

# SHAPING NINTH LINE FISCAL ANALYSIS

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Region of Peel



HEMSON Consulting Ltd.

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# **FISCAL ASSESSMENT OF REGIONAL COSTS AND REVENUE**

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The following report describes the Regional costs and revenues associated with the development of the Ninth Line study area. The results are based on high-level analysis of costs and revenues that are most likely to deviate from existing Regional averages. It does not consider the costs and revenues associated with City of Mississauga services. The development projections contained herein are consistent with the Growth Management Analysis.

## **A. CAPITAL COSTS**

The first-round capital costs associated with the development for engineered services (roads, water, and wastewater) will not have a significant impact on the Region's tax or rate base. Larger watermains, sewer mains and arterial roads will be funded through development charges and smaller sized watermains, sewer mains and local and collector roads will be constructed by developers as a condition of planning approval. The replacement cost of these assets is the key consideration in the analysis.

The development of the study areas would also lead to incremental costs to provide soft services (police, emergency medical, social services etc.) and corporate overhead, although these costs would be relatively small given the size of the development compared to the Region as a whole.

### **1. Water Services**

As noted in the Water and Wastewater Assessments prepared by Amec Foster Wheeler, external water servicing costs are estimated at \$2.28 million. This cost primarily encompasses a network of 400mm pipes that would be funded through Regional development charges.

The replacement cost of these assets is estimated at \$13.9 million, using the high-level per kilometre replacement cost assumptions in the Region's Asset Management Plan. The higher replacement value, compared to the initial construction value, reflects the additional costs of replacing infrastructure in built-up areas compared to the present undeveloped state. The replacement of the assets would be funded by utility rates.

The quantity of local watermains is based on an estimate of local and collector roads lengths provided by the City of Mississauga.

As shown in Table 1, the replacement costs for linear water infrastructure in the study area are estimated to be 20 per cent less than the Region's existing average. This result is expected given the comparatively high density nature of the proposed plan.

Water Services Replacement Costs				Table 1	
Asset	Quantity	Replacement Cost	Replacement Cost Per Capita + Employment		
			Study Area	Region Average	
External Watermains	6.4 Km	\$13,860,000	\$1,537		
Pressure Reducing Valve and Chamber	1 Unit	\$200,000	\$22		
Local Watermains	9.9 Km	\$21,350,000	\$2,367		
Total		\$35,410,000	\$3,926	\$4,710	

Note: Population and employment of study area: 9,020

The lower costs in the study area reflect the relatively dense plan for the new community. Apartment neighbourhoods typically require much less small sized pipes compared to areas with a higher proportion of single detached units.

The water plant related costs for the study area are anticipated to mirror those in other areas of Mississauga on a per capita and employment basis.

## 2. Wastewater Services

The Water and Wastewater Assessments by Amec Foster Wheeler, does not anticipate the need for any external wastewater infrastructure. It was assumed that capacity limitations related to the existing 450 mm sanitary sewer on Ninth Line north of Britannia Road West can be addressed through the construction of a new local sanitary sewer west of, and parallel to, Ninth Line to split the flows.

Approximately 9.9 km of local sewer mains are proposed based on an estimate of local and collector roads lengths provided by the City of Mississauga. As shown in Table 2, the replacement cost of local, or internal, wastewater systems is estimated at \$20 million. These replacement costs are estimated to be 58 per cent less than the Region's existing average.

<b>Table 2</b>				
<b>Wastewater Services Replacement Costs</b>				
Asset	Quantity	Replacement Cost	Replacement Cost Per Capita + Employment	
			Study Area	Region Average
Local Sewer mains	9.9 Km	\$19,949,000	\$2,212	\$3,490

Note: Population and employment of study area: 9,020

Similar to water, linear wastewater infrastructure replacements will likely cost less than Regional averages due to the higher density nature of the study area.

The wastewater plant related costs for the study area are anticipated to mirror those in other areas of the Region on a per capita and employment basis.

### **3. Roads and Related Services**

Although the road network is planned based on growth occurring throughout the Region, there are several projects identified in the Transportation Assessment prepared by MMM Group that emanate from the development of the Ninth Line lands. They include the following:

Road Widening:

- Widening of Derry Road from 2 lanes in each direction to 3 lanes within the City's jurisdiction, specifically at the Derry Road and Ninth Line intersection, and at the Derry Road and Rosehurst Drive/Lisgar Drive intersection.
- Widening of Britannia Road from 2 lanes in each direction to 3 lanes within the City's jurisdiction, specifically at the Britannia Road and Ninth Line intersection, and at the Britannia Road and Maple Gate Circle/Churchill Meadows Boulevard intersection.
- Widening the west leg of Eglinton Avenue at Ninth Line from 1 through lane to 2.
- The EMME projected growth rates are likely worst-case scenario as the future background volumes continue to exceed capacity in the north-south corridor on Ninth Line. Once Ninth Line is widened, then the north-south volumes can be accommodated. However, the widening of Ninth Line within the study area is primarily for the development of the local Ninth Line corridor and not to encourage general background growth.

