

**TOWNSHIP OF BLANDFORD-BLENHEIM
COUNCIL MEETING AGENDA**

Wednesday September 6, 2017
Township Council Chambers
47 Wilmot Street South, Drumbo
4:00 p.m.

1. Welcome

2. Call to Order

3. Approval of the Agenda

4. Disclosure of Pecuniary Interest

5. Consideration of Minutes

- a. August 2, 2017 Regular meeting of Council

6. Business Arising from the Minutes

7. Delegations/Presentations

- a) Tom Pridham, R. J. Burnside & Associates Limited

Consideration of the Hamilton Drain 'B' Drain Extension report.

- b) Harold Bickle

To address Council on the Windsor/London/K-W/Toronto high-speed rail line. Copy of a memorandum from the Ontario Federation of Agriculture as well as Oxford County staff report CAO-2017-09 on the proposed High Speed Rail line is provided.

- c) Bryan Smith, Oxford Community Sustainability Bursary

Information on a bursary available to Blandford-Blenheim high school students.

8. Correspondence

- a. **General**

None

- b. **Specific**

- i Second House Agreement request - Dennis and Lorraine Willms

Recommendation:

That the CAO/Clerk be authorized to sign an agreement with the owners of 896941 Washington Road (Willms) to allow for a permit to be issued for a second dwelling unit on the property. Removal of existing home to occur within six months of the completion of new house.

9. Public Meeting

a. Public Meeting Under the Planning Act

- i Application for Zone Change ZN 1-17-08 – Lorne & Laurie Loree

Recommendation:

That Council approve the zone change application submitted by Lorne and Laurie Loree whereby the lands described as part Lot 5, Concession 8 (Blenheim), Township of Blandford-Blenheim are to be rezoned to permit a garden suite.

10. Committee of Adjustment

a. Minutes

July 5, 2017 meeting of the Committee of Adjustment

b. Application:

- i Minor Variance Application A-08-17, Andrew & Ashley Neves

Recommendation:

That the Township of Blandford-Blenheim approve Committee of adjustment application A-08-17 submitted by Andrew and Ashley Neves for lands described as Part Lot 1, Concession 5 (Blenheim), Township of Blandford-Blenheim as it relates to:

1. Relief from Table 5.1.1.3 – Regulations for Accessory Uses, to increase the maximum permitted lot coverage of a building accessory to a residential use from 100 m² (1,076.4 ft²) to 120.7 m² (1,300 ft²) and maximum height from 4 m (13.1 ft) to 4.6 m (15 ft), to facilitate the construction of a detached garage on the subject property.

As the proposed variances are not deemed to be:

- (i) minor variances from the provisions of the Township of Blandford-Blenheim Zoning By-law number 1360-2002;
- (ii) desirable for the appropriate development or use of the land;
- (iii) in keeping with the general intent and purpose of the Township of Blandford-Blenheim Zoning By-law No. 1360-2002; and,
- (iv) in keeping with the general intent and purpose of the Official Plan of the County of Oxford.

11. Staff Reports

a. **Rick Richardson, Director of Protective Services**

- i. FC-17-13, Tiered response agreement

Recommendation:

That Report FC-17-13 be received as information.

And further that Council approve and support the necessary changes of a new tiered response agreement between the Township of Blandford-Blenheim and the County of Oxford,

And further that Council approve the administration requirements and fire department operations in order to reduce the present volume of non-Code 4 medical calls.

b. **Jim Harmer, Drainage Superintendent**

- i. DS-17-18, Hamilton Drain B Drain Extension 2017

Recommendation:

That report DS 17-18 be received as information;

And further that council gives consideration to By-Law No. 2032-2017 for the Hamilton Drain B Extension 2017 for first and second reading (provisional by-laws);

And further that the Court of Revision be set for Wednesday October 4, 2017 at 4:00 p.m.

And that the Engineer be directed to invite tenders for the Hamilton Drain B Extension 2017 with tender closing September 28, 2017 at noon.

c. **Jim Borton, Director of Public Works**

- i. PW-17-23, Monthly Report

Recommendation:

Visit our website @ www.blandfordblenheim.ca

That report PW-17-23 be received as information.

d. Ken Wood, Manager of Community Services

i. CS-17-07, Monthly Report

Recommendation:

That Report CS-17-07 be received as information.

e. Denise Krug, Director of Finance / Treasurer

i. TR-17-06, 2016 Budget Surplus

Recommendation:

That Report TR-17-06 be received as information;

And further that the 2016 surplus be allocated to the Tax Stabilization reserve (\$11,215.32) and the Road Construction reserve (\$94,192.31).

ii. TR-17-07, Interim variance

Recommendation:

That report TR-17-07 be received as information.

iii. TR-17-08, 2018 Budget Schedule

Recommendation:

That Report TR-17-08 be received as information;

And further that Council adopt the budget schedule for the 2018 Operating and Capital Budgets, set out in Report TR-17-08.

f. John Scherer, CBO/Manager of Building Services

i. CBO-17-09, Monthly Report

Recommendation:

That Report CBO-17-09 be received as information.

g. Rodger Mordue, CAO/Clerk

i. CAO-17-17, Candidate nomination requirement

Recommendation:

That report CAO-17-17 be received, and;

That Council provide comment to the Ministry of Municipal Affairs that the requirement to collect the endorsement of 25 electors will not present a challenge to candidates in the 2018 municipal election, and,

That Council provide no comment on the appropriate number of electors for the exemption threshold to apply.

ii. CAO-17-18, Plattsville Estates Letter of Credit

Recommendation:

That Report CAO-17-18 be received as information; and,

That Council authorize the following Letter of Credit reduction on the recommendation of the Township's Consulting Engineer:

- Plattsville Estates Stage 4 from \$1,463,128.15 to \$498,496.65

12. Reports from Council Members

13. Unfinished Business

14. Motions and Notices of Motion

15. New Business

16. Closed Session

17. By-laws

a. 2031-2017

Being a By-law to amend zoning by-law 1360-2002 (Loree).

b. 2032-2017

Being a by-law to provide for drainage works. (Hamilton Drain 'B' Drain Extension). 1st and 2nd reading only.

c. 2033-2017

Being a by-law to provide for the acquisition of certain lands from the County of Oxford for the extension of Hofstetter Road.

d. 2034-2017

Being a By-law to confirm the proceedings of Council.

17. Other

18. Adjournment and Next Meeting

Wednesday, September 20, 2017 at 4:00 p.m. in Council Chambers.



August 15, 2017

The Mayor and Council
Township of Blandford – Blenheim
Box 100
47 Wilmot Street South
Drumbo, Ontario N0J 1G0

Mayor Wearn and Members of Council:

**Re: Hamilton Drain
'B' Drain Extension, 2017
File No.: D-BLE-109
Project No.: 300040698.0000**

Under the provisions of the Drainage Act R.S.O. 1990, Chapter D.17, Section 4 and in accordance with our appointment, we have made an examination and survey of the area and submit herewith our report, plan, profile, specifications and assessments for the proposed work. The work is to be known as the Hamilton Drain, 'B' Drain Extension, 2017.

Should there be any questions regarding the report, please contact the undersigned directly at 1-519-938-3077.

Yours truly,

R.J. Burnside & Associates Limited

T.M. Pridham, P.Eng.
Drainage Engineer
TMP/NLC:kl

N.L. Connell, E.I.T.
Engineering Assistant

Enclosure(s) Hamilton Drain, 'B' Drain Extension, 2017 Report



BURNSIDE

**Hamilton Drain
'B' Drain Extension, 2017**

Township of Blandford-Blenheim

**R.J. Burnside & Associates Limited
15 Townline
Orangeville ON L9W 3R4 CANADA**

**August 2017
300040698.0000**



Hamilton Drain
'B' Drain Extension, 2017
August 2017

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- Appendix B General Conditions
- Appendix C General Specifications (Tile Work)
- Appendix D Road or Railway Crossings (Boring Method)
- Appendix E Instruction to Bidders

Hamilton Drain
'B' Drain Extension, 2017
August 2017

1.0 Background

On February 1, 2017, a Petition for Drainage Works by Road Authority – Form 2 was signed by Mr. Gary Crandall, the Township's Director of Public Works. The petition requested:

“Improvement of the existing private drain (formerly a MTO drain) at Blandford Road and Oxford County Road 8 which will outlet into the existing Hamilton Drain Improvement 2009. This drain will give outlet to the southwest corner of Blandford Road and Oxford County Road 8 at Lot 6, Con. 10 the former Township of Blandford.”

The petition was subsequently circulated to the Grand River Conservation Authority (GRCA). No comments were received with respect to Council's intention to appoint an Engineer under the provisions of the Drainage Act. On March 15, 2017 our firm was appointed to prepare a report. Our appointment was subsequently acknowledged and a site meeting date set.

2.0 Site Meeting

On May 4, 2017 a site meeting was held at the intersection of the Blandford Road and Oxford County Road No. 8. The meeting was well attended and a good discussion took place.

Mr. Crandall indicated the petition was submitted in order to address an existing deteriorated private tile along the easterly shoulder of the Blandford Road. The tile extended from the 'B' Drain crossing of the Hamilton Drain to the south side of Oxford County Road No. 8. The drain terminated at a catchbasin in close proximity to the road shoulder and turning radius.

The poor condition of the existing drain was noted on site and clearly posed a serious traffic hazard if the tile was to fail. It was also noted on site that the N. Pt. Lot 6 Concession 10 (C. & A. Van Welij) had been recently tile drained and connected to the existing catchbasin. The newly installed tile drainage also caused concern with respect to the integrity and longevity of the existing drain.

It was concluded that the best solution was to decommission the existing drain and replace it with a new one constructed on private lands. A new road crossing would be required on Oxford County Road No. 8 with appropriate catchbasins on each side. The newly installed underdrainage in the Van Welij property would also be connected to the new catchbasin on the south side of the road as part of the work.

Hamilton Drain
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3.0 Area Requiring Drainage

Section 4 of the Drainage Act indicates the means whereby a drainage works can be constructed pursuant to a petition. Section 4(1)(c) provides that a petition may be submitted "where a drainage works is required for a road or part thereof". In our opinion, based on the discussions at the site meeting and subsequent walkover, the petition complies with Section 4(1)(c) of the Drainage Act.

4.0 Investigation

Our investigation found that Oxford County Road No. 8 was formally Highway No. 97. The provincial highway was governed by the Ministry of Transportation (MTO). The existing drain on the easterly shoulder of the Blandford Road was likely installed by the MTO to provide intersection drainage. We could find no evidence that the drain was ever constructed or incorporated as part of the Hamilton Drain.

Our investigation also found that the installation of a new drain on private lands as discussed at the site meeting was quite feasible. The outlet for the work would be the 'B' Drain of the Hamilton Drain. This branch drain had been improved as part of a 2009 report and terminated at a catchbasin at the easterly limit of the Blandford Road.

The work would commence at the catchbasin and continue southerly across Oxford County Road No. 8. Some clearing would be required; however, this could be kept to a minimum with the installation of non-perforated high density polyethylene (HDPE) pipe.

Lastly, it was found that the proposed drain route would pass along the western edge of a wetland recognized by the GRCA. Impacts on this wetland by the drain installation will be mitigated with the installation of non-perforated HDPE pipe and minimal clearing as described above. In addition to this, sediment and erosion control will be used during construction of the drain adjacent to the wetland area.

5.0 Proposed Design and Appurtenances

This report provides for the installation of 237 m of closed drain including one road crossing. The design is based on removing approximately 25.4 mm (1 in) of surface and subsurface drainage water per hectare of watershed area per 24 hour period. The tile size required is 300 mm (12 in) diameter throughout. The material specified is non-perforated HDPE pipe with bell and spigot joints to prevent tree root intrusion.

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 'B' Drain Extension, 2017
 August 2017

Appurtenances associated with the work on private lands include clearing trees and brush, the connection to the existing catchbasin, the stripping and replacing of topsoil along the drain route and the connection of existing field tubing on the south side of the Oxford County Road No. 8.

The road crossing bore pipe on Oxford County Road No. 8 has been increased to 400 mm (16in) diameter as a safety factor in case some grade is lost during the installation. Appurtenances associated with the road crossing include the installation of two catchbasins, the grouting of the abandoned crossing and the seeding of all disturbed areas.

The Plan and Profile (Drawing No. P1) indicates the location of the work and the lands affected by it. It also shows the dimensions, grades and other details of the work.

6.0 Allowances to Owners

The amounts to be paid in allowances to the owners entitled thereto under Section 29 - 33, where applicable, which shall become due in accordance with Section 62(3) and (4) are determined as follows:

Roll No.	Con.	Lot or Part	Owner	Damage to Lands, Crops, etc. (Section 30) \$
10-040-020	11	Pt. 6	Rathview Farms Ltd.	375.00
10-050-021	10	N. Pt. 6	C. & A. Van Welij	100.00
Total Allowances				
Hamilton Drain				
'B' Drain Extension, 2017				\$475.00

The allowance for Damage to Lands, Crops, etc., pursuant to Section 30, is an allowance for the disruption created as a result of the construction activities. A disrupted area of 10 m along the drain route has been used to calculate the applicable compensation. The allowance provided was based on \$2,000.00 per ha. Where applicable a minimum damage allowance of \$100.00 was granted.

Hamilton Drain
 'B' Drain Extension, 2017
 August 2017

7.0 Estimate of the Cost of the Work

The estimate of the cost of all labour, equipment and material required to construct this project is as follows:

Item	Descriptions	Approx. Quantity	Cost Estimate
Work on Private Lands			
1.0	Clearing as specified including cutting trees to log length, chipping of brush and loading, hauling and disposing of stumps as detailed (Sta. B024 to Sta. B207)	L.S.	\$6,000.00
2.0	Supply and install 300 mm dia. bell and gasket HDPE pipe including clear stone bedding, stripping and releveling topsoil and connection to existing catchbasin as detailed (Sta. B024 to Sta. B207)	183 lin.m	\$14,500.00
Work on Oxford County Road No. 8			
3.0	Supply and install 300 mm dia. bell and gasket HDPE pipe including clear stone bedding, stripping and releveling of topsoil (Sta. B207 to Sta. B209)	2 lin.m	\$250.00
4.0	Supply and install 900 mm x 1200 mm on-line concrete catchbasin with bird cage style grate including connections and quarry stone rip-rap inlet apron (Sta. B209)	1 ea.	\$3,000.00
5.0	Supply and install 400 mm dia. 9.5 mm thick smooth walled welded pipe by boring method including filling of bore pit to grade with 19 mm dia. clear stone (Sta. B209 to Sta. B237)	28 lin.m	\$13,750.00
6.0	Supply and install 900 mm x 1200 mm on-line concrete catchbasin with bird cage style grate including connections and quarry stone rip-rap inlet apron (Sta. B237)	1 ea.	\$3,000.00

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 'B' Drain Extension, 2017
 August 2017

Item	Descriptions	Approx. Quantity	Cost Estimate
7.0	Remove and dispose of existing buried junction box (Sta. B195) and existing catchbasin (Sta. 235) and fill existing abandoned 300 mm drain with low strength concrete as detailed (Sta. B195 to Sta. B235)	40 lin.m	\$2,500.00
Work on Private Lands (Cont'd)			
8.0	Locate and connect existing 150 mm dia. field tubing (two locations) to new catchbasin as detailed including clear stone bedding and stripping and replacing topsoil (Sta. B237)	20 lin.m	\$1,000.00
Contingencies			
9.0	Additional cost to install drain on 300 mm depth of 19 mm dia. clear stone bedding in areas of soil instability as directed by the Engineer including cost to supply and place stone	25 lin.m	\$1,000.00
10.0	Contingency for unforeseen conditions including unknown tile connections, etc.		\$2,500.00
Total Estimated Cost for the Construction of the Hamilton Drain			
'B' Drain Extension, 2017			\$47,500.00

Hamilton Drain
 'B' Drain Extension, 2017
 August 2017

Allowances to Owners

Damage to Lands, Crops, etc. (Section 30). \$475.00

Preparation of Report

Site Meeting,
 Investigations and Field Survey,
 Information Meeting,
 Watershed Plan, Design and Profile,
 Report Preparation including Allowances,
 Construction Assessment Schedule, and
 Maintenance Provisions. \$14,500.00

Meetings and Procedure

Preparation of Report Copies for Distribution,
 Preparation and Attendance at the
 Consideration of the Report
 And Assistance on Procedure. \$2,000.00

Tendering and Construction Inspection

Preparation and Distribution of Tender,
 Inspections During Construction,
 Payment Certificates and Related Appurtenances
 And Project Finalization and Grant Application. \$6,250.00

Administration and Financing

Administrative Costs,
 Net HST (Construction and Engineering)
 and Interest Charges Incurred by the
 Municipality until the Cost is Levied. \$2,275.00

Total Estimated Cost

Hamilton Drain

'B' Drain Extension, 2017 **\$73,000.00**

NOTE: The above summary contains cost estimates only. It is emphasized that these estimates do NOT include costs to defend the drainage report and procedures should appeals be filed with the Court of Revision, Ontario Drainage Tribunal and/or the Ontario Drainage Referee. Unless otherwise directed, additional costs to defend the report are typically distributed in a pro-rata fashion over the assessments contained in the Construction Assessment Schedule, excluding any Special Assessments.

Hamilton Drain
 'B' Drain Extension, 2017
 August 2017

In addition to the work included in the above estimate, should repairs, replacements, underpinning or other alterations be required for existing bridges, culverts, overflow culverts or any other structure necessary to conduct overflow water, or water in open channels under or across a road allowance, as affected by this drainage work, the work and cost thereof, including any necessary expenses incidental thereto, and if not determined otherwise, shall be the responsibility of and shall be assessed against the authority having control of such road or road allowance.

8.0 Special Assessment

Pursuant to Section 26 of the Drainage Act the following Special Assessment is made:

Work on Oxford County Road No. 8

The Special Assessment for this portion of the work is the increased cost to the drainage works due to the presence and operation of the road and is calculated as follows:

Construction Costs	- Equivalent Drain	+ Engineering/ Administration	= Special Assessment
Consisting of Items 3.0, Item 4.0, Item 5.0, Item 6.0 and Item 7.0 in the estimate of the cost of the work plus net HST.	Consisting of 30 m of 300 mm dia. HDPE pipe plus net HST.	Consisting of Survey, design, determination of special assessment, construction layout, inspection and determination of final costs plus net HST.	
\$22,896.00	- \$2,300.00	+ \$8,904.00	= \$29,500.00

Whether or not the County of Oxford elects to do the work on Oxford County Road No. 8, they shall be assessed or pay the actual cost of the work (estimated as \$22,896.00) minus the actual cost of an equivalent drain (estimated as \$2,300.00) plus engineering/administration (estimated as \$8,904.00) as a Special Assessment.

In accordance with Section 69 of the Drainage Act, the Road Authority may elect to construct any or all of the works located on its road allowance.

9.0 Construction Assessment Schedule

This sum of \$73,000.00 is assessed as benefit, outlet liability and Special Assessment against the lands and roads affected according to the following Construction Assessment Schedule. Injuring liability is deemed not applicable.

Outlet liability was assessed over the natural watershed. Adjustments have been made for lands tiled out of the watershed. The roads have been assessed at a marked up rate for outlet liability because of the higher runoff factor associated with the granular and paved surfaces.

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Due to the difficulty understanding the term "outlet liability" a greater explanation of the upstream owner's responsibility has been provided. To explain the obligations of the owners of higher lands under the Drainage Act of Ontario, the following is an excerpt from a decision given by the late Drainage Referee, his Honour Judge Sidney L. Clunis, in his Court at Windsor, Ontario on the first day of October 1975.

"The Drainage Act has established machinery, as it were, the procedure, for dealing with disputes between high land and low land owners. The Act is designed to provide a fair method of apportionment of the cost of drainage works as between high and low lands. While it's prime purpose was to increase the area of land that may be used efficiently for agricultural purposes, its secondary purpose was to avoid and settle disputes. It is the law of Ontario, that the owner of higher lands in which water arises, may be required to pay the cost of carrying that water to a proper outlet. This is the proportion of cost of this work which has been assessed against the lands of these appellants and other owners of high lands."

Lands used for agricultural purposes have traditionally been eligible for an one-third grant for assessments imposed under the Drainage Act. In the Construction Assessment Schedule, the designation 'A' indicates the property is considered eligible for grant. The eligibility may be confirmed or rejected subject to a provincial audit during the grant application process.

In order to determine the approximate net cost for a particular property, two items need to be considered and deducted, where appropriate, from the total assessment as shown in the Construction Assessment Schedule. As previously outlined, the properties designated 'A' are considered agricultural and eligible for the one-third grant. Secondly, the allowances previously listed are payable to those properties shown and as such, also need to be deducted where appropriate to determine the approximate net cost.

Hamilton Drain
 'B' Drain Extension, 2017
 August 2017

Construction Assessment Schedule

Roll No.	Owner	Con.	Lot or Part	Approx. Ha Affected	Land Class	ASSESSMENTS		
						Benefit \$	Outlet Liability \$	Total \$
10-040-020	Rathview Farms Ltd.	11	Pt. 6	0.2	A	1,500.00		1,500.00
10-050-021	C. & A. Van Welij	10	N. Pt. 6	11.4	A	4,000.00	10,779.00	14,779.00
10-050-022	S. Chadder / S. Elliott		N. Pt. 6	0.6	NA		583.00	583.00
Total Lands						5,500.00	11,362.00	16,862.00
Blandford Road, Township of Blandford-Blenheim						10,500.00	2,913.00	13,413.00
County Road No. 8, County of Oxford						4,000.00	9,225.00	13,225.00
Total Roads						14,500.00	12,138.00	26,638.00
Total Lands and Roads						20,000.00	23,500.00	43,500.00
Special Assessment, Work on Oxford County Road No. 8								29,500.00
Total Assessment								
Hamilton Drain								
'B' Drain Extension, 2017								\$73,000.00

10.0 Maintenance Provisions

After construction, the drainage works shall be maintained by the Township of Blandford-Blenheim in accordance with Section 74 of the Drainage Act. Any repair/maintenance work required on the drain shall be conducted from the Blandford Road side to minimize the disruption to the GRCA identified wetland. Similar to construction, appropriate sediment and erosion control measures are to be used during any maintenance activities. The work on the Oxford County Road No. 8 constructed as part of the drainage works and assessed as Special Assessment shall be maintained by the Road Authority.

Hamilton Drain
'B' Drain Extension, 2017
August 2017

Section 74 of the Drainage Act states:

“Any drainage works constructed under a by-law passed under this Act or any predecessor of this Act, relating to the construction or improvement of a drainage works by local assessment, shall be maintained and repaired by each local municipality through which it passes, to the extent that such drainage works lies within the limits of such municipality, at the expense of all the upstream lands and roads in any way assessed for the construction or improvement of the drainage works and in the proportion determined by the then current by-law pertaining thereto until, in the case of each municipality, such provision for maintenance or repair is varied or otherwise determined by an engineer in a report or on appeal therefrom.”

Should repair/maintenance costs be incurred by the drainage works in order to accommodate buried utilities such as gas lines, telephone cables, etc. or to relocate or perform repairs to any such plant, then under the provisions of Section 26 of the Drainage Act, the extra costs (including costs of permits, locates etc.) incurred by the drain, shall be borne by the utility affected.

Owners are reminded that catchbasin grates may become covered with vegetative debris, litter, etc. and as such, it is in their best interest to periodically check the grates and remove any debris. Likewise, any significant problems should be reported to the Township of Blandford-Blenheim.

11.0 Summary

This report has been respectfully prepared based on our investigation and subsequent discussions with the affected owners, County of Oxford and Municipal representatives. The report and final design takes into consideration all of the comments expressed. The cooperation shown by all parties is to be complimented.

R.J. Burnside & Associates Limited



T.M. Pridham, P.Eng.
Drainage Engineer
TMP:pm:kl

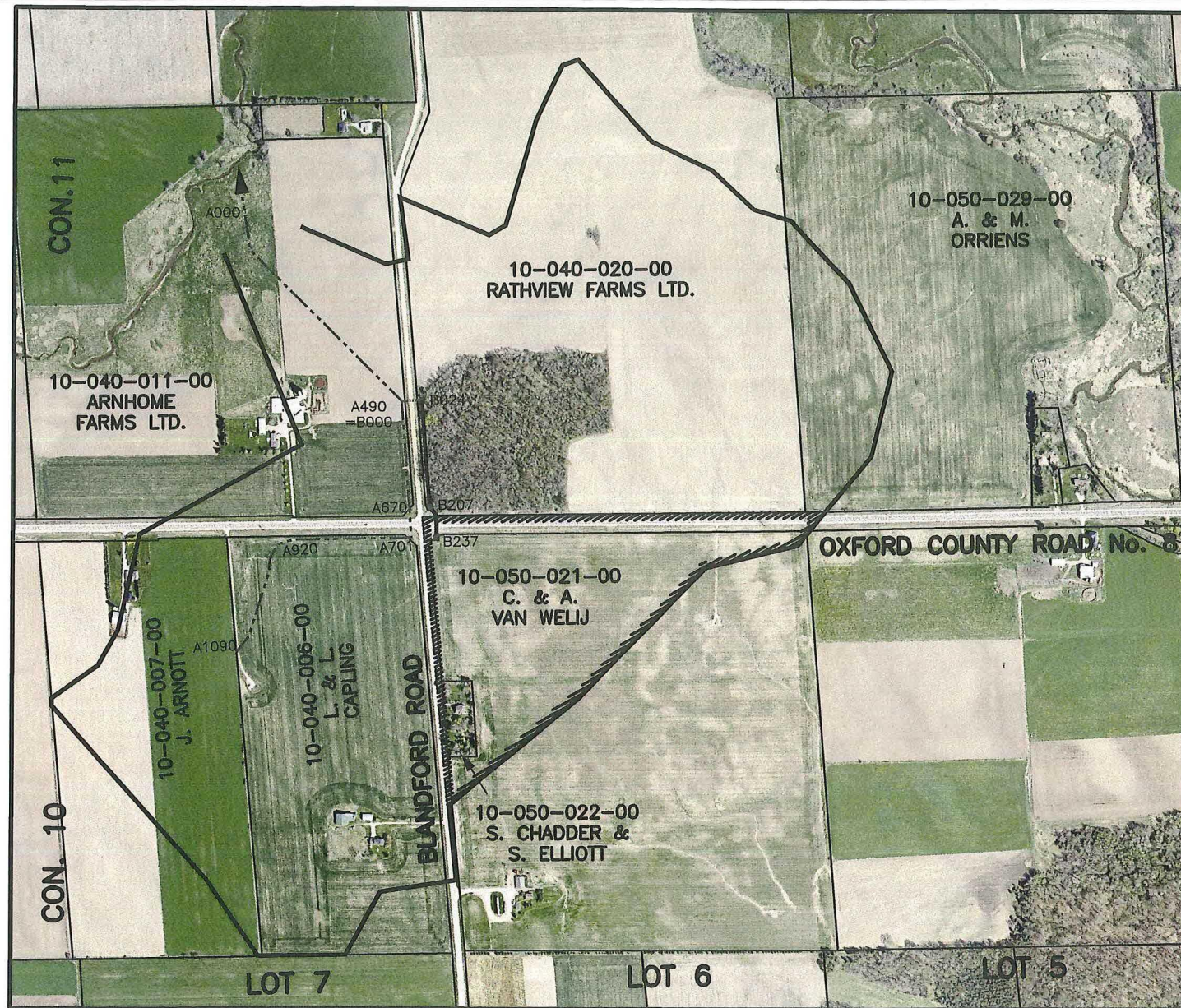


BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Drawing No. P1

Plan and Profile

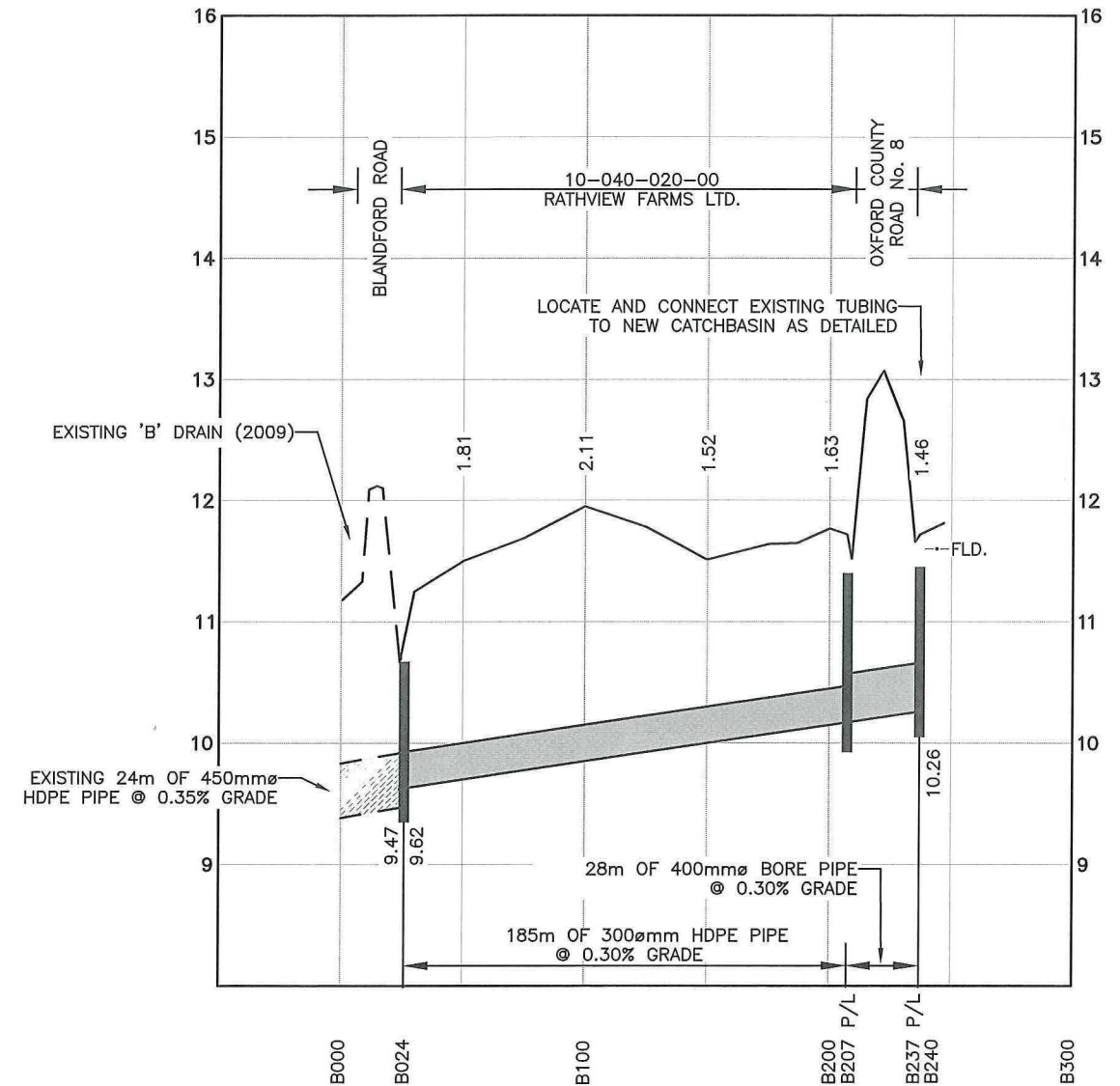
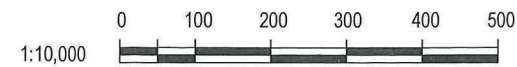


LEGEND

- APPROXIMATE EXTERIOR WATERSHED LIMITS
- APPROXIMATE ASSESSED WATERSHED LIMITS
- EXISTING DRAIN
- DRAIN ROUTE (CLOSED DRAIN)
- STATION
- ASSESSMENT ROLL NO.
- PROPOSED CATCHBASIN

THE PROPERTY LINES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.

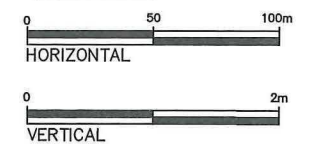
SCALE



BENCHMARKS

- STA. B030 SPIKE IN HYDRO POLE 3m WEST
ELEV= 11.19
- STA. B213 TOP CENTERLINE DOWNSTREAM
CONCRETE BOX CULVERT 8m WEST
ELEV= 12.40

SCALES



- Notes**
- This drawing is the exclusive property of R. J. Burnside & Associates Limited. The reproduction of any part without prior written consent of this office is strictly prohibited.
 - The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.
 - This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.

