development Potential (GFA) around 3 Vaughan subway stations, and**
- **To develop Long-Range Forecast from 2007 to 2036 using two potential scenarios**
  - **Scenario 1, No Subway (cancellation of project)**
  - **Scenario 2, Completion of Subway (to Highway 7)**

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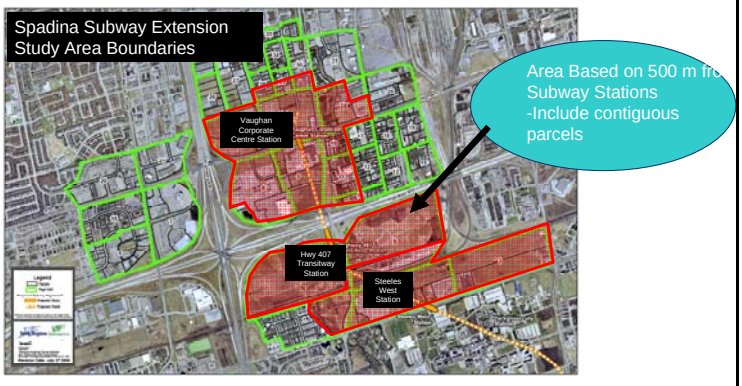
Executive Summary

Study Area – Vaughan Stations



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Executive Summary

Methodology
Comprehensive Policy & Market Approach

STEP 1: Subway Corridor Analysis - Steeles to Highway 7

- Review current conditions
- Identify all sites supportive of Transit-Oriented Densities.
- Analyze the parcel fabric (size, ownership, current use)
- Identify sites with and without development potential

STEP 2: Policy Review & FSI-based Forecasts

- Province Places To Grow – Urban Growth Centre
- York Region – *Centres & Corridors*, *ROPA 43*
- City of Vaughan – *OPA 450, 500, 660, 663*

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Executive Summary

Methodology
Comprehensive Policy & Market Approach

STEP 3: Market Analysis

- Housing Growth Patterns for GTA, York and Vaughan (Apartments, Rows)
- Office absorption patterns for GTA, York and Vaughan
- Identify benchmark subway stations
- Identify emerging benchmark mixed use area's in York Region (e.g. Markham Centre, Leslie/Hwy 407)
- Evaluate retail market patterns in Vaughan.

STEP 4: Develop 3 Scenarios

- Market Forecast (High and Low)
- No Subway Forecast

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Executive Summary

Methodology
Office Market Forecasts

Assumptions:

- **Total Growth in York Region's employment base = 355,000 new jobs (based on PTG). This will drive need for 9 to 14 million sf of new office space in the Region**
  (based on 25 to 40 sf office space for every 1 job)*
- **All 3 million square feet of space currently in development pipeline in York Region (including Richmond Hill and Markham) will be built as proposed.**
- **Total residual office space warranted in York Region estimated at 6 to 11 million sf.**
- **Forecasts consider VCC and Steeles West Station to capture 30 to 40% of this warranted demand in York Region.**

*** Current Level: 21 sf per employee in York Region**

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Methodology
Comprehensive Policy & Market Approach

	Description
Market – High	• Sites develop in accordance with potential market conditions • Assumes absorption of all "developable land" by 2036
Market – Low	• Project ambiguity about timing leads to a five development lag. • Assumes absorption of all "developable land" would occur by 2041.
No Subway	• Assumes York invests in "BRT" - VIVA service • Development as per current market patterns • Assumes all existing big-box formats are stable to 2036.

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Executive Summary

Methodology
Comprehensive Policy & Market Approach

Step 5: Site-by-Site Evaluation

- Remove lands required for public infrastructure- roads, utilities, institutional uses, recreation uses, etc.
- All developable sites > 2.5 acre: assume 70% Developable
- All developable sites < 2.5 acre: assume100% Developable

Step 6: Phasing of Sites - 2007 to 2036

- "Active" sites – assume approval and development by 2014
  - UPS Expansion, Empress Gardens, Jane/Doughton Banquet Hall, various prestige industrial sites
- Evaluation of "key sites" based on "best-estimates" of market conditions and characteristics.

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Phasing of Key Sites

	Subway		No Subway
Key Sites of Redevelopment or Intensification - Timing	High Market	Low Market	Status Quo
Royal Empress Gardens (VCC)	2007-2011	2007-2011	2007-2011
UPS (Steeles)	2007-2011	2007-2011	2007-2011
Toromont (VCC)	2012-2016	2017-2021	2012-2016
Steeles West Station Office (Steeles)	2012-2016	2017-2021	2017-2021
AMC Interchange (VCC)	2012-2016	2017-2021	2022-2026
Wal-Mart (VCC)	2027-2031	2032-2036	Post 2036
Sam's Club (VCC)	2027-2031	2032-2036	Post 2036
IKEA (VCC)	2032-2036	Post 2036	Post 2036
Future Shop/Home Outfitters (VCC)	2032-2036	Post 2036	Post 2036
Sin City Night Club (VCC)	2032-2036	Post 2036	Post 2036

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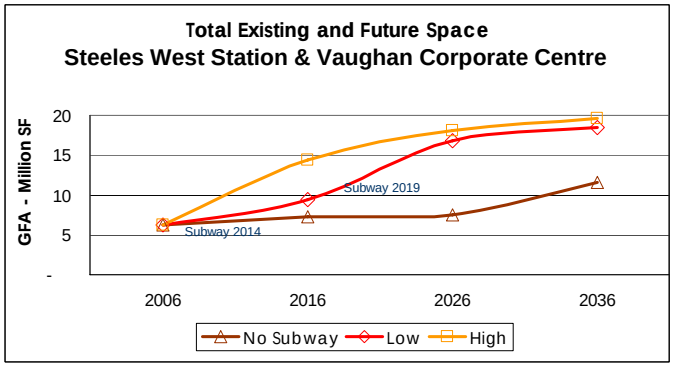
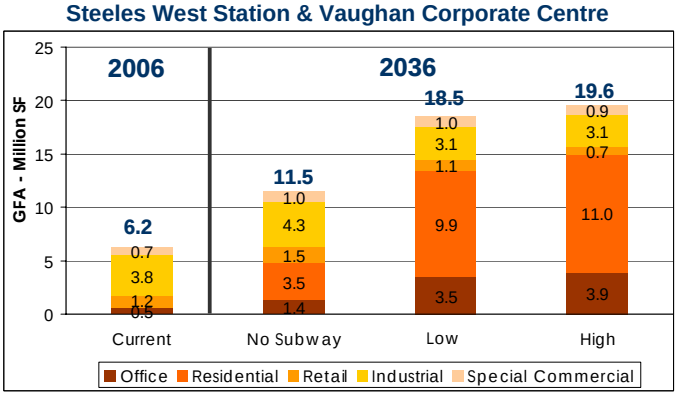
Executive Summary

2036 Forecast Scenarios: Phasing



Executive Summary

2036 Forecast Scenarios: Scale of Development



Comparison
VCC & SWS to Other TTC (within 500m)

Station (Opening Date)	Years Since Opening (3	Jobs (1	Residents (2	Total
Vaughan Corp Centre (2014)	22	11,200	17,000	**28,200**
Steeles West (2014)	22	4,900	3,100	**8,000**
Finch (1974)	27	5,000	11,200	**17,200**
NYCC (1987)	14	10,200	7,300	**17,500**
Sheppard (1974)	17	9,000	5,000	**14,000**
Kipling (1980)	21	2,700	600	**3,300**
Islington (1968)	33	5,100	8,000	**13,100**
Yonge/Bloor (1954)	47	32,200	11,100	**43,300**
Yonge/Eglinton (1954)	47	18,600	9,900	**28,500**

1) Based on 1996 Census Information from TTC

2) Based on 2001 Census Information

3) Comparisons – Opening to 2001 Census Year

VCC and Steeles W -2014 to 2036.