Control and Signal Timing Modifications:

- At the intersection of Derry Road and Ninth Line, implement a permissive/protected phase for the westbound left-turn movement during the weekday a.m. peak hour.
- At the intersection of Derry Road and Rosehurst Drive/Lisgar Drive, implement a permissive/protected phase for the eastbound left-turn movement during the weekday a.m. peak hour.
- At the intersection of Britannia Road and Maple Gate Circle/Churchill Meadows Boulevard, implement a permissive/protected phase for the westbound left-turn movement during the weekday a.m. peak hour.
- The monitoring of signal warrants at the intersection of Ninth Line/Beacham Street.
- At the intersection of Eglinton Avenue West and Ninth Line, implement a permissive/protected phase for the northbound left-turn movement during the weekday a.m. peak hour.

Using the road widening and signal costs estimates contained in the Region's 2015 Development Charges Study, the costs of undertaking the above noted road infrastructure is provided in Table 3.

<b>Table 3</b>				
<b>Road-related Replacement Costs</b>				
Asset	Quantity	Replacement Cost	Replacement Cost Per Capita + Employment	
			Study Area	Region Average
New Lane KM of Roads	19.47	\$19,470,000	\$2,159	
Upgraded Signals	4	\$400,000	\$44	
<b>Total</b>		<b>\$19,870,000</b>	<b>\$2,203</b>	<b>\$944</b>

Note: Population and employment of study area: 9,020

It is important to note that the costs associated with widening Ninth Line (17.3 km) have been entirely attributed to development occurring in the study area. This results in a roads replacement cost value exceeding the Regional average. Practicality, growth in other areas of the Region would likely benefit from this major road improvement.

## **B. TAXATION REVENUE ANALYSIS**

Taxation revenue derived from the ultimate development of the study area has been estimated based on recent assessment data from comparable developments. The

“minimum” development forecast values from the MCR scenario have been used. As shown in Table 4, the development of the study area is expected to generate over \$1.53 billion in additional assessment and annual Regional taxation revenue in the order of \$5.06 million, using 2017 Regional tax rates from the City of Mississauga adjusted to account for assessment phase-ins.

Estimated Annual Taxation Revenue				
Building Type	Quantity	Assessment Per Unit/sq. ft.	Total Assessment	Tax Revenue (2017 Interim)
Rows	900 units	\$585,000	\$526,500,000	\$1,667,300
Condo Apartments	2,381 units	\$371,000	\$883,289,500	\$2,797,200
Rental Apartments	265 units	\$281,000	\$74,334,900	\$374,000
<b>Residential</b>	<b>3,545 units</b>		<b>\$1,484,124,400</b>	<b>\$4,838,500</b>
Industrial	296,192 sq. ft.	\$93	\$27,545,900	\$126,600
Office	40,007 sq. ft.	\$256	\$10,241,900	\$47,100
Retail	35,459 sq. ft.	\$273	\$9,680,200	\$44,500
<b>Non-Residential</b>	<b>371,658 sq. ft.</b>		<b>\$47,468,000</b>	<b>\$218,200</b>
<b>Total</b>			<b>\$1,531,592,400</b>	<b>\$5,056,700</b>

Note: Assessment Based on January 1, 2016

The development planned in the study area is likely to produce slightly more revenue on a total per capita and employment basis than the existing Regional average. Table 5 provides a summary of forecasted annual taxation revenue.

Estimated Annual Taxation Revenue per Capita and Employment			
Land-Use Category	Quantity	Ninth Line Revenue Per pop./empl.	Region Average Revenue Per pop./empl.
Residential	8,509 people	\$569	\$543
Non-Residential	510 employees	\$428	\$395
<b>Total</b>	<b>9,019</b>	<b>\$561</b>	<b>\$493</b>

Note: Based on 2017 Budget and 2017 Phase-in Adjusted Tax Rates

The analysis assumes the average occupancy of all residential units in the study area is 2.4 persons per unit and the average apartment size in the assessment sample is just over 1,000 square feet. On a population basis, the study area would generate \$569 of annual tax revenue compared to \$543 for the Regional average. On per residential unit basis, the study area would generate \$1,365 of annual tax revenue compared to \$1,642 for the Regional average. The per unit results are largely expected since the

Ninth Line plan primarily consists of apartment units, which tend to have lower assessed values, than lower density units. However, on a per capita basis, apartment condominiums typically generate more tax revenue due to their lower occupancy levels.

Non-residential development in the study area will likely produce slightly higher tax revenues on a per employee basis than the Region's current average. This reflects the newness of the potential development compared to the Region's existing base of non-residential properties.

### **C. CONCLUSIONS**

- The development of the Ninth Line area will not place any undue financial burden on the Region.
- The dense nature of the proposed development plan will likely lead to water and wastewater servicing costs below the Regional average.
- Road-related servicing costs are calculated to be higher than the Regional average. However, the widening of Ninth Line will likely benefit growth occurring beyond the borders of the development area, which would lessen the variance.
- Tax revenue associated with the development is likely to be slightly higher than the Regional average on a population and employment basis.