No.	Issue / Revision	Date	Auth.
1	ISSUED FOR DRAINAGE REPORT	2017/08/15	TMP



T. M. Pridham, P. Eng.



R.J. Burnside & Associates Limited
 15 Townline
 Orangeville, Ontario, L9W 3R4
 telephone (519) 941-5331
 fax (519) 941-8120
 web www.rjburnside.com

Client
TOWNSHIP OF BLANDFORD-BLENHEIM
 BOX 100/ 47 WILMOT STREET SOUTH
 DRUMBO, ON
 N0J 1G0

Drawing Title
**HAMILTON DRAIN
 'B' DRAIN EXTENSION, 2017
 PLAN AND PROFILE**

Drawn GGB	Checked TMP	Date 2017/08/15	Drawing No. P1
Scale AS SHOWN	Project No. 300040698.0000		



BURNSIDE

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Appendix A

Special Provisions

Appendix A

APPENDIX A

SPECIAL PROVISIONS

R. J. BURNSIDE & ASSOCIATES LIMITED
Engineers, Hydrogeologists, Environmental Consultants
15 Townline
Orangeville, Ontario
L9W 3R4

DRAINAGE SPECIFICATIONS

One complete set of plan, profile and specifications shall be kept by the operator at the construction site at all times.

These specifications, including report, plan and profile of the same date apply to and govern, where applicable, the construction of the

HAMILTON DRAIN 'B' DRAIN EXTENSION. 2017

Township of Blandford – Blenheim

EXTENT OF THE WORK:

213 m of Closed Drain plus Related Appurtenances
Including One Road Crossing

SPECIAL PROVISIONS:

CLOSED WORK - GENERAL

The 300 mm diameter smoothwalled polyethylene pipe (HDPE) shall be per Boss 2000 (320 kPa) with bell and gasket joints per CSA B182.08.02 or an approved equivalent. The polyethylene elbow shall also be per Boss 2000 (320 kPa) or an approved equivalent. The 150 mm diameter perforated drainage tubing for the field tile connections shall be per Big 'O' with geotextile filter sock.

The Contractor's supplier shall confirm the details of the catchbasins with the Engineer prior to fabrication and delivery. The specifications for each structure are outlined below:

STRUCTURES			
STATION	DESCRIPTION	INVERT OF DRAIN/LEAD	LOW WALL/INLET ELEVATION
Sta. B209	900 x 1200 ON-LINE CB	10.18 m (300 mmØ HDPE) N 10.18 m (400 mmØ BORE) S	11.38 m
Sta. B237	900 x 1200 ON-LINE CB	10.26 m (400 mmØ BORE) N 10.41 m (150 mmØ TUBING) S (E) 10.41 m (150 mmØ TUBING) S (W)	11.46 m

THE 1200 mm WALLS SHALL BE THE NORTH AND SOUTH SIDES

The location of all catchbasins shall be as directed by the Engineer at the time of construction. On road allowances, catchbasins shall be installed parallel to the road, unless otherwise directed. On private lands, catchbasins shall be installed perpendicular to the route of the drain, unless otherwise directed. Catchbasin markers and grates are required and are to be supplied by Coldstream Concrete or equivalent.

Catchbasins shall be backfilled with compacted native material. In areas of poor soil conditions, Granular 'B' or 19 mm clear stone shall be used for backfill. Granular or clear stone backfill material will be paid for as an extra if required. Pipe connections to catchbasins shall be grouted in place from the inside and outside. The connections shall also be trimmed flush on the inside wall. The outside pipe connection and any riser joints shall be wrapped with a layer of geotextile underlay. The geotextile underlay shall be Terrafix 270R or an approved equivalent.

The rip-rap inlet apron for the 900 mm x 1200 mm catchbasins shall be 6 sq.m of 100 mm to 150 mm dia. quarry stone placed 300 mm thick on geotextile underlay. The geotextile underlay shall be Terrafix 270R or an approved equivalent.

CLOSED WORK – ROAD CROSSING

The Contractor shall be responsible for signing and traffic control in accordance with Ontario Traffic Manual, Book 7 – Temporary Conditions. The Contractor shall be responsible for notification of all utilities and obtaining locates prior to construction.

All work on Oxford County Road No. 8 shall be as directed and subject to the approval of Mr. Scott Boughner, Supervisor of Roads Operations/Fleet, Oxford County. Details concerning the road work may be discussed and/or confirmed with Mr. Boughner at (519) 539-9800, ext. 3106.

WORK ON PRIVATE LANDS
STA. B024 TO STA. B207

From Sta. B024 to Sta. B207 all trees, branches and stumps for a width of 10 m east of the easterly limit of the road allowance shall be cleared. The limits of the clearing will be provided by the Engineer prior to tendering.

Trees 200 mm (8 in) and larger shall be cut to 2.4 (8 ft) log lengths and hauled to the farm buildings off Township Road 12. The logs shall be placed at a location as designated by the Owner. All brush shall be chipped on site and blown into the remaining bush or otherwise disposed of off site. All stumps shall be completely removed and disposed of at a site arranged by the Contractor.

The HDPE pipe shall be installed in accordance with OPSD 802.010 Type 2 soil on a minimum of 100 mm depth of 19 mm clear stone bedding. The topsoil shall be stripped and replaced for the full width of the trench and 1:1 taper excavation.

The HDPE pipe may also be installed with a wheel machine provided the topsoil is stripped and replaced for the full width of the machine. In the event the cuts to grade exceed the digging depth of the wheel machine, the topsoil shall be stripped and replaced for the full width of any necessary stripping operations.

At Sta. B024 a new hole shall be created centred in the easterly wall of the existing catchbasin to accommodate the HDPE installation. Extreme care shall be taken in order to not impair the integrity of the existing structure.

At approximately Sta. B027 a 45° polyethylene elbow shall be installed to accommodate the bend in the drain.

After the completion of the backfilling and topsoil replacement, all disturbed areas shall be seeded. Seeding shall be as specified; General Conditions, Item 13.

WORK ON OXFORD COUNTY ROAD No. 8
STA. B207 TO STA. B237

Prior to commencing work, the topsoil in all areas to be disturbed shall be stripped and stockpiled. After the completion of the work the topsoil shall be reinstated and all disturbed areas seeded with an approved grass seed mixture.

The boring shall be installed from north to south (upstream). Access for materials and equipment shall be off Blandford Road along the drain route

At Sta. B195, the existing buried junction box and at Sta. B235 the existing catchbasin shall be removed and disposed of at a site arranged by the Contractor. At Sta. B195 the upstream end of the existing tile shall be capped with a polyethylene end cap as per OPSS.MUNI 510.07.03.07. The existing 300 mm drain from Sta. B195 to Sta. B235 shall be abandoned as per OPSS.MUNI 510.07.03.09 and pressure grouted with concrete grout through grout plug fittings to fill the void within the existing drain as per OPSS.MUNI 510.05.03. Grout shall have a 28-day strength of 20 MPa and the Contractor shall submit the mix design for review prior to placing the grout.

WORK ON PRIVATE LANDS
STA. B237

At Sta. B237 two existing 150 mm diameter field tubing headers on the south side shall be located and connected with 150 mm perforated tubing with geotextile filter sock. The short length of 200 mm diameter field tubing connected to the catchbasin that is to be removed shall also be removed. A tile plan will be provided with the tender package to help detail the work to be undertaken.

The Contractor's attention is drawn to the existence of a small sweet gas line (on private lands) and Bell cables in the vicinity of the connections. Care shall be taken when working around the utilities.

WORKING SPACE AND ACCESS ROUTES

The width of the working space for the construction, maintenance and repair of the Hamilton Drain, 'B' Drain Extension, 2017 shall be as follows:

The working space shall be an average of 10 m along the closed drain route to allow for stripping, stockpiling and releveling of the topsoil. The working space shall also extend for 10 m beyond the end of the work at Sta. B237 to allow for the connection of the existing tubing as specified. Access to the working space shall be off the Blandford Road and Oxford County Road No. 8.



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Appendix B

General Conditions

APPENDIX B

GENERAL CONDITIONS

1. MUNICIPALITY means the Corporation of the Township awarding the Contract.
2. ENGINEER means the Project Engineer of R.J. BURNSIDE & ASSOCIATES LIMITED, Municipal Drainage Consultants, who shall decide on questions arising under the Contract Documents as to the interpretation of specifications or performance of the work.
3. INSPECTOR, if any, means the representative of R.J. BURNSIDE & ASSOCIATES LIMITED who is authorized to inspect and to oversee the construction process.
4. DRAINAGE SUPERINTENDENT OR COMMISSIONER, if any, means the person or persons appointed by the Municipality to assist in the construction of the drainage works.
5. CONTRACTOR means the Corporation, Company or person having been awarded the Contract.
6. CONTRACT means the signed proposal or tender offered by the Contractor and accepted by signature on behalf of the Municipality and which shall be a formal and binding document.
7. BENCH MARKS means the permanently established level marks, recorded on the profile as to description, location and elevation and which shall govern the drainage work. It is an offence under the Drainage Act to interfere with, remove or destroy any bench mark.
8. STAKES mean survey marks set twenty-five metres apart and at all fences or as shown on plan and profile and are for vertical control only. The Contractor shall not be held liable for the cost of replacing any stakes, except stakes destroyed during construction.
9. PROFILES show the cuts or depths from the ground at the numbered side of the stakes and from the average bottom of the present open drain to the gradeline, which shall be at the bottom of the finished drain or the invert of the tile, as the case may be. The cuts or depths are indicated in metres and parts thereof, but the bench marks must govern.
10. FENCES mean enclosures by wire, railing, or otherwise, which may be removed by the Contractor to the extent necessary for the construction, but they shall be repaired to as good a condition as found. In no case shall a fence be left open or unguarded. Watergates, where required, shall be constructed as part of the work.
11. HEAVY STONE RIP-RAP AND SPILLWAYS shall in general be keyed in place and a minimum of 500 mm thick at the toeline and fitting the contours and slopes of the banks. All installations shall include Mirafi P150 filter mat or an approved equivalent. Spillways shall have a minimum slope of 2:1 (horizontal to vertical) and shall be shaped to guide the flow over the centre.
12. HIGHWAYS AND ROAD AUTHORITIES, Governmental Departments, Public or Private Utilities shall be notified in advance by the Contractor before performing any work affecting land or properties under their jurisdiction. The Contractor shall guard against damaging pipes, conduits, cables, etc. All work on roads, utility lands, etc. as to construction methods,

location, type of pipes, catch basins and grates, disposal of excess material, general clean-up, etc. shall be under the direction and supervision of the authority having jurisdiction. (See Instructions to Bidders, Item 6.)

13. SEEDING permanent grass mixture, Creeping Red Fescue 35 Kg, Perennial Ryegrass 17 Kg, and Wild White Clover 6 Kg per ha. or equivalent, all Canada No. 1 grass mixture. Total 58 Kg per ha.
14. UNSTABLE SUBSOIL OR ROCK conditions, previously unknown to exist, but which may make alternations necessary, shall immediately be reported to the Engineer. Changes subsequently authorized shall not release the Contractor from obligations under his Contract.
15. MINOR CHANGES mean necessary alternations made by the Engineer as the work progresses. An amount proportionate to the amount contained in the tender being added to or deducted from the contract price to cover such changes.
16. WORKING SPACE shall mean a strip of land reasonably close to the drain and necessarily used for and during construction and shall in general be 25 m or less.
17. REASONABLE ACCESS TO THE WORK AREA shall be provided by any owner receiving allowances for damages.
18. POWER TO ENTER. Under Sec. 63 of the Drainage Act, the Contractor is entitled to enter upon whatever lands are necessary to complete the work within the designated working space. Interfering with or obstructing the contractor is offence.



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Appendix C

General Specifications (Tile Work)

APPENDIX C

GENERAL SPECIFICATIONS (TILE WORK)

1. LINE OF CONSTRUCTION shall in general be as staked, but the drain shall run straight throughout each course and at intersections it shall run on a smooth and gradual curve.
2. CLEARING for tile shall mean the removal of trees, brush, stumps, heavy stones or other obstructions for a minimum width of 15 metres on each side of the drain, and in open land shall be left in piles. It shall be left to the owner to salvage any wood or timber.
3. MATERIAL, whether or not supplied by the Municipality, shall be arranged for and shall be accepted, or rejected if not first quality, by the Contractor at the site on delivery.
4. TRENCHING AND LAYING shall in general be done by a wheel trencher together with accurate grade controls. The tile shall be laid with the invert at the gradeline with joints fitting properly. The minimum trench width shall be equal to the outside diameter of the tile plus 150 mm.
5. BLINDING shall be made as rapidly as is consistent with the construction progress. After inspection, the trench shall be backfilled. Minimum cover to natural surface shall in general be 750 mm.
6. TRIBUTARY TILE shown on the profile shall be connected as part of the work. Existing tile not shown shall be connected as extra work. A sufficient length of pipe, in general one size greater in diameter, shall be used through the bottom of a graded overflow run-way or if reconnection is to be made across a trench.
7. OUTLET PROTECTION shall in general be a length of standard metal pipe with a hinged rodent-proof grate. The end of the pipe shall be rip-rapped with heavy stone, which shall also extend into the bottom of the open drain. Overflow water shall not be directed over the tile outlet.
8. GRADED OVERFLOW RUNWAYS shall be constructed by cutting down the banks of a ditch that is being replaced by a tile drain. In no case shall its elevation be such as to hinder the free flow of surface water. It shall be graded to such condition that it may be cultivated by use of ordinary farm machinery. Grassed runways are recommended on heavy grades, but shall be left to the owner, if not otherwise specified.
9. CATCHBASINS shall in general be constructed of concrete (20 MPa) sides and bottom minimum 150 mm thick, inside dimensions 600 x 600 mm with a 300 mm sump, poured in place or pre-fabricated. The top shall be a standard Ministry of Transportation riveted grade or a welded metal fram with iron bars on 50 mm centres. Provisions must be made for surface water to enter, or catchbasins may be off-set into the overflow runway. A 200 mm dia. tile as cross-connection is in general sufficient. Backfill shall be firmly packed and all tile connections, bottom and side joints, shall be grouted in cement mortar.
10. JUNCTION BOXES shall be of concrete with tile grouted and fitting properly.

11. DAMAGES to crops within the working space shall not be the liability of the Contractor, nor damages to livestock or by livestock occasioned by leaving trenches open for inspection. He shall, however, give the owner concerned a reasonably advanced notice. The Contractor will be held liable for any such damages if the backfilling is delayed more than 10 days after the acceptance of the work, weather conditions permitting. (See instructions to Bidders, Item 4.)



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Appendix D

Road or Railway Crossings (Boring Method)

APPENDIX D

ROAD OR RAILWAY CROSSINGS (BORING METHOD)

Where a Drainage Works crossing any Road or Railway Right-of-Way by the boring method is to be carried out by the Municipality's Contractor. The following specifications shall apply and will be enforced and supervised by the Authority having jurisdiction over such Right-of-Way.

1. Unless otherwise directed the Authority will supply no labour, equipment or materials for the construction of such crossing.
2. The pipe or casing used in the crossing shall be smoothwall welded steel pipe with a minimum wall thickness of 6.35 mm for Roads and 7.92 mm for Railway.
3. The pipe or casing shall be of sufficient length and shall be placed by means of continuous flight augering inside the casing and simultaneous jacking to advance the casing immediately behind the tip of the auger. Complete augering of a tunnel slightly larger than the pipe and placing the entire length by pulling or jacking after completion of the tunnel, WILL NOT BE ACCEPTABLE.
4. The auger pit to accommodate the boring machine shall be constructed so that the top edge of the pit shall not be closer than 3 metres to the edge of the pavement or the track. The slope of the pit from the top edge of the embankment to the bottom of the pit shall be no less than 1:1. Shoring, sheeting, etc. shall be in accordance with the Construction Safety Act or the Ditch Excavators Protection Act. The pit shall be left open for an absolute minimum length of time and if at all possible work should be scheduled so that excavation, placement of pipe and backfilling takes place in one working day.
5. During excavation, the topsoil shall be placed in a separate pile for replacement after completion of the backfill operation. If this is not possible or practical, the Contractor shall import and place a minimum of 150 mm of good quality topsoil over the excavated and backfilled area. In either case, the disturbed area shall be seeded with a good quality grass seed mixture (General Conditions, Item 13 to the requirements of the Authority. The finished work shall be left in a clean and orderly condition, flush or slightly higher than the adjacent ground so that after settlement it will conform to the surrounding ground. Excess material (if any) shall be removed from the Right-of-Way and shall be disposed of elsewhere.
6. The Contractor shall at his expense, supply, erect and maintain suitable and adequate barricades, flashing lights, warning signs and / or flagmen to the satisfaction of the Authority.
7. The type, location on the right-of-way and the elevation of the top of catch basins, inlets and junction boxes, shall be as required by the Authority.
8. THE CONTRACTOR SHALL GIVE THE AUTHORITY AND THE TOWNSHIP'S DRAINAGE ENGINEER AT LEAST 48 HR. NOTICE BEFORE COMMENCING ANY WORK ON SUCH RIGHT-OF-WAY. NO WORK SHALL BE PERFORMED WITHOUT THE CONSENT OF THE AUTHORITY HAVING JURISDICTION OVER SUCH RIGHT-OF-WAY.



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Appendix E

Instruction to Bidders

APPENDIX E

INSTRUCTIONS TO BIDDERS

1. TENDERS, submitted on the prescribed form and accompanied by the required bid deposit in favour of the Municipality, will be considered and contracts awarded only in the form of a lump sum for the completion of the whole works, or of such portions as specified in the tender call.
2. INVESTIGATIONS in regard to plans, profiles, specifications, the location and extent of the work should be made by the bidders themselves before tendering, and any doubt as to the exact meaning of any of the relevant documents or their intentions must be removed before signing the Contract; thereafter, the Contractor shall be bound by the decisions of the Engineer on all points.
3. GUARANTY BONDS covering the faithful performance of the Contract may be required by the Municipality prior to awarding the Contract.
4. CLAIMS OR LIABILITIES resulting from accidents, damages, losses, etc. directly or indirectly arising out of the Contract or manner of performance thereof, and if not otherwise provided for, shall be the responsibility of the Contractor. The Municipality may require proof of his insurance against any or all liabilities prior to awarding the Contract, or may withhold an equal amount to claims filed from payments then due.
5. FAULTY MATERIAL OR WORKMANSHIP shall be the responsibility of the Contractor at his own expense for a period of one year from the date of final acceptance of the work, and he shall remedy any defect and pay for any damage therefrom which may appear within such period and neither the final certificate nor payments thereunder shall relieve him from such responsibility under or by virtue of the signed Contract.
6. PERMITS AND SUPPLEMENTARY SPECIFICATIONS shall be obtained by the Contractor at his own expense before performing any work affecting any Road, Right-of-Way, Land or Property of any Governmental Department, County or Township, or of any Public or Private Utility, and he shall perform the work as though said specifications were hereto attached.
7. PAYMENTS up to 80% of the value of the work completed may be made by the Municipality on the written certificate of the Engineer, with a holdback payable after 45 days from the date of final acceptance. The Municipality may require the Contractor to furnish a complete release from sub-contractors or of all liens arising out of the Contract (other than his own) before the final payment shall become due.
8. FINAL INSPECTION will be made within two weeks after notice has been received from the Contractor that the work has been completed, or as soon thereafter as weather conditions permit. All work must at that time have the full dimensions, grades, etc. as specified and the general clean-up must be fully completed. If deficiencies are found, which should have been known to the Contractor as not complying with the specifications, the cost and expenses incidental to such inspection shall, due to his negligence, become the liability of the Contractor and may be deducted from the Contract price.

9. STATEMENTS OF SATISFACTION, voluntarily signed by the owners in regard to the treatment of the spoil, the clearing, the fences, the general clean-up, etc. may release the Contractor from further obligation in that regard.
10. TERMINATION OF CONTRACT: All work must be completed within the time limit as specified by or as extended under the Contract. If at any time, the Engineer should certify in writing, that the work is unnecessarily delayed or that conditions of the Contract are being violated, the Municipality shall have the power to terminate by written notice all work thereon, but reserving all claims against the Contractor for breach of Contract. If, however, the work has not been completed on or before the date fixed, the Contractor may apply in writing for an extension prior to the expiry date of his Contract.



Ontario Federation of Agriculture

Ontario AgriCentre

100 Stone Road West, Suite 206, Guelph, Ontario N1G 5L3
Tel: (519) 821-8883 • Fax: (519) 821-8810 • www.ofa.on.ca

MEMORANDUM

TO: OFA Board of Directors

CC: OFA Policy Advisory Council
Neil Currie
Jason Bent
OFA Member Service Representatives

FR: Peter Jeffery
Senior Farm Policy Analyst

Date: June 21, 2017

RE: Ontario Government's High Speed Rail announcement

On May 19th, Premier Wynne announced that the provincial government is undertaking preliminary design work on a Windsor/London/K-W/Toronto high-speed (250 km/h or 155 mph) rail line.

Transport Canada's Grade Crossing Regulations (May 11, 2017) prohibits level crossings when train speeds exceed 177 km/h or 110 mph.

Both the Special Advisor's final report, "High Speed Rail in Ontario" and "Preliminary Business Case" totally ignore a range of socio-economic impacts and outcomes that would fall principally on rural and agricultural areas, should the Windsor to Toronto high-speed rail line ever become a reality.

From a rural/agricultural perspective, those the socio-economic impacts and outcomes include;

- A high speed rail line would require grade separation (i.e. overpasses or tunnels) of selected road crossing (provincial highways plus some county roads and township roads), that carried over the rail line.
- Remaining lower traffic volume rural roads (other county & township roads) would dead end at the right-of-way, increasing local travel times across the rail line, not only farm to farm, but farm to town, farm to input supplier, plus longer travel times for school buses, emergency responders (police, fire, ambulance) and services delivering to rural addresses.
- A high speed right-of-way, regardless of on an existing right-of-way, or a new one, would cut farms in two, even those that currently have a "farm crossing". As noted, level

crossings are not an option where train speeds exceed 177 km/h. This would lead to lengthy travel times to access fields on the opposite side of the tracks, or necessitating land swaps between farmers on opposite sides of the rail line.

- The studies make no mention of the financial costs or the social impacts from expropriation of farmland for any “greenfield” right-of-way. Also no consideration of the loss of prime agricultural land, particularly between Kitchener and Windsor, where a new right-of-way is proposed.
- Any separate, dedicated right-of-way would result in a loss of prime agricultural land. A 100’ wide right-of-way (assuming it’s the minimum width necessary for a twin-track line?) would consume approximately 12 acres/mile; but not all of the proposed route would be on a new right-of-way; portions of the exiting right-of-way would be on upgraded existing rail lines.
- Some of the current GO Transit rail line between Guelph and Brampton is a single track line. Land would need to be acquired to allow for a double-track line.
- Likely significant localized impacts on agricultural infrastructure such as municipal drains, field tile systems and multi-farm irrigation systems.
- Likely safe to say that for any “greenfield” right-of-way, agricultural land will be “chosen” over natural heritage lands for any right-of-way.
- The entire of a high speed rail line facilitating commuting from home to work for some of the larger centres (London, KW, Guelph and Toronto) runs completely counter to the concept and policies pertaining to “complete communities”. We should be making urban centres throughout the Greater Golden Horseshoe and beyond complete communities.

High Speed Rail in Ontario 130 pages): <http://www.mto.gov.on.ca/english/publications/high-speed-rail-in-ontario-final-report/pdfs/high-speed-rail-in-ontario-final-report.pdf>

Preliminary Business Case (110

pages): <http://www.mto.gov.on.ca/english/publications/pdfs/preliminary-business-case-hsr.pdf>

To: Warden and Members of County Council

From: Chief Administrative Officer

Ontario's Proposed High Speed Rail (HSR)

RECOMMENDATIONS

1. That Council support the initiation of an Environmental Assessment process to consider the possible development of High Speed Rail in Ontario concurrent with the Province of Ontario leading a multi-stakeholder process to develop an Integrated Public Transportation Master Plan for Southwestern Ontario, as outlined in Report CAO 2017-09;
2. And further, that the aforementioned Integrated Public Transportation Master Plan include a strategy to cultivate public transportation ridership and establish a feeder system in advance of any High Speed Rail implementation while addressing the need for effective, efficient and viable Inter-community transportation across Southwestern Ontario;
3. And further, that the High Speed Rail Environmental Assessment specifically address potential rural community and agricultural industry impacts associated with the development of a high speed rail corridor across Southwestern Ontario.

REPORT HIGHLIGHTS

- This report seeks Council's endorsement of the Province of Ontario's planned initiation of a High Speed Rail Environmental Assessment concurrent with the Province of Ontario leading a multi-stakeholder process to develop an Integrated Public Transportation Master Plan for Southwestern Ontario;
- The report raises the need for a feeder system that will cultivate the ridership necessary to ensure the viability of any future HSR implementation and which is vital to the mobility and connectivity of small urban and rural communities across Southwestern Ontario;
- As well the report raises concern for the potential issues that a significant barrier such as a high speed rail corridor can create within rural communities and the associated impacts to the agricultural industry that can result.

Implementation Points

If adopted, this report will form the basis of the County of Oxford's discussion with the Minister of Transportation at AMO in August 2017. As well, the 2016 "New Direction's" document will be updated to reflect Council's position on the HSR proposal.

Financial Impact

The adoption of this report will not result in any costs being incurred beyond the approved 2017 Business Plan and Budget. The Treasurer has reviewed this report and agrees with the financial impact information.

Risks/Implications

There are no risks associated with the adoption of this report, rather it is appropriate and timely to raise any issues and begin to engage in HSR planning.

Strategic Plan (2015-2018)

County Council adopted the County of Oxford Strategic Plan (2015-2018) at its regular meeting held May 27, 2015. The initiative contained within this report supports the Values and Strategic Directions as set out in the Strategic Plan as it pertains to the following Strategic Directions:

2. i. **A County that is Well Connected** – Improve travel options beyond the personal vehicle by:

- *Exploring the feasibility of innovative inter-municipal transportation strategies (E.g., car/ride share)*

2. ii. **A County that is Well Connected** – Advocate for appropriate federal and provincial support, programming and financial initiatives to strengthen the movement of people and goods to, from and through the County

3. i. **A County that Thinks Ahead and Wisely Shapes the Future** – Influence federal and provincial policy with implications for the County by:

- *Advocating for fairness for rural and small urban communities*
- *Advocating for federal and provincial initiatives that are appropriate to our county*

DISCUSSION

Background

At its April 13, 2016 meeting, Council endorsed Report CAO 2016-05 entitled “**New Directions Advancing Public Transportation in Southwestern Ontario**”. Subsequently the Western Ontario Warden’s Caucus (WOWC), the Mayors of SouthWest Ontario (MOSO) endorsed a call for the Ministry of Transportation to lead a multi-stakeholder initiative to develop an Integrated Public Transportation Master Plan for Southwestern Ontario. The City of London subsequently used Oxford County’s work as a basis for a similar position with the Ministry of Transportation.

Warden Mayberry has presented Oxford’s position with Minister Del Duca multiple times, most recently in a delegation to Minister Del Duca at the Rural Ontario Municipal Association (ROMA) in January 2017 (Attachment 1).

Comments

The Province's High Speed Rail Announcement

On May 19, 2017, Premier Kathleen Wynne announced the Province of Ontario's intent to move ahead with preliminary design work on a High Speed Rail corridor, and investing \$15 million in a comprehensive environmental assessment. The HSR corridor is proposed to connect Toronto to Windsor with planned stops at Pearson/Malton, Guelph, Kitchener, London, Chatham-Kent and Windsor (Attachment 2).

The provincial announcement also included the release of "**High Speed Rail in Ontario**" the final report from the Honourable David Collenette, Special Advisor for High Speed Rail. (Attachment 3).

The Implications of High Speed Rail

In the long term, a viable High Speed Rail system connecting Toronto to Windsor will benefit much of Southwestern Ontario. Notwithstanding, the proposed system will only be viable if public transportation ridership throughout the corridor is developed / cultivated well in advance of HSR start up.

Recognizing the time and expense to develop an HSR system that cannot operate until each phase is fully functional, Oxford County has promoted the potential incremental and strategic value of developing public transportation ridership through the development and implementation of an Integrated Public Transportation Master Plan. Such a plan is envisioned to be one that recognizes the broad spectrum of public transportation components that will comprise an integrated system. Such a system should include not only HSR but a viable and enhanced VIA Rail (High Performance Rail), multi-modal terminals, urban transit, a strong and viable inter-community busing/transport system and inter-urban transit (GO Transit) all operated within a seamless and integrated system that allows the passenger to move across Southwestern Ontario and to/from the Greater Toronto Area.

In supporting the initiation of a HSR Environmental Assessment process, Oxford County believes that such should be concurrent with the development and strategic implementation of a Provincially lead **Integrated Public Transportation Master Plan for Southwestern Ontario**.

In addition, Oxford County is deeply concerned with the rural community and agriculture industry implications that a physical barrier such as a high speed rail corridor could mean to our community. With this issue in mind, it is prudent to ensure that the Province of Ontario is advised that Oxford County expects that the Environmental Assessment process will address and mitigate the access implications of a high speed rail corridor in our community.

Conclusions

Staff recommend that Council support the initiation of an Environmental Assessment for the High Speed Rail project proposed by the Province of Ontario, with the understanding that such support also includes the Province of Ontario concurrently leading the development and implementation of an Integrated Public Transportation Master Plan for Southwestern Ontario. In addition, staff recommend that Council identify its expectation that the HSR Environmental Assessment will address all concerns regarding rural community and agriculture industry access implications with the development of a high speed rail corridor through Oxford County.

SIGNATURE

Approved for submission:

Original signed by _____

Peter M. Crockett, P.Eng.
Chief Administrative Officer

ATTACHMENTS

Attachment 1 – Briefing Note presented to Minister Del Duca, January, 30, 2017
Attachment 2 – High Speed Rail Announcement, Premier Wynne, May 29, 2017
Attachment 3 – High Speed Rail in Ontario, December 2016

January 30, 2017

Minister of Transportation

Advancing Public Transportation in Southwestern Ontario and Empowering Ontario's Short Line Railways

Overview

- Mobility is one of the keys to economic, social and environmental prosperity.
- Highly mobile regions are the ones that succeed in attracting residents, investment and a skilled workforce.
- The successful development of a highly mobile Southwestern Ontario Region must include a fully integrated and comprehensive public transportation system.
- Oxford County's "*New Directions: Advancing Southwestern Ontario's Public Transportation Opportunities*" toolkit has been endorsed by the Western Ontario Warden's Caucus, the Mayors of Southwestern Ontario and VIA Rail. All support the Minister of Transportation leading the development of an Integrated Multi-modal Public Transportation Master Plan for Southwestern Ontario in partnership with all transportation partners (enclosed).
- Oxford County has prepared an "Empowering Ontario's Short Line Railways" information package focusing attention on key recommendations from the Canadian Transportation Act Review that will help ensure the long-term viability of a valued short line railway system in Ontario (attached).

Key points

- The Oxford County "*New Directions: Advancing Southwestern Ontario's Public Transportation Opportunities*" toolkit is intended to assist Southwestern Ontario in seizing several opportunities presented by upcoming public policy and funding decisions concerning the future of our national and provincial transportation systems.
- Developing a successful public transportation system requires leadership and cooperation among federal, provincial, and municipal governments, Crown corporations, public agencies and service providers.
- Ontario's Short Line Railways play a critical role as "first and last mile" feeders to the continent-wide freight rail system. The opportunity to enact the Canadian Transportation Act Review's short line recommendations has been created by the new federal Transportation 2030 policy announcement of November 3, 2016 (attached).

Background

- Oxford County is committed to our Future Oxford Community Sustainability Plan and goals to achieve 100% Renewable Energy by 2050 and Zero Waste

- Oxford County recognizes the environmental implications of continued fossil fuel use and the growing impacts of climate change that are well documented and recognized by international leaders:
 - At an estimated 35 per cent, transportation emissions are the single-largest source of greenhouse gas (GHG) emissions in the province;
 - By 2025, the CAFÉ standards will apply to automobiles, SUVs and light trucks, and are so stringent that industry experts ascertain they will only be met through broad electric vehicle availability and use.
- Oxford County supports a National-Provincial Climate Change Action Plan and recognizes the need to meet society's mobility expectations through:
 - Advocating and encouraging active modes of transportation (walking and cycling);
 - Advocating and encouraging the transition to electric vehicles to meet personal mobility needs;
 - Advocating and encouraging the development of a systematic and fully integrated public transportation system for Southwestern Ontario that will reduce the dependency on the automobile for personal travel and enhance the economic, community and environmental vitality of the region.