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Key Findings

The extension of the subway to Vaughan Corporate Centre will attract between 7 and 8 million square feet more space than not building the subway.

- The subway would stimulate between ***4,000-4,500 additional jobs*** compared to the no-subway scenario.
- The subway would attract between ***12,000-14,000 additional residents*** compared to the no-subway scenario.

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1. Introduction

After more than 20 years of planning and deliberation, the Province of Ontario announced in its Spring-2006 budget a $670M funding package to extend the Spadina subway line by 8.6 km from its current terminus at Downsview Station to the planned Vaughan Corporate Centre, located in the vicinity of Highway 7 and Highway 400. This landmark announcement was made through the Move Ontario Initiative. If built, it represents the first time that a subway line in Toronto will cross a regional municipal boundary.

In total, the approved subway extension will comprise six new stations. Three stations will be developed within the City of Toronto, including Sheppard West Station, Finch West Station and York University Station. Three stations will be developed within the City of Vaughan portion of the alignment, two of which can support and accommodate significant land development and intensification. One station, the Steeles West Station, will be developed under Steeles Avenue. The grade-related portion of this station (i.e. the bus terminal and the surface commuter parking lot) will, however, be located on the Vaughan-side of Steeles Avenue. The other station, Vaughan Corporate Centre will be situated just north of Highway 7 at Edgeley Boulevard.

The current funding model for the subway is based on a one-third commitment from each of the three levels of government from each of the three levels of government. At this point in time the provincial and municipal partners have reached an agreement in principle; the federal government has yet to confirm its commitment.

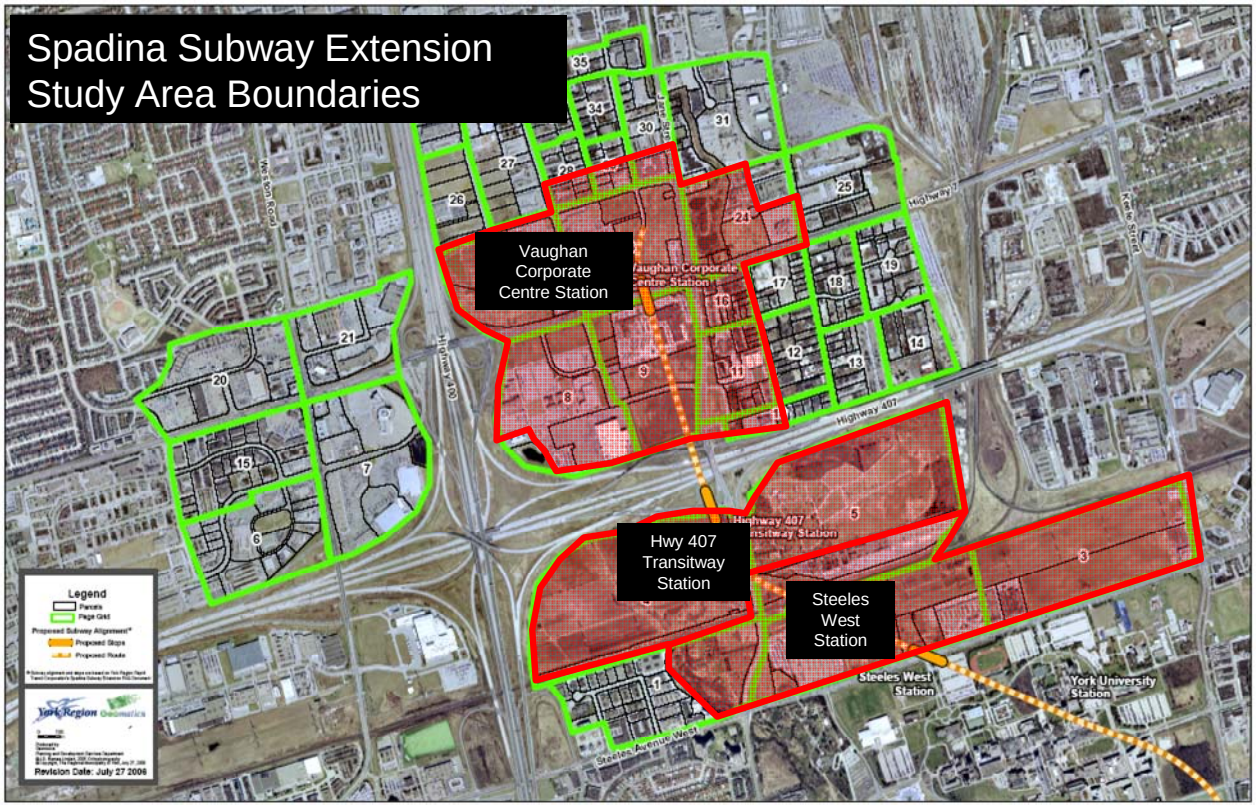
1.1 Purpose of the Report

This study has been prepared by urbanMetrics inc. ('urbanMetrics') on behalf of the Regional Municipality of York ('York Region' or 'the Region'). It is intended to provide the Region with a series of "order of magnitude" estimates as they relate to the long-term (30-year) development potential of land opportunities around the proposed subway stations in Vaughan. The report is intended to provide market guidance to Regional Council related to the scale of development that could be reasonably anticipated around each of the stations. In turn these estimates will be used to calculate the additional tax and development charges revenue "up-lift" resulting from development and redevelopment of sites adjacent to the stations, and establish the potential funding gap that will need to be overcome to complete the project, either with or without federal funding.

1.2 Study Area

The Study Area used in our analysis is based on a site by site assessment of land parcels found within approximately 500-metres of each of the planned stations in Vaughan. The Study Area includes all land parcels located within York Region (City of Vaughan) that are situated within a comfortable walking distance of each of the stations.

The following map illustrates the extent of the Study Area. It has been defined based on an assessment of existing (and future) local area conditions, such as road patterns, and natural and physical land features that influence pedestrian movement. The parcels that make up the Study Area include all lands that can (and should) be redeveloped according to more transit-supportive densities within a 30 year time frame.



1.3 Forecast Scenarios

This study provides three potential 2036 development scenarios for lands within the defined study area.

- **Scenario 1 – No Subway (Status Quo)**: Assumes that the decision to extend the subway into Vaughan fails to materialize. It assumes that other transit priorities are pursued, including an east-west dedicated transit right-of-way along Highway 7 ("Avenue 7") connecting Vaughan with other parts of York Region.

- **Scenario 2** – **Market Forecasts**: A number of market forecasts were tested to estimate the amount of development generate during the 2007-2036 time period. We used combination of land use policy and market growth considerations in the Greater Toronto Area to develop the scenarios. Development timing assumptions were used to provide for "high" and "low"

estimates of development volumes between 2007 and 2036. These estimates assume the same amount of development, but for different time horizons.

- The **High Market Forecast** assumes that development around the stations will advance in accordance with strong market absorption patterns, and that the land area will be developed with residential and non-residential uses by 2036.

- The **Low Market Forecast** assumes that the pace of development will moderate somewhat and that full development of the Study Area will not materialize until beyond the 2036 timeframe. In the case of the low market forecast, we lagged the pace of development by 5 years. This lag is used to recognize potential project ambiguity about timing that leads to a period of inaction for development community.

- **Scenario 3 – Policy Forecast**: Similar to our market forecasts, the policy scenario assumes that the subway will be completed and operational by 2014. This forecast is based entirely on the achievement of maximum permitted building densities around the Vaughan Corporate and Steeles West stations.[1] The policy forecast represents an unconstrained estimate of growth in which full-build out potential is realized by 2036. Achievement of such densities, across the entire study area, is not, in our professional opinion, achievable within the 2036 period. The policy forecast is provided for comparative purposes only. In essence, it provides the physical maximum of permissible development. It does not accurately depict what market growth conditions would dictate. No weighting has, or should be placed on this forecast.

[1] 'Maximum permitted densities' refer to the maximum policy targets found in OPA 663 and OPA 620.

2. Assumptions – Development Potential, 2036

The following assumptions have been utilized by urbanMetrics in our development forecasts regarding construction and redevelopment activity around the proposed Vaughan subway stations.

2.1 Timing of Subway Construction

The subway is assumed to be built and operational within 7 years of an approved funding agreement between all levels of government.

For the purposes of our study we have assumed the opening date of the subway will be **January 1, 2014**.

2.2 Phasing of Development

The subway will be constructed, delivered and opened as a single project (a non phased opening).

We have been instructed that it is technically feasible to build the project as a single, fully-integrated facility stretching the full 8.6 kilometres from the existing Downsview Station, and terminating at the proposed Vaughan Corporate Centre Station located at Highway 7 ('Avenue Seven'). [2]

2.3 Development Densities

On a site by site basis, over time, the subway is assumed to yield development densities that are the same or greater than those that currently exist. For analytical purposes, density calculations are based on the measurement of Floor Space Index ('FSI'), which considerers the land area of each parcel in the defined Study Area, on an individual basis and the amount of gross floor area (GFA) built on that site.

Our forecasts have been predicated on policy considerations which include land use policies that are both approved by the City of Vaughan, and those which are currently proposed by the City's planning department (i.e. with draft status). We have allowed these target densities to inform the upper-limit of our forecasts of full build-out potential around the stations.

For land parcels larger than 2.5 acres we have assumed 70% of the area is developable. The remaining 30% has been reserved for public access considerations and services, including:

[2] Discussions with Scott Thorburn, URS Consulting Engineers in August 2006 based on the City of Toronto Environmental Assessment for the Spadina Subway Extension. Timing recognizes that all issues related to detailed design, tender, finance and construction are resolved and that political commitment and funding is sustained over the course of the entire development period.

roads, utilities, public facilities and open space. We would note that the 70% rate is somewhat higher than our typical allocation in this regard; however given that the area is not currently served by school, libraries and other community-based services, a larger adjustment factor was deemed necessary in order to account for the integration of such uses.

The reader should note that the net FSI-based calculations in our study are applied to the "net" portion of the developable sites only, and therefore exclude the 30% allocation for roadway and other public allowances. This methodology does not account for stacking densities from public uses onto developable sites. Official Plan policies could provide credit for public uses through bonusing or density transfers.

2.4 Forecast Scenarios

Given the extremely central regional locational context of the Study Area, combined with the recent physical growth limitations placed on the Greater Toronto Area through the Province's *Greenbelt Act* legislation, we have assumed that all parcels – save and except those lands adjacent to the planned Highway 407 transit corridor, including the Beechwood Cemetery, the TRCA lands, and the hydro corridor – will be developed and occupied by residential, non-residential or mixed-used activities within a 30-year planning horizon. This assumption applies to the No Subway, High Market and the Policy Forecasts. The Low Market Forecast assumes, however, that the pace of development will moderated somewhat, with full development not anticipated until 2041. The low market forecast also takes into consideration the fact that existing land owners in the Study Area will continue to delay development of their sites until the ambiguity around funding (or non-funding) of the subway project is resolved.

2.5 Classification of Parcels

In our analysis of development potential we have classified each of the land parcels in the Study Area as follows:

- **Vacant & Developable** – A greenfield development site with no formal planning application as present time.

- **Undevelopable** – A greenfield parcel that is constrained by the following considerations:
  - Environmental (e.g. Black Creek Floodplains)
  - Physical (e.g. the hydro transmission lines, 407-Transitway corridor, and water treatment, cemetery lands)

- **Under Application** – A parcel that has an active (or imminent) development application in process.

- **Stable** – No change in use (or density) is anticipated. The existing use will remain intact over the 2007-2036 period.

- **Intensification** – Existing uses to continue with additional construction or density to be added over the 2007-2036 period.

- **Redevelopment** – Existing uses to end, new uses and greater density to be added over the 2007-2036 period.

It should be noted that the classifications assigned to each parcel may vary between forecast scenarios. For example some parcels have be classified as "stable" under the No Subway Scenario "redevelopment" under the Market Scenario.

2.6 Developable Lands

Under both the low and high market forecasts, the following amount of land (expressed in total acreage) has been identified as developable. These parcels have been identified and earmarked for future development. The developable category below includes sites that are classified as either intensification or redevelopment as per the descriptions above.

(in acres)	Steeles West Station	407 Transit-way Station **	Vaughan Corporate Centre Station
Developable *	**116**	**0**	**269**
Stable	57	262	66
Undevelopable	92	0	20

* includes site that are vacant & developable, under application, supportive of intensification and suitable for redevelopment.

** For the purposes of our analysis we have assumed that there will be no development of lands owned by the Ontario Realty Corporation, Mount Pleasant Cemeteries (Beechwood Cemetery), and Stelllarbridge Management Inc. (7171 Jane Street).

2.7 Office

While Vaughan has a rather substantial employment base, relative to other suburban 416 and 905 areas, it actually has a very small portion employment base working in office buildings larger than 20,000 square feet.

The City of Vaughan currently has approximately 1.35 million square feet of office space.[3] This represents less than 2% of the 80.6 millions square feet of office space found in the suburban

[3] Cushman& Wakefield Lepage: 2006. Includes buildings larger than 20,000

GTA market. Clearly, the opportunity should exist for a City the size of Vaughan to establish itself as a stronger player within Toronto's office market.

Office development within the Study Area will generally occur on parcels that provide either direct access to one of the stations, or on selected parcels that are situated along-side Highway 7 (future Avenue 7), Highway 400, Highway 407 or Steeles Avenue West. All future office projects are assumed to be "mixed-use" in orientation with a partial allocation of retail space at-grade. Over the forecast period, generally parking associated with office buildings in the study area will be provided below-grade, or within structured facilities above grade.

Our analysis of market demand for office space recognizes that there is approximately 3 million square feet of new space either under construction or in the pre-leasing phase of development across York Region, including both Markham and Richmond Hill, where the majority of office development has, and will continues to occur.

Our forecasts assume that all office projects now in the planning and development stages across York Region will be delivered to the marketplace, as proposed, in advance of the 2014 subway opening date. These projects will be absorbed by the market in advance of new product coming on stream in the Study Area.

2.8 Retail

The Study Area is currently comprised of a significant amount of retail space (1.2 M square feet), largely within low-density, big-box store formats. The presence of big-box retail, particularly in the vicinity of Highway 400 and Highway 7, has helped to establish this particular commercial node as one of Canada's single largest concentrations of retail floor area. While the majority of retail space is largely beyond the defined Study Area (i.e. to the west of Highway 400), there are several large and very prominent commercial outlets currently operating in the Study Area, most notably IKEA, AMC Theatres, Wal-Mart, and Sam's Club.

Over the 30-year forecast period, the growth (or contraction) of retail uses in the Study Area will largely be dictated by a number of intervening market forces, including:

- the outcome of the subway project;
- the influence that Vaughan Mills Shopping Centre, located at Highway 400 and Rutherford Road, will have on future location decisions of established and future retailers in Vaughan;
- congestion and traffic volumes in the vicinity of the subway stations stemming from additional office and residential growth;
- the ability of developers and retailers to effectively integrate structured parking adjacent to shops and services; and

- the competitive impact that new retail and service commercial activities housed within mixed use developments will have on consumer needs and market demand.