Request

That Minister Del Duca, on behalf of the Ontario Government, lead the development of an integrated multi-modal Public Transportation Master Plan for Southwestern Ontario, in partnership with the Government of Canada, Southwestern Ontario municipalities, and the public transportation service providers serving the Southwestern Ontario region including VIA Rail, Metrolinx, and the Ontario Motor Coach Association.

And further, that Minister Del Duca work in partnership with the Federal Minister of Transport to implement the reforms necessary to ensure the long-term viability of Ontario's short line railways by:

- Establishing a tax credit program to offset track and bridge rehabilitation costs;
- Modifying eligibility criteria for federal infrastructure programs to allow short lines to apply for funding directly without a government sponsor;
- Creating a federal/provincial rail infrastructure program to meet capital investment needs through grants and low-cost, long-term financing; and
- Assisting in the establishment of a pooled short line insurance regime.

Oxford County looks forward to official representation from the Ministry of Transportation in February 2017 when we formally launch the County's new charging stations under the Electric Vehicle Chargers Ontario program.

Prepared for: **The Honourable Steven Del Duca, Minister of Transportation**

Further information: David Mayberry – Warden, County of Oxford (warden@oxfordcounty.ca)
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Attachments

New Directions – Advancing Public Transportation in Southwestern Ontario, April 2016
 Empowering Ontario's Short Line Railways, January 2017
 Transportation 2030, Minister Marc Garneau, November 3, 2016



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Speaking notes for The Honourable Marc Garneau, Minister of Transport - Transportation 2030

Chamber of Commerce of Metropolitan Montréal

November 3, 2016

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Good morning, everyone, and thank you for joining us.

I am proud to be here in my city, Montréal. I am proud to be the federal MP for Notre-Dame-de-Grâce—Westmount and proud to be one of six Quebec ministers. Thank you, Mayor Coderre, for being here with us today.

I'm here today because I want to talk about the future of Canada's transportation system. I know I am speaking to a room full of the converted when I say that Canada's transportation system is critical to the well-being of our economy. It is the lifeblood that transports our goods and our people within Canada and to the world.

Our government is focused on growing the economy and supporting the middle-class, and a modern, efficient transportation is key to these goals.

In February I tabled the Review of the *Canada Transportation Act* in Parliament. In this report David Emerson presented a key recommendation to envision Canada's transportation system 20-30 years from now and invest today to build that future – and I agree. I would like to thank Mr. Emerson for the work he and his team did to produce this excellent report.

Over the last several months we consulted with Canadians— in person and online. We met with representatives of both industry and workers – including a number of you in the room here today. We sat down with Indigenous groups, non-governmental organizations and individual Canadians. We spoke with provincial and territorial ministers of transport, infrastructure, and with ministers of agriculture.

In all, we held some 150 sessions between May and October – getting the widest possible range of views to gain the best possible understanding of where we need to go and what we need to do.

Informed by the feedback and guidance of Canadians, we are moving forward as a government. Today I am pleased to announce important elements of our Transportation 2030 plan.

To begin, I want you all to imagine what Canada’s economy will look like in 2030.

Without a doubt it will be cleaner and more innovative. Countries around the world today are investing in public transit networks, and smart cities with advanced digital infrastructure with smart roads, smart cars, unmanned aerial vehicles or drones, and distributed energy systems. Norway and Germany are already moving to full zero-emission cars and the world will follow.

Canada’s transportation system in 2030 will be increasingly electrified, supporting alternative fuels like hydrogen, increasingly using rail and renewable fuels in more efficient planes like the C-Series. To ensure Canada’s auto sector, aerospace sector and others remain strong, Canada must be on the leading edge of that change. Canada must invest today in that transportation sector of the future.

If we imagine the year 2030, we also know that trade will be critical for the Canadian economy, and that trade will have shifted significantly to Asia and other developing regions.

For Canada’s economy to succeed we must be able to get Canadian products, services and people to key markets. We must have modern airports and airlines with competitive and quality services. We must have access to advanced gateways with logistics and integrated infrastructure.

To ship our products to the world, we must also protect our environment, protect our coasts, marine habitats and our marine shipping lanes. As we have seen, we must bring our products to market in an efficient manner while taking necessary steps to balance growth with the environment.

This modern, advanced vision of Canada's transportation system in 2030 defines the objective of our government's plan. But in imagining this future, let me be clear I am not imagining wistfully - in no uncertain terms we know this cleaner, more innovative future is coming. We know trade is shifting. These changes are happening today and if we are not ready, we will get run-over by that change, we will be left behind.

It is incumbent on all of us to seize this opportunity – to invest today so we are on the leading edge of that future, not left trying to catch up. Smart investments are the key to growing our economy and creating good, strong, middle-class jobs.

So today, I'm going to give you some of the highlights – and share with you a number of specific announcements. In the weeks and months ahead, I'll be outlining our major undertakings in greater detail – so all Canadians are aware of the improvements we plan to make, and the benefits they will bring.

I will tell you about an integrated, forward-looking plan that involves new actions and encompasses generational change – from the current systems to the ever-more sophisticated technological tools of tomorrow.

I've got a lot to talk about, so I'm going to get right to it.

Let's start with improving the experience of the Canadian traveller.

When it comes to air travel, security is paramount – and will remain so. Everyone understands the imperative to protect travellers in an age of heightened risk. But no one enjoys being delayed at airport security.

Long lineups at screening checkpoints should be the exception but that is not the case. Too many Canadians are waiting too long.

You have been on a tiring business trip. It's late. All you want to do is get home to see your spouse and your kids. Our goal should be to help speed up the process and get you there safe and sound.

We need to do better. By comparison, our competitor countries are doing better. Wait times in Germany, France and Belgium range between 90 and 95 percent of passengers waiting 10 minutes or less. We will work to set internationally competitive targets, allowing Canada's airports to keep up with hubs in other countries.

To improve security screening, we will have to look at innovations, at new equipment and technology. We will also look at CATSA governance. Can we make it more accountable to a service standard and its funding more responsive and sustainable? Ultimately, we want to move more people, faster, through airport screening using new technologies and new methods, whilst improving the quality of screening.

We want to achieve tangible improvements to the traveling experience.

But that's not all. There were two other recurring themes in our discussions with travellers.

The first is a sense of frustration at the cost of air travel within Canada – and the litany of fees and charges.

And the second is confusion regarding a traveller's rights and the extent to which consumers are protected when problems arise.

We are taking action to address both concerns.

In the months ahead, we will be introducing an Air Travellers Passenger Rights Regime – to ensure that Canadians' rights are protected by rules that are both fair and clear.

The new Rights Regime will establish clear minimum requirements so that Canadians will know what their rights are and when they are eligible for compensation – an approach that takes lessons from what other countries are implementing.

Some of the measures we are looking at include compensation standards for passengers denied boarding due to factors within the carrier's control, or in case of lost or damaged baggage.

This will create a more predictable and reasonable approach that will ensure that Canadians understand better what their rights are as they travel by air. This will be done in a balanced way that also ensures air carriers do not suffer undue burden and loss of competitiveness.

At the same time, we will set the conditions for lower fares and increased competition by changing the rules on ownership in Canada's passenger airline industry.

International companies will be able to own 49 per cent of an airline in Canada – up from the current 25 per cent, but a single foreign investor, or combination of foreign investors, will be capped at a maximum of 25 per cent.

This will lead to more options for Canadians, and allow the creation of new, ultra-low cost airlines in Canada.

Consistent with this, I am happy to announce today that two companies will immediately benefit from these new criteria. While I pursue the legislative amendments necessary to complete these changes, I will issue exemptions to two companies, Canada Jetlines and Enerjet, to allow them to immediately pursue increased investment, with appropriate conditions. This is a concrete example of increased services that could become available to Canadians.

We believe that greater competition and strengthened passenger rights within our domestic airline industry will be good for Canadians – providing more choice, greater connectivity, and making fares more affordable, while ensuring that all airlines have an incentive to deliver the best possible customer service.

With the goal of further enhancing the experience of Canadian travellers, our government is exploring the potential for high-frequency passenger rail service in the corridor between Quebec City and Windsor.

And we will also begin working immediately with other federal departments to improve accessibility across the transportation system for people with disabilities and to accommodate our ageing population. Transportation must be more accessible to all.

Today, I want to talk about further improving transportation safety.

The explosion that killed 47 people in Lac-Mégantic was a tragedy for the community, for Quebec and for all of Canada. Beyond the terrible human cost, the incident raised real and legitimate concerns about the safety and security of rail transportation in our country.

Most of you here today know that we have already taken numerous steps to make the system safer. But there is more that can be done.

I can tell you today that the government will speed up its review of the *Railway Safety Act* – so we can move more quickly to further enhance railway safety standards.

Accidents do happen, but we need to learn from experience to avoid accidents in the future.

In line with recommendations from the Transportation Safety Board, we intend to put in place new regulations that will require railways to include video and voice recording devices in locomotives, so that this critical information can be used during accident investigations of the future, while protecting the privacy of employees.

We have already moved to strengthen the *Motor Vehicle Safety Act*. The changes will better protect consumers by giving government new powers to compel vehicle manufacturers to recall and repair defective vehicles at no cost to the owner of the vehicle.

My department is also working to ensure that drones – or unmanned air vehicles – are subject to simple, clear and enforceable regulations. UAVs are contributing to advances in scientific research, exploration and rescue operations. The role of government here is to enable innovation in the use of UAVs while ensuring they fly safely. In fact, I am announcing today that we are certifying the first UAV test site in Canada, located in Foremost, Alberta.

As I have said, we need to focus on investing in the future of our transportation sector so

that it is cleaner, more efficient and more environmentally responsible.

Canada is a partner to the Paris Agreement to reduce greenhouse gas emissions. And we've announced plans to put a price on carbon pollution in all areas of our country.

The transportation sector accounts for almost a quarter of all greenhouse gases in Canada – and 80 per cent of these emissions come from cars and trucks. To reach our goals, we clearly have to take significant action in transportation.

The future of transportation will be in electric cars and vehicles using zero-emission fuels like hydrogen.

As a government, we have already invested 62 million dollars to increase the network of charging stations available to owners of electric vehicles and of other alternative-fuel vehicles. And with the new recently announced Green Infrastructure Fund, I will work with my colleagues in Cabinet to bring more initiatives forward.

On November 1st, we also announced details of tens of billions of dollars of investments in infrastructure in our towns and communities to modernize them and to build the economy of the future.

As part of this plan, our government will be launching a Smart-Cities Challenge to catalyze investment in the Internet of Things including smart roads, smart traffic systems and integrated transportation grids. Through this investment and others, we will focus on accelerating the adoption of zero-emission connected and automated vehicles – vehicles that will be cleaner and safer than today's cars, and will help reduce the pollution caused by traffic congestion. We also announced that we use the Green Infrastructure Fund to invest in projects that will reduce greenhouse gases.

Over the coming year, I will be working with my provincial and territorial counterparts to hasten our transition to a lower-carbon transportation system. We will be setting new, more aggressive tail-pipe emissions and tire standards in cooperation with our North American partners.

As a government, we will work to play a leading role in developing and deploying the new technologies that will help us further reduce the emissions in ports, airports and other transportation hubs.

By focusing on innovation, we can not only meet our own emissions targets – we can lead the world in developing the products and services that will help other countries meet their goals.

Next – and building on our environmental commitments – we will better protect our waterways and coasts, including in the North.

As we've already made clear, we are working to formalize a moratorium on oil tanker traffic along the North coast of British Columbia.

On top of that, we must, and we will, introduce stronger environmental protections for all our coastlines and our oceans. Canada must have a world-class national plan for increased marine safety, emergency response and closer partnerships with Indigenous peoples and coastal communities. You will hear more about this in the coming days.

We will also invest in the North, where the most basic transportation infrastructure remains limited and – in some cases – antiquated. This makes it difficult, time-consuming, expensive, and less safe to move passengers and goods in and out of northern communities. This is simply not acceptable to me. It limits economic opportunities for Northerners and we need to change this.

Transport Canada will work with territorial governments, Indigenous peoples and the communities of the North to better assess their transportation infrastructure needs – whether it's roads, airport improvements or marine investments.

Which leads me directly to the final element of our plan: We will invest in our infrastructure and trade corridors – to ensure our goods and resources can move efficiently within Canada and on to global markets.

Our long-term prosperity as a nation depends on our ability to compete in the world and to create jobs. By investing in our trade corridors, we invest in our own future.

As announced two days ago, we will invest 10.1 billion dollars in transportation infrastructure initiatives to support projects that will help keep people and goods moving as efficiently as possible at gateways, along corridors and across the wide expanse of our country, East, West and the North.

In total, the Fall Economic Statement proposes an additional 81 billion dollars through to 2027–28 in public transit, green and social infrastructure, and transportation infrastructure that supports trade, and rural and northern communities.

The government will also establish the new Canada Infrastructure Bank, an arm's-length organization dedicated to increasing investment in growth-oriented infrastructure, transforming the way we plan, fund and deliver infrastructure across the country.

Our government has made a priority of focusing on the middle class – and those working hard to join it. Investing in trade and transportation infrastructure delivers on that commitment – by creating jobs, making our companies more competitive and establishing Canada as a favourable destination for new investment and the employment that it brings.

Working in partnership with other levels of government and the private sector, we will be investing in trade-critical improvements of national priority such as addressing railway bottlenecks that slow traffic in important export corridors.

We will also be looking to place a renewed focus on information sharing and collaboration – for example, by putting in place a new data regime to support evidence-based decision making by government and all stakeholders.

The motivation here is clear: We need to make smart decisions based on the best possible – and most complete – information. That’s the path to a safer and more efficient transportation system, and to a better understanding of how today’s trends will affect tomorrow’s economy.

If we do it, we should also make sure that data is available to all who operate, oversee, analyze and use the transportation system. Better information will allow us to understand and approach our transportation system as an integrated whole, a complex web of connections and logistics that hold the potential to bolster – or undermine – our economic performance.

As most of you know, we live in a country in which a fifth of all goods are shipped by rail. Demand continues to grow. There are more rail cars than ever on the tracks – at a time when speed of delivery has never been more important.

We need our railways to be efficient and competitive. We need goods to get where they’re going – be it here in Canada, across the border to the United States, or to a port for shipment overseas, in order to better support our economy.

Over the past 30 years, the volume of goods travelling by rail has doubled. Marine traffic has gone up by 50 per cent. Cargo is loaded and unloaded at speeds that would boggle the minds of past generations.

Meanwhile, some of our infrastructure is out of date. Some of our supply routes can’t handle the capacity.

But when we invest in improvements, we see the benefits. For instance, the expansion of the Roberts Bank Rail Corridor in British Columbia has increased the flow of trade between Canada’s largest port and the continental rail system.

And improvements at the Port of Halifax allow it to accommodate the next generation of container ships, while improving facilities for value-added trade.

We must build on these investments to support ongoing economic growth.

This is crucial for small- and medium-sized businesses, which make up about 90 per cent of all Canadian exporters. Inefficiencies and disruptions within transportation networks can mean lost opportunities and higher costs.

Further details of our 10.1 billion-dollar plan for infrastructure will be forthcoming. But I also want to address one very important piece with respect to rail.

I have met with many stakeholders over the last several months with respect to competition and the quality of our rail system – farmers, grain companies, forestry companies, mining companies, the chemical industry and, of course, the railways themselves. I can tell you that Canada has a world-class rail transportation system, but that does not mean it is perfect. It can be better.

Striking the balance is important, and we must move forward. As part of our 2030 plan, our government will introduce legislation in the spring of 2017 to advance a long-term agenda for a more transparent, balanced, and efficient rail system that reliably moves our goods to global markets. As part of this plan, we will :

- Establish the ability to apply reciprocal penalties between railway companies and their customers in their service level agreements,
- better define "adequate and suitable service",
- improve access and timelines for Canadian Transportation Agency decisions; and
- address the future of the Maximum Revenue Entitlement and extended interswitching.

We will continue to work with stakeholders to ensure there's a proper balance in place – one that supports rail customers and delivers continued investments in the system. That's how we will create a freight rail system that is even more competitive and efficient in the long term.

And so to sum up, because I know there's a lot here to digest... To improve the travel experience and prepare our transportation sector for the future:

- We will invest 10.1 billion dollars in transportation infrastructure to help eliminate bottlenecks and build more robust corridors – so travellers and cargo alike can move more swiftly.
- We will introduce more robust environmental protection for our coasts – and stronger safety regulations to better protect Canadians.

- We will look to improve service standards for CATSA to make the passenger screening experience better.
- We will change Canadian airline international ownership rules in order to increase competition and create more options for Canadians.
- We will establish an Air Travellers Passenger Rights Regime to better protect consumers.

Through regulatory action and our investment in infrastructure, we will take action and invest today to build cleaner, more sustainable transit systems, smart cities and a cleaner transportation sector for the future.

By way of conclusion today, I'll say this: the Transportation 2030 plan I've outlined today represents a major renewal of transportation policy in our country. More details will be revealed in the weeks and months ahead.

This much I'm sure is clear: Our work is only beginning. This plan kicks off a large effort to put in place new legislation and new regulations to transform Canada's transportation system and its economy. I am looking forward to taking action and putting this plan to work for Canadians.

This work is shaped by the views and preferences of Canadians. It will be implemented through close collaboration and ongoing communication with my Cabinet colleagues, the private sector, Indigenous groups, other levels of government and the people of our country.

I am very honoured that you are all here today to hear me talk about this plan. I have with me, at the head table, some people who symbolize each of the 5 pillars I have described today.

- We have here today Mr. Tim Shearman, President of the CAA, the Canadian Automobile Association.
- To highlight the importance of transportation safety and my commitment to this priority, I wish to acknowledge the presence of Mr. Denis Lauzon, Fire Chief from Lac-Mégantic.
- Mr. François Adam is here with us today. He is the President of the Institut du véhicule innovant in Saint-Jérôme, an institute that well represents the small- and medium-sized enterprises that make a difference in the future of transportation.

- We often stress the importance of keeping our waterways safe and protecting our coasts and the North. I would like to introduce Mr. Mario Pelletier, Deputy Commissioner at the Canadian Coast Guard.
- From an organization that well represents the country's economic interests and our investments in infrastructure, here is Mr. Duncan Wilson, Chairman of the Board of the Canadian Chamber of Commerce.

By working in partnership, we can build a transportation system that will serve and benefit Canadians for decades to come.

As Canadians, we have always understood both the challenge and the privilege of living in such a vast land.

The blood of our economy runs through the veins of Canada's transportation system.

As travellers, we value the highways, waterways, railways and air carriers that connect us to friends and family, to work and leisure. More than in most countries, we understand and appreciate the relationship between commerce and transportation – the need to move goods and resources through seaways, rivers and lakes, across prairies and through mountain ranges, from the Atlantic to the Pacific, south to our largest trading partner or north toward the Arctic Circle, over great distances and in every imaginable kind of weather.

Some of our defining undertakings as Canadians have been motivated by our transportation needs – the Canadian Pacific Railway, the St. Lawrence Seaway, the Trans-Canada Highway.

We need to invest today to ensure they can work for us amid the demands of tomorrow, and the decades beyond.

Thank you.

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Hon. Marc Garneau

Transport Canada

Transport

Date modified:

2016-11-03

Bringing High Speed Rail to the Toronto-Windsor Corridor

Project will Connect People and Create Good Jobs

May 19, 2017 10:00 A.M.

High speed rail cuts down on travel times, gives people more low-carbon transportation options, and creates new opportunities for workers and businesses. Ontario is supporting economic growth in Southwestern Ontario and across the province by moving forward with high speed rail along the Toronto-Windsor corridor, becoming the first province to undertake a rail transformation of this magnitude.

Premier Kathleen Wynne, Steven Del Duca, Ontario's Minister of Transportation, and Deb Matthews, MPP for London North Centre, were in London today to announce that the province is moving ahead with preliminary design work on the project and investing \$15 million in a comprehensive environmental assessment. Ontario will establish a new governing body to oversee the ambitious work required to design and implement high speed rail.

The announcement comes as the province releases a new report by David Collenette, Ontario's Special Advisor on high speed rail. In 2015, Mr. Collenette was asked to assess the project's feasibility. After extensive consultations, his report has concluded that there is a business case for high speed rail along the Toronto-Windsor corridor and that there are opportunities to engage the private sector in financing and delivering the project.

High speed rail could cut travel times between Toronto and Windsor from four hours to just over two. With high speed rail expanding Ontario's innovation supercorridor to Windsor, businesses will be able to attract the best talent, increase their productivity and support a low-carbon innovation economy.

Investing in high speed rail is part of our plan to create jobs, grow our economy and help people in their everyday lives.

QUOTES

" Building high speed rail along the Toronto-Windsor corridor isn't just a game changer for Southwestern Ontario — it's going to deliver benefits all along the line. Seven million people live along the Toronto-Windsor transportation corridor. High speed rail will get them where they

need to be faster. Whether it means accepting a job that previously seemed too far away, visiting family more often or having ready access to the innovators who can take your business growth to the next level — high speed rail will make a real difference in people's lives and drive economic growth and jobs."

- Kathleen Wynne
Premier of Ontario

" High speed rail will have a transformative impact on travel in Southwestern Ontario, helping people to innovate, connect with each other, and travel for work, study and play. This is just one part of our plan to invest in transit across the province — connecting communities and supporting growth in jobs and the economy."

- Steven Del Duca
Minister of Transportation

QUICK FACTS

- Trains on high speed rails would move at speeds of up to 250 kilometres per hour using a combination of existing track and new, dedicated rail corridors.
- A request for bids for the design required to support the Environmental Assessment for the full length of the Toronto-Windsor corridor will be issued this fall.
- Proposed stops on the new HSR line include Windsor, Chatham, London, Kitchener-Waterloo, Guelph and Toronto, with a connection to Pearson International Airport.
- Ontario will continue to engage with private and public partners, including Indigenous communities and municipalities, while the environmental assessment, design work and ridership forecasting are completed.
- [The Honourable David Collenette](#), a former federal Minister of Transport, has significant experience interacting with diverse and influential stakeholders, as well as knowledge of policy and regulatory issues related to the transportation sector. Since his retirement from Parliament in 2004, Mr. Collenette has served as an advisor to many organizations in the defence and transportation industries.

LEARN MORE

- [Special Advisor for High Speed Rail: Final Report](#)
- [2017 Ontario Budget](#)
- [Building Together, Ontario's infrastructure plan](#)

[Available Online](#)
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High Speed Rail in Ontario:

Transforming mobility, connecting communities, integrating centres of innovation and fostering regional economic growth and development

Special Advisor for High Speed Rail: Final Report

December 2016

December 2, 2016

Dear Minister,

Just over a year ago, the Government of Ontario asked me to be Special Advisor on its commitment to establish High Speed Rail service in the Toronto-Windsor corridor. Throughout the past year I have worked with a dedicated and talented team of officials from the Ministry of Transportation on the concept, preliminary business case, governance structure, financing, and next steps for delivery of High Speed Rail (HSR).

Over the course of this work I have engaged widely with local municipalities, Indigenous communities and public and private sector stakeholders to obtain their advice and considerations on how HSR should be implemented. I have drawn from the experiences other countries have had with HSR, including the United States, United Kingdom, France, Germany, Spain, Japan and China. There have been thorough market soundings with the private sector, organized by Infrastructure Ontario. All of this work has led me to the conclusion that a business case exists for HSR in the corridor, which would connect Toronto, Pearson Airport, Guelph, Kitchener-Waterloo, London, Chatham and Windsor. I have also concluded that there are opportunities to engage the private sector in financing and delivering the project.

I encourage the Government of Ontario to proceed with: detailed project planning; the environmental assessment process; further engagement with Indigenous communities, and key stakeholders including municipalities, the two national freight railway companies, VIA Rail, Metrolinx (GO Transit) and regulatory bodies at both the Ontario and federal level; evaluation of appropriate financing and delivery models; and seeking financial approvals.

I wish to thank you and your colleagues for your cooperation throughout the mandate and wish the Government well in delivering its bold commitment to create Canada's first High Speed Rail service.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'D. Collenette', written in a cursive style.

Honourable David Collenette, P.C., F.C.I.L.T.

High Speed Rail in Ontario – Report by the Special Advisor for High Speed Rail

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Executive Summary

Mandate

On October 30, 2015, the Honourable David Collenette, Privy Councillor (PC) and Fellow of the Chartered Institute of Logistics and Transport (FCILT), was appointed as Special Advisor for High Speed Rail (HSR) to assist the Province in bringing HSR to the Windsor, London, Kitchener-Waterloo, and Toronto corridor.

Tasked to work with public and private stakeholders as well as Indigenous communities, the Special Advisor was asked to identify economic development opportunities, assess international HSR experience in HSR, explore potential financing and delivery models, and provide advice on a preliminary business case for HSR in the corridor. The Special Advisor's advice and recommendations to government are contained in this final report for what would be the first implementation of an HSR service in Canada.

From October 2015 to November 2016, Mr. Collenette has worked to fulfil this mandate, supported by officials from the Ministry of Transportation (MTO). His work included the tasks outlined above, to consider the opportunities and challenges associated with HSR in the Toronto to Windsor corridor, and to make recommendations for implementing an HSR system that meets the needs of Ontarians. The services of Steer Davies Gleave (SDG) were procured to complete a preliminary business case, which laid the groundwork for the development of these recommendations. With the support of the Province's agency, Infrastructure Ontario (IO), a market sounding was conducted with stakeholders representing the financial, engineering, construction, railway operations and equipment sectors, to discuss financing and delivery model considerations that would promote innovation and ensure value for money.

This report reflects the key lessons gathered over the course of this mandate and recommends a path forward for the Province to bring HSR to Ontario.

Vision: High Speed Rail in the Toronto-Windsor Corridor

The Toronto-Windsor corridor is one of Ontario's most diverse and vibrant regions. It is home to more than 7 million people and accounts for 3.4 million jobs and over 50% of Ontario's GDP. It also includes the province's *Innovation SuperCorridor*, with its dense pockets of start-ups, research institutions and world-class talent, as well as leading manufacturing and agricultural hubs.

The Special Advisor's work was governed by the principle that implementing HSR would enhance Southwestern Ontario's strengths and increase its global competitiveness. The goals and objectives for his work are reflected in the following vision statement:

"To transform mobility in Southwestern Ontario in order to connect communities, integrate centres of innovation, and foster regional and economic growth and development."

This vision is supported by three foundational principles for developing HSR in the region, which are reflected throughout this report, and illustrated in Figure ES.1:

- Transform mobility choice in Southwestern Ontario.
- Catalyze economic development.
- Support regional integration and development.

Every community the Special Advisor engaged with expressed a view that HSR would be a transformative project with the potential to support and deliver economic growth. HSR could benefit Southwestern Ontario by providing communities with fast, reliable, intercity connections. It would alleviate pressure on Highway 401 between Toronto and Windsor and support Lester B. Pearson International Airport (Pearson Airport) by freeing up capacity now taken up by short-haul flights. It would also create opportunities for regional development, help shape transportation planning in cities and towns throughout the corridor, and improve interconnectivity and mobility options across Southwestern Ontario. HSR would provide a distinct service on a corridor shared with other passenger services, which requires consideration of how they are aligned to provide the most effective, efficient range of transportation options for travellers.

Figure ES.1: Foundational Principles



Graphic Produced by Steer Davies Gleave

Connecting Communities

The Special Advisor engaged with public and private stakeholders and Indigenous communities throughout his term. He held engagement sessions in each of the four main station-area communities (Toronto, Kitchener-Waterloo, London and Windsor) in February 2016. Attendees included elected officials and/or staff representatives across all levels of government as well as people representing chambers of commerce, boards of trade, academic institutions and key regional industry groups. The Special Advisor met with Indigenous communities in March, April, and May 2016.

Overall, communities along the corridor expressed significant enthusiasm for HSR. Stakeholders and Indigenous communities at the engagement sessions acknowledged that frequent, efficient and fast public transportation between regional hubs is essential to the prosperity and long-term growth of the corridor. However, this initial engagement also highlighted the need for the Province to demonstrate a clear case for HSR and to work in close partnership with communities to ensure that the project is integrated with regional economic and transportation priorities.

All communities would like to be informed of the HSR business case results as the project develops and be engaged, with an emphasis on collaboration, transparency and information-sharing.

Indigenous communities emphasized their desire to be considered true economic partners, as well as the importance of ensuring a project of this nature is constructed in an environmentally-sensitive way.

Key recommendations to pursuing HSR include ensuring that municipalities and Indigenous communities are included in the economic opportunities associated with HSR, and that the Province works closely with partners at all levels on HSR planning, development, and implementation.

This should include identifying opportunities to integrate local transit to ensure first-mile/last-mile connections are made.

Implementation of HSR

Preliminary Business Case

As informed by the preliminary business case analysis, it is recommended that HSR in the Toronto-Windsor corridor be implemented in two phases. Phase One would connect Toronto with Kitchener-Waterloo and London, while Phase Two would extend the route to Windsor.

In addition to the government's commitment to advancing HSR between Toronto, Pearson Airport, Kitchener-Waterloo, London and Windsor, the preliminary business case also demonstrated the value of additional HSR stations at Guelph and Chatham. HSR stations in these cities would increase ridership and intercity connections in the corridor.

HSR Costs and Benefit-Cost Ratio (BCR)

To assess the viability of HSR in the Toronto-Windsor corridor, the preliminary business case examined two HSR scenarios:

- **Scenario A:** Electrified HSR service operating primarily on a dedicated right-of-way and capable of achieving a top speed of 300 km/h.
- **Scenario B:** Electrified HSR service capable of achieving a top speed of 250 km/h operating on a combination of mixed conventional and dedicated railway.

To compare the scenarios, a detailed assessment of Benefit-Cost Ratios (BCR)^{*} was undertaken to compare the net benefits that each scenario would yield in relation to its costs. The assessment found that Scenario A yielded a BCR of 0.36 for Phase One (Toronto-London) and a BCR of 0.17 for

^{*} The BCR is a value for money indicator and compares the net benefits of HSR against the net costs of the project. BCRs greater than one indicate that the project will yield economic benefits above its costs. BCRs below one indicate that a project's costs outweigh its total net benefits. The BCR is calculated using "uplifted" capital costs.

Phase Two (London-Windsor), and was therefore not a viable option. Scenario A's low BCR was due to extensive tunnelling requirements, yielding base direct* and base uplifted capital† costs of over \$19 billion and \$56 billion respectively for the full Toronto-Windsor corridor.

In contrast, Scenario B was found to have a BCR of 1.02 for Phase One and a BCR of 0.24 for Phase Two. The difference in BCRs was due to the relatively higher levels of HSR ridership in the Toronto-London segment. Costs for this scenario were also found to be significantly lower compared to Scenario A, at approximately \$7.5 billion base direct costs and \$21 billion base uplifted capital costs for the full Toronto-Windsor corridor.

A key conclusion from this analysis is that Scenario B is the preferred option for HSR. Additionally, the business case for HSR is strongest between Toronto, Kitchener-Waterloo and London. This part of the corridor demonstrates high levels of economic and population growth and is one of Canada's most innovative regions. This portion of the HSR line would generate significant ridership and benefits, and it is therefore recommended that it be delivered in a first phase with operations targeted to start as soon as 2025.