Under the No Subway scenario, we have assumed that all existing retail stores will be maintained over the duration of the forecast period[4], and that additional box-type retail facilities will likely to continue to be attracted to any remaining commercially viable sites within the Study Area.

Under the High Market and Policy Target forecasts we have assumed that existing big-box retail buildings will be redeveloped or intensified with mixed-use developments. Under the High Market Forecast, for example, retail space will be significantly reduced by 2036 from its current level as a result of comprehensive redevelopment of the area. Under the Policy Forecast, all future retail space will be delivered in the form of mixed use projects. The retail space is anticipated to be developed according to the upper end of the permitted density provisions, which allow for up to 2 storeys of retail/service commercial space within all high density residential and office oriented buildings.

2.9 Industrial Development

The Study Area currently includes both prestige and general industrial uses. While prestige uses are generally found west of Jane, the industrial area to the east of Jane, between Highway 7 and Highway 407 is defined by more intensive industrial uses - many of which take advantage of somewhat 'loose and flexible' zoning standards that allow for outside storage.

For the purpose of our forecasts, we have assumed that future industrial expansion in the area would only materialize in the event that the subway project is abandoned. In our Market and Policy forecasts we have assumed that some additional industrial space would be added in accordance with current expansion plans, such as those anticipated by UPS on the north side of Steeles and Jane.

An important assumption built into all forecasts is that the Toromont facility located on the south side of Highway 7, west of Jane will be relocated outside the study area in advance of the opening of the subway in 2014. Currently, the 27 acre site is used for industrial purposes (i.e. heavy equipment machinery distribution). It is important to note that the company's office and administrative functions could still be maintained within the Study Area should the company so choose. Such functions would be absorbed within our office space forecasts.

2.10 Special Commercial

The Study Area has a number of large "special commercial" facilities that include hotels, banquet/conference facilities, night clubs and privately owned arena facilities. We have assumed that the study area's three existing hotels will be stable activities over the duration of

[4] Store tenants and retail categories however are likely to change over a 30 year period.

the 2007-2036 period. We have also assumed that two new hotel properties will be added to the study area. Specifically we have assumed that the north side of Steeles Avenue, west of Keele Street (the Milestone Property) will include a hotel component. This 40 acre site currently comprises one office building and possesses significant potential for additional development. Our forecasts also consider (and assume) that a recently received application for intensification of the banquet hall facility at the southeast corner of Jane Street and Doughton Road will be approved. The application includes the construction of four new buildings including an apartment building and some mixed use buildings that would include both a hotel and performing arts centre.

Elsewhere in the study area, we have assumed that the Sin City night club, located at Highway 407 and Jane Street represents a strong redevelopment opportunity. Given the site's prime location and its high exposure to Highway 407, it is anticipated that this site will be developed as an office-based employment facility.

We have also assumed that the Princess Convention Centre on the north-side of Highway 7, east of Jane will be redeveloped. An application is presently active for a major residential project which is described in more detail in the section below.

Finally, we have assumed that the arena complex east of Jane Street will be maintained. We do however recognize that the facility will likely be up-graded and modernized at some point within the 30 year development timeframe.

2.11 Housing Development

The Study Area does not currently contain any housing.

That being said, local, regional and provincial policies all support the development of medium and high density housing in this area, fully recognizing the critical importance that housing plays in the creation of vibrant mixed use areas capable of supporting higher-order transit services.

With respect to housing, an application was recently submitted for a major condominium development on the north side of Highway 7, east of Jane Street. This application, known as Royal Empress Gardens, includes 1,850 apartment units spread over six towers. Each of our three forecasts assumes that this development will be approved and developed as proposed by the developers. In light of this, and other similar-scaled high density residential projects in York Region, each of our scenarios recognize the tremendous opportunity that housing can play in stimulating positive change within the Study Area, including the influence that it will play on new forms of retail and service commercial development.

For the purposes of our analysis, we have assumed that mid-rise and high-rise buildings will be developable throughout the Study Area. Allocations between medium density and high density apartment construction have been made on a site-by-site basis. We have assumed that medium density will be developed at the upper range of the prescribed policy range of 35

units per hectare (90 units per acre)[5]. For high density apartment buildings, we have determined unit yield through a combined analysis of FSI measurement and an underlying assumption of 1 unit per 1,100 sf GFA[6].

2.12 Phasing of Key Sites

The Study Area has a number of large and prominent properties that are assumed to be developable (i.e. redeveloped or intensified) with higher and better uses. The following table provides the timing assumptions related to key sites.

	Subway		No Subway
Key Sites of Redevelopment or Intensification - Timing	**High Market**	**Low Market**	**Status Quo**
Royal Empress Gardens (VCC)	2007-2011	2007-2011	2007-2011
UPS (Steeles)	2007-2011	2007-2011	2007-2011
Toromont (VCC)	2012-2016	2017-2021	2012-2016
Steeles West Station Office (Steeles)	2012-2016	2017-2021	2012-2016
AMC Interchange (VCC)	2012-2016	2017-2021	2012-2016
Wal-Mart (VCC)	2027-2031	2032-2036	Post 2036
Sam's Club (VCC)	2027-2031	2032-2036	Post 2036
IKEA (VCC)	2032-2036	Post 2036	Post 2036
Future Shop/Home Outfitters (VCC)	2032-2036	Post 2036	2017-2021
Sin City Night Club (VCC)	2032-2036	Post 2036	Post 2036

[5] Once we determined the number of units, we have also assumed a ratio of 1 unit per 1,500 sf GFA for medium density housing for the purpose of developing analysis of the resulting FSI within the Study Area.

[6] Based on 1,000 sf per unit for livable area and 100 sf per unit for common area. According to CMHC Toronto Regional Analyst, Jason Mercer, the average apartment unit size in the Toronto CMA is 960 sq.ft. urbanMetrics have assumed 1,000 sq.ft. per unit given the 905 context of the study area. Further to this discussion we have assumed that common area represents approximately 10% of the total GFA of a typical high density residential project.

It is important to note that the development of these key sites has been used to inform our assumptions regarding the timing of development on other adjacent greenfield properties within the study area, as well as redevelopment opportunities that exist on underutilized parcels.

2.13 Employment and Population Yields

To determine the number of new jobs and residents in the study area, we have assumed the following yields[7]:

- **Office:** 350 sf per FT employee
- **Retail:** 400 sf per FT employee
- **Industrial:** 800 sf per FT employee
- **Special Commercial:** 1,500 sf per FT employee
- **Medium Density Housing:** 2.95 persons per unit
- **High Density Housing:** 2.0 persons per unit

2.14 Limitations and Exemptions

The introduction of residential units in the Study Area will require the development of public services and other community-based facilities to functionally support the day to day needs of residents. The scale and timing of development of the following facilities has not been quantified into our forecasts:

- Schools
- Recreation Facilities
- Community Centres
- Places of worship

Our forecasts have, nonetheless, provided full opportunity for these uses to be built into the Study Area, without the need to reduce the development potential stated in each forecast[8].

[7] These yields are based on guidance from York Region staff, industry standards and comparable developments in York Region.

[8] As mentioned in Section 2.3 for vacant and redevelopable land parcels larger than 2.5 acres we have reserved 30% for public access considerations and services including roads, utilities, public facilities and open space.

Finally, with respect to our retail forecasts, we have not undertaken a detailed market demand and impact study taking into consideration trade area population growth patterns and existing and proposed commercial competition within a defined trade area. Our estimates of retail demand should be considered as 'high-level' estimates, and are not intended to be used by any proponent in support or opposition of future retail applications within York Region or the City of Toronto.

3. Methodology

This section provides a description of the work steps undertaken by urbanMetrics toward the development of detailed forecasts which are provided in Section 4.

3.1 Step 1: Subway Corridor Real Estate Analysis

The first step of our project involved the identification of site specific development conditions that currently exist in the Study Area. In these investigations we identified all land parcels that exhibit market characteristics that support Transit Oriented Densities. urbanMetrics has analyzed each individual parcel in terms of: site size, building age, ownership, established uses/tenancies, active development applications and neighbouring land uses. Through this analysis we determined the quantum of land with and without future long-term development potential. In developing our real estate analysis consideration was given to emerging development trends taking place around existing subway stations in Toronto, as well as densities being achieved elsewhere in the GTA, including Markham, Richmond Hill and Mississauga.

3.2 Step 2: Policy Scan

In establishing development potential for the study area, the following policy documents were considered in the preparation of policy based forecasts.

3.2.1 Vaughan – OPA 450 (1997)

OPA 450 (also known as the *Employment Growth and Management Plan*) is intended to guide growth and development of employment areas in the City of Vaughan. In doing so, OPA 450 establishes two specific land use designations that apply to the area located south of Highway 7 and east of Jane Street. The 'Prestige Area' designation which applies to lands located adjacent to arterial roads was introduced as a means to provide greater opportunities for employment intensive uses which can take advantage of, and indeed support transit service. The 'Employment General' designation is intended to provide locational opportunities for industrial development, while at the same time controlling the impact of outside storage on neighbouring uses.

3.2.2 Vaughan - OPA 500 (1998)

OPA 500 (also known as the *Vaughan Corporate Centre Secondary Plan*) was prepared by the City of Vaughan as a means to promote and advance the establishment of a Regional Centre at Highway 7 and Jane Street. The area covered by OPA 500 includes lands both east and west of the Highway 400 & 407 interchange. The document recognizes lands within the Study Area as having potential for higher intensity land uses, and for becoming the major urban focus ('downtown') of the City of Vaughan. The vision of the Vaughan Corporate Centre is the establishment of a liveable community containing a mixture of land uses capitalizing on existing and planned GTA-wide transportation links. In order to achieve this vision, the plan encourages a variety of higher density residential uses with complementary community amenities and

services. It also encourages the City of Vaughan to establish a substantial civic presence and support the provisions of a wide variety of commercial goods and services. Higher order transit facilities connecting the Corporate Centre with other urban centres are also required to achieve the anticipated status of Vaughan Corporate Centre. The plan attempts to remove most of the traditional planning policy impediments such as height and density limits.

The document identifies new land uses designations including 'Corporate Centre Node' and 'Corporate Centre District'. The former includes 50 hectares along Highway 7 and the latter contains lands further from Highway 7 where development is expected to be less intensive and more ground-related in nature. A development block pattern based on a 100 metre by 100 metre grid plan was established within the lands of the 'Corporate Centre Node'. The Plan also prescribes the adoption of a ring road. No outdoor storage is permitted under OPA 500. According to the Plan, the amount of development within the Node can reach 6.5 million square feet of Gross Floor Area. OPA 500 also anticipates 2,200 high density housing units to be built in Vaughan Corporate Centre. The mix of land uses is assumed to be determined as the market dictates – recognizing that there is no 'ultimate' mix of uses.

3.2.3 Vaughan - OPA 600 (2001)

OPA 600 amends and replaces OPA 400 and its schedules. It includes an expansion of the urban area, introduces new policies and incorporates previously approved amendments to OPA 400. The plan also includes revised growth forecasts for the City in order to better reflect recent increases in population and employment. It projects 11,500 medium and high density units to be built throughout the City through future intensification by 2026. Assumptions of persons per unit (ppu) are established as 2.77 ppu for medium density and 2.03 for high density residential. OPA 600 prescribes a density for medium density housing in the range of 25 to 35 units per hectare and for the high density housing in the range of 60 to 185 units per hectare. Commercial uses in High Density Areas shall be limited to a density of 2 FSI.

3.2.4 Vaughan - OPA 528 (2001)

The main purpose of OPA 528 is to introduce new policies relating to the road network serving OPA 500. It contains amendments to the transportation plan included in OPA 500 addressing issues of road capacity and congestion. Additional roads improvements are suggested to balance the capacity of the network with future travel demand generated by 30,000 jobs and 5,000 residents by 2021. The improvements added through OPA 528 include a northbound Highway 400 on-ramp connecting the proposed ring road and a two-way bridge that links the west and east sides of Highway 400 in order to reduce congestion Highway 7.

3.2.5 Vaughan - Jane/7 Employment Area Redevelopment Study (2004)

This study prepared by the City of Vaughan discusses the potential for redevelopment of the area southeast of the intersection of Jane Street and Highway 7. The purpose of the study is to identify impediments to redevelopment to better ensure that planning policies and objectives in the area can be achieved. The study suggests that there is both a lack of financial feasibility and market support for the type of development contemplated under the current policy

context. Also, there is no development stimulus in form of the public transit facility or through public building investment. The study also indicates that the land use character and resultant poor image attached to this area may actually hold back the evolution of the broader Corporate Centre vision. Another obstacle is the Black Creek floodplain which runs through several properties and affects the long range redevelopment potential of the area. Although the potential for land use change is limited in the medium term, it is anticipated that commercial uses could eventually be attracted to the main arterials bordering the area. The study also affirmed that the Jane/7 area will face considerable competition from greenfield lands that can support similar uses, which are easier to develop in light of potential site remediation costs.

3.2.6 Vaughan – Highway 7 Land Use Futures Study (2004)

This study intends to provide a clear vision for urban change within the Highway 7 corridor and establish the role that mass transit will play in creating more sustainable and compact forms of development. The study acknowledges that improving infrastructure and providing higher order transit along Highway 7 are some of the critical steps in realizing the vision of an urban "Avenue" that will become the focus of adjacent residential neighbourhoods. These amendments aim to establish density targets and built form performance standards; provide higher order transit facilities; and promote a finer-grained road and development blocking pattern. More particularly, it suggests amending OPA 500 by implementing housing objectives within Vaughan Corporate Centre as defined in OPA 600, and by stating that Corporate Centre Node should achieve an average density of 5.0 FSI without any height limitation on any sites. It suggests allowing interim form of development that do not meet minimum density target as long as the developer can effectively demonstrate how higher density can be achieved on the site over time. One of the key recommendations of this study is the exclusion of future retail uses in excess of 100,000 sq.ft. of GFA within the Corporate Centre Corridor designation.

3.2.7 York Region –York Region Centres & Corridors Study (2004)

The study discusses the role of the Region's Centres and Corridors. Centres (such as the Vaughan Corporate Centre) shall be vibrant, higher density mixed use precincts where developments and investments are concentrated. The regional corridors (including Highway 7) are expected to provide efficient transportation links to the centres as well as providing services in a mixed-use form which are supportive of higher order transit services. The study suggests that the public sector must lead the process of change by creating and enhancing the reasons for businesses and residents to locate in centres and corridors. Policies regarding the Region centres and corridors include directing office and service jobs to centres and corridors as well as emphasizing the importance of appropriately phased intensification and development. The Centres & Corridor study concludes that a significant amount of new investment will be required to facilitate the development of the area in accordance with the Region's overall planning framework, and that the benefits of the change within these key area can be justified.