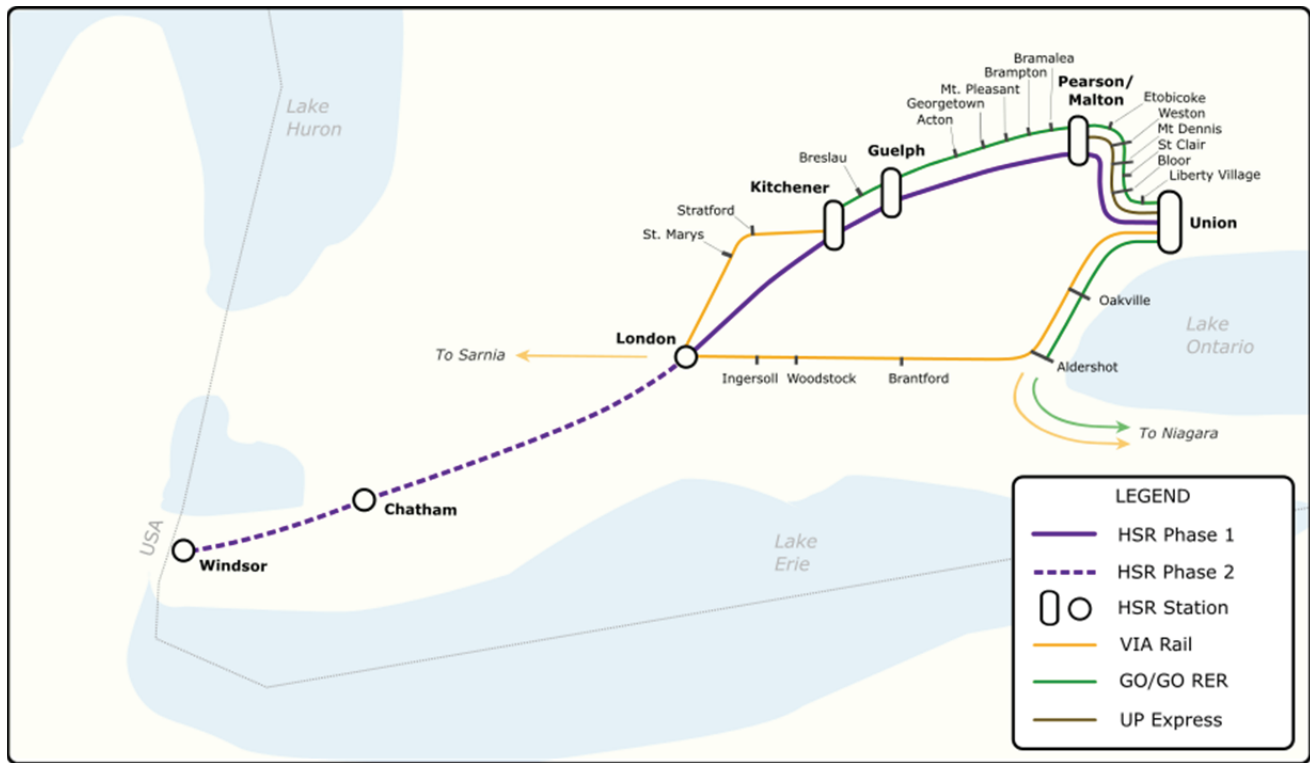
Between London and Windsor, the case for HSR can be recommended on socio-economic and regional development grounds. The preliminary business case results demonstrated that this portion of the service is best built in a second phase, once ridership to London and revenues have been established. The business case for a Windsor connection could also be strengthened once future international connections to the United States rail system through Detroit to Chicago are considered and planned.

The following figure illustrates the Special Advisor's proposed future Southwestern Ontario passenger rail network with a 250km/h HSR system. Recommended phasing, station locations and alignment are described further below.

* Base direct costs do not include a contingency and reflect the total gross costs of implementing HSR within one year.

† Uplifted capital costs include several cost contingencies based on assumptions for as-yet unknown expenditures. These costs also include a contingency of 66%; it should be noted that other transportation projects in Ontario apply a contingency ranging from 10% to 50% depending on the stage of the project.

Figure ES.2: Proposed Future Southwestern Ontario Passenger Rail Network



Phasing and Service

General Service Overview

The HSR corridor is currently shared with GO Transit to Kitchener-Waterloo, with VIA Rail beyond that to London and Windsor, and with freight traffic. HSR service levels must be customer-focused and well-integrated with existing services to ensure a range of complementary travel options.

In order to achieve service optimization, HSR and RER will interoperate between Toronto and Kitchener. It is also proposed that HSR replace VIA Rail on the Kitchener corridor, in order to ensure the route is not over-served; however, VIA Rail would still maintain a number of services in Southwestern Ontario. A codesharing agreement between VIA Rail and HSR would ensure that the rail system in Southwestern Ontario is seamless and integrated.

Phasing and Service by Segment

Toronto to Kitchener Segment (Phase 1)

Departing from Toronto's Union Station, HSR trains would travel along GO Transit's Kitchener corridor, stopping at Malton for Pearson Airport, and at Guelph station. HSR trains would share the corridor with the Union Pearson (UP) Express before it branches off to Pearson Airport, and with GO

RER services on the corridor to Kitchener. This service interoperation is likely to require a number of infrastructure upgrades; the initial assumptions, subject to further detailed capacity analysis, are described in the preliminary business case. Since track upgrades, expansions, speed improvements and electrification of the Kitchener corridor will be implemented under the GO RER plan, there are opportunities to share costs between the two services. HSR operating speeds are planned to be up to 250 km/h, however HSR interoperation with other services on these upgraded lines will restrict the areas where this speed will be possible (subject to operational modelling). In terms of frequencies on this segment, the proposed HSR service would offer three trains per hour during peak periods, and two trains per hour off-peak.

Kitchener to London Segment (Phase 1)

Westward from Kitchener-Waterloo's planned multimodal station HSR trains would travel on newly-built dedicated tracks to London. This new two-track corridor would be constructed from Kitchener to London adjacent to the existing hydro corridor. This would require extensive engagement and study with Hydro One and various stakeholders, Indigenous communities, and landowners to ensure public safety and the proper functioning of the infrastructure in relation to the hydro right-of-way. Building dedicated tracks for HSR would allow the trains to achieve sustained speeds of 250 km/h for the majority of the segment, significantly improving travel times.

London to Windsor Segment (Phase 2)

From London to Windsor, HSR would operate on a new bi-directional, electrified track adjacent to the existing CN and CP corridors.

Stations

The following recommendations provide guidance on where the HSR stations should be located, the infrastructure improvements that would be necessary at station locations, and how the service should be operated to maximize value. In general, HSR trains would require level boarding platforms at all stations to provide seamless accessibility for all passengers.

HSR Phase One: Toronto to London

Union Station, Toronto: The eastern terminus for HSR would be located at Union Station, providing a key connection to downtown Toronto and allow connection to the GO RER network and municipal transit. To accommodate HSR and its riders, Union Station would need to address capacity constraints. Metrolinx is currently exploring capacity options to provide services for GO RER.

Pearson Airport: Initially, the airport would be served from an expanded Malton GO Station. The Province would work with the Greater Toronto Airports Authority (GTAA) to provide a people-mover system linking HSR riders to Terminals 1 and 3 and to parking facilities. In the future, the Province could work with the GTAA to provide direct access for HSR to support their plans for the Pearson Airport multimodal hub.

Guelph: The historic multimodal terminal would be expanded to accommodate an HSR stop. This would require station and track expansion, including the construction of an additional platform, as well as a third passing track.

Kitchener-Waterloo: The City of Kitchener has plans underway to build a new multimodal station slightly to the west of the existing VIA Rail station. HSR would stop at this new station, connecting the system to local services such as Waterloo's ION Light Rail Transit (LRT) and Grand River Transit buses.

London: A new multimodal station constructed at downtown London's existing VIA Rail station would be part of the city centre's multimodal hub development. Once completed, this hub would include two new HSR platforms, three VIA Rail platforms for continued Toronto-London service via the CN South Main line and local service to Kitchener via Stratford, as well as connections to the London Shift Bus Rapid Transit (BRT) service and other local bus services.

HSR Phase Two: London to Windsor

Chatham: HSR would be extended westward from London to Chatham. The existing VIA Rail station in Chatham would be refurbished and a second platform would be built to accommodate the new HSR service.

Windsor: A new station would be constructed in Windsor. The station would be most suitably situated at a point somewhere on the CP main line near the downtown, which would reasonably allow for future expansion of HSR service to Detroit through the existing rail tunnel under the Detroit River. HSR service could eventually connect to Chicago.

Benefits of HSR

HSR will present a significant change to the transportation landscape in the Toronto-Windsor corridor. In 2041, over 10 million travellers annually are forecast to use HSR and the service will capture an 11% mode share in the corridor, taking more than five million cars off of Southwestern Ontario's highways.

This will support the Province in reducing the carbon footprint of passenger transportation in the corridor and improving transportation efficiency. Overall, HSR will yield over \$20 billion in economic benefits over 60 years from passenger travel time savings, automobile operating cost savings, GHG reduction benefits, benefits from reduced congestion on roads, and other wider economic benefits.

One of the most significant benefits of HSR will be travel time savings. HSR is anticipated to offer savings of between 40% and 60% over current average journey times. In particular, HSR will nearly halve existing average travel times between city pairs along the Toronto-Windsor corridor. For example, travel times between Toronto and Kitchener-Waterloo will be reduced to a minimum of 48 minutes with HSR, down from the current average of 74 minutes by automobile. Travel times

between Kitchener-Waterloo and London will be reduced to a minimum of 25 minutes from the current average of 46 minutes by automobile.

In terms of environmental benefits, it is estimated that HSR in the Toronto-Windsor corridor will reduce greenhouse gas (GHG) emissions by over 7 million tonnes over a 60-year time horizon.

HSR will also generate wider economic benefits (WEBs) stemming from the increased labour mobility and connectivity between companies within a geographic area.

Governance

Good governance is critical to project success and a key determinant of whether projects are completed on time and on budget, and whether they fulfill the government's objectives for the project. When implemented, HSR will present a new form of transportation in Ontario distinct from any other mode of travel. The Special Advisor therefore recommends the development of a new governing entity for HSR.

A dedicated governance system for HSR will not only ensure that the service meets the Province's objectives but also that the needs of communities in the Toronto-Windsor corridor are considered. It will provide the right expertise to deliver service on a complex system that is partially shared with GO RER commuter services.

Under this recommended model HSR would be authorized by statute, which would establish a new entity, High Speed Rail Corporation (HSRCO), with an appointed Board of Directors.

The intention is that HSR design and the environmental assessment (EA) process will be advanced by MTO. As the project moves into construction and procurement, HSRCO will comprise a larger team of dedicated rail professionals, both from government and the private sector to ensure the project's success. This model has been successfully used most recently to create the High Speed Two (HS2) Limited Company in the U.K. and the California High-Speed Rail Authority in the U.S.A.

Financing and Delivery

HSR will represent the largest infrastructure project undertaken by the Province. Consideration for how it will be financed and delivered is therefore critical, especially to ensure that the risks and costs of the project are managed. As is often the case for public transportation and other works for public good, capital costs for HSR systems are generally not fully recoverable through fares and other operating revenues alone. Although revenues typically cover operating and maintenance costs for HSR systems internationally, reliable financing and funding are always required to deliver the capital infrastructure.

To support the development of financing and delivery recommendations, the Special Advisor, with support from MTO, undertook an analysis of models applied internationally and a market sounding of private-sector interests, with the support of IO. The IO-facilitated market sounding showed that private-sector interest in the project is high overall, but the results and an analysis of international experience both indicated that deciding on a specific model at this point in the project would be premature. It is reasonable to agree in principle that an Alternative Financing and Procurement (AFP) model is a viable option for aspects of the program to finance and deliver HSR; however, a full value for money (VfM) analysis will need to be conducted during the EA process. A VfM analysis would compare traditional procurement models to the different options available under an AFP in order to determine the optimal model that will manage risks and costs, deliver innovation, and ensure on-budget and on-time delivery.

It is suggested that the Province continue to engage key private-sector partners throughout the HSR project. This could include engaging in a follow-up market sounding once more project details become established. This should include re-engaging participants and potentially broadening to other private-sector interests as well.

Next Steps

In parallel to the work the Special Advisor has conducted over the course of the past year, MTO has continued to advance the planning work for HSR in the Toronto-Windsor corridor. This has included supporting the Special Advisor with the development of the preliminary business case, as well as undertaking modelling and forecasting work and early preparations for the EA process.

To support MTO in advancing the project and to reach a target operational date for HSR of 2025, the Special Advisor recommends that the Province undertake a number of key next steps. These include the following phases:

1. Planning.
2. Approvals and Design.
3. Design and Construction.
4. Maintenance and Operation.

Additionally, parallel work streams will be pursued throughout the project including the analysis of financing and delivery models, linkages to GO RER planning, and extensive engagement. Steps to advance this work should be taken in the near term.

Following the completion of this report and the preliminary business case analysis, MTO should continue to pursue planning work by undertaking preliminary investigations into appropriate Building Information Modelling (BIM), HSR infrastructure and rolling stock standards, procurement strategies, and research potential vehicle specifications and regulatory frameworks.

After completion of the planning phase, the next major step is the approvals and design phase. This includes procurement of EA approvals, engineering design, land acquisition support, as required, and construction monitoring. EA approvals will include the federal process through the Canadian Environmental Assessment Agency and the provincial Transit Project Assessment Process.

As part of ongoing engagement throughout the HSR project, it will be important for MTO to engage extensively with Indigenous communities and municipalities, among others, as detailed in Chapter 2 of this report. In addition, MTO should pursue early engagement and or/ working-group activities with Metrolinx and Transport Canada. Hydro One is also an important partner, as MTO will need to engage with the company on power grid access and supply. Furthermore, it is proposed that HSR run adjacent to the existing hydro right-of-way between Kitchener and London, which will require working closely with Hydro One as well. CN and CP are also critical stakeholders that will need to be engaged since HSR will interface with the CN and CP corridors west of London.

The “Design and Construction” and “Maintenance and Operation” phases will be pursued in the future. Design and construction should ideally start by 2022 to reach a target operational date of 2025.

Introduction

This section introduces the concept of high speed rail (HSR) by providing an overview of HSR systems around the world, and describes the ongoing work to develop HSR in Ontario.

High Speed Rail (HSR)

High Speed Rail (HSR) is a form of passenger rail transportation that operates at significantly faster speeds than conventional train technologies. The Paris-based Union of International Railways (UIC) references the European Council definition of HSR as systems that operate at speeds on the order of 200 km/h on upgraded, existing corridors and at speeds equal to or greater than 250 km/h on new corridors.¹

Although the above definition has become widely accepted internationally, standards and definitions of HSR are still variable and dependent on regional and national contexts; HSR systems vary around the world in terms of train length, speed, type and technologies. Most are described as falling within one of the following general categories: dedicated, mixed conventional, or fully mixed.

Dedicated These HSR networks are purpose-built for HSR trains only, are fully electrified and feature dedicated tracks and advanced signalling systems to allow for faster speeds and higher service frequencies. They typically cover long distances and link major metropolitan areas. The Japanese *Shinkansen* (“bullet train”), linking major urban centres across Japan with operating speeds of up to 320 km/h, best exemplifies this model (see Figure I.1).

Mixed Conventional These networks feature a mix of conventional passenger rail and HSR operating on shared corridors. One such example includes France’s *Train à Grande Vitesse* (TGV), an integrated network featuring 300+ km/h systems on dedicated tracks with traditional 200+km/h lines on conventional tracks (see Figure I.2).

Fully Mixed These HSR networks feature a combination of HSR and conventional passenger and freight rail on the same corridor. The German Intercity-Express (ICE) is based on this model as is Amtrak’s Acela Express in the U.S. (see Figures I.3 and I.4).

Figure I.1: The Shinkansen System, Japan



Source: *The Government of Japan*

Figure I.2: The Train à Grande Vitesse (TGV) System, France



Source: *EURail*

Figure I.3: The Intercity-Express (ICE) System, Germany



Source: EURail

Figure I.4: The Acela Express System, United States



Source: Amtrak

Every high speed rail system is different since each system must take city population sizes and the distances between cities, topography and existing infrastructure into account. Tracks for conventional trains can be used by high speed trains but if train speeds are planned to exceed 200 km/h, increasingly intensive maintenance is required. As well, signalling systems along the tracks where trains are travelling at speeds higher than 200 km/h need to be replaced with systems installed on the trains themselves. Because mixed train fleets with large differences in average speeds reduce track capacity, an HSR strategy that supplements the capacity of networks when they reach their limits is often implemented.

High speed travel requires specialized trains that comfortably transport passengers and meet aerodynamic, system reliability and safety requirements.

Other Jurisdictions

Many countries, recognizing the benefits of moving people at fast speeds over great distances, are upgrading existing tracks and building new dedicated ones to create HSR networks. Of particular note are those planned or already under construction in France, Spain, Germany, China and the United Kingdom, where the planned new High Speed Two (HS2) line will link the North of England to London and improve connectivity to the existing High Speed One (HS1) line and the Channel Tunnel link to continental Europe. The common theme across jurisdictions is that these projects will expand interconnectivity between economic and population hubs, as well as to wider transportation networks.

In North America, Amtrak is the only railroad currently operating and maintaining tracks over 160 km/h; Amtrak's Acela Express, which achieves a top speed of 241 km/h (150 m/h) serving the Boston-New York-Washington corridor, is the only HSR system currently in operation in North America.² Many factors have limited HSR's development on this continent including geography, long distances between cities, mixed corridor ownership, the primacy of freight over passenger services, the public preference of car travel over rail; and, perhaps most important, the political willingness to support the huge investment over more than one election cycle.

To further reduce trip times, Amtrak recently announced a USD \$2.45 billion investment (CDN \$3.2 billion) to improve infrastructure and introduce new European-designed rolling stock (the vehicles that operate on the railway track) that can achieve top speeds of 300km/h, a major departure from normal North American practice.³ The U.S. Department of Transportation's Federal Railroad Administration (FRA) has always had higher thresholds for passenger train crashworthiness than European standards. FRA standards were developed because passenger trains in North America share rail corridors with longer, heavier freight trains.

Given the integration of American and Canadian freight rail operations, this country's rail safety regulator, Transport Canada, has always adhered to FRA standards. Now the FRA has modified its regulations in consultation with Amtrak, recognizing that modern train signalling and safety measures have made the interoperation of traditional freight trains and passenger vehicles much safer. The new Amtrak-FRA agreement will have positive implications for passenger rolling stock acquisition in Canada and particularly for high speed rail.

HSR investments are also being made in California, where North America's latest HSR project is currently under construction. Once completed, phase one will link San Francisco to Los Angeles and phase two will link Sacramento to San Diego. Operations are anticipated to commence in 2029.⁴ Other potential HSR corridors are being studied in the U.S., including New England, Florida, Texas, Pennsylvania, and Colorado/New Mexico.

High Speed Rail in Ontario

Canada is the only G8 country that does not yet have an HSR system under construction or in operation. However, the concept has been considered and studied for a number of years in Ontario. Most recently, in 2014, the Government announced its decision to pursue further study of HSR between Toronto and Windsor in Southwestern Ontario. Specifically, the Minister of Transportation's 2014 mandate letter committed to "advancing environmental assessments for high-speed rail—building on the GTHA's forthcoming Regional Express Rail network—which will link Toronto, Lester B. Pearson International Airport, and Waterloo Region and London, as well as London and Windsor." This commitment was reiterated in Budget 2015.

To advance this mandate, in October 2015, former federal transport and defense minister the Honourable David Collenette, Privy Councillor (PC) and Fellow of the Chartered Institute of Logistics and Transport (FCILT), was appointed as Special Advisor for High Speed Rail (HSR) to the Minister of Transportation to continue to advance HSR in the province.

The Special Advisor was tasked to provide advice to government on the implementation of HSR service between Toronto, Lester B. Pearson International Airport (Pearson Airport), Kitchener-Waterloo, London and Windsor, generally referred to as the Toronto-Windsor corridor. Mr. Collenette's mandate included working with public- and private-sector stakeholders and Indigenous communities to identify economic development opportunities associated with high speed trains, assessing international experience with HSR, and providing advice to government about a preliminary business case and financing and delivery models.

Over the course of the past year Mr. Collenette, supported by officials from the Ministry of Transportation (MTO), undertook the following key tasks:

- Oversaw a preliminary business case analysis for alternative service scenarios, to identify travel time, ridership and other economic benefits associated with HSR.
- Worked with the Premier's Business Advisor, the Ministry of Economic Development and Growth, and other ministries to ensure HSR is aligned with the government's economic development agenda.
- Held engagement sessions with public- and private-sector stakeholders, as well as with Indigenous communities, to identify the opportunities and challenges associated with HSR in the Toronto-Windsor corridor and to build a relationship with communities early in the HSR project.
- Assessed HSR experience in other countries and compiled key lessons that could be applied to support a system that meets the needs of Ontarians.
- Conducted a market sounding with the support of Infrastructure Ontario (IO) to engage stakeholders representing the financial sector, engineering and construction firms, and operators and equipment providers to discuss key considerations with regard to financing and delivery models that will promote innovation and ensure value for money.

Budget 2016 referenced the Special Advisor's report under the section "Supporting Ontario's Innovation SuperCorridor," which underscores the importance of HSR from the perspective of economic development.

It is also important to note that, in parallel with the Special Advisor's work, MTO has been undertaking several additional tasks to advance the environmental assessment (EA) process for HSR. This includes starting work on a demand forecasting model, as well as planning for the procurement of technical and design studies. The Special Advisor's recommendations and advice will ultimately help to guide the direction of HSR work for the Province.

The Province has been studying the feasibility of HSR for more than two decades. In 1991, it implemented the Ontario/Quebec Rapid Train Task Force, whose findings provided a basis for studies conducted in 1993 and 1995. In 2011, a detailed study on the feasibility of HSR between Windsor and Quebec City, referred to as the EcoTrain report, was conducted jointly by MTO, Transport Canada, and the Ministère des Transports du Québec (MTQ).

In 2014, the Province retained the British transportation consulting firm First Class Partnerships (FCP) to conduct a pre-feasibility study of HSR on a specific segment of the previously studied corridor between Toronto and London. This segment forms a key area within Ontario's Innovation SuperCorridor, whose dense pockets of start-ups, research institutions and world-class talent comprise one of Canada's most innovative regions.

These two recent studies determined that HSR service in Ontario is conceptually feasible and has the potential to realize benefits for the Province.

The Special Advisor's extensive engagement, research and business case analysis over the past year have taken these previous studies of HSR to the next level, demonstrating that there is a tremendous opportunity to bring HSR to the Toronto-Windsor corridor.

As part of Ontario's transportation system, HSR can connect communities, generate economic growth and opportunity, and support the Province of Ontario in its desire for *Moving Ontario Forward*. Recommendations for the implementation of HSR in Southwestern Ontario are included throughout the report, as well as key considerations for the Province to support decision-making.

REFERENCES

¹ Union of International Railways (2016). *High Speed*. <http://www.uic.org/highspeed#General-definitions-of-highspeed> and European Council (2007).; *DECISION No 1692/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 1996 on Community guidelines for the development of the trans-European transport network*. http://ec.europa.eu/transport/sites/transport/files/wcm/infrastructure/grants/2008_06_20/2007_tentative_guidelines_en.pdf, 8.

² National Railroad Passenger Corporation (2016). *Amtrak National Facts*. <https://www.amtrak.com/national-facts>.

³ Leeds, Christina (August 26, 2016). *Amtrak Invests \$2.4 Billion for Next-Gen High-Speed Trainsets and Infrastructure Upgrades*. <http://media.amtrak.com/2016/08/1610/>.

⁴ California High-Speed Rail Authority (June 2016). *California High-Speed Rail Big Picture*. http://www.hsr.ca.gov/docs/newsroom/fact%20sheets/Big_Picture_Factsheet.pdf.

Chapter 1

Travel in the Toronto-Windsor Corridor

This section describes the range of transportation and travel options available in the Toronto-Windsor corridor, with a focus on the evolution of freight and passenger rail services. Historically, the majority of rail lines in the corridor were owned by freight companies, which necessitated the sharing of tracks and initially constrained the development of passenger rail service. Recently, more focus has been placed on improving passenger rail service, including infrastructure investments through Moving Ontario Forward to support increased track capacity and electrification, which will support GO Regional Express Rail (RER) and provide faster, more frequent passenger service. Further work will be required to coordinate all intercity passenger rail services, including GO RER, VIA Rail, and HSR. Work is also underway to rationalize (align and accommodate) freight and passenger rail services. Together these commitments will set the stage not only for improved rail service in the Greater Toronto and Hamilton Area, but also for HSR service in the Toronto-Windsor corridor.

Rail Services

Track Ownership and Mixed Freight/Passenger Services – An Overview

The relationship between the owner of a rail corridor and companies paying to use the corridor often entails negotiations over use and service. In North America, the vast majority of rail lines are owned by freight companies that also operate their businesses on those lines.

When freight companies own rail lines, they give priority to freight trains over passenger trains. Freight trains can be as long as three kilometres and for freight businesses to succeed, these trains need to be kept moving. The movement of goods is itself key to the success of the economy and by its nature requires flexibility in its scheduling. When various services share track, capacity challenges and operational constraints are created for all of them, including for train schedules and the speeds trains can achieve.

In Southwestern Ontario, passenger rail services, including VIA Rail and GO Transit, have traditionally had to negotiate and share track space with freight companies, and specific passenger train paths are agreed to between the freight companies and GO Transit. Each additional GO Transit service that Metrolinx wants to introduce first requires negotiation with the freight companies.

Many of Southwestern Ontario's rail lines were built or bought in the nineteenth and early twentieth centuries by the Canadian National Railway (CN) and the Canadian Pacific Railway (CP), still the two main private freight companies operating lines in the Windsor-Toronto corridor today.

Starting with the introduction of the *National Transportation Act* in 1987, and continuing with the adoption of the *Canada Transportation Act* in 1996, both CN and CP closed unprofitable lines and sold others to freight operators (shortline railways) or passenger operators.

GO Transit, which is now a division of Metrolinx, purchased a number of the lines or sections of track to provide almost exclusive commuter services in the Greater Toronto and Hamilton Area (GTHA), including portions of the Kitchener GO line; some freight access rights continue to be in place on the corridors, although access is restricted to outside of peak passenger hours. The exception was a 14-kilometre stretch of track between Georgetown and Bramalea, which still forms part of CN's main freight line and is the only non-Metrolinx-owned section of track between Toronto and Kitchener-Waterloo. Metrolinx now owns 80% of the GO Train corridor network, which it has progressively purchased from the freight rail companies.

The Evolution of GO Train Service to Kitchener

GO Train service has increased over time to meet demand, and work is ongoing to continually improve service. Current efforts are focused on building infrastructure and on electrification, both of which will enable GO RER service and future HSR service. Of particular note for HSR is the evolution of, and plans for, the Kitchener line.

GO Trains were introduced by the Province in 1967, connecting Pickering, Toronto and Oakville along the north shore of Lake Ontario. In 1974, a new service was implemented between Toronto's Union Station and Georgetown, which today forms part of the Kitchener line. More trains have been added over time in response to increasing ridership.

Initially, GO Trains operating on what is now known as the Kitchener line terminated at Georgetown. In December 2011, service was expanded west to Guelph and Kitchener, with two peak trains departing eastbound from Kitchener to Toronto on weekday mornings and returning from Toronto in the afternoon, with travel times of approximately 125 minutes. This service level remained more or less the same until 2016.

In September 2016, GO extended two morning and two afternoon peak train trips that had been running between Georgetown and Union Station to now also serve Acton, Guelph, and Kitchener. This doubled the number of weekday train trips between Kitchener and Toronto. GO also introduced a new express bus service running all day between Kitchener and the Bramalea GO station, timed to allow bus passengers to transfer to trains.

Moving Ontario Forward, GO RER and Electrification

In spring 2014, the Province announced its *Moving Ontario Forward* plan, committing \$29 billion over 10 years to build an integrated transportation network across the province. This commitment was increased to \$31.5 billion in the 2015 budget. *Moving Ontario Forward* ultimately falls within the largest infrastructure investment plan in Ontario's history: a total of \$130 billion over ten years for critical infrastructure. As part of this plan, on April 17, 2015, the Province and Metrolinx announced commitments for Ontario's first RER network. The concept of regional express rail originated in Europe as a system to link suburban commuters to the downtown core.

The program includes implementing electric trains that run all day and in both directions within the most heavily travelled sections of the Metrolinx network, including a portion of the corridor from Toronto to Kitchener-Waterloo. Under this plan, core segments of the GO network will feature all-day service with faster trip times operating at expected maximum speeds of 160 km/h based on the number of station stops on each corridor. The track alignment design on the Kitchener corridor is assumed to accommodate possible speeds of up to 200 km/h, although faster speeds are assumed not to be precluded. The envisioned electrified GO RER services would offer frequent, all-day stopping services, either terminating at or passing through Union Station.

Under the 2015 GO RER budget commitment, the government allocated funding for the first stages of electrification of the Kitchener line as far as Bramalea, with planned service every 15 minutes. This commitment was expanded in 2016 to include all-day, electrified service to Kitchener.

Considerations and Implications

A main challenge facing HSR in the Toronto-to-Windsor corridor is the number of current freight and commuter passenger operators that share infrastructure, including VIA Rail semi-express services connecting cities with limited stops and GO Train stopping services serving multiple stations. With the expansion of GO RER on the Kitchener corridor, these challenges can be expected to become more significant.

Because the Province has indicated that the Toronto-to-Kitchener-Waterloo corridor should be served by a combination of HSR and GO RER service, a reference point for this study will be how these two concepts can best serve the travelling public and taxpayers in general. In the absence of a coordinated approach, there is a risk that current commitments and plans could result in three publicly-funded services (HSR, GO RER, and VIA Rail) all competing for passengers on the same corridor. The Special Advisor's recommended approach seeks to mitigate this risk and provide the best overall connectivity for the travelling public through a service plan coordinated between federal and provincial services.

Union Station in Toronto was originally designed to accommodate long-distance passenger trains and relatively low passenger volumes; increased train services through this hub will require re-consideration of existing infrastructure. Although significant improvements have been made in recent years to accommodate an increasing number of passengers and to better integrate local, regional, and long-distance services, the long-term capacity required to accommodate future GO RER and HSR passengers will also need to be considered.

GO RER and ultimately HSR services will require a significant increase in the capacity and efficiency of the Kitchener corridor and will only be possible if the majority of freight traffic bypasses it or is removed, allowing it to become a predominantly passenger corridor. The government's preferred option is to build a freight bypass in return for Metrolinx assuming ownership of the portion of the Kitchener line currently owned by CN. This proposed solution has been termed "rail rationalization."

On June 14, 2016, the Province announced an agreement-in-principle with CN that began technical analysis and planning for the construction of a new freight line. When built, the bypass will separate the majority of freight and passenger services, allowing CN to shift its traffic between Georgetown and Bramalea to the new freight line, as there is insufficient space in the corridor to provide for both freight and passenger services. Once it is complete, Metrolinx will own the entire Kitchener corridor and have sufficient flexibility to meet its GO RER commitments. HSR will also be able to successfully operate on the corridor once the majority of freight traffic is removed.

VIA Rail

Ontario's plans for HSR will need to consider VIA Rail's intercity services in Southwestern Ontario. In comparison with an HSR service, average travel times on the current VIA Rail system are lengthy, at 95 minutes from Toronto to Kitchener, 153 minutes to London, and 255 minutes to Windsor.

In 1977, the federal government formed VIA Rail, Canada's national passenger rail corporation. In the 1980s and 1990s, following budget cuts and declining ridership, VIA Rail's services were gradually withdrawn from many communities across Southwestern Ontario. Today trains operate on two lines in the Toronto-Windsor corridor: the former CN North Main Line through Guelph, Kitchener, Stratford, St. Marys and London; and the CN South Main Line through Brantford and Woodstock to London, which then continues to Windsor. VIA Rail also offers one train trip per day both ways between Toronto and Sarnia. Additional trips to Sarnia are offered by an intercommunity bus connection provided by Robert Q Airbus from the London VIA Rail station.

Since 2014, VIA Rail has indicated its intention to acquire dedicated tracks to offer electrified "High Frequency Rail" (HFR) service in the Quebec-Windsor corridor, though details for HFR are not yet known. It has indicated that it hopes to attract private investment for the necessary infrastructure investments. Recent announcements include its intention to build new track in Eastern Ontario via Peterborough as part of its plan to acquire dedicated tracks.

The 2016 federal budget committed \$3.3 million in funding for Transport Canada to further study the HFR proposal, and also committed \$7.7 million for VIA Rail to proceed with pre-procurement and technical studies for fleet renewal and safety upgrades. At the time of writing this report, the federal government had not yet confirmed its long-term plans for VIA Rail in Ontario; however, it has publicly expressed interest in HFR and the potential to increase train frequencies in the Toronto-Ottawa-Montreal corridor.

Bus Travel

The bus industry has played a crucial role in delivering transportation options for Ontario residents for more than a century. Ontario's economic regulatory regime was established in the 1920s to ensure that intercommunity bus operators served both large urban centres and small, rural and remote communities across the province. These operators were almost exclusively private, and were required to subsidize their unprofitable routes or services with their profitable routes. This is no longer the case, and there have been reductions and discontinuances of unprofitable scheduled service routes for Ontario's small, rural and northern communities in recent years as companies have started to require that their individual business lines be independently profitable.