3.2.8 Ontario – Places to Grow (2006)

The Places to Grow Plan is an important part of the province's renewed mandate to redirect and contain the patterns of urban growth within the Greater Golden Horseshoe. The Plan formally identifies the Vaughan Corporate Centre as one of 25 Urban Growth Centres. These Urban Growth Centres are intended to accommodate a significant amount of development activity, creating opportunities for both residential and employment growth. Under the Plan, the Vaughan Corporate Centre is formally mandated to achieve a minimum gross density target of 200 residents and jobs combined per hectare by 2031 or earlier. It also stipulates that by 2015, 40% of all new residential development must be constructed in existing built-up areas. The Places to Grow Plan further acknowledges that transit will be the primary means of accommodating new transportation demands within and across the Region. Schedule 5 of the Growth Plan identifies a north-south "higher order" transit facility by 2031 connecting the Vaughan Corporate Centre to the existing subway system.

3.2.9 Vaughan – OPA 660 -Draft

OPA 660 amends OPA 450 (the Employment Growth and Management Plan). The document applies to the lands located adjacent to Highway 7. The purpose of the amendment is to establish a clear vision of the intended long-term urban structure within the Avenue Seven Corridor. OPA 660 sets a new suite of planning tools and programs for the Corporate Centre Node, which includes: establishing a financial incentive program, establishing public parking facilities and preparing a community improvement plan. According to OPA 660, developments within the Corporate Centre Note that achieve a minimum density of 3.5 FSI would potentially be eligible for the incentive program.

3.2.10 York Region – Regional Official Plan Amendment 43

ROPA 43 integrates and implements the findings of the Centres & Corridor Study within the Regional Official Plan. ROPA 43 provides clear policies to distinguish between areas serving a regional and local function, and to promote an overall density target of 2.5 FSI as the miminum density need to achieve transit supportive development. ROPA 43 also provides guidelines for local municipalities to identify appropriate areas along regional corridors where higher density development is to be encouraged and achieved.

3.2.11 Vaughan – OPA 663-Draft

OPA 663 amends and builds upon the policies found in OPA 500. It also implements the recommendations of the Avenue Seven Land Use Future Study. The plan recognizes that some of the intended changes in Vaughan Corporate Centre since OPA 500 have not materialized as quickly as anticipated. Hence, the proposed changes under in OPA 663 are intended to achieve the planned urban structure for Vaughan that has been promoted over the past several years. It incorporates and introduces the following changes:

- A new designation 'Corporate Centre Corridor' along Highway 7 and Jane Street to replace a portion of the lands formerly in the 'Corporate Centre District'.

- The redesignation of some lands affected by the Black Creek floodplain from 'Corporate Centre District' to 'Valley Lands' and 'Public Open Space'.

- The deletion of lands designated 'Prestige Area' and 'Employment Area General' from OPA 450, and their incorporation into OPA 500 and redesignation as 'Corporate Centre District'.

OPA 663 also provides for an increase in the potential number of housing units in the Corporate Centre and increase amount of permitted commercial floors space to 600,000 square meters (6.5 million square feet). The plan establishes an overall density objective of 5.0 FSI within the Node and a maximum permitted density and height restrictions within 'Corporate Centre District' of 1.5 FSI and 16.5 metres respectively. Lands in 'Corporate Centre Corridor' should achieve a Floor Space Index of 1.5 with a minimum of .75 FSI to a maximum of 2.5 FSI per site. OPA 663 identifies all of the Vaughan Corporate Centre with the exception of the Corporate Centre District as a 'Community Improvement Area' to enable the City to implement a financial incentives package to encourage developers and property owners to redevelop their properties with more intensive uses.

3.2.12 Vaughan - OPA 620-Draft

The purpose of OPA 620 (also known as the Steeles West Secondary Plan) is to establish land use and design policies that will guide the City of Vaughan in its consideration of development applications within the Steeles Avenue Corridor – an area delimitated by Jane Street to the west, Steeles Avenue to the south and Keele Street to the east. OPA 620 proposes new densities for the area in the context of the availability of high order transit and discussed improvements to the road network. The goals and objectives of the plan are to see the area develop with transit-supportive and compact pedestrian-friendly urban forms that will accommodate 5,500 residential units and 900,000 square feet of office/commercial planned at full build-out. The plan proposes maximum densities of 4.0 FSI within 250 m of the subway station, 2.5 FSI between 250-500 m of the station and 1.5 FSI to the areas beyond the 500 metres.

The 12 policy documents reviewed in Step 2 have been used by urbanMetrics to inform the development of Policy-based forecasts. The density provisions and the type of uses envisioned within the Highway 7 and Steeles Avenue Corridor have been thoroughly assessed. We have used these policies have been used to establish the upper limit of physical development potential within the Study Area over a 30 year planning horizon (2036).

3.3 Step 3: Review Active Development Applications

urbanMetrics, in collaboration with staff from City of Vaughan and York Region, have identified all known planning applications on lands within the defined Study Area. Based on these applications we have assumed that the developers' (landowners') intentions/applications will be supported and approved by Municipal Council.

3.4 Step 4: Market Research

3.4.1 Housing

urbanMetrics has based its housing forecasts upon housing start information for Vaughan during in the period 1999 to 2005, as supplied by the Canadian Mortgage and Housing Corporation ('CMHC'). During this time market demand for medium and high density housing products has been in the range of 750 to 900 units per year. Our forecasts assume that housing demand will continue to be strong in the City of Vaughan and recognize that Vaughan will continue accommodate a strong share of population and growth, consistent with findings and forecasts contained in the new Places to Grow Plan.

Conservatively assuming: (a) a market production rate of 800 medium and high density starts per year; and (b) a market capture rate of between 10% and 40% of all Vaughan medium and high density units for sites within the Study Area, we estimate that a comprehensive, well-planned development strategy around the Steeles Avenue West Station and the Vaughan Corporate Centre Station could yield an estimated 8,500 to 9,500 units over the 2007-2036 time period.

In the event that subway funding fails to materialize, we continue to assert that a lower, albeit still significant, amount of residential development should still be anticipated in the Study Area. Our No Subway forecast indicates that about 3,000 units could still be expected in the area over the next 30 years. Approximately 90% of these units would be developed north of Highway 407, in the vicinity of the proposed Avenue Seven.

3.4.2 Employment

The approved *Places to Grow Plan* provides new employment projections for York Region to the year 2031. In light of the fact that these forecasts have not yet been officially allocated to the local municipalities in the Region, we have applied the employment share for Vaughan (30%) contained in the Region's Official Plan to the York Region employment numbers provided in Schedule 3 of the Places to Grow Plan. The reader should note that our 2036 employment forecasts for York Region are based on a straight-line growth estimate between 2031 and 2036.

Between 2001 and 2036, it is anticipated that York Region will experience average annual employment growth of 13,000 jobs per annum. Over the forecast period we have assumed that Vaughan will continue to represent 30% of all employment in the Region.

3.4.3 Office Space

As the largest corporate, financial and administrative centre in the country, the GTA has a significant share of its total workforce engaged in office-based employment.

With approximately 161.8 million square feet of built office space in the market and a total labour force of 3.07 million jobs in 2006, there is roughly **53 square feet of office space for every job in the GTA**. While the City of Toronto, continues to have a significant share of the total

market for office (approximately 75% of the total inventory), the 905-region has a strong and active office market, lead by Peel Region, York and Halton. The following table demonstrates the amount of office space per total employment in four parts of the GTA.

Office Markets	2006 Employment Est. (million)*	2006 Office Inventory (Square Feet) **	SF/Employee (2006)
Greater Toronto Area (excluding Hamilton)	3.07	161.8	53
City of Toronto	1.49	121.3	81
Peel Region	0.63	24.9	40
York Region	**0.49**	**10.1**	**21**
Halton Region	0.24	4.9	20

* Estimate based on Places to Grow Forecasts, Schedule 3, 2006.