Currently the private bus company Greyhound has operating licences for intercommunity bus services between Toronto and Windsor, which is one of their high-volume corridors. Greyhound also offers a number of daily bus trips to and from cities within the corridor. As of November 2016, these included

- Toronto to Kitchener-Waterloo (21 trips)
- Kitchener-Waterloo to Toronto (18 trips)
- Toronto to London, and London to Toronto (12 trips each way)
- Toronto to Windsor, and Windsor to Toronto (4 trips each way)

With the exception of Pearson Airport, Greyhound serves all the station stops proposed for HSR as well as a number of smaller communities along the route. Larger cities in the corridor usually have more than one Greyhound bus stop.

In 2016, the Province consulted with stakeholders and the public on intercommunity bus modernization, discussing whether to maintain the current approach to regulating buses in the province, or to pursue de-regulation. At the time of writing, no consensus has been reached among stakeholders on a preferred approach; however, the Government continues to work with bus operators, communities and other key stakeholders to establish a regime that is both fair to operators and better serves Ontario's communities and the travelling public.

Within the GTHA and Kitchener, GO Transit also operates an extensive bus route network. It has multiple bus stops within cities and serves a number of smaller communities in the Toronto-

Kitchener corridor, offering transportation options to an interregional market that cannot be served by GO Train services.

Air Travel

The proposal for HSR in Southwestern Ontario includes a stop at Pearson Airport, Canada’s largest and busiest airport. It is currently connected to Toronto’s Union Station via rail and served by the UP Express, but lacks rail connections to other Ontario cities.

Operated by the Greater Toronto Airports Authority (GTAA), Pearson Airport is a hub for approximately 443,000 flights a year, with 41 million passengers using the airport in 2015; the numbers are projected to reach 65 million to 70 million by 2043.¹ While Pearson serves a number of regional airports, its main role is as a hub for long-haul domestic and international flights. It is the second-busiest international airport in North America after New York’s John F. Kennedy International Airport.

Currently, Pearson Airport is mostly accessed by car; however, the proximity of the Kitchener GO line to the airport facilitated the construction of the UP Express service between Terminal 1 and Union Station. Service began in 2015, offering trips to and from Union Station and Pearson every 15 minutes, with a journey time of approximately 25 minutes. The airport is also served by a number of Toronto Transit Commission bus routes, including an express bus service that connects to the subway system at Kipling Station.

According to the GTAA, only 8% of air passengers in Ontario take public transit to Pearson Airport, a significantly lower percentage compared to other world airports, as detailed in Table 1.1.²

Table 1.1: Public Transit Travel to Airports: An International Comparison

International Airport	Percentage of Public Transit Use by Air Travellers
Frankfurt Airport, Germany	33%
London Heathrow Airport, U.K.	36%
Amsterdam Schiphol Airport, The Netherlands	39%
Kai Tek International Airport, Hong Kong	63%
Shanghai Pudong International Airport, China	51%

Source: Greater Toronto Airports Authority/Urban Strategies Inc.

GTAA information indicates that approximately two million people per year travel from London and Kitchener-Waterloo to Pearson Airport. There is no direct rail service to the airport along the Windsor-London-Kitchener corridor. People in these communities have to rely either on driving,

limited bus and private shuttle services, or on local regional airports, some of which offer air travel options to Pearson Airport.

Current air travel patterns from Windsor, London, and Kitchener to Toronto are relatively low, comprising less than 1% of travel in the corridor. By comparison, the automobile serves approximately 93% of trips in the corridor and bus serves 5%.³

HSR service in the Toronto-Windsor corridor is expected to replace short-haul flights in the corridor, effectively freeing up capacity and runway space for bigger, more profitable long-distance flights. This has been the case for HSR between major European cities such as Paris to London and Frankfurt to Cologne, where rail has a dominant market share.⁴

The GTAA has recently released reports on its development strategy for Pearson Airport, which envisions transforming the airport into a multimodal transportation hub that would connect air, rail, bus, and rapid transit systems.⁵ An HSR station at Pearson Airport would complement the GTAA's strategy to create a truly multimodal hub for Ontario.

Automobile Travel

The automobile is the Toronto-Windsor corridor's most frequently used mode of transportation. Highway 401 is one of the country's busiest automobile and truck routes, connecting Canada's busiest land border crossing, the Windsor-Detroit Gateway, to the Quebec border, and passing through Toronto. The 401 is a main artery for the movement of goods and commuters in the province's road system. Private automobiles account for approximately 93% of mode share in the Toronto-Windsor corridor.⁶ In the GTHA alone, the number of car trips is increasing at a faster rate than that of the population: between 1986 and 2011 the number of trips made by automobile in the region grew 71%; in comparison, the population increase for the same period was 62%.⁷

In 2016, MTO announced the expansion of the current six-lane Highway 401 west of Toronto. Contrary to its original intent of reducing traffic congestion, evidence has shown that highway expansion actually leads to an increase in car use and associated traffic congestion and carbon emissions.

Another fact that cannot be ignored is that Ontario's highways are subject to winter weather conditions that can impede traffic flow. Rail travel in winter conditions tends to be more reliable.

REFERENCES

¹ Greater Toronto Airports Authority. *Toronto Pearson: an economic engine for our region and all of Canada*. <https://www.torontopearson.com/en/economicimpact/#>; and Greater Toronto Airports Authority. *Toronto Pearson Fast Facts*. <https://www.torontopearson.com/en/press/toronto-pearson-fast-facts/#>.

² Toronto Pearson International Airport and Urban Strategies (February 2016). *Pearson Connects: A multi-modal platform for prosperity*. http://www.urbanstrategies.com/wp-content/uploads/2015/10/PearsonConnects_20160225.pdf.

³ MTO Preliminary Business Case Analysis. Based on 2011 Travel Survey of Residents of Canada (TSRC) data from Statistics Canada. <http://www.statcan.gc.ca/eng/survey/household/3810>.

⁴ Dutzik, T. et al. (Fall 2010). Maryland PIRG Foundation. *A Track Record of Success: High-Speed Rail Around the World and Its Promise for America*. <http://www.marylandpirg.org/sites/pirg/files/reports/A-Track-Record-of-Success-vMD.pdf>.

⁵ Toronto Pearson International Airport and Urban Strategies (September 2015). *Toronto Pearson: Growth, Connectivity, Capacity*. <http://www.urbanstrategies.com/wp-content/uploads/2015/10/Regional-Airport-Whitepaper.pdf>; and Toronto Pearson International Airport and Urban Strategies (February 2016). *Pearson Connects: A multi-modal platform for prosperity*. http://www.urbanstrategies.com/wp-content/uploads/2015/10/PearsonConnects_20160225.pdf.

⁶ MTO Preliminary Business Case Analysis.

⁷ Metrolinx (2015). *Regional Transportation Snapshot*. http://www.metrolinx.com/en/regionalplanning/rtp/20150625_RTS_Accessible_EN.pdf, 2.

Chapter 2

Connecting Communities

Among the most important factors to consider when implementing an HSR service is who the end users will be and how the service will benefit their communities. During the course of his appointment, the Special Advisor met with municipal and provincial stakeholders and Indigenous communities within the Toronto-Windsor corridor to discuss the opportunities and challenges associated with HSR. Enthusiasm for and interest in the project is high overall; however, this community engagement has highlighted a number of important considerations that must be reviewed when implementing HSR.

Community Engagement

A key component of the Special Advisor's mandate was to engage with First Nations and Métis communities as well as public- and private-sector stakeholders. Over the course of his appointment Mr. Collette held municipal engagement sessions in each of the four main station-area communities (Toronto, Kitchener-Waterloo, London, and Windsor) and engagement sessions with Indigenous communities in the corridor. Informal and one-on-one meetings were also held with stakeholders throughout the Special Advisor's term. Throughout the past year, many individuals, organizations and communities approached the Special Advisor to meet on the HSR file. While everyone received a response, the limited time frame for concluding work on the study meant that it was impossible to accept every request to meet. However, as plans for HSR move forward, there will be further engagement opportunities for interested parties.

This chapter summarizes key feedback and provides recommendations for government based on what was heard at the engagement sessions.

Engagement Sessions – Public and Private Sectors

The engagement sessions were designed to explore four key areas:

- Opportunities associated with HSR.
- Key considerations.
- Related projects that the Ministry should be made aware of.
- Future engagement as the project progresses.

Stakeholders and Indigenous communities were invited to attend sessions in Toronto, Kitchener-Waterloo, London and Windsor in February 2016. Each session included a presentation on the HSR project by the Special Advisor and MTO officials followed by breakout table discussions.

The engagement sessions were well-attended, with Kitchener-Waterloo and London having the highest numbers of participants. Attendees included elected officials and/or staff representatives across all levels of government as well as people representing chambers of commerce, boards of trade, academic institutions and key regional industry groups.

The following themes emerged consistently across all four engagement sessions:

Economic Development Opportunities

Every community expressed a view that HSR has the potential to be transformative—spurring economic growth, increasing labour mobility, attracting talent, addressing traffic congestion and increasing the quality of life for all of the communities along the proposed corridor.

Toronto attendees identified the connection of communities further west to the airport as a key economic factor. Although Pearson Airport already has a downtown link via the UP Express, the airport and surrounding commercial and industrial areas, sometimes termed “employment lands,” remain relatively disconnected from other regional transit projects and lack broader connections to Southwestern Ontario. Participants noted that it was likely that a direct airport connection to HSR would increase ridership for the service through connecting key employment hubs such as Kitchener-Waterloo to Pearson Airport.

As the sessions moved further west, interest in the economic development opportunities associated with HSR increased. At the engagement session in Kitchener there was general agreement that one key challenge that area businesses face is attracting talent, particularly in the high-tech industry. An HSR connection has the potential to make living in the Kitchener-Waterloo region more appealing for residents commuting to Toronto, and would also increase the attractiveness of “reverse commuting,” giving employees working in Kitchener-Waterloo the option of living in Toronto. Representatives from the tech industry indicated that highly skilled prospective employees, particularly those who are younger, tend to prefer to live in larger city centres such as Toronto’s, and that the reverse commute would make it easier for them to do so.

Participants in London also discussed the potential of HSR to create talent attraction opportunities for the city, similar to those described above for Kitchener-Waterloo. They indicated that although thousands of students attend the University of Western Ontario or one of the city’s colleges, fewer than desired settle in London once they graduate. According to participants, one reason for this could be a lack of job opportunities commensurate with the graduates’ knowledge and skills.

Participants at the session indicated that talent is often lost to Toronto or Kitchener-Waterloo, although this talent loss is difficult to quantify.

Some participants in London also believed that HSR service could create the opportunity for London to become a hub for HSR rolling-stock maintenance since the region already has a long history of building heavy-rail locomotives. Some also believed a case could be made for the HSR maintenance and operations centres to be located in London because it is situated at the mid-point of the corridor.

At the Windsor session, HSR was viewed as potentially transformational from the perspective of reviving the manufacturing industry and providing new employment opportunities. HSR's potential to resume cross-border connections with the United States via the existing tunnel also generated considerable enthusiasm. This point was echoed in a discussion with representatives from Michigan's Department of Transportation, the Council of the Great Lakes Region, and Amtrak, the American passenger rail and bus operator.

Many people at various sessions also noted that HSR could make train travel an enjoyable experience for commuters, optimizing productivity levels by making the trains efficient and work-friendly spaces, with access to Wi-Fi, designated quiet cars and quality refreshment services. HSR riders would enjoy their journeys, welcoming trips as opportunities for reading, reflection, and work, in contrast to the "lost time" experience of long car commutes.

Coordination and Integration of Transportation and Transit Services

The second key theme that emerged from the engagement sessions was the need to coordinate services in the corridor and to integrate HSR with local and regional transit systems.

At each session it was noted that rationalizing existing services such as VIA Rail, GO RER, and the UP Express, which run within the same corridor as the proposed HSR system, would be critical to its success. Stakeholders suggested that MTO work closely with the municipal and federal governments to achieve the right balance for optimal service in the corridor.

Stakeholders also highlighted the need to ensure that HSR would not displace existing services such as VIA Rail's services to communities not on the HSR line such as Woodstock, Ingersoll, Stratford and St. Marys. A system-wide approach in developing better connectivity and mobility options in Southwestern Ontario was suggested to ensure that existing rail and bus services would be able to connect passengers to a future HSR network. Participants firmly believed that investing in services for smaller communities in the near term would build ridership and increase mobility options in advance of HSR implementation.

On a related note, stakeholders emphasized that integration of local and regional transit strategies was essential to ensure coordination of transportation priorities and so that services would operate

as one user-friendly system. The topic of “first-mile/last-mile” connections was discussed extensively at the engagement sessions. Table 2.1 summarizes local projects underway that were discussed at the sessions and which projects MTO should take into consideration when coordinating with HSR.

Table 2.1: Projects and Services Discussed at the Special Advisor’s Engagement Sessions

Toronto	KW	London	Windsor
<ul style="list-style-type: none"> • UP Express • GO Regional Express Rail • SmartTrack • Mississauga Transitway • Hurontario-Main LRT (Brampton) • Eglinton Crosstown • Finch West LRT 	<ul style="list-style-type: none"> • Waterloo ION LRT/Bus Rapid Transit (BRT) • King/Victoria multimodal transportation hub • GO Transit 	<ul style="list-style-type: none"> • Shift Rapid Transit project • City of London’s corridor protection strategy 	<ul style="list-style-type: none"> • Planning and track upgrade activities across the border in the United States

The various local projects listed in Table 2.1, all in different stages of development, are positive contributions to the HSR planning process and will contribute to the success of HSR. As Kitchener-Waterloo builds its new multimodal hub, for example, regular community engagement may also help with HSR integration plans.

It was also beneficial to learn that some communities have already started planning for HSR or are receptive to beginning planning for HSR integration. Municipal stakeholders in London mentioned that their corridor-protection plans are forward-looking and that HSR is already being considered, including what a downtown HSR station might look like, as they upgrade existing CN lines and grade separations. The Special Advisor also met with the Mayor of Guelph and senior city staff who expressed interest in supporting planning efforts to bring HSR to Guelph.

Future Engagement

In all the sessions participants emphasized the need for the continued engagement of stakeholders on the project. There was a specific interest from participants discussing the business case for HSR, in particular implementation timelines, budget, and the target market for the service.

MTO officials explained that the HSR project is in its early stages, and that more information will be made available as the EA process advances. This is a formalized process outlined in legislation that that government must follow and it includes requirements for Indigenous engagement and public and stakeholder consultation.

Other Considerations

Fares

Participants emphasized that both HSR's target market and how much it will cost users must be made very clear during the planning and technical stages of the project. If business travellers are target users, a potential pricing approach would be to offer tiered fares with business class seats at one price, as well as other more affordable options. The Special Advisor was encouraged to consider other pricing approaches, such as student and senior prices, or offering discounts for bulk ticket purchases or for passes. In Europe, for example, HSR fares can vary significantly depending on how many tickets are purchased at a time or how far in advance they are purchased, and discounts are generally provided for trips that are paid for in advance. Fare integration with intercommunity buses, VIA Rail and GO Transit was noted as a desirable aspect of HSR.

Service Levels

Participants discussing service levels had various opinions, often dependent on their location. In Kitchener-Waterloo, for example, many stakeholders felt that a shorter commute time to Toronto was one of the most desired factors. In communities such as London and Windsor, although speed was important, so was the provision of predictable and regular service, particularly at peak times in the morning and evening.

Emerging Technologies

A number of stakeholders encouraged the Special Advisor and MTO to consider the impacts and implications that emerging technologies would have on future transportation services. It was suggested that Autonomous Vehicles (AVs) might provide excellent opportunities for first-mile/last-mile connections and for smaller communities to connect with HSR, and that alternative rail technologies merited further consideration. Hyperloop, an emerging technology now being tested around the world where people are transported in pods at immense speeds through pneumatic tubes on a cushion of air, was also raised.

Business Case Results

Finally, a number of stakeholders recommended that more detailed information be shared at future engagement sessions about the project and about the business case for HSR in the corridor. They would like to see more detail on potential station locations, timing, and the costs and benefits, including a Benefit-Cost Ratio (BCR), if possible, to demonstrate evidence-based decision-making for the project.

Recommended Approach – Public and Private Sectors

Overall, stakeholders in the Toronto-Windsor corridor are enthusiastic about the potential opportunities that HSR can bring to their communities, with economic development opportunities being the primary area of interest. Stakeholders believe that HSR will extend Toronto’s and Kitchener-Waterloo’s “commute sheds,” making both commuting to work and business-related day-trips to and from these major employment hubs easier. They believe HSR will also spur jobs and economic growth in London and Windsor.

Stakeholders also indicated that it will be important for the Province to ensure that services are integrated and that first-mile/last-mile connections are made, creating a comprehensive transportation network for Southwestern Ontario with HSR as the foundation. Where possible, work already underway in the communities on transit projects, mobility hubs, or other infrastructure investments must be taken into account and integrated with HSR. Shorter-term investments to bolster mobility options in advance of HSR implementation could be made in municipal transit and intercommunity services, particularly in smaller communities in the corridor. Stakeholders’ expectations are high for future engagement on HSR to include more information about the business case.

Based on the feedback from the engagement sessions during the Special Advisor’s term, it is recommended that the Province undertake the following as the HSR project advances:

Recommendation 1: Integration with Local Transit Services

The Province should continue to work closely with municipal stakeholders in the corridor to identify opportunities to integrate local transit and existing and planned services with future HSR stations and ensure that first-mile/last-mile connections are made.

Recommendation 2: Regional Transportation Infrastructure

The Province should encourage and support investment in regional transportation infrastructure in the near term to increase transportation options in smaller communities, which will help build ridership in the corridor and establish a system-wide approach to mobility in Southwestern Ontario.

Recommendation 3: Share Detailed Business Case Results

The Province should share detailed business case results for HSR as the project develops, emphasizing collaboration, transparency and information-sharing, to ensure that communities along the corridor are informed about and engaged in the project.

Recommendation 4: Continued Engagement with Stakeholders

The Province should continue to engage with stakeholders, including but not limited to municipalities and land owners in the corridor, on the planning, development, and implementation of HSR, including throughout the Environmental Assessment process.

Engagement with Indigenous Communities

There are a number of First Nations and Métis communities in the proposed HSR study area, and the Special Advisor emphasized the need to engage with Indigenous communities as early as possible in the project-planning phase.

Letters introducing the Special Advisor and the proposed HSR project were sent to all First Nations communities in the study area, as well as to the Métis Nation of Ontario. The Special Advisor offered to meet with community leaders to provide more information and to have discussions about the communities' interests and concerns.

The objectives for the meetings with Indigenous communities were similar to the municipal engagement sessions, including

- Providing communities with a high-level overview of the proposed HSR project.
- Seeking feedback on how best to engage with First Nations communities in the corridor.
- Understanding the key challenges and opportunities presented by HSR from the perspective of First Nations.

The following section summarizes feedback from the Indigenous communities that met with the Special Advisor and/or MTO officials.

Ongoing Engagement with Indigenous Communities

One theme that emerged in each of the meetings with Indigenous communities was the need for ongoing, regular engagement throughout the duration of the HSR project with communities in the study area. Community leaders stressed the importance of collaboration between their communities and the Province, to ensure that the views and interests of Indigenous peoples are adequately incorporated at each stage in the project.

Communities requested that long-term engagement plans for the HSR project be defined and developed in partnership with their communities; each has differing needs, interests and preferred approaches. For example, the Aamjiwnaang, Chippewas of the Thames, Walpole Island, and Kettle and Stoney Point First Nations indicated a preference to be engaged as a group to allow for a unified regional voice. Other communities may prefer to be engaged one-on-one.

All communities emphasized the importance of ongoing engagement leading up to and throughout the EA process, particularly as more project details become available.

Economic Development Opportunities and Partnerships

Communities meeting the Special Advisor and MTO officials were interested in the economic development benefits of the project, identifying employment, procurement opportunities, ongoing revenue generation, business arrangements, and partnerships as potential economic opportunities. They noted that the proposed project could bring substantial benefits to Indigenous communities and businesses through activities related to

- Construction
- Operations
- Maintenance
- Consulting services (e.g., for feasibility or EA studies).

Some communities recommended that the Province consider how to ensure that communities are prepared before the project begins so that they can take advantage of economic development opportunities that arise from the project—for example, identifying what specialized skills and education will be required for various components of the project (construction, maintenance, operations) and determining what the Province can do to help ensure Indigenous peoples and businesses have the capacity, expertise, and skills required to take advantage of these opportunities.

The concept of equity partnership and a desire to be shareholders in the HSR project was also raised by some communities. There are no models for such an arrangement to do with rail infrastructure in the Province; however, equity arrangements between the private sector and First Nations have been successful for other types of infrastructure, such as energy utilities, and equity partnership models for

HSR could be explored. Above all, Indigenous communities want to be considered true economic partners as HSR moves forward.

Environmental Protection and Respect for Culturally Sensitive Lands

The protection of the natural environment and respect for culturally sensitive lands must be a priority throughout the implementation of HSR. Overall, assuming that HSR would be an electrified service, the communities expressed the view that the project would be a positive one for the environment, particularly because it would reduce greenhouse gas (GHG) emissions by taking cars off the road; however, a number of important considerations for the HSR corridor were raised by the communities, including but not limited to concerns about

- Protecting wildlife, including the provision of wildlife overpasses/underpasses on the HSR corridor.
- Minimizing impacts of rail corridors on the environment such as the loss of Carolinian grassland, woodlands, or the spread of invasive species, such as phragmites, an invasive species of grass that crowds out native vegetation and can spread along transportation corridors.
- Soil contamination and leaching risks posed by construction materials.
- Noise and vibration impacts from fast and frequent train movements.
- Protecting water systems such as the Grand River, Thames River Watershed, and others.

Communities encouraged the Province to recognize that Indigenous peoples are experts on the environment and have a deep knowledge and understanding of local species of plants and animals. Their services could be retained to support the EA process for environmental monitoring or to offer traditional knowledge.

On a case-by-case basis at provincial construction projects the Province and Indigenous communities often arrange for environmental or archaeological field monitors when necessary. For example, after the Highway 407 East project revealed thousands of Indigenous artifacts from a former Huron-Wendat settlement, Indigenous field monitors visited the site for inspections, as shown in Figure 2.1.

Figure 2.1: Indigenous Field Monitors on an Archaeology Site in the Highway 407 East Corridor



Source: Ministry of Transportation

Of primary concern to communities is the protection of lands used for cultural purposes such as for ceremonies or for gathering medicinal plants, as well as potential impacts on archaeological resources such as traditional First Nations' settlements and burial sites, and this concern must be considered when planning any new infrastructure for HSR, including tracks or new stations.

Education and Awareness

Communities viewed the HSR project as providing an excellent opportunity to advance education and build awareness of Indigenous culture, history and traditions in Southwestern Ontario, a way to build trust and understanding and to educate Ontarians and all HSR users about First Nations and Métis history. It was suggested that Indigenous communities could engage directly with the public in a number of ways throughout the project, including during the EA process, to raise awareness about their traditional territories, histories, and cultures.

Participants suggested that if HSR is built the Province could procure Indigenous artists and historians to create art and cultural installations for HSR stations. This has been a successful endeavour in other MTO projects. The Right Honourable Herb Gray Parkway, for example, features artwork produced by local Indigenous artists (see Figure 2.2), and the hiking trail running parallel to the highway includes educational plaques that detail Indigenous history and traditions for path users to read and interact with. As a second example, the artifacts from the former Huron-Wendat settlement on the 407 East site mentioned above went on public display during Doors Open Whitby in 2014 (see Figure 2.3).

Figure 2.2: Sculpture of a Turtle Designed by Walpole Island First Nation Artist Teresa Altman Featured on the Herb Gray Parkway Trail



Source: Ministry of Transportation

Figure 2.3: Indigenous Stone and Bone Artifacts Found on the 407 East Site



Source: Ministry of Transportation

Capacity Funding

Participants raised lack of capacity as a potential barrier to successful engagement on the HSR project, noting that many Indigenous communities do not have the human resources, financial capacity or technical expertise to meaningfully participate in government-led engagement processes. Communities in the HSR study area identified the need for the Province to provide capacity funding to facilitate their meaningful participation in the HSR project; communities often request capacity funding so they can hire their own technical experts to review project information such as EA studies or engineering reports, and since many communities are small, they may also require capacity

funding to hire administrative staff to deal with the hundreds of requests received each year from government that seek feedback on various policies, initiatives and projects.

Recommended Approach – Indigenous Engagement

Overall, the HSR project is viewed as a positive opportunity with the potential to generate economic development and environmental benefits; however, Indigenous communities want to ensure that there will be real benefits and shared prosperity for their communities.

Given the important considerations that were raised by Indigenous communities during early engagement, it is advised that the Province adopt the following recommendations as the HSR project advances.

Recommendation 5: Continued Engagement with Indigenous Communities

The Province should continue to engage with Indigenous communities on the planning, development, and implementation of HSR, including throughout the Environmental Assessment process, and work with communities to determine preferred approaches to engagement.

Recommendation 6: Opportunities for Indigenous Communities – Economic Benefits

The Province should consider opportunities for Indigenous communities to share in the economic benefits associated with HSR, including generating future opportunities related to procurement and other economic partnership arrangements.

Recommendation 7: Protection of the Environment and Lands of Cultural and Archaeological Importance

The Province should commit to protecting the natural environment, culturally sensitive lands and archaeological sites throughout the Toronto-Windsor corridor, recognizing that Indigenous communities are experts in these areas of knowledge.

Recommendation 8: Showcasing of Indigenous Art and Culture

The Province should provide opportunities to showcase Indigenous culture, history and traditions throughout the HSR project, including showcasing Indigenous art and culture at future HSR stations, and consider Indigenous traditional naming opportunities for HSR-related infrastructure.

Recommendation 9: Indigenous Capacity Funding

The Province should consider providing capacity funding to Indigenous communities in the study area to facilitate engagement on the HSR project.

Chapter 3

The Business Case for High Speed Rail

HSR in Southwestern Ontario would operate between Toronto's Union Station and Pearson Airport, Guelph, and Kitchener-Waterloo on a corridor shared with commuter services, including GO RER. West of Kitchener, HSR would operate on new, dedicated track to London, Chatham, and Windsor. This mix of services would allow rail to capture a significant mode share in the corridor and serve a wide range of markets from commuter to leisure to business. This chapter contains the Special Advisor's recommendations for station locations, alignment, speed, and implementation.

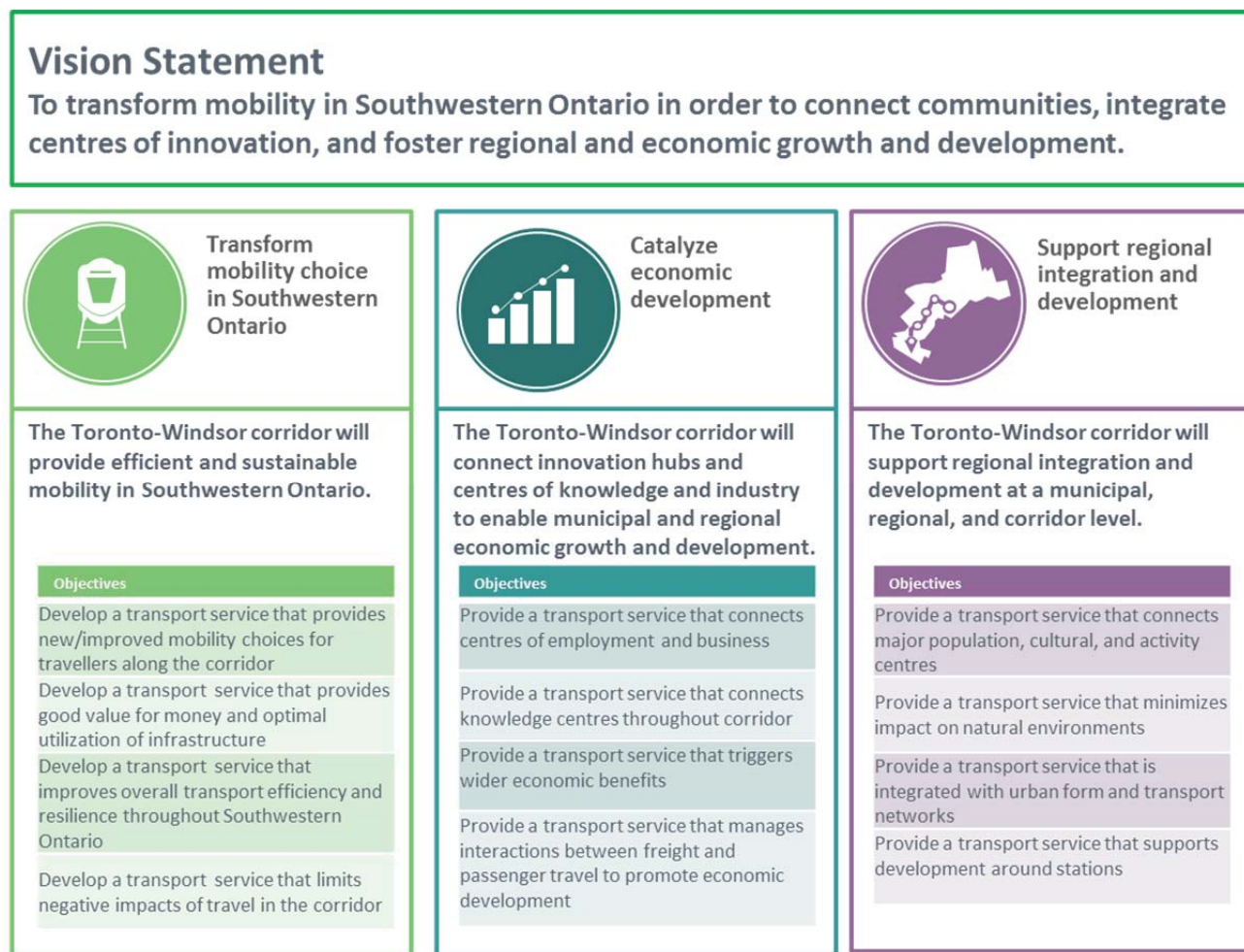
HSR will be a new and unprecedented transportation infrastructure initiative for Ontario. The Special Advisor clearly found that HSR has the potential to transform travel in the Toronto-Windsor corridor and help the Province in achieving its transportation, economic development, and environmental goals, a finding that was supported by the business case analysis.

Vision for HSR

The vision for HSR in the Toronto-Windsor corridor, shown in Figure 3.1, was developed to guide the assessment of various implementation options and delivery of the HSR system. Ultimately, the vision underpins the Special Advisor's recommendations regarding stations, alignment, speed, phasing, and implementation considerations, which are detailed below.

It encapsulates three foundational principles: to transform mobility choice in Southwestern Ontario; to catalyze economic development; and to support regional integration and development. A series of objectives expands upon each principle.

Figure 3.1: Vision for HSR in the Toronto-Windsor Corridor



Graphic Produced by Steer Davies Gleave

The Foundational Principles in Detail

The objectives articulated under each of the three foundational principles reflect the challenges and opportunities in the corridor. Each principle is described in more detail below.

Transform Mobility Choice in Southwestern Ontario

Based on input from communities in the Toronto-Windsor corridor and an assessment of transportation trends, economic profiles and the government’s objectives for transportation in the corridor, it is clear that a change from the overwhelming reliance on automobile use is required. The automobile’s dominance along the corridor can be understood from two perspectives:

- There is a lack of reliable, competitive travel options.
- Rail as a means of travel is less attractive than it once was.

Existing rail services do not provide adequate trip frequencies or travel times to effectively compete with the automobile, even despite highway congestion and unpredictable travel times that automobile users often face. Although the Province's GO RER program on the Kitchener corridor can be expected to expand travellers' reliance on and expectations of the regional rail market, the Toronto-Windsor corridor still lacks an intercity rail alternative.

For HSR to be successful it must provide a fast, frequent and comfortable travel option that will be the best alternative to existing modes. The provision of such a service will create new travel markets between cities within and adjacent to the HSR network. Additionally, it will shape mode share in the corridor by providing a convenient alternative to automobile use. HSR will also provide options for rural residents to access larger centres on the network.

HSR should be implemented with careful consideration of its fiscal impacts and long-term sustainability. It should be implemented based on a sound business case, provide value for money, and build on and complement existing and planned rail infrastructure and services.

Catalyze Economic Development

HSR will be a transformative investment in transportation infrastructure for Ontario, which in turn will trigger economic growth and development. Communities along the corridor have highlighted HSR as being critical to the economic potential of the corridor and its long-term prosperity.

In particular, London and the Region of Waterloo have advocated strongly for frequent and fast rail services to support the growth of their high-tech industries. In North America, the Toronto-London portion of the Innovation SuperCorridor is one of the top regions in terms of the rate of technology start-ups and growth in technology employment. Currently this corridor lacks the required frequent, efficient transportation linkages to support Ontario's position as a leader in the knowledge economy.

HSR will improve travel speeds and frequency of service to foster substantially stronger economic integration between cities throughout Southwestern Ontario.

Support Regional Integration and Development

HSR should be delivered as part of an integrated solution for transportation in the corridor. This means ensuring that regional transportation, urban development and economic plans consider the possibility of HSR and protect for its development and operations.

Stations on the network should be developed within urban cores in such ways as to maximize the economic, social and environmental benefits of HSR. The Province should work closely with

communities to ensure the presence of adequate first-mile/last-mile linkages and plans for leveraging the potentially wider economic benefits of the service.

HSR will support provincial policies that manage growth and development by linking existing urban areas and encouraging their growth and revitalization, which will in turn mitigate urban sprawl.

Directly supporting the urban structure of the *Growth Plan for the Greater Golden Horseshoe (2006)*, and connecting communities without adding pressure on the Greenbelt, HSR is well aligned with the Provincial Policy Statement, which guides municipalities across Ontario in planning where and how to grow. HSR directly supports transit-oriented development, for example, a key principle of these plans.

By linking cities, encouraging the continued protection of the Greenbelt, and making living in Guelph, Kitchener-Waterloo, London, Chatham or Windsor more viable options for Ontarians who need to commute or travel to the GTHA for business and leisure, HSR will support where and how the Province wants to grow.

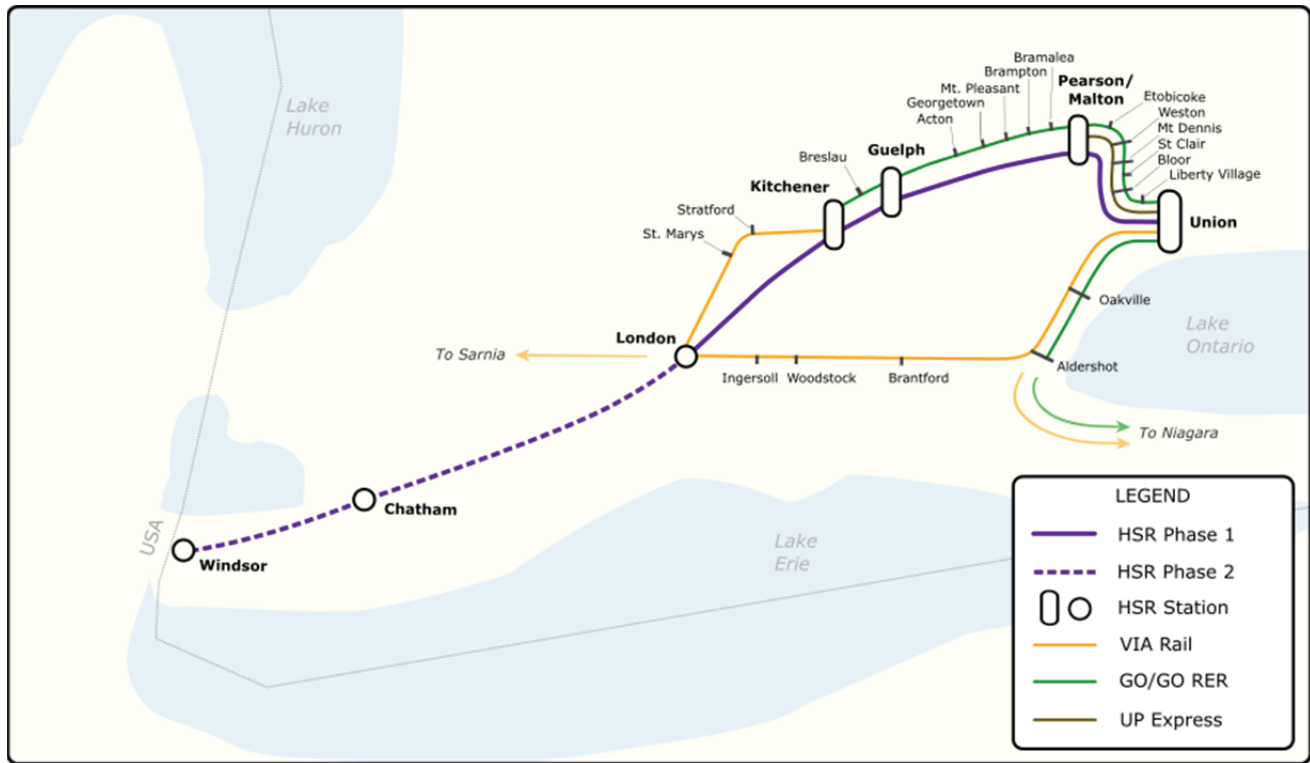
Stations, Alignment, and Speed

This section provides details on the business case for HSR, including key station locations, the preferred alignment for the service, and how fast the trains should travel to provide the optimal service to attract ridership. To assess the viability of HSR service, the Special Advisor directed Steer Davies Gleave (SDG), an internationally respected transportation consultancy, to conduct a detailed business case analysis of two comparative HSR scenarios: a dedicated HSR system operating at top speeds of over 300 km/h (Scenario A), and an HSR system operating on a combination of mixed conventional and dedicated railway at top speeds of 250 km/h (Scenario B).

Stations and Alignment

As mandated by the Province, the Special Advisor pursued an analysis of HSR stops at Union Station, Pearson Airport, Kitchener-Waterloo, London, and Windsor. Following community engagement in the corridor, cross-jurisdictional research, and the business case analysis it became apparent that a case can also be made for recommending HSR stops in Guelph and Chatham. This would offer a seven-stop HSR system connecting economic hubs, increasing regional interconnectivity and spanning nearly 400 kilometres across Southwestern Ontario. Figure 3.2 illustrates the Special Advisor's recommended HSR stations and alignment, which are consistent with Scenario B, as well as other passenger rail services in the corridor following the implementation of HSR.

Figure 3.2: Proposed Future Southwestern Ontario Passenger Rail Network



Source: MTO

It is proposed that HSR be implemented in two phases. Phase 1 would connect Toronto to London and Phase 2 would extend HSR to Windsor. In addition to offering a prudent approach to HSR implementation, phasing major construction projects is also a best practice that has been applied in comparable jurisdictions. The benefits of a phased approach include spreading capital costs out over time and allowing revenue and ridership generation to begin in earlier phases.

Recommendation 10: Phased Implementation

The Province should proceed with a phased approach to implementing HSR to maximize benefits and reduce costs.

- **Phase 1** would be implemented from Toronto to London with a target operational date of 2025.
 - This phase would build on GO RER investments between Toronto and Kitchener-Waterloo.
- **Phase 2** would be implemented from London to Windsor with a target operation date of 2031, as demand for HSR develops.

The following section details the Special Advisor's station recommendations for the Government's consideration, and includes considerations for associated infrastructure requirements and rationale. Through the EA process, the stations and alignment would be finalized following engagement and consultation with Indigenous communities, land owners, and municipalities in the Toronto-Windsor corridor to address issues and seek input from all affected parties. Throughout the HSR project, measures should be taken to protect environmentally and culturally sensitive lands, agricultural land, and areas of architectural significance.

Recommended Stations and Alignment

The Special Advisor recommends that the Toronto-Windsor corridor include the following HSR stations: Toronto Union Station, Pearson Airport, Guelph, Kitchener-Waterloo, London, Chatham and Windsor.

Toronto: Union Station

A Union Station stop, as the eastern terminus of the HSR network, is essential to the integration of HSR with existing services and to connect Southwestern Ontario with Toronto for business and leisure travel purposes. Union Station is Canada's largest passenger railway station and a key transportation hub, connecting local Toronto Transit Commission (TTC) services to regional bus and GO train services, the UP Express and VIA Rail.

The station building is currently owned by the City of Toronto; the Province, through Metrolinx, owns the train shed, rail corridor and platforms. The station is currently undergoing significant upgrades to increase capacity, improve safety and modernize the train concourse and platforms.

In 2012, Metrolinx released its *Union Station 2031 Demands and Opportunities Study*, which indicated that Union Station was serving over 240,000 users per day, including GO Rail, TTC and VIA Rail passengers. The study found that, based on trends in population growth in GO catchment areas and employment growth in GO destination areas, Union Station could expect to experience at least a doubling of daily passenger boarding over the next 20 years. This analysis did not include projections for HSR passengers both boarding and disembarking, which would add significant demands on station capacity. Despite the upgrades now underway at Union Station, additional work will need to be undertaken to address capacity issues and accommodate the growth of GO RER services, which will double from the current 29 trains in the peak hour to more than 50 in 2024.

As demand for rail services is expected to continue growing beyond 2024, further expansion is needed to support this future increase. The expansion should also be designed to accommodate HSR trains, which could represent almost 10% of the service in the peak hour. One option that has been discussed to add capacity is to build a new four-track, two-platform concourse under the western approach tracks to the station around Simcoe Street.

Recommendation 11: Union Station

The Province should work to ensure that

- Station capacity is addressed to accommodate future growth in ridership that will occur due to use by HSR, GO RER and VIA Rail services.
- Further consideration is given to developing a new concourse and platforms west of the existing station, building them under the approach tracks.
- A minimum of two level-boarding HSR platforms are constructed.

Moving west from Union Station, HSR trains would proceed along the Kitchener corridor toward Pearson Airport, sharing track with other rail services.

Pearson Airport

Internationally, HSR stations at airports often provide intercity connections that let air passengers access a wide and integrated network of various modes of transportation within a particular region. HSR stations at airports are typically either

- Direct connections within the airport and integrated within a multimodal airport hub; or
- Indirect connections, where the HSR station is connected to the airport by another mode of transportation such as a bus, LRT or subway.

The Netherlands' *Amsterdam Airport Schiphol* is one example of a direct connection, with an HSR station beneath the airport's terminal complex. This station is also a stop for a number of other transportation modes, creating a multimodal hub that provides integrated local, regional, and international service connections.

Newark Liberty International Airport in New Jersey, one of three international airports serving the New York City area, is an example of an indirect connection. Passengers can use Newark's AirTrain monorail service to access the airport, but to do so requires one or more connections to and from services such as New Jersey Transit and Amtrak rather than a direct, seamless link.

In the short term, it is recommended that Pearson Airport be served by an expanded Malton GO Station, offering an indirect connection to the airport from the HSR line. Access to the airport would be via an enhanced "people-mover" system connecting the approximately three kilometres between Terminals 1 and 3 and Malton Station. A Pearson Airport/Malton HSR stop would connect HSR to GO RER services, as well as to local Mississauga Transit services. HSR would enhance service from Union Station to the airport and would expand access to the airport for cities to the west (Guelph, Kitchener-Waterloo, London, Chatham and Windsor).

In the long term, it is recommended that the benefits of direct HSR access to the airport be explored, including increased ridership. Furthermore, the GTAA is currently planning for airport expansion and the development of a multimodal hub at Pearson Airport. Any planning work the Province undertakes for an HSR station directly at Pearson Airport should be aligned with the GTAA's work, to achieve efficiencies and ensure effective implementation.

HSR's infrastructure between Union Station and the airport station at Malton GO would require joint operation on tracks shared with GO RER services and UP Express. This could be addressed through track upgrades, the construction of passing tracks and/or a service priority agreement to enable HSR to overtake slower services in the corridor as necessary. The exact details of these upgrades will be defined with further analysis and design in the next stage of project development.

Recommendation 12: Pearson Airport

It is recommended that the Province

- Expand Malton GO Station as necessary to accommodate an HSR stop.
- Work with the Greater Toronto Airports Authority (GTAA) to provide a people-mover system linking HSR at Malton Station to the airport terminals.
- Coordinate the infrastructure requirements for GO RER and UP Express with those for HSR through this segment of the corridor.
- Work with the GTAA to provide direct access for HSR as air passenger volumes increase and to support its plans for the future Pearson Airport multimodal hub, most likely by 2031.

Guelph

The next stop westward on the HSR line, in Guelph, would bring HSR into the historic downtown train station at the intersection of Carden and Wyndham Streets. There are plans to expand the current station into a multimodal terminal to be used by VIA Rail, GO RER, and local Guelph Transit services. Accommodating HSR would require station and track expansion, including the construction of two level-boarding platforms, as well as a third passing track in the middle of the existing tracks to allow for the interoperation of GO RER and HSR services. This accommodation was encouraged by the Mayor of Guelph and city officials in discussions with the Special Advisor.

The route westwards from Guelph Station is aligned in the middle of Kent Street and is flanked by century homes of architectural significance. This severely limits train speeds through the area, although improvements are possible if some of the four level crossings before Guelph Junction are rationalized (for example through the implementation of grade separations or closures). The infrastructure requirements for GO RER will also need to be coordinated with those for HSR through this stretch of the corridor.

Recommendation 13: Guelph

It is recommended that the Province

- Work closely with the City of Guelph to deliver on infrastructure requirements to accommodate GO RER and an HSR stop at the historic Guelph Station.
- Ensure that all necessary measures are undertaken to protect the historically significant architecture in the station precinct.
- Coordinate the infrastructure requirements for GO RER with those for HSR through this stretch of the corridor.

Kitchener-Waterloo

Apart from the need to rationalize some of the crossings at Guelph Junction, the route westward toward Kitchener-Waterloo is straight and can accommodate the construction of double tracks.

The City of Kitchener has plans underway to build a new multimodal station slightly to the west of the current VIA Rail station. HSR would connect to local services such as Waterloo ION LRT and Grand River Transit buses.

Recommendation 14: Kitchener-Waterloo

It is recommended that the Province

- Work closely with the Cities of Kitchener and Waterloo to ensure that planning for the new multimodal station accommodates HSR.
- Coordinate the infrastructure requirements for GO RER with those for HSR to Kitchener-Waterloo.
- Work to ensure that station upgrades do not preclude future HSR service.

London

It is recommended that the Kitchener-London segment of the HSR corridor be constructed as a new, dedicated HSR line. A feasible option is to build the tracks adjacent to the existing hydro corridor to the point where they would interface with CN, and from there continue adjacent to the CN South Main line corridor into London. The hydro right-of-way is currently protected for future hydro expansion; however, there is an opportunity to build new HSR tracks beside the corridor. It would be prudent to perform various HSR engineering studies to ensure the proper functioning of HSR infrastructure and public safety.

The introduction of HSR would offer the opportunity to rebuild the existing London Station as a multimodal transportation terminal, in cooperation with the City of London and VIA Rail.

The new HSR station in London would be built by expanding the existing VIA Rail station, located on York Street in the city centre. The new station would enable connections to London's planned bus rapid transit (BRT) system, Shift, and is close to the existing Greyhound bus terminal.

Recommendation 15: London

It is recommended that the Province

- Build a new, dedicated HSR line between Kitchener-Waterloo and London adjacent to the existing Hydro One corridor.
- Work closely with Hydro One throughout the duration of the project.
- Work with VIA Rail and the City of London to expand the existing VIA Rail station to accommodate HSR and ensure seamless connection with the future Shift BRT service.
- Work with CN on requirements for the new HSR line to run adjacent to the CN South Main line into London.

Chatham

Service from London to Chatham would require a new, grade-separated, single, bi-directional, electrified track running adjacent to the existing CN Rail corridor to Chatham.

The existing VIA Rail Station in Chatham would be refurbished and a second platform built to accommodate the new HSR service and to allow for the development of a multimodal hub in Chatham, connecting HSR to Chatham-Kent's local bus and taxi services as well as to intercommunity buses.

Recommendation 16: Chatham

It is recommended that the Province

- Work with CN to explore options to build a new electrified track, adjacent to the existing CN corridor.
- Work with VIA Rail and the Municipality of Chatham-Kent to explore options to expand Chatham Station to accommodate HSR.

Windsor

Westward from Chatham, HSR service would continue to Windsor, veering off the CN/VIA Rail right-of-way and connecting with the CP corridor into Windsor. The service could eventually connect with Amtrak tracks in Detroit via the existing CP tunnel.

A new HSR station would also be constructed in Windsor, ideally located adjacent to the CP corridor at a point close to downtown. As with all HSR stations, coordination between HSR and local transit in Windsor to ensure first-mile/last-mile connections is essential.

Recommendation 17: Windsor

It is recommended that the Province

- Work with CP to explore the implementation of a new track and passing tracks along the existing CP Windsor corridor.
- Work with CP and the City of Windsor to identify options for the building of a new HSR station that will provide access to downtown Windsor.
- Work with CP, Amtrak and the State of Michigan on plans for future expansion of the HSR service to the U.S. via Detroit through the existing rail tunnel under the Detroit River.

Speed

Once the station stops have been determined, the next important aspect of the system to be considered is optimal speeds for HSR service. As discussed in Chapter 1, the speeds, distances, number of stops and costs of HSR systems around the world vary; the types of HSR systems that countries pursue essentially depend on regional transportation contexts and policy priorities.

The Special Advisor's recommendation on optimal speed was supported by the analysis of two scenarios and their corresponding benefit-cost ratios (BCRs), as described in this section.

The introduction to this report provided a brief description of dedicated, mixed conventional and fully mixed HSR systems. The distinctions are important since each system type has characteristics that are relevant to the question of speed. For example, the Japanese HSR system, with trains operating at speeds of over 300 km/h, has a number of key factors that contribute to its success, including dedicated track, a potential market of millions of daily passengers and long distances (generally between 400 kilometres and 600 kilometres) between relatively few stops.

HSR systems in Germany and the United States, which reach speeds of between 200 km/h and 300 km/h and operate on a mix of dedicated, mixed conventional, and fully mixed railway, provide a

frequent, fast alternative to both automobile and air travel and are aimed at encouraging regional integration. In many cases stops serve relatively small communities and are not very far apart; the larger number of stops and the mix of dedicated and conventional rail tracks do not typically permit the same “bullet” speeds experienced in other systems.

The Toronto-Windsor HSR corridor exhibits similar characteristics to the German and American systems described above. Distances between station stops are relatively short and HSR would interoperate with other conventional passenger rail services, particularly on the Toronto-London segment. These factors would constrain the ability of HSR trains to achieve or maintain very high speeds (for example in excess of 250 km/h).

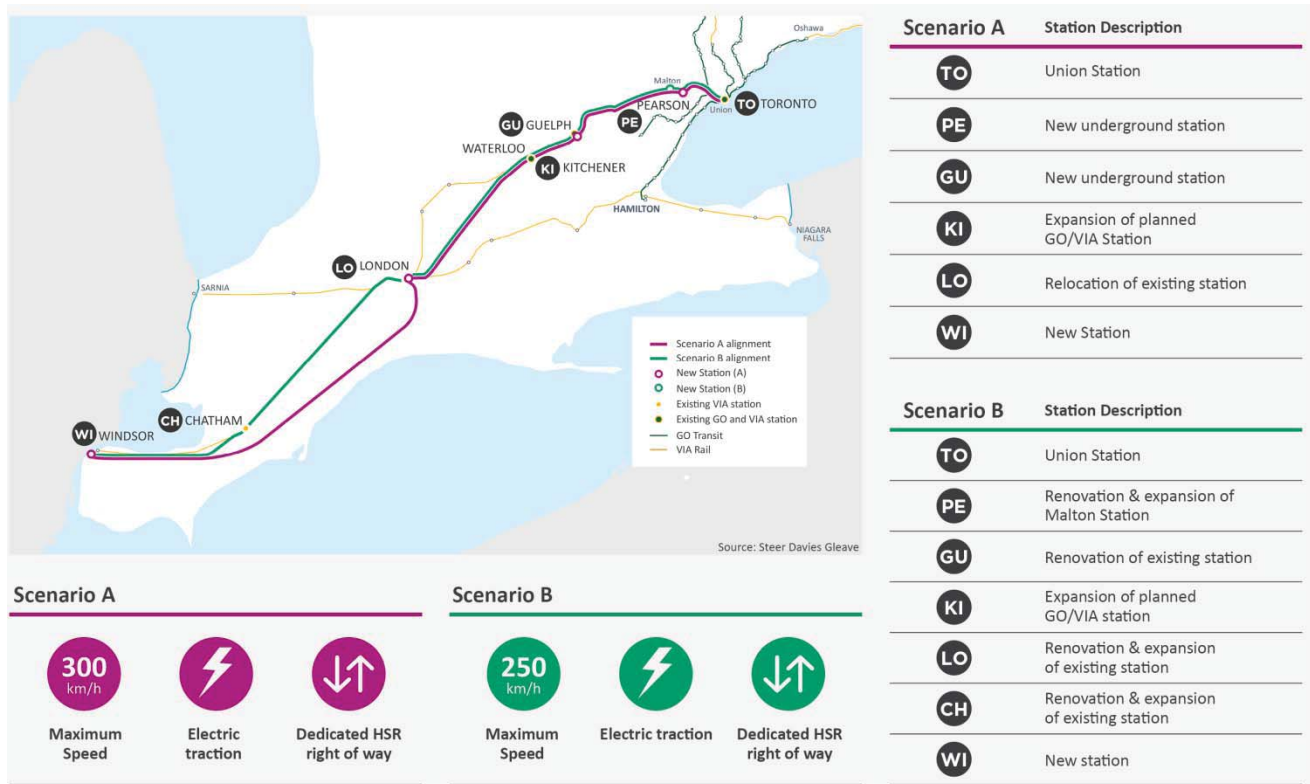
Analysis: Preferred Speed and Alignments

In determining the preferred speed of an HSR system between Toronto and Windsor, two representative scenarios were analyzed based on the recommended station stops and an assessment of the financial and economic impacts.

- **Scenario A:** Electrified HSR service operating primarily on a dedicated right-of-way and capable of achieving a top speed of 300 km/h.
- **Scenario B:** Electrified HSR service capable of achieving a top speed of 250 km/h.



Figures 3.3 and 3.4 illustrate the alignments, stations, travel times and distances for each of the two scenarios. Figure 3.3 provides an overview of the HSR alignments for Scenarios A and B and describes the station stops. Figure 3.4 illustrates the alignment and travel times between station stops for both scenarios and total travel times between Toronto and Windsor.



Figure 3.3: HSR Scenario A and Scenario B Alignments and Station Stops



Source: Steer Davies Gleave

Figure 3.4: HSR Scenario A and Scenario B Travel Times, Distances and Alignment Description

Scenario A	 Travel time on segment (min)	 Distance (km)	Description
TO ▶ PE	14	22.8	Use of existing rail alignment along the Union Station Rail Corridor (USRC) and Kitchener Line until Humber River. Tunnel from Humber River to Pearson Airport to allow for underground rail access
PE ▶ GU	18	53.9	Tunnel through to western Brampton, return to existing Kitchener Line until Rockwood, access Guelph in greenfield alignment with tunnel into Guelph under College Ave alongside the University of Guelph
GU ▶ KI	9	21.8	Use of Greenfield alignment and Guelph subdivision to access downtown station in Kitchener Waterloo
KI ▶ LO	25	87.1	Guelph subdivision to western limits of Kitchener, greenfield alignment alongside hydro corridor to allow high speed travel to eastern limits of London, trench alongside CN Dundas line into London
LO ▶ WI	49	190.7	CN Talbot line exiting London, onto former Canadian Southern Line to the west and through a greenfield curve to new track along the CP Windsor line at Tilbury with a connection to downtown Windsor
Total	115	376.3	

Scenario B	 Travel time on segment (min)	 Distance (km)	Description
TO ▶ PE	16	27.8	Use of existing rail alignment along the USRC and Kitchener Line leading to Malton Station Shared operations along alignment
PE ▶ GU	23	49.9	Use of upgraded Kitchener Line right of way
GU ▶ KI	9	18.1	Use of upgraded Kitchener Line right of way
KI ▶ LO	25	88.3	Guelph subdivision to western limits of Kitchener, greenfield alignment alongside hydro corridor to allow high speed travel to eastern limits of London, trench alongside CN Dundas line into London
LO ▶ CH	29	105.6	Development adjacent to existing CN line with connection in Chatham
CH ▶ WI	22	75.6	New track along the CP Windsor line with a connection to downtown Windsor
Total	124	365.3	

Source: Steer Davies Gleave

Scenario A (300 km/h)

In Scenario A, the 300 km/h HSR would take 115 minutes to travel between Toronto and Windsor. Due to its higher train speeds, Scenario A would require the development of dedicated HSR infrastructure for a greater portion of the alignment and would be a significant capital undertaking, including the construction of a new rail tunnel from Pearson Airport to just past Brampton, a tunnel under the University of Guelph, and a newly-built corridor between Kitchener and London, as well as between London and Windsor. The distances between HSR stations in the Toronto-Windsor corridor and relatively low population densities limits the ability of a 300 km/h service to achieve its top speed for sufficient time to maximize benefits through travel time savings and increased ridership. A summary of the costs and benefits of Scenario A is provided in Tables 3.1, 3.2 and 3.3.

Scenario B (250 km/h)

In Scenario B, the 250 km/h HSR would offer similar travel times to those in Scenario A. Scenario B is envisioned to operate primarily on the existing rail alignment between Toronto and Kitchener-Waterloo. Westward from Kitchener-Waterloo, HSR would run on a newly-built, dedicated corridor from Kitchener to Windsor.

It is important to note that the interoperation with GO RER between Union Station and Kitchener in Scenario B would require the integration of service timetables and capacity as well as speed improvements on the corridor. Interoperation may also reduce the potential ridership market for HSR and limit the range of fares that HSR could charge due to the availability of GO RER services. Key considerations related to the interplay between HSR and GO RER are discussed in the next section.

Scenario Costs and Benefits

To assess the viability of the two HSR scenarios, an in-depth analysis of the costs of implementing HSR and the benefits that it would bring to the corridor is summarized below.

The analysis concluded that Scenario B could be undertaken at a significantly lower cost relative to Scenario A, would yield similar economic benefits, and would provide similar journey times and passenger demand.

The analysis generated BCRs for each scenario. The BCR is an economic tool that compares the net benefits of HSR (detailed in Chapter 4) against the net costs of the project. As a value-for-money indicator, the BCR is a critical benchmark for evaluating large infrastructure projects.

BCRs greater than one indicate that the project will yield economic benefits above its costs. BCRs less than one indicate that a project's costs outweigh its total net benefits.

Scenario Capital Costs

HSR capital costs comprise expenditures related to construction and delivery (including building or upgrading railway tracks, electrification, building stations, signalling systems and other civil engineering requirements), and expenditures related to non-capital requirements such as design, project oversight and environmental mitigation.

Due to the complexity and scale of an HSR system, international best practice is to fully assess the project in terms of economic impact and cost. The capital costs for Scenarios A and B were therefore estimated with three different ways of evaluating the service. All costs are estimated in 2021 dollars:

1. **Base direct capital costs:** These costs summarize the total gross costs of procuring and operating an HSR system and form the basis for the other two cost calculations noted below. Base costs are not adjusted over time and represent the cost of implementing the entire system within one year. This category of costs is used to illustrate the total dollar value of procuring HSR at a specific time.
2. **Economic costs estimated in inflation-adjusted (“real”) dollars:** These costs are adjusted over the 60-year lifecycle of HSR construction and operations based on assumptions about growth rates for economic variables, for example growth in revenues, population and/or the cost of buying goods and services. Economic costs are used to assess the net economic benefits of HSR and to estimate the BCR, and are expressed in terms of present value.
3. **Financial costs estimated in non-adjusted (“nominal”) dollars:** These financial costs are intended to compare revenues and costs of HSR over the lifecycle of the project. These costs are increased over time based on an assumed 3% rate of inflation, as the intent is to conduct an equivalent assessment of the extent to which HSR revenues can cover operating and capital costs at the time they are incurred.

Table 3.1 provides a summary of the base direct capital costs for HSR in the Toronto-Windsor corridor. These costs do not include a contingency for cost overruns or uncertainties that may affect project delivery. They reflect only the direct costs of procuring HSR infrastructure and vehicles.

Table 3.1: Summary of Scenario A and Scenario B Base Direct Capital Costs (Without Contingency)

Base costs in million \$2021	Scenario A	Scenario B
Toronto-London	\$15,090	\$4,110
London-Windsor	\$4,370	\$3,390
Total: Toronto-Windsor	\$19,460	\$7,500

Source: Steer Davies Gleave

Scenario B is anticipated to cost over \$4 billion for the Toronto-London segment of the corridor and approximately \$3.4 billion for London-Windsor. In contrast, Scenario A entails significant costs due to tunnelling, with capital costs of \$15 billion for Toronto-London and \$4.4 billion for London-Windsor.

Given the early stages of HSR analysis and study, and in consideration of potential uncertainties and risks to project delivery (e.g., unanticipated future infrastructure costs), the analysis included a 66%

contingency (also termed an “uplift”) to these base direct capital costs, in addition to other soft costs.*

The 66% uplift is based on international best practices and guidance from the American Association of Cost Engineering (AACE)¹ and the United Kingdom Treasury Board Green Book for projects that are similar in scope to HSR.² It is important to note that this uplift is significantly higher than other rail projects in Ontario such as GO RER, which assumes a 50% contingency for its cost estimates.³ This demonstrates that HSR costing has been undertaken on a conservative basis that is appropriate for this stage of the project.

Building on the base direct capital costs in Table 3.1, capital costs that include the 66% contingency are shown in Tables 3.2 and 3.3 and are listed by the three cost categories defined previously. As noted above, the base direct, economic and financial costs differ only because the growth assumptions used to calculate them are different. For example, since financial costs are increased by an assumed annual inflation rate of 3% throughout the project lifecycle, these estimates are higher than the adjusted economic costs and the base direct capital costs, which are incurred in their entirety within one year.

Table 3.2: Summary of Scenario A Uplifted Capital Costs (Including Contingency)

Capital costs in million \$2021	Toronto-London	London-Windsor	Toronto-Windsor
Base	\$43,580	\$12,970	\$56,550
Economic	\$41,610	\$10,630	\$52,240
Financial	\$45,250	\$12,020	\$57,270

Source: Steer Davies Gleave

Table 3.3: Summary of Scenario B Uplifted Capital Costs (Including Contingency)

Capital costs in million \$2021	Toronto-London	London-Windsor	Toronto-Windsor
Base	\$10,870	\$10,070	\$20,940
Economic	\$10,600	\$8,940	\$19,540
Financial	\$11,480	\$9,760	\$21,240

Source: Steer Davies Gleave

* Soft costs include assumptions for as-yet unknown expenditures such as environmental mitigation, HSR project staffing and overhead, training and project preparation costs (for example, detailed design, consultation, etc.). These assumptions are further detailed in the appended business case.

It is important to note that if the above HSR figures were estimated using the GO RER contingency assumptions based on the GO RER initial business case, the capital cost estimates for HSR would be lower, as illustrated in Table 3.4, below.

Table 3.4: Estimate of Scenario B Capital Costs Using GO RER Assumptions (Including 50% Contingency in \$2014)

Capital costs in million \$2014 based on GO RER assumptions	Toronto-London	London-Windsor	Toronto-Windsor
Base	\$8,000	\$7,400	\$15,400

Source: Steer Davies Gleave

As the EA process proceeds and more information about the corridor and procurement approach for HSR is obtained (for example, in terms of governance and financing), it is anticipated that the contingency will be reduced and that costs estimates will be refined accordingly.

A key conclusion from the capital cost assessment is that Scenario B represents the lowest capital costs across all categories of cost estimation.

For the purposes of this report and subsequent chapters, the economic cost estimates including the contingency are used since they allow for a comparative assessment of HSR costs and benefits. The economic costs are compared with economic benefits to yield the BCR, which provides a clear benchmark of the value for money of undertaking HSR.

As illustrated in Table 3.5, the analysis demonstrates a positive business case for Scenario B only in the segment between Toronto and London (BCR of 1.02), since its BCR of greater than one indicates that the economic benefits of HSR between Toronto and London outweigh the costs of delivering the service; the BCR for the entire corridor, however, is less than one.

In contrast, the business case analysis reveals that Scenario A, with a BCR of 0.36 between Toronto and London and a BCR of 0.17 between London and Windsor, is not a viable option; although it provides similar benefits to Scenario B, it also presents significantly higher costs.