** Estimate based on Cushman Wakefield LePage Q1-2006.

To determine the amount of office space anticipated in York Region and Vaughan we have:

1. Determined the total job growth projected between 2007 and 2036 using Places to Grow.
2. Used SF/Employee ratios to determine the amount of office space warranted in York Region.
3. Excluded the 2.8 million square feet of office space in York Region that is already under construction or in the pre-leasing phases of development.
4. Applied Vaughan's share of Region's employment base (30%) to the projected employment growth over the 2007 and 2036 as per the Places to Grow Plan.
5. Applied a capture rate ranging from 30% to 40% of future warranted office space to be realized adjacent to transit within Vaughan's new subway corridor.

Overall our forecasts suggest that the Vaughan Corporate Centre and the Steeles West Station area could functionally accommodate a significant amount of new office space. Based on conservative market assessment we estimate that an additional 3.0 and 3.5 million square feet could be support if the subway were developed.

3.4.4 Industrial Space

While industrial uses have largely dictated the patterns of land development in the Study Area, particularly to the immediate north and east, we do not anticipate that industrial uses will be widely drawn to this area over the medium to long-term. This basic assumption applies to development scenarios both with and without subway service.

In our forecasts we have assumed that most of the existing industrial uses will remain stable over the duration of the forecast period. The most notable exceptions are:

- the Toromont facility at Jane and Avenue Seven, which we have assumed to be a redevelopment site, and
- the UPS facility at Jane and Steeles Avenue, which we assume will be expand as proposed.

Overall, our forecasts have not assumed any new, *major* industrial developments taking place in the Study Area.

3.4.5 Retail Space

The Study Area currently has approximately 1.2 million square feet of retail space, much of which is comprised of large-format, "big-box" retail tenants. Over the forecast period, we have assumed that the introduction of full subway service will likely lead to a net reduction in the amount of retail space. It is expected that escalating real estate values around Vaughan Corporate Centre Station will see big-box retail uses replaced with more grade-oriented, mixed-use retail development integrated into high density residential and office buildings.

Under the high market scenario we anticipate that all major retail facilities currently operating in the Study Area will be re-developed; and that the net effect of this transition will be a loss of approximately 500,000 square feet of retail space by 2036.

Under the No Subway scenario we have assumed that all existing retail facilities will remain largely intact, and that development patterns will yield an estimated 370,000 square feet of additional space by 2036 in the Study Area.

3.4.6 Special Commercial

Special Commercial uses in the Study Area include hotels, banquet and convention centres, and privately owned recreation facilities such as hockey arenas and night clubs. At present time there is an estimated 730,000 square feet of space in this category.

Based on market research, it is our understanding that two[9] property owners in the Study Area have formally expressed intentions to develop (or redevelop) their properties with Special Commercial uses. Our forecasts have assumed that these landowners will proceed with their developments as proposed.

[9] These include the Milestone Property site on Steeles West and the Banquet Hall site on Jane Street.

4. Development Forecasts

In conjunction with the assumptions and approach described in Section 3, this section presents urbanMetrics' land development forecasts around the proposed subway stations in Vaughan.

Table 1 summarizes the total volume of residential and non-residential development that is anticipated in Study Area by 2036 compared to existing conditions (as of mid-year 2006). The development potential provided in the table is apportioned by land uses and includes a final yield for Total Residents & Jobs on a per-hectare basis around the stations. These calculations are based on net land area.

4.1 No Subway Scenario (Status Quo)

The No Subway scenario assumes that the subway extension will not materialize during the next 30 years. It does however anticipate that other rapid transit services such as dedicated right of way bus-transit routes will gradually be provided, thereby improving service levels. This 'status quo' scenario assumes that the existing built form in the Study Area would not be significantly altered. Without a subway it is likely that the lands will continue to develop at a scale that does not fully maximize development potential in accordance with stated policies such as the Province's *Places to Grow Plan* (2006) and the Region's *Making It Happen! Centres and Corridor Plan (2004)*.

Under the 'No Subway' scenario, the Vaughan Corporate Centre will remain an important retail node and additional Big Box stores will continue to be drawn into the Study Area. The Steeles West corridor will absorb some level of residential and office construction albeit at a smaller scale than those which include direct subway service.

Under this scenario, by 2036 the study area will accommodate:

- 1.4 million sq.ft. of office GFA;
- 1.5 million sq.ft. of retail GFA;
- 4.3 milllion sq.ft. of industrial GFA;
- 1 million sq.ft of Special Commercial GFA and;
- 3,000 new residential units

TABLE 1- SUBWAY CORRIDOR DEVELOPMENT POTENTIAL, VAUGHAN

Development Potential: Vaughan Corporate Centre

(square feet)		2036 Scenarios				Notes
		No Subway	Subway			
	Existing Conditions 2006	Status Quo	Low [9]	High [10]	FSI Policy Target	
Office	440,000	960,000	2,220,000	2,630,000	6,780,000	
Retail	1,190,000	1,420,000	930,000	600,000	1,380,000	
Industrial	1,680,000	1,920,000	1,500,000	1,500,000	1,570,000	
Special Commercial	730,000	860,000	860,000	810,000	810,000	1
Residential	0	3,228,000	8,201,000	9,250,000	11,350,000	2
High-Density *(units)*	0	2,430	6,460	7,250	9,240	
Medium-Density *(units)*	0	370	730	850	790	
Total	0	2,800	7,190	8,100	10,030	
Jobs	6,810	8,970	10,850	11,190	24,820	3
Residents	0	5,950	15,070	17,020	20,820	
Jobs+Residents/Hectare (Net)	50	100	180	190	310	4
Jobs+Residents/Hectare (Gross)	40	80	140	150	240	5
Floor Space Index (Gross)	0.3	0.5	0.9	0.9	1.4	6
Floor Space Index (Net)	0.4	0.8	1.3	1.4	2.0	7

Development Potential: Steeles West Station

(square feet)		2036 Scenarios			
		No Subway	Subway		
	Existing Conditions 2006	Status Quo	Low [9]	High [10]	FSI Policy Target
Office	80,000	420,000	1,280,000	1,280,000	2,600,000
Retail	0	40,000	120,000	120,000	120,000
Industrial	2,100,000	2,350,000	1,580,000	1,580,000	1,600,000
Special Commercial	0	110,000	110,000	110,000	110,000
Residential		233,000	1,711,000	1,711,000	1,711,000
High-Density *(units)*	0	130	1,460	1,460	1,460
Medium-Density *(units)*	0	60	70	70	70
Total	0	190	1,530	1,530	1,530
Jobs	1,790	2,710	4,900	4,900	8,500
Residents	0	460	3,110	3,110	3,120
Jobs+Residents/Hectare (Net)	16	30	70	70	110
Jobs+Residents/Hectare (Gross)	16	30	70	70	110
Floor Space Index (Gross)	0.2	0.3	0.4	0.4	0.5
Floor Space Index (Net)	0.5	0.7	1.1	1.1	1.4

Development Potential: Total Study Area

(square feet)		2036 Scenarios				
		No Subway	Subway			
	Existing Conditions 2006	Status Quo	Low [9]	High [10]	FSI Policy Target	
Office	520,000	1,380,000	3,500,000	3,910,000	9,380,000	
Retail	1,190,000	1,460,000	1,050,000	720,000	1,500,000	
Industrial	3,780,000	4,270,000	3,080,000	3,080,000	3,170,000	
Special Commercial	730,000	970,000	970,000	920,000	920,000	
Residential	0	3,461,000	9,912,000	10,961,000	13,061,000	
High-Density *(units)*	0	2,560	7,900	8,700	10,700	
Medium-Density *(units)*	0	430	800	920	860	
Total	0	2,990	8,700	9,620	11,560	
Jobs	8,600	11,680	15,750	16,090	33,320	
Residents	0	6,410	18,180	20,130	23,940	
Jobs+Residents/Hectare (Net)	40	70	130	140	230	8
Jobs+Residents/Hectare (Gross)	30	60	120	120	200	
Floor Space Index (Gross)	0.2	0.4	0.7	0.7	1.0	8
Floor Space Index (Net)	0.4	0.8	1.2	1.3	1.8	8