Table 3.5: Summary of BCRs for Scenario A and Scenario B

Economic BCR	Scenario A	Scenario B
Toronto-Windsor	0.32	0.70
Toronto-London	0.36	1.02
London-Windsor	0.17	0.24

Source: Steer Davies Gleave

Travel demand, population densities and distances between cities along the Toronto-Windsor corridor do not support the additional cost associated with a dedicated 300 km/h HSR system. A pragmatic approach, whereby existing provincial infrastructure investments on the corridor can be leveraged to improve travel times and service frequencies, is required.

In summary, the assessment of costs and the BCRs demonstrate that Scenario B (a seven-stop, 250 km/h HSR service in the Toronto-Windsor corridor) yields better value for money.

Recommendation 18: Speed

The Province should implement electrified 250 km/h HSR technology for the Toronto-Windsor corridor.

- This would offer a distinct intercity service that meets the UIC definition for HSR.
- To reduce infrastructure costs, the Province could investigate the procurement of HSR trains with tilting capability, which can allow trains to achieve higher speeds on less optimal alignments, such as curves.

The following section and Chapter 4 examine considerations for implementing HSR and the economic benefits that the service will bring to the corridor.

Implementing High Speed Rail

This section provides details on HSR capital works and service planning and makes recommendations with respect to integration of HSR capital planning with GO RER and coordinating service planning with other passenger rail and intercommunity bus services.

Preparatory Work – HSR and GO RER Integrated Capital and Service Planning

As discussed in the previous section, HSR will be operating on a shared corridor with GO RER between Toronto and Kitchener-Waterloo, so the interplay between the two services on the Kitchener corridor is a critical consideration underlying the success of HSR in Ontario. The Province will need to ensure that both initiatives are aligned, in particular by ensuring that current planning and procurements for GO RER take account of and enable HSR.

Building on its 2014 commitment for GO RER to Kitchener-Waterloo, the Province has tasked Metrolinx with providing all-day two-way service along the corridor. Several planning and procurement studies are currently underway, including freight rationalization, electrification and station upgrades. Specifically, the Province's commitment to GO RER includes

- Fifteen-minute service between Union Station and Bramalea.
- All-day two-way service to Kitchener-Waterloo. This service is expected to serve all stops between Kitchener-Waterloo and Bramalea and then run directly as an express to Union Station.
- Additional peak-period service to Georgetown and Mount Pleasant.
- New GO station stops at Breslau, St. Clair, Mount Dennis and Liberty Village.
- Enhanced Train Control (ETC) (Request for Quote issued in June 2016).

Capital works and service planning are two key aspects of the Province’s GO RER plans that, if undertaken strategically and with a long-term vision, could accelerate HSR delivery and increase the viability of expanded rail services on the Kitchener corridor. Measures to ensure that GO RER capital works protect for HSR and that service planning is integrated for all rail services are discussed in further detail below.

GO RER Capital Works

It will be critical for MTO to work in close partnership with Metrolinx to ensure an alignment of service planning and capital cost assumptions for GO RER and HSR. The following recommendations, based on the HSR business case, are essential for enabling HSR on the Kitchener corridor.

Recommendation 19: Accommodating HSR in GO RER Work
<p>The Province should ensure that GO RER commitments, planning and capital works accommodate future HSR on the Kitchener corridor.</p> <ul style="list-style-type: none"> ■ The development of GO RER with a view to its interoperability with HSR on the Kitchener corridor will support the Province in advancing both commitments. ■ The Province should <ul style="list-style-type: none"> ○ Ensure that electrification and railway on the Kitchener corridor is built to accommodate speeds of 250km/h. ○ Protect the Kitchener corridor and stations for future capacity expansion wherever feasible. ○ Ensure level boarding platforms are not precluded at the designated HSR/GO RER station stops. ○ Prioritize the implementation of Enhanced Train Control (ETC) and ensure that signalling systems and other technologies do not preclude HSR operations.

Service Planning

Service planning refers to the number and frequency of trains operating along a corridor within a given period. In the case of international HSR systems, trains generally run every hour; however, on certain busy international corridors there can be as many as 10 trains an hour. Service planning is based on ridership demand and the capacity available on railway corridors.

To assess ridership for HSR on the Toronto-Windsor corridor, annual demand for the service was extrapolated based on traveller preferences for time savings, fares, proximity and ability to access HSR stations, and other socio-economic variables.

The business case has forecast total HSR ridership of up to 10.6 million by 2041.

The following frequency of services is the initial recommendation to minimize costs, optimize benefits, and to meet the projected ridership demands. Detailed train service demand modelling is required to confirm the recommendation and this will take place during the EA process.

Recommendation 20: Union-Kitchener Service Frequency

Based on ridership demand and corridor capacity, it is recommended that during peak periods the Province provide, in both directions, a frequency of 3 HSR trains and 1 GO RER train between Union Station and Kitchener.

- The Province should also provide the following service levels during off-peak periods:
 - 2 HSR trains per hour.
 - 1 GO RER train per hour.

HSR will become an essential part of the region's transportation network. As in most countries with high speed intercity services, the new service must become only one part of an integrated public transportation system. To ensure an appropriate level and mix of intercity and commuter services, it is recommended that the Province optimize its own rail services and coordinate with VIA Rail, Metrolinx, and other services that operate in the corridor, such as intercommunity bus services.

Recommendation 21: Integrated Provincial Services

The Province should align provincial mandates to optimize rail services by directing Metrolinx and MTO to collaborate on the development of an Integrated Rail Strategy for the Toronto-Kitchener corridor, which would

- Clarify the mandates of GO RER, UP Express and HSR on the corridor.
- Assess ridership and service frequencies.
- Recommend how the Province might optimize GO RER, UP Express and HSR ridership to maximize the benefit to Ontarians.

Recommendation 22: Coordination with VIA Rail Services

The Province should coordinate the integration of Southwestern Ontario passenger services with VIA Rail.

- MTO should engage VIA Rail with the objective of rationalizing VIA Rail and HSR service patterns in the Toronto-Windsor corridor.
 - On the Toronto-Kitchener corridor, HSR would replace VIA Rail service.
 - VIA Rail would continue operations from Union Station to London on the CN South Main line (not on the Kitchener corridor), serving a number of communities, including Oakville, Aldershot, Brantford, Woodstock, and Ingersoll.
 - Between Kitchener and London, VIA Rail would continue to operate on the CN North Main line via St. Marys and Stratford.
 - Between London and Windsor, VIA Rail would continue providing existing services until HSR is introduced in this segment of the corridor.
 - To ensure an integrated system, VIA Rail and HSR would enter into a codeshare agreement (i.e., a business arrangement where two operators share services) that would allow passengers to seamlessly use the two services with the same ticket.

In addition to aligning HSR with other rail service providers, the Province will also need to consider opportunities to coordinate with private bus companies. The Province's intercommunity bus consultations in summer 2016 showed that private bus companies have become increasingly concerned that subsidized public transit operators like GO Transit and VIA Rail are being given an unfair advantage. It is reasonable to assume that these concerns will only be amplified with the development of HSR.

The business case demonstrates that HSR will have an impact on bus travel in the Toronto to Windsor corridor as former or potential bus customers switch to HSR. HSR implementation, however,

also has the potential to be used as a catalyst to develop a strategy and partnership with the bus industry to encourage feeder services to HSR stations and in the process, facilitate a re-opening of abandoned routes to smaller communities. This could provide a means for the bus industry to benefit from, rather than be adversely affected by, the transportation modal split that HSR will precipitate.

Recommendation 23: Intercommunity Bus

As work on the intercommunity bus modernization initiative advances, the Province should work closely with the bus industry and other stakeholders to develop a partnership strategy with HSR for mutual benefit.

REFERENCES

¹ AACE Inc. (2003). *AACE International Recommended Practice No. 17R-97 Cost Estimate Classification System*. https://www.nsf.gov/about/contracting/rfq/s/support_ant/docs/facility_manuals/palmer_mcm_and_southpole/costestimatingssystemaace-208a.pdf.

² HM Treasury (2013). *Green Book Supplementary Guidance: Optimism bias*. <https://www.gov.uk/government/publications/green-book-supplementary-guidance-optimism-bias>.

³ Metrolinx. *GO Regional Express Rail Initial Business Case*. http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/GO_RER_Initial_Business_Case_EN.pdf.

Chapter 4

The Benefits of High Speed Rail

HSR will have a transformative impact on Ontario's economy and deliver benefits by motivating a significant mode shift away from the automobile, reducing travel times and providing better connectivity along the Toronto-Windsor corridor; all of these will support the Province's goals for addressing climate change. HSR will also generate benefits by connecting economic clusters, increasing employment catchment areas, and encouraging competition and knowledge-sharing.

This chapter details some of the benefits that will be realized both quantitatively and qualitatively as a result of HSR in the Toronto-Windsor corridor. It is structured to reflect the three key themes (foundational principles) highlighted in the vision for HSR as described in Chapter 3: Transform Mobility; Catalyze Economic Development; and Support Regional Integration and Development. Figure 4.1 illustrates the benefits described in this chapter within the context of the three themes.

The BCRs shown in Table 3.4 of Chapter 3 include a range of benefits that fit under the first two key themes and include, for example, GHG reductions as a result of HSR, benefits of reduced road congestion and passenger travel time savings, and cost savings through a reduction in personal automobile ownership, all over a 60-year time frame.

The third key theme is covered in the second half of the chapter, which describes what are commonly referred to as wider economic benefits, or WEBs. There is a growing practice worldwide of including WEBs in BCR calculations for transportation projects. WEBs are the additional benefits that transportation projects such as HSR can deliver to regions as a result of increased connectivity and mobility options, which generate what is referred to as "expanded benefits." With the inclusion of WEBs in the BCR calculation for HSR between Toronto and London, the expanded BCR increases from 1.02 to 1.09.

It is estimated that HSR would generate over \$20 billion in economic value over a 60-year period. Approximately \$17 billion of these benefits will be realized in the Toronto-London segment of the corridor, with the remaining \$3 billion realized in the London-Windsor segment.

Figure 4.1: The Benefits of HSR



Source: Steer Davies Gleave

Transform Mobility

Based on projections consistent with the Province's *Growth Plan for the Greater Golden Horseshoe (2006)*, over 10 million travellers annually are forecast to use HSR in the Toronto-Windsor corridor by 2041. As a comparison, in 2015, VIA Rail carried approximately 920,000 passengers in the Toronto-Windsor corridor and 3.6 million passengers in the entire Quebec City-Windsor corridor.¹

As the business case demonstrates, HSR will alter transportation patterns in the Toronto-Windsor corridor and encourage a shift away from automobile use. A comparison between forecast mode shares in 2041 under a business-as-usual (BAU) scenario and with HSR implemented demonstrates that if the BAU scenario prevails, automobile use in the corridor would reach 95%. With the implementation of HSR, automobile use is forecast to be 86%. In 2041, HSR could therefore take an estimated 5.7 million cars off of the highway network between Toronto and Windsor.

Travel Time Savings

A key benefit of HSR would be reliability and travel time savings. HSR is anticipated to offer savings of between 40% and 60% over current travel times, as highlighted in Table 4.1.

Table 4.1: Comparison of Travel Times: HSR and Other Modes

Segment	Travel time (minutes)							
	A	B	UPX	GO	GO RER	VIA Rail	Air	Auto
TO ▶ PE	14	16	25					23
TO ▶ GU	32	39		99		69		67
TO ▶ KI	41	48		123	72	95		74
TO ▶ LO	66	73				130	42	120
TO ▶ CH		102				200		172
TO ▶ WI	115	124				254	68	221
GU ▶ KI	9	9		24		26		7
KI ▶ LO	25	25				118		46
LO ▶ WI	49	51						101
Resulting HSR Ridership (2041)	11,662,300	10,621,700						

Source: Steer Davies Gleave

These travel-time reductions represent an unprecedented level of efficiency for passenger travel in this corridor, especially when viewed in combination with the productivity and environmental benefits. The business case has estimated that travel time savings from HSR would yield over \$7 billion in economic benefits over a 60-year period.

Savings from Automobile Use

HSR will provide an alternative to the automobile and consequently could reduce the need or desire for automobile ownership or use. This would yield significant economic benefits including reductions

in costs related to automobile ownership (purchase costs, insurance) and operations (fuel, maintenance etc.).

The reduction in automobile use would also result in a reduction in expenditures related to highway maintenance and expansion along the corridor (i.e., if personal automobile use decreases, this would result in less wear on highway infrastructure). In combination, these reductions are estimated to yield approximately \$9 billion in benefits over a 60-year period.

Congestion Reduction and Safety Benefits

According to the business case, automobile use in the Toronto-Windsor corridor is primarily single occupancy with an average of 1.2 occupants per car.

HSR's travel time savings would encourage automobile users to switch to HSR, which would increase the overall efficiency of passenger travel on the Toronto-Windsor corridor and free up road capacity for other productive uses including the movement of goods. The business case estimates that the Province would realize approximately \$3.7 billion in economic benefits over a 60-year period through a reduction in congestion and associated improvements to transportation safety (i.e., due to a reduced number of vehicles on the road) directly attributable to HSR.

Environmental Benefits

HSR would unlock significant environmental and economic benefits. Over a 60-year period, HSR would lead to reduced emissions and save over 7 million tonnes of CO₂ from entering the atmosphere.

Although this represents a relatively small percentage of overall Ontario emissions, a 250 km/h electrified HSR service has a carbon reduction factor of over 20. This suggests that for every tonne of CO₂ that the HSR system would create due to electricity supply requirements, it would remove over 20 tonnes of CO₂ emissions from the road network due the changes in travel demand driven by the HSR service.

Travel by HSR produces one-third of the carbon emissions of car travel and one-fourth of the emissions of an equivalent trip by air.² In the long term, this would contribute to the Province's goals to transition to a low-carbon economy and reduce GHG emissions, particularly in the transportation sector.

In addition to the reduction of GHG emissions, HSR generally also presents other environmental benefits. Studies indicate that HSR systems demonstrate high levels of land-use efficiency in

comparison with the land required for highway operations; for example, a two-track HSR railway can carry 13% more passengers per hour than a six-lane highway and requires 40% less land.³

Catalyze Economic Development

Talent Mobility and Attraction

HSR could shape travel in the Toronto-Windsor corridor by expanding the commute shed* and reducing commute times between Toronto and Kitchener-Waterloo to an average of 48 minutes. This will enable greater mobility for all categories of travellers from business to leisure and allow more Ontarians to live and work in different communities.

Compared to driving, which can take up to two hours between Toronto and Kitchener-Waterloo during peak times, this is a significant time-saving benefit. It is also worth considering that the time spent commuting by rail can be considered productive time, since high speed internet and mobile connectivity options would enable HSR commuters to do work or other tasks they would otherwise be unable to accomplish if they were driving.

Similarly, Kitchener-Waterloo and London would be brought well within the 45-minute commute shed range at 25 minutes. This means that the total two-way daily commute time between the two cities would be less than one hour, representing a significant opportunity for talent mobility between two growing communities that have strong industrial foundations and world-class universities.

In addition to reducing travel times and enabling the expansion of commute sheds, HSR would connect knowledge centres throughout the corridor. The benefits of this are difficult to quantify, but connecting key centres of learning has been undertaken elsewhere in the world. For example, in the U.K., the London-Cambridge high-tech corridor rail service connects world-class educational institutions with the country's largest city and financial centre.

In the Toronto-Windsor corridor, many knowledge and corporate centres, including those highlighted in Table 4.2, would be linked by HSR connections.

By connecting these knowledge centres, HSR could support innovation and collaboration between industries and academic institutions, or create more opportunities for university/college partnership programs or the expansion of satellite campuses.

* For the purposes of this report, "commute shed" is defined as a geographic area within which people can travel in a specified time.

Table 4.2: Selection of Knowledge Centres in the Toronto-Windsor Corridor

Urban Centre	Knowledge Centre
Downtown Toronto	<ul style="list-style-type: none"> • University of Toronto • Ryerson University • Ontario College of Art and Design (OCAD University) • MaRS Discovery District/Healthcare District • Financial District • Humber College • George Brown College • Seneca College • Various universities with downtown campuses
Pearson Airport	<ul style="list-style-type: none"> • Adjacent airport corporate centre
Guelph	<ul style="list-style-type: none"> • University of Guelph
Region of Waterloo	<ul style="list-style-type: none"> • Wilfrid Laurier University • University of Waterloo • Conestoga College • Start-up and high-tech hub
London	<ul style="list-style-type: none"> • University of Western Ontario • Fanshawe College
Windsor	<ul style="list-style-type: none"> • University of Windsor • St. Clair College

Source: Steer Davies Gleave. Note that this list of knowledge centres and institutions in the corridor is representative and not necessarily exhaustive.

In a recent speech, the Premier’s Business Advisor, Ed Clark, gave sound advice: “Create the right environment and companies will come to where the supply of talent and ideas are located.” Modern, fast, efficient transportation links, including HSR, are an essential part of creating such an environment, one that will foster innovation, investment and productivity.

Global connectivity is so important to commerce today that access is crucial not just to Toronto as the region’s major business centre but to other cities in North America and around the world as well. Efficient and reliable transportation links from Pearson, Canada’s largest airport, to businesses within the Greater Toronto Area are essential.

Throughout the Special Advisor’s engagement with Indigenous communities and with stakeholders, particularly those representing the business sector in the corridor, a key theme was repeated: talent mobility among Southwestern Ontario municipalities is the single-largest challenge for growing

companies. For example, representatives of the technology business community in Kitchener-Waterloo believe that when a company grows beyond 300 employees it often “hits a wall” where talent attraction and retention becomes challenging. Many young professionals tend to prefer to live in larger urban centres such as downtown Toronto. Without access to the talent pool of high-tech professionals in the Toronto area, companies find it more difficult to expand their operations.

Beyond Kitchener-Waterloo, similar challenges are faced by companies in the London area. At a roundtable held in London by the Mowat Centre in 2015 with information communications technology executives, the main concern expressed was over the barriers posed by a skills shortage—executives worry that they only have partial success in attracting top talent to London although the city has access to top university and college graduates and attractive features such as more affordable housing. But they compete with, and often lose out to, what they perceive to be more desirable city centres. The connection of economic hubs through a fast, reliable HSR service will expand the overall commute shed and enable greater mobility.

Wider Economic Benefits (WEBs)

As described earlier in the chapter, the expanded BCR for HSR includes the measurement of WEBs. According to the business case, the literature on WEBs typically divides benefits into three categories:

- Agglomeration benefits.
- Imperfect competition.
- Labour supply improvements.

The primary benefits related to HSR are associated with agglomeration.

Agglomeration benefits, or “cluster benefits,” are generated when firms and people locate near one another in cities and industrial clusters and encourage knowledge-sharing, competition, and innovation.⁴ HSR can be considered to bring firms and people closer together through reduced travel times.

These benefits would positively impact the following industries in the Toronto-Windsor corridor:

- Manufacturing (light and heavy manufacturing).
- Construction (residential, commercial, and industrial construction).
- Consumer services (sales, retail, tourism, transportation).
- Producer services (insurance, finance, research and development, and knowledge-based industries).

As shown in Table 4.3, WEBs would generate an additional \$1.3 billion in economic benefits for the corridor over a 60-year period, which in addition to the base benefits brings the total value generated in the corridor to \$21.55 billion. The business case demonstrates that producer services are expected to generate the majority of benefits due to the density of knowledge in this sector between Kitchener-Waterloo, Guelph, and Toronto in particular.

Additionally, WEBs that have been calculated for Kitchener-Waterloo to London are anticipated to see the most growth over the 60-year period, largely due to the population and employment growth forecast for the region.

Table 4.3: Value Generated Through WEBs

Sector	Value
NPV 60-year (million \$2021)	\$1,300
Manufacturing (million \$2021)	\$260
Construction (million \$2021)	\$80
Consumer services (million \$2021)	\$100
Producer services (million \$2021)	\$860

Source: Steer Davies Gleave

Overall, although the WEBs generate fewer benefits compared to the base benefits, it is important to understand that HSR systems generate more than just travel-related benefits. Measuring agglomeration benefits in particular quantifies some of these WEBs, while other benefits are qualitative.

Support Regional Integration and Development

As demonstrated throughout the business case, HSR will provide a fast, efficient connection between urban centres and knowledge centres in the corridor. In addition to transforming mobility and catalyzing economic development, HSR will also contribute to regional integration and development.

According to the business case, the population catchment for HSR by 2041 will be 13.5 million people, providing a significant number of Ontarians access to a service that connects them to jobs, universities, and cultural centres when and if they need it. This shift in regional integration benefits can be expanded by investing in first-mile/last-mile connections to HSR and expanding the feeder system for buses and rail, and by encouraging mixed-use development and intensification in and around HSR stations.

From a land-use perspective, HSR will support provincial policies such as the *Growth Plan for the Greater Golden Horseshoe (2006)*, by helping the Province to grow where it has designated for intensification without adding pressure to the Greenbelt. It will be necessary to encourage this by intensifying development around HSR stations and encouraging municipalities to pursue transit-oriented development.

Furthermore, regional integration is closely linked to economic growth, which is more likely to occur in places that have better transportation connections. This includes local transit and first-mile/last-mile linkages, but it also includes HSR and its ability to increase market access and connect communities within a larger region.

Some argue that HSR has a tendency to exacerbate sprawl by allowing more people to commute to the hub city, which just increases challenges faced by regional centres that were supposed to benefit from quicker connectivity. For example, there has been some doubt in the U.K. that the planned HS2 between London and Birmingham will turn Birmingham, the U.K.'s second-largest city, into a bedroom community rather than an independent commercial hub. However, an assessment of the German ICE model has shown that an HSR connection in smaller communities can actually directly contribute to strong economic growth.

Limburg and Montabaur, two small German towns with populations of approximately 34,000 and 13,000, are 20 kilometres apart along the German ICE track that runs from Cologne to Frankfurt, two major hub cities with populations of around 1 million and 700,000 respectively.

In partnership with other levels of government, local planning authorities in both Limburg and Montabaur were able to negotiate an HSR stop when the ICE line was being planned and to provide land for development. The HSR station at Montabaur was built outside the city centre, a short distance from a highway connecting Cologne and Frankfurt. Commuters were attracted by low residential land values and proactive zoning of private land. Development in the area surrounding the station started occurring as the station and HSR line were being developed and accelerated after operations began.

The station also spurred the development of business and retail centres. Since the station opened, approximately 50 enterprises with 1,000 jobs have located in Montabaur. A study of the spatial impacts of HSR found that the Montabaur's GDP and employment grew by 2.7% more than other comparable communities, and concluded that HSR had a tangible and permanent impact on the town's growth.⁵

The key lesson from this example is that the implementation of any HSR system should be coupled with an alignment of regional transportation and of economic and urban planning policies. In cases where HSR has generated economic benefits, it has been coupled with efforts to connect stations to transit linkages and other first-mile/last-mile connections.

Recommendation 24: Encouraging Density

It is recommended the Province develop and/or encourage, as appropriate, regional development initiatives, tax incentives and/or grants to mitigate any urban sprawl HSR might create, and encourage transit-oriented development in station areas.

- Since growth and development policies are implemented at the municipal level, the Province should work closely with municipalities to achieve this objective.

Chapter 5

Governance

HSR will establish a new form of transportation in Ontario, distinct from any other mode of travel. It is essential for the Government to establish the right governance structure to ensure that HSR is delivered to meet the Province's objectives. This section reviews international experience and sets out a recommended governance framework for HSR planning and operations in Ontario.

The function of governance is to ensure that an organization or partnership fulfils its overall purpose, achieves its intended outcomes and operates in an effective, efficient and ethical manner.⁶

Appropriate governance supported by relevant legislation will ensure that HSR is subject to proper oversight, is effectively and efficiently delivered, and meets the Province's objectives.

Significant organizational capacity will be required to oversee the delivery of HSR. Due to their scale and complexity, international HSR projects are generally delivered and managed by public corporations with significant autonomy over business operations. As Ontario does not yet have governance and delivery systems in place for HSR, it is recommended that the Province create a new legislated entity to manage the implementation and operation of the service.

Aligning the mandates of provincial agencies, including this new HSR entity and Metrolinx, and ensuring that their roles and responsibilities are each clearly delineated will be critical, particularly with respect to the operation of services in the Kitchener corridor.

Current Passenger Rail Governance Systems in Ontario

Passenger rail services in Ontario are delivered by the publicly-owned corporations Metrolinx (provincial) and VIA Rail (federal). Reviewing the governance systems for each of these corporations provides context for considering potential models for HSR governance.

Metrolinx

Originally established in 2006 as the Greater Toronto Transportation Authority (GTTA) under the *GTTA Act*, Metrolinx is a Crown agency with authority now established through the *Metrolinx Act*.

The act defines the agency's mandate and outlines responsibilities, reporting relationships and scope of operations. Metrolinx is overseen by a board appointed by order-in-council (OIC) by the Minister of Transportation and operates under the oversight of MTO.

A legislated mandate provides clear direction to both Metrolinx and MTO on their respective roles and responsibilities. This direction is further specified in a five-year Memorandum of Understanding (MOU) that governs the relationship.

The agency is responsible for providing leadership in the coordination, planning, financing and development of an integrated, multimodal transportation network in the GTHA. It also plays a lead role in the procurement of vehicles for local transit systems, equipment, technologies, facilities, and related supplies and services on behalf of Ontario municipalities.

While Metrolinx was originally established as a regional transit planning organization, in 2009 the province merged it with GO Transit. This provided Metrolinx with a significant transit operations role and brought provincially-operated bus and rail services under one umbrella.

Metrolinx currently oversees two rail services: GO Trains, which provide commuter services, and the UP Express, a dedicated rail link to Pearson Airport that also carries some commuters. Through the implementation of GO RER, Metrolinx is overseeing a significant expansion in its rail network with the eventual goal of offering frequent services along all of its rail corridors.

With the exception of a 14-kilometre stretch between Bramalea and Georgetown, Metrolinx owns the track between Toronto's Union Station and Kitchener on the Kitchener corridor, and has the authority to charge track access fees and regulate the operations of rail services running on its tracks.

Key Features of the Metrolinx Model

As an integrated service provider, Metrolinx has the ability to align transit operations and provide an interconnected system. Through its operation of buses, trains, and its ownership of stations, railway, parking and ticketing services, Metrolinx provides commuters with an integrated solution that can cater to specific regional markets, and it can offer aligned service timetables, consistent service and predictable ticketing and fares. This system of operations is similar to European regional rail networks, especially those of France and Germany.

Metrolinx is provincially funded. Although rail services recoup a portion of their operational costs, all capital investments, rolling stock procurements and maintenance work is financed through annual and project-specific appropriations.

VIA Rail

VIA Rail was created in 1977 as a subsidiary of CN (then a Crown corporation) to provide intercity passenger service in Canada. VIA Rail's shares were soon purchased by the Government of Canada, and it was established as a parent Crown corporation under the *Financial Administration Act*. VIA Rail is incorporated under the *Canadian Business Corporations Act* of 1985 with the Government of Canada as the sole shareholder.

VIA Rail provides services across Canada, including through Ontario. Within the province it offers frequent intercity semi-express rail services from Toronto to Ottawa and beyond to Quebec, and limited semi-express service from Toronto to Southwestern Ontario. Close to 95% of VIA Rail's passenger volume and 75% of its annual national revenues are based on the Quebec City-to-Windsor corridor.⁷

Key Features of VIA Rail Governance

VIA Rail does not have enabling legislation. The corporation's governance, financing and mandate are determined by the federal cabinet and subject to change depending on government's financial priorities.

Similar to other Crown corporations, VIA Rail is at arm's-length to the federal government, with an independent board and Chief Executive Officer appointed by the Minister of Transport Canada. VIA Rail operates under a subsidy model. It receives an annual appropriation from the federal government and all net losses are covered through operating subsidies.

Unlike Metrolinx, VIA Rail does not have an MOU. Its operations are influenced by the *Canada Transportation Act (CTA)*, which establishes the legislative framework for Canada's transportation sector; however, the CTA does not make specific provisions for passenger rail operations.

VIA Rail's strategic direction, which assumes a five-year timeframe, is detailed in its corporate plans, which are annually prepared and must be approved by Transport Canada.

Towards a Governance Model for HSR – International Experience

To inform recommendations for an appropriate approach to HSR governance in Ontario this study reviewed models used in Europe, the U.K., and Japan, which are each described in detail below. As a general observation, international experience provides three broad conclusions about the governance of HSR systems and similar large passenger rail operations:

1. **Dedicated governance:** HSR systems around the world are primarily delivered and operated by dedicated, publicly-owned corporations. These are structured as arm's-length bodies with clear legislative mandates and reporting relationships to their respective governments. The few privately-owned operations (e.g., HS1 in the U.K. and Japan Rail) operate under public oversight and regulation that sets clear requirements for service levels, fares, fees and maintenance.
2. **Separation of operations and infrastructure:** In Europe and Japan, legislation requires a separation of railway infrastructure and operations. These functions are delivered by distinct entities with the objective of allowing open access to railway networks, fostering competition

and ensuring that infrastructure is developed in a consistent manner. Indeed, this is the official policy of the European Union. The separation of railway operations and infrastructure in Ontario through regulation would require radical policy and legislative change in Ottawa that would force the freight railways to divest their infrastructure, with compensation. This is a very unlikely scenario and has never seriously been considered in Canada.

3. **Service delivery frameworks:** In all cases HSR systems operate as distinct services separate from commuter or conventional intercity railway services. HSR is marketed separately, generally operates on dedicated infrastructure, and its fares may be set based on market demand. This is in contrast to commuter and conventional intercity services, which aim to maximize passenger volumes, have regulated fares, and serve a greater number of stops.

HSR would be a new intercity passenger rail service in Ontario. A single-purpose entity tasked with implementing and operating the project would be able to effectively manage the various stages of the project from preliminary design and engineering to financing and operations.

A service-delivery framework would help clarify the roles and responsibilities of all passenger rail operators on the corridor, help manage service levels, and ensure that all services are complementary. This model would, in effect, mirror the regulated systems observed in Europe.

Assessing International Experience

With a few exceptions HSR systems around the world are owned and operated by national governments and funded by the public sector:

Europe: Germany, France, Spain (Publicly-Owned Infrastructure and Operations)

The French, German and Spanish model of delivery and operations is based on highly-integrated, publicly-owned railway corporations that operate at arm's-length but are publicly funded. These corporations also have oversight over all their countries' railway services including regional and intercity passenger operations.

As a result of European Union (EU) competition directives, European railway companies are required to separate infrastructure ownership from operations to foster competition and ensure that all rail providers have fair access to the railway network.

In France, the Federal Ministry of Transportation established the Société Nationale des Chemins de Fer Français (SNCF) as the primary organization to deliver rail services. SNCF Group consists of three state-owned corporations, including SNCF Réseau (network) and SNCF Mobilités (passenger and freight operations).⁸

SNCF Réseau (formerly incorporated as the separate Réseau Ferré de France [RFF]) manages French rail infrastructure, including expansion of the network, infrastructure maintenance, allocation of capacity, and establishment of track access fees. Over half of SNCF Réseau's revenue is derived from track access fees charged to SNCF Mobilités, which operates transit, commuter, regional, and HSR services and is fully funded by the French government.⁹

This dual structure has increased railway efficiency by fostering competition and simplifying management and reporting structures. Separating infrastructure from operations has ensured that all infrastructure works are undertaken consistently and based on clear standards and guidelines, maintenance schedules and procurement processes.

However, it has also led to challenges for government in ensuring a balance between the fees charged by SNCF Réseau to cover infrastructure maintenance and expansion costs and the fees paid by SNCF Mobilités to operate on the network. An increase in SNCF Réseau fees results in increases in SNCF Mobilités' operating costs and therefore lower net revenues; this necessitates a greater government subsidy or higher fares and/or lower service levels on unprofitable routes.

The German and Spanish systems operate under similar governance structures. The German railway network is overseen by Deutsche Bahn (DB), a highly-integrated, publicly-owned corporation. DB operates a wide range of services from freight rail to HSR to regional rail and bus.¹⁰ The corporation's integrated nature allows it to spread costs across a broad range of markets and business units, which reduces its operating risk.