Notes

1) Includes Hotels, Nightclubs, Conference Centre, Arenas and Banquet Hall.
2) Residential square footage is based on 1,100 sq.ft of GFA per high-density unit and 1,500 sq.ft. per medium-density unit
3) The total number of jobs does not included the jobs associated with institutional uses (e.g. hospitals, schools, parks, etc.) that will be created to service residents.
4) Based on the total area of all parcels within the study area.
5) Based on the total land within the study area (i.e. including existing roads)
6) The Gross Floor Space Index is based on the gross area of the developable and non-developable parcels within the study area.
7) The Net Floor Space Index is based on the net area (70%) of the developable parcels within the study area
8) Weighted Average based on the sum of Vaughan Corporate Centre yields and Steeles West Study Area. Excludes lands around Transitway Station
9) Low Scenario assumes the same density of development than the High Scenario but lagged development by 5 years.
10) High Scenario is a market forecast that assumes a complete built-out by 2036.

Overall, it is anticipated that under the No Subway scenario approximately 3,100 jobs and 6,400 residents will be added to current conditions.

4.2 Market-based Forecast

Our market-based forecast scenarios are based on realistic patterns of market demand and absorption in the vicinity of the subway corridor. Our market forecasts also take into account existing policy-based numbers related to both population and employment levels within York Region and the City of Vaughan. They have also been "benchmarked" against other subway stations across the City of Toronto.

The development of under-utilized land around subway stations does not occur overnight. Islington and Kipling stations on the Bloor-Danforth Line, which were built in the late 1960s and early 1980s respectively, are still in the process of building-out with more transit-supportive uses including apartment, office and institutional buildings.

Station (Opening Date)	Years Since Opening (3	Jobs (1	Residents (2	Total
Vaughan Corp Centre (2014)	22	11,200	17,000	**28,200**
Steeles West (2014)	22	4,900	3,100	**8,000**
Finch (1974)	27	5,000	11,200	**17,200**
NYCC (1987)	14	10,200	7,300	**17,500**
Sheppard (1974)	17	9,000	5,000	**14,000**
Kipling (1980)	21	2,700	600	**3,300**
Islington (1968)	33	5,100	8,000	**13,100**
Yonge/Bloor (1954)	47	32,200	11,100	**43,300**
Yonge/Eglinton (1954)	47	18,600	9,900	**28,500**

1) Based on 1996 Census Information from TTC

2) Based on 2001 Census Information

3) Comparisons – Opening to 2001 Census Year

VCC and Steeles W -2014 to 2036**.**

Recent development patterns around newer stations, such as Bayview Station on the new Sheppard subway line, provide a strong indication of the impact that subway service can have on both the rate and intensity of growth adjacent to new station facilities.

To reflect uncertainties about timing of redevelopment, two market-based forecasts have been prepared – a High Market Forecast and a Low Market Forecast.

The High Market forecast assumes that the Study Area will not have any "greenfield" or under–utilized sites remaining by 2036. The Low forecast scenario assumes the same density of development than the High forecast scenario but is lagged by 5 years.

Based on a detailed site-by-site analysis of yields, assuming the construction of the subway, the ultimate development potential for the Study Area by 2036 has been estimated as follows:

- 3.5 – 3.9 million sq.ft. of office GFA;
- 0.7 - 1.1 million sq.ft. of retail GFA;
- 3.1 million sq.ft. of industrial GFA
- 0.9-1.0 million sq.ft of Special Commercial GFA and;
- 8,700 - 9,600 new residential units.

Overall, it is anticipated that under the market scenarios approximately 7,200 - 9,500 jobs and 18,000 - 20,000 residents will be added to current conditions. This represents approximately 40% more employment and 3 times more residents drawn to the area compared to the No Subway forecast scenario.

4.3 Policy-based Forecast

The policy forecast represents an un-constrained forecast in which full-build out potential is realized according to the upper-limit of the prescribed policy densities contained within Official Plan documents. Under the Policy forecast, the retail portion of mixed use development is anticipated to be developed according to the upper end of the permitted density allocation. This would allow for up to 2 storeys of retail/service commercial within all residential and office developments.

Under the Policy-based forecast scenario, the Study Area could accommodate:

- 9.4 million sq.ft. of office GFA;
- 1.5 million sq.ft. of retail GFA;
- 3.2 million sq.ft. of industrial GFA
- 0.9 million sq.ft. Special Commercial GFA and;
- 11,600 new residential units.

Overall, it is anticipated that under the policy scenario approximately 25,000 jobs and 24,000 residents would be added to current conditions. This represents about 3 times more jobs and about 20% more residents compared to what the market could reasonably support by 2036.

5. Conclusions

The Spadina subway extension project represents an important step in the development of a more sustainable and better integrated transit system. It supports improved connectivity between York Region and the City of Toronto. The subway project also represents a unique opportunity to establish higher density development patterns in a built-up area of Toronto and York Region that can readily accommodate additional population and employment growth.

In order to achieve the development potential outlined in this report, it will be critical that all provincial and municipal policy decisions reinforce the need to facilitate subway transit development densities. This will not only enable development opportunities to be achieved to meet financial requirements, but will ensure the planned structure of the Urban Growth Centre and Regional Centre is accomplished.

Relative to other mass transit options, the Spadina subway extension is now widely considered to be the highest priority transit expansion project in Toronto - not only because it physically connects York University (which is one of the GTA's single largest vehicle trips generators) to the subway system, but because it provides the best option to achieve ridership balance on the Yonge-University-Spadina line, which in the end maximizes public investments already made elsewhere in the system.

The subway extension to Highway 7 has been fully incorporated into local, regional and provincial planning policies and will also be integrated with other future transit projects, including the east-west Highway 407 Transitway connecting Halton, Peel, York and Durham regions.

The development of under-utilized land around subway stations does not occur overnight. Islington and Kipling stations on the Bloor-Danforth Line, which were built in the late 1960s and early 1980s respectively, are still in the process of building-out with more transit-supportive uses including apartment, office and institutional buildings.

Urban development patterns in the Greater Toronto Area have evolved significantly over the past 20 years. Recent development patterns around newer stations, such as Bayview Station on the new Sheppard subway line, provide a strong indication of the impact that a subway can have on both the rate and intensity of growth adjacent to new station facilities. The growing market acceptance of townhouse and apartment/condominium housing products is highly evidenced not only in the 416-area but across the 905-area. This density trend is now enshrined in GTA land use policies by virtue of the intensification guidelines mandated in the new Places to Grow Plan.

The results of our independent market analysis indicate that the defined Study Area around the 3 proposed Vaughan stations has the potential to evolve into a mixed use area comprising a residential base of up to 20,000 persons and an estimated 16,000 jobs. This represents a significant increase over existing conditions. It also represents a significant departure from what the Municipality could reasonably expect to see develop in this area if the subway project does not occur. Our estimates suggest the subway will stimulate an additional 7 to 8 million square feet of total built space over a 30 year period compared to the no subway option. To put this in perspective, this scale of development would be equivalent to adding as many as five Yorkdale Shopping Centres or three First Canadian Place office towers in the region.