Europe: United Kingdom (Publicly-Owned Infrastructure, Private Operations)

The United Kingdom has one of Europe's oldest and largest intercity and commuter rail networks. Prior to 1993, the U.K.'s railways were owned, operated and controlled by a single public entity, British Rail. Policy reforms in 1993 and 2004 led to increasing privatization of railway operations; all intercity, regional, and passenger commuter services are currently operated as franchises by private companies.¹¹

The U.K. has balanced private-sector ownership of rail operations with public-sector oversight and regulation over infrastructure, management, revenues and costs. Network Rail as a government agency owns and is responsible for maintaining and developing the railway network. The Department for Transport's Office of Rail and Road provides oversight over the entire system, setting track access charges, fares, and customer service standards, granting licences to train operators, and monitoring the railway system.¹²

The U.K.'s current railway governance system has led to a significant expansion in rail use, greater service efficiencies and higher levels of competition. At the same time, government subsidies have been reduced while fares have significantly increased. This expansion has also placed a number of

pressures on the rail network, necessitating greater public investment in building and upgrading railway infrastructure.

The scale and complexity of the U.K.'s commuter and HSR networks, which are governed separately, have meant greater government involvement in building HSR infrastructure, regulations and operations.

HS1 was the U.K.'s first experience with HSR. Initially envisioned as being delivered by a public-private consortium, the project's development was challenged by escalating costs, which led to increased delivery risks and consequent concerns from private-sector partners about the project's viability. To address these challenges, the government restructured the consortium and assumed a larger role in overseeing project delivery and funding.¹³

After completion, HS1 was operated by the government for ten years before its infrastructure and operations were tendered to a consortium of public-private interests. Currently, the Ontario Teachers' Pension Plan (OTPP) and Borealis own HS1's infrastructure and stations while SNCF, Caisse de dépôt et placement du Québec (CDPQ) and Hermes Infrastructure, a private equity fund, own the primary operator, Eurostar.¹⁴ It is interesting to note that Canadian pension funds became long-term investors in HSR once it established viability in a given market.

Figure 5.1 illustrates the U.K.'s HSR network. HS1 operates from London and connects to France via the Channel Tunnel. HS2 is a planned expansion to the HSR network that will provide connections to northern England and Scotland through Birmingham.

Figure 5.1: U.K. High Speed Rail Network



Source: U.K. Department for Transport

The U.K.'s experience with HS1 has significantly influenced subsequent large rail infrastructure projects such as Crossrail and HS2. Overviews of their governance structures and key lessons are detailed in Tables 5.1 and 5.2.

Table 5.1: Case Study of Crossrail

Crossrail	
Project Overview ¹⁵	<p>Crossrail is Europe’s largest infrastructure project, with a total cost of close to \$30 billion. It covers 118 km of rail, including 42 km of tunnels, has 40 stations, and is being built by over 10,000 workers.</p> <p>The project is aimed at increasing transit capacity, providing faster connections across London, supporting revitalization of neighbourhoods and balancing growth. Once complete, Crossrail will increase London’s transit capacity by 10% and bring an additional 1.5 million people to within 45 minutes of Central London.</p> <p>95% of Crossrail procurement has been awarded to domestic firms, most of them small and medium-sized businesses.</p>
Results	<p>The first Crossrail trains will begin service in 2017 and the full network will be operational by 2019. The project is anticipated to be delivered on time and on budget.¹⁶</p>
Governance Model	<p>The U.K. National Audit Office has singled out Crossrail’s governance model as a template for other large infrastructure projects.¹⁷ Independent reviews of the project by KPMG and the U.K. government have also highlighted the critical role that governance has played in ensuring effective project delivery.¹⁸</p> <p>Key elements of Crossrail’s governance:</p> <ul style="list-style-type: none"> • Establishment of a new independent public corporation (Crossrail Limited) to oversee project delivery. • Clear agreements between all partners, including industry and public-sector sponsors (U.K. Department for Transport and Transport for London). • A checkpoint system which gradually allowed Crossrail Limited to assume an increasing level of decision-making authority. • Private-sector partnership to help finance station stops along the Crossrail network.
Key Lessons	<ol style="list-style-type: none"> 1. Develop a clear business case that fully accounts for total project costs. 2. Create a new public or public-private corporation to oversee delivery. 3. Involve project beneficiaries (e.g., airports, businesses close to stations, municipalities) in supporting financing and delivery. 4. Ensure clear reporting relationships and mandates between the

	<p>delivery agent and the government.</p> <p>5. Create milestones or checkpoints in transitioning authority from the government to the delivery agent.</p> <p>6. Dedicate a discrete function within the delivery agent to pursue the delivery of wider economic benefits.</p>
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Table 5.2: Case Study of HS2

High Speed Two Limited (HS2 Ltd.)	
Project Overview	<p>HS2 is a \$93 billion CDN project to build a new HSR service from London to Manchester and Leeds via Birmingham. The project has three phases, with Phase 1 planned to open in 2026.¹⁹</p> <p>Objectives for building HS2 include enabling economic growth by meeting existing and future rail demand, and improving connectivity between towns and cities. The U.K. Department for Transport is also seeking to increase investment and regeneration around station areas.²⁰</p> <p>HS2 Ltd. is the company established to develop, build, and maintain this new HSR line.</p>
Results	<p>Construction is set to begin in December 2016.</p> <p>Results of HS2 Ltd.'s performance to date have been mixed:</p> <ul style="list-style-type: none"> • In 2013, the U.K. National Audit Office reported on early HS2 project preparations, having reviewed its business case, program management, and estimated project costs; the report identified weaknesses in a number of areas. For example, it found that the HS2 business case lacked strategic context and did not adequately detail certain aspects, such as the scale of potential future capacity shortages on HS2's rail lines.²¹ • In June 2016, the National Audit Office reported that steps had been taken to address weaknesses identified in 2013 and found that timelines projecting Phase 1 to open by 2026 were at risk due to legislative and other delays. As a result, the Department for Transport has advised HS2 Ltd. to review its project schedule without increasing costs.²²
Governance Model	<p>Key elements of HS2's governance:²³</p> <ul style="list-style-type: none"> • The establishment of a new independent public corporation, HS2 Ltd., as the project's delivery agent.

	<ul style="list-style-type: none"> • HS2 Ltd. is wholly owned by the Department for Transport. • The Department for Transport and HS2 Ltd. entered into a development agreement, similar to an MOU, which acts as the principal mechanism for managing the governance and operational relationship between them. • The Department for Transport acts as the project’s funder and sponsor and HS2 Ltd. is the delivery agent, subject to periodic reviews, reporting annually to the department, and subject to progress reports from the National Audit Office.
Key Lessons	<ol style="list-style-type: none"> 1. Create a new public corporation to oversee project delivery. 2. Ensure clear reporting relationships and mandates between the delivery agent and the funding sponsor through a mechanism such as a development agreement or MOU. 3. Establish periodic reviews to measure the corporate body’s performance and efficiency. Appoint an independent government person or body to oversee these reviews, identify at-risk milestones and project weaknesses and track the governing body’s performance in addressing them.

Japan Rail (privately-owned operations and infrastructure)

Japan has the oldest and one of the most extensive and integrated HSR networks in the world. The popular system accounts for a mode share of over 80% for all intercity trips of between 320 kilometres and 600 kilometres in length.²⁴

Prior to 1987 the entire Japanese railway system was integrated under Japanese National Railways, a single, state-owned entity. Reforms in 1987 led to restructuring and privatization of the HSR network, which now comprises six single passenger railway entities roughly divided by region.²⁵

The Japanese HSR network operates under a hybrid structure, whereby the government subsidizes services along low-volume and unprofitable routes but does not subsidize generally profitable lines on high-volume routes.

Railway reform also led to the creation of a dedicated entity, the Japan Railway Construction, Transport and Technology Agency (JRCTTA), to construct new HSR lines. JRCTTA owns the HSR infrastructure and leases it to the privatized HSR operators.²⁶

Recommended Approach

Based on an assessment of the Toronto-Windsor corridor and best practices of large rail infrastructure projects around the world, it is evident that effective and timely delivery of such projects, especially HSR, is predicated on the presence of a clear governance structure.

HSR would be one of the largest infrastructure projects ever undertaken in Ontario. The Province would need to maintain an ongoing role in the project's delivery due to its scale and complexity, and to ensure the Province's objectives for HSR were achieved.

It is therefore recommended that the Province pursue the creation of a dedicated governance body.

Recommendation 25: HSR Governance

The Province should establish, at an early date, a new independent Crown corporation to oversee HSR (HSRCO).

- The corporation would be a legislated entity with authority over the operations of HSR and all railway assets owned by the Province beyond Kitchener to Windsor.
- HSRCO would be established in the near term as the EA process proceeds under MTO's direction and would be in place prior to the start of HSR construction.
- Its mandate would include:
 - Oversight of all aspects of the project from financing and delivery to operations.
 - Responsibility for ensuring value-for-money and wider benefits from HSR implementation and operations.
 - Coordination with VIA Rail and Metrolinx on service plans.
- HSR operations from Toronto's Union Station to Kitchener would be detailed in an MOU with Metrolinx.
- A provincially-appointed board of directors would oversee the corporation.

HSRCO

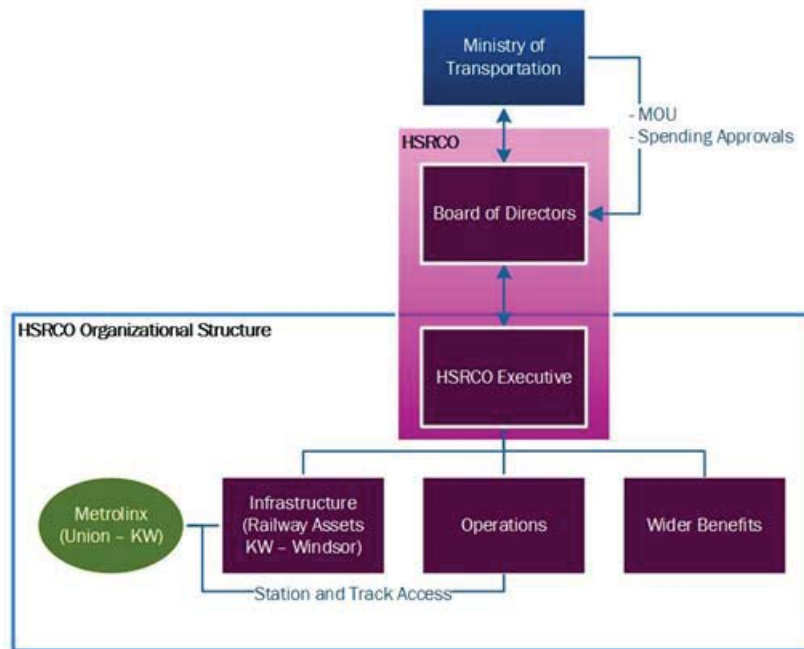
For the purposes of this report, the proposed Crown corporation to oversee HSR will be called "High Speed Rail Corporation" (HSRCO).

The Province should carefully consider the U.K.'s Crossrail and HS2 as potential models for the new HSRCO. Both projects have similar opportunities and challenges to those facing the implementation of HSR in Ontario.

Time frames for the new HSRCO are subject to government decision-making on HSR; however, as noted in the recommendation above, the entity should be in place to oversee the project's construction at an early stage in the project. MTO would continue to be responsible for the planning and analysis in support of the EA process before the establishment of HSRCO, and would lead robust consultation, studies and technical work.

A potential governance structure for HSRCO is illustrated in Figure 5.2 and described in the section below.

Figure 5.2: HSRCO Governance Structure



Legislated Entity

The new HSRCO would be created through legislation that would set the framework for the corporation’s mandate, responsibilities, reporting requirements and organizational structure.

HSRCO Organizational Structure

The relationship between HSRCO and MTO would be governed by an MOU that reflects the terms established in the legislation and details the responsibilities and requirements for reporting to the Minister of Transportation.

HSRCO would report to the Minister through a provincially-appointed board and would work closely with MTO on all matters related to HSR’s implementation and operations.

As mentioned earlier in the chapter, other jurisdictions often separate railway infrastructure and operations into distinct entities through legislation. HSRCO would not do this; however, there is value in managing the two in separate divisions within the same entity. This provides a clear mandate to the Infrastructure Division to have direct responsibility over construction, maintenance and capital financing of the assets while the Operations Division remains focused on running the service.

Additionally, Crossrail has had success with the implementation of a Wider Benefits division in their governance structure, which would also be an effective addition to the HSRCO structure. HSRCO would therefore comprise the following three primary divisions:

Infrastructure Division

Once a preferred financing and delivery model for HSR is determined, HSRCO would oversee all construction and infrastructure assets, including the stations and right-of-way between Kitchener and Windsor. This division would act as the dedicated HSR asset manager. Responsibilities could include overseeing or administering construction and maintenance of track, signals, communications and electrification systems. Should the private sector be engaged to finance and deliver the entire system or components of the system, the Infrastructure Division could oversee the key functions of such a contract.

Operations Division

The Operations Division would manage aspects of operations, including customer-focused services such as marketing, and ticket services, as well as non-customer facing services such as operating the trains, safety, inspection, and rolling-stock (train) management. Should the private sector be engaged to operate any or all of these services, the Operations Division could be responsible for managing the concession and ensuring that key performance indicators are met, as set out in agreements between HSRCO and the private sector proponent.

Wider Benefits Division

The establishment of a dedicated “wider benefits” function was a key recommendation from the U.K. government’s evaluation of Crossrail. This division’s purpose would be to ensure that HSR implementation and operations generate economic benefits and have transformative impacts. This could include pursuing land and station development opportunities, working with communities on creating linkages to HSR stations, and acting as the main HSR liaison division for local and Indigenous communities.

Engagement and Partnership

A key factor behind Crossrail’s success was the strong financial support the U.K. government and Transport for London were able to elicit from the business community, which included securing financial contributions for future Crossrail stations and instituting a business levy to help pay for the infrastructure.

As detailed in Chapter 2, *Connecting Communities*, there is strong interest from stakeholders and partners along the Toronto-Windsor corridor for HSR. The Province should ensure that future work

on the project, and ultimately HSRCO, continues to build on this engagement and cultivates partnerships with the business community as the project develops.

REFERENCES

¹ VIA Rail Canada. *Annual Report 2015*. https://www.viarail.ca/sites/all/files/media/pdfs/About_VIA/our-company/annual-reports/2015/ViaRail_AnnualReport_2015_EN.pdf, 9.

² Greengauge 21. *High-Speed Rail (HSR) and Carbon Emissions*. <http://www.greengauge21.net/wp-content/uploads/HSR-CarbonEmissions.pdf>.

³ Greengauge 21 (2009). *Fast forward: A high-speed rail strategy for Britain*. <http://www.greengauge21.net/wp-content/uploads/fast-forward1.pdf>; and American Public Transportation Association (January 2012). *An Inventory of the Criticisms of High-Speed Rail With Suggested Responses and Counterpoints*. <http://www.apta.com/resources/reportsandpublications/Documents/HSR-Defense.pdf>, 66–67.

⁴ Glaeser, E. L. (February 2010). *Agglomeration Economics*. The University of Chicago Press. <http://www.nber.org/chapters/c7977.pdf>, 1–14.

⁵ Ahlfeldt, Gabriel M. and Arne Feddersen (2010). *From periphery to core: economic adjustments to high speed rail*. London School of Economics & University of Hamburg. <http://eprints.lse.ac.uk/29430/>.

REFERENCES

⁶ Office for Public Management Ltd. and The Chartered Institute of Public Finance and Accountancy (2004). *The Good Governance Standard for Public Services*. ISBN: 1 898531 86 2

⁷ VIA Rail Canada. *Annual Report 2015*. https://www.viarail.ca/sites/all/files/media/pdfs/About_VIA/our-company/annual-reports/2015/ViaRail_AnnualReport_2015_EN.pdf, 9.

⁸ SNCF Group. *1 Group, 3 EPICS, 5 Business Units*. <http://www.sncf.com/en/meet-sncf/public-service-company>.

⁹ Ibid.

¹⁰ Deutsche Bahn AG (September 13, 2016). *Group profile*. http://www1.deutschebahn.com/ecm2-db-en/ir/dbgroup/group_profile.html.

¹¹ Competition & Markets Authority (July 17, 2015). *Competition in Passenger Rail Services in Great Britain*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/446255/Passenger_rail_services_in_Great_Britain.pdf.

¹² Ibid.

¹³ National Audit Office (March 28, 2012). *The Completion and Sale of High Speed 1*. HC 1834 SESSION 2010–2012. <https://www.nao.org.uk/wp-content/uploads/2012/03/10121834.pdf>.

¹⁴ Ontario Teachers' Pension Plan (November 5, 2010). *Borealis and Teachers' agree to acquire HS1, UK's only high-speed rail network*. <https://www.otpp.com/news/article/-/article/22888>; and Eurostar International Ltd. (2016). *Behind the scenes*. <http://www.eurostar.com/uk-en/about-eurostar/our-company/behind-the-scenes>.

¹⁵ Crossrail Ltd. (March 2016). *Crossrail in Numbers*. <http://www.crossrail.co.uk/news/crossrail-in-numbers>.

¹⁶ National Audit Office (January 24, 2014). *Crossrail*. HC 965 SESSION 2013–14. <https://www.nao.org.uk/wp-content/uploads/2014/01/Crossrail.pdf>.

¹⁷ Ibid.

¹⁸ Croft, Chris (August 2016). *What have we learned from the governance arrangements for the UK's Crossrail project?* KPMG. "Foresight: A global infrastructure perspective, 44th edition." <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/08/foresight-44-crossrail-lessons.pdf>.

¹⁹ National Audit Office (June 28, 2016). *Progress with preparations for High Speed 2*. HC 235 SESSION 2016–17. <https://www.nao.org.uk/wp-content/uploads/2016/06/Progress-with-preparations-for-High-Speed-2.pdf>.

²⁰ Ibid.

²¹ National Audit Office (May 16, 2013). *High Speed 2: A review of early programme preparation*. HC 124 SESSION 2013–14. <https://www.nao.org.uk/wp-content/uploads/2013/07/Full-Report.pdf>.

²² Ibid.

²³ The Department for Transport in consultation with High Speed Two (HS2) Ltd. (December 2014). *High Speed Two (HS2) Ltd. Framework Document*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389375/High_Speed_Two_HS_2_Ltd_framework_document_December_2014.pdf.

²⁴ Central Japan Railway Company (2016). *Market Area Characteristics and Transportation Capacity*. Annual Report 2016. http://english.jr-central.co.jp/company/ir/annualreport/_pdf/annualreport2016-02.pdf.

²⁵ Mizutani, Fumitoshi and Kiyoshi Nakamura (January 2004). *The Japanese Experience with Railway Restructuring*. NBER East Asia Seminar on Economics, Volume 12. <http://www.nber.org/chapters/c10195.pdf>; and High Speed Rail. *International High-Speed Rail System Summary: Japan*. https://ftp.dot.state.tx.us/pub/txdot-info/rail/high_speed/system-summaries/japan.pdf.

²⁶ Japan Railway Construction, Transport and Technology Agency. *For the Future Transportation Networks*. <http://www.jr-tt.go.jp/11english/pdf/pamphlet.pdf>.



Chapter 6

Financing and Delivery

HSR will be built within the context of the Province's path to a balanced budget; therefore, consideration of value for money is paramount. Determining how best to finance and deliver a project of this scale requires an understanding of options that balance innovation in design, construction, and user experience with risk and cost to government.

Financing and Delivering Ontario's Largest Transportation Project

As is often the case for public transportation and other public goods, capital costs for HSR systems are generally not fully recoverable through fares and other operating revenues alone. Although around the world revenues typically cover operating and maintenance costs for HSR systems, reliable financing and funding is always required to deliver capital infrastructure. This chapter discusses financing and delivery options for HSR in Ontario and identifies some potential funding opportunities.

To achieve a successful HSR system a variety of elements must be considered, including but not limited to

- **Planning the HSR system**
 - A major transportation infrastructure project such as HSR requires significant study and planning, including the pre-design, engineering, and technical feasibility studies that ultimately inform the design characteristics of the preferred HSR system.
 - This work supports the future EA process.

- **Environmental assessment process, land permitting, and if required, land acquisition**
 - All transportation infrastructure projects in Ontario are subject to provincial EA requirements.
 - The EA process supports responsible environmental decision-making by ensuring that governments and other public bodies consider potential environmental effects before an infrastructure project begins.

- The process ensures Indigenous engagement and public consultation, including before and during a project.
- The environmental permits and other approvals that are required depend on the scope of the project being undertaken.
- **Determining a financing and delivery model based on a value for money analysis**
 - A VfM analysis is conducted on various financing and delivery models being considered for a particular infrastructure project to determine the most efficient and effective way to deliver a project while also ensuring the best value for taxpayer dollars spent.
 - Based on the specific project and consideration for factors such as budget, risk, innovation, and schedule, the model that delivers the best value for money might be traditional (100% public funds), or a mix of public and private funds structured through one of the various Alternative Financing and Procurement (AFP) models.
- **Design and construction**
 - Detailed concept design and construction of the HSR system involves the physical build-out of the infrastructure, which can include new, dedicated HSR lines or building the infrastructure needed to upgrade existing track and/or to accommodate higher speeds; this can also include the construction of new or expanded stations, if necessary.
 - The work generally consists of civil engineering, tunnelling if required, signalling, and electric power supply/distribution.
 - The high speed trains to run on the system—also termed the “rolling stock”—must also be designed, bought if required, tested and serviced on the system prior to the start of operations.
- **Operation and maintenance**
 - Once the HSR system is built, ongoing operation and maintenance are required over the lifecycle of the system.
 - Operations refer to both the operation of the infrastructure (signalling, train control, safety inspections), and the trains (day-to-day service, ticket sales, customer service).
 - Maintenance includes replacing and fixing track, repairing damage, and servicing and cleaning trains.

To deliver an HSR system, the above tasks must be undertaken either directly by government or procured through various types of contracts. In many cases the private sector is better equipped to deliver on components, such as the civil engineering and construction, for example, and the government may choose to award a contract to a private-sector company for such work through a competitive procurement process.

Risk

The inherent environmental, technical, operational, and financial risks associated with a project this large and complex are different than those associated with more typical industrial investments, due in part to the relatively high capital costs and long construction periods of such projects, and, in the case of rail transportation, to the relatively slow-rising revenues, where passenger volumes increase over time. Whereas the risk profile of some of the Province's construction projects, such as highways, is fairly well-understood, HSR would be unprecedented for Ontario and Canada. Some major risk factors for this project include

- **Environmental risks**, or those risks associated with environmentally sensitive lands, watersheds, plant and animal species, archaeology, or culturally sensitive lands.
- **Weather-related risks**, especially in winter (e.g., storms), causing delays or potential infrastructure issues such as subsidence.
- **Cost overrun risks** during construction, which can negatively impact on-time, on-budget delivery.
- **Lifecycle risk** related to potential maintenance and operational cost overruns, such as the inability to run trains on time due to poor maintenance.
- **Interface risk**, or the risk that components of the HSR system, including the track, rolling stock, operations, maintenance and other components, do not integrate or work together efficiently; interface risks can arise when a project is dependent on the interconnection or interaction of separate components being delivered by two or more suppliers.
- **Revenue risk**, resulting in revenues that are less than forecast, also referred to as **passenger risk**, since passenger demand drives revenues.

Identifying and allocating risk appropriately is integral to project success and an important input in any VfM analysis, which helps to determine any particular infrastructure project's optimal financing and delivery model.

The Models: How Are Major Transportation Projects Financed and Delivered?

When determining the most appropriate procurement model for HSR, analyzing which model will provide the best value for money and the preferred net fiscal impact over the project's lifecycle is one of the most important steps. Because the Province has never undertaken this type of project before, delivering a successful HSR system will require both expertise and innovation.

Various models for HSR financing and delivery exist internationally, from traditional 100% public-sector delivery to 100% private-sector delivery, but because rail infrastructure, similar to other public goods, is built to provide socio-economic benefits and not purely for monetary gains for investors, the latter model is extremely rare.¹

The *Brightline* from Miami to Orlando, Florida, is one such example, the United States' first privately-owned and operated intercity passenger rail system. Currently being built by All Aboard Florida, a subsidiary of the Florida East Coast Industries corporation (a real estate, transportation and infrastructure company), the *Brightline* is unique for a few reasons: its business model is driven by a large, successful tourism industry and the system is being built on an existing right-of-way owned by Florida East Coast Industries, so environmental and land impacts are minimal.² But conditions like these are rare.

As this chapter will detail, HSR systems around the world are typically financed and delivered through some combination of public and private involvement and through various types of financing and delivery models.

Traditional

Historically, transit and other major infrastructure projects in Ontario have been delivered through traditional design, bid and build (DBB) models whereby the government puts out requests for bids. First, proponents bid on design, based on a predetermined scope of work. Next, they bid on constructing the resulting design from the first bid. Subsequent to the construction contracts, separate contracts can be issued for operations, maintenance, and rolling stock. This model has been most commonly applied for Ontario's linear transportation infrastructure such as highways.

DBB can result in several separate contracts that are typically overseen by the government. In a DBB, although the private sector remains involved in delivering components of the project and is paid by the government for work completed, it is not often involved in financing the project. Benefits of the traditional approach include the relatively simple procurement process and the government's ability to access lower capital costs.

Some disadvantages of the traditional approach to procurement include the potential of disconnects between a project's various components, since all of them are procured and delivered separately. If problems arise there is the potential for suppliers to refuse responsibility—an HSR system's poor maintenance, for example, could be blamed on poor construction or poor design. Under the DBB model, such "interface risk" is ultimately borne by government, as are lifecycle and operational risks. The risks of this approach are overcome by employing a *system and safety integrator* responsible for integrating the different designs and construction tasks.

The majority of HSR systems around the world have been procured using traditional models. This is partly to ensure that more detailed design is completed before the construction is tendered as the risks of price escalation when this is not done have been seen as unacceptably high. Design-build contracts offer the private-sector partner incentives for innovation (in construction methodology, for example) and are often combined with benefit-sharing to achieve better VfM.

Another variant of the traditional approach was used successfully by the federal government in the 1990s when it decided to confront the issue of modernization of antiquated airport infrastructure. Under the National Airports Policy, not-for-profit local airport authorities (LAAs) were established to take over management and operations of Canada's 29 major national airports on 60-year concessions, although the Government of Canada still owns the facilities. These LAAs faced the huge challenge of renovating and/or rebuilding airports that required vast sums of capital to do so. However, as bodies that are arm's-length from government, the LAAs have been able to borrow on open financial markets to finance their projects. Revenue streams to recover the money borrowed come from a variety of sources, including landing fees and commercial rents. Since the devolution of airports began in 1992, some \$19 billion dollars of improvements have been financed privately, with no burden to the general taxpayer. The GTAA alone financed more than \$4 billion in expenditures for terminals, roads and other infrastructure from domestic and international sources. Whether this model could be adapted to the building of HSR should be one of the subjects for further discussion.

Alternative Financing and Procurement Models

Public-private partnerships (P3s), also referred to in Ontario as AFP models, have recently been used to deliver major transit and infrastructure projects in the province. The AFP model aims to bring together private- and public-sector expertise in a structure that transfers some project risks (e.g., project cost increases, scheduling delays, etc.) from the public sector to the private sector. Under AFP, provincial ministries and/or project owners establish the scope and purpose of a project while design and construction work is financed and carried out by a private-sector consortium. Depending on the structure of the contract, the same consortium could also be responsible for the operation and/or maintenance of the asset.

The Province established IO in 2005 as a Crown agency responsible for financing and modernizing public infrastructure. One of IO's business lines, "Major Projects," manages the delivery of infrastructure projects primarily through the AFP model.

The Province uses a VfM assessment for AFP projects, comparing the total project costs for AFP to the costs of traditional procurements, to ensure that AFP offers the best value for government. If an AFP delivery model is chosen for a particular project IO often acts as the procurement and commercial lead, supporting contract development and evaluating the financial structure proposed by bid respondents.

Under the AFP model the private-sector consortium arranges for its own project financing. This can involve different types of private lenders, ranging from banks to life insurance companies. Since the consortium typically does not get paid until the construction is well underway and certified as meeting the project requirements, the lenders' interests are aligned with the government's interests in ensuring that construction is completed on schedule, within budget and with the proper level of quality.

To reduce a project's overall financing costs while ensuring appropriate risk transfer is maintained, IO recently modified its AFP model to provide construction progress payments (CPPs) during construction. Previously, the consortium received no payments until the project was constructed and certified as fit for use, at which point the consortium would receive a substantial completion payment (SCP) representing approximately 60%–85% of the consortium's total project budget.

CPPs are monthly payments made by the project sponsor (i.e., government) to the private consortium once the consortium has expended 50% of its construction costs. The CPPs and SCP are sized to maintain the incentives for on-time and on-budget performance. After substantial completion, regular (typically monthly) "availability" payments are provided to the consortium as long as the asset is maintained and available for its intended use.

These tools ensure that the government optimally balances risk transfer and financing costs, and that the private sector retains sufficient "skin in the game" to meet its obligations. AFP projects are characterized as having higher initial costs due to the higher costs of borrowing from private sources compared to the government's lower borrowing costs for construction financing, although the trade-off is that a portion of the construction and operating risks are transferred to the private sector under an AFP model.

In Europe, where HSR systems have been built for a number of years, traditional procurement approaches tend to be preferred. In the U.K., for example, although HS1 was originally envisioned as an AFP-type project, the government had to assume the delivery of the project due to lower-than-projected revenue forecasts. More recent rail projects in the U.K., such as HS2, have resumed using traditional financing and delivery models.

To support the Special Advisor in developing insight and recommendations around the appropriate delivery models for HSR, MTO engaged IO to undertake a market sounding. Between January and July 2016, IO and MTO officials met with stakeholders representing the financial sector, engineering and construction firms, and operators and equipment providers to discuss the potential opportunities associated with HSR in Southwestern Ontario as well as key considerations regarding financing and delivery.

Lessons from the Market Sounding: What We Heard

Overall, private-sector interest in an HSR system in Southwestern Ontario is high. All respondents indicated a strong interest in having a role in the project under the right conditions and were keen to be kept engaged as the project advances.

Private-sector participants in the market sounding were asked a series of questions related to their interest levels in the HSR project, the allocation of various types of risk, their preferred capital structures, where the private sector sees the role of government and, ultimately, what their preferred

delivery model would be for a project of this scale. Participants were not given any information pertaining to the business case for HSR (e.g., cost estimates or potential timelines), since at the time it was not available. Instead, participants were asked to express their general thoughts and opinions about what such a project might look like and how they would like to be involved. The following is an overview of what respondents said about HSR in general and about key project factors.

Cost to Government

Market respondents articulated clearly and unanimously that they saw no scenario where the private sector would finance and deliver a turnkey HSR solution funded solely by projected ridership. This response suggests that the market is also unlikely to accept a financing and delivery model that transfers significant revenue risk (i.e., passenger risk) to the private sector. It was emphasized that this reluctance flows from HSR systems not having an established revenue stream and existing traffic patterns.

However, transferring some portion of passenger risk to the private sector is not unprecedented. For example, as described in Case Study 1, Vancouver’s Canada Line LRT system was able to transfer approximately 10% of its passenger risk to the private sector via an AFP contract.

Case Study 1: Canada Line LRT, Vancouver³

Key Lesson:	Government transferred most risks to the private sector (i.e., InTransitBC) through a 35-year Design-Build-Finance-Operate-Maintain (DBFOM) AFP contract.
Considerations:	<ul style="list-style-type: none"> • Most notably, the private sector assumed a portion of the line’s passenger or revenue risk, since the contract stipulates that 10% of its revenue is dependent on achieving ridership forecasts. • Since it markets the system, sets fares, and controls bus service to support the line, the Greater Vancouver Transportation Authority retained some risks including the majority of ridership revenue. • This AFP was expected to generate \$92 million (NPV) in savings to the government compared to a traditional procurement.

As HSR in Ontario would be a new system the market indicated that government would need to bear a significant portion of costs and revenue risk, at least for a certain period of time, until ridership and revenues are proven. Some respondents suggested that one approach to reducing cost to government is to have the government operate the HSR trains for five or ten years to build ridership and revenue levels. Once these levels are proven, the government could sell the operations as a concession to the private sector to recoup a share of project costs. This is the model used in the U.K. for HS1. Case Study 2 describes how the concession model was implemented for this project.

Case Study 2: High Speed One (HS1), U.K.⁴

Key Lesson	Government had to assume project delivery following lower-than-projected traffic outcomes for HS1; government was eventually able to recuperate some costs through an operating concession model after ridership and revenue levels were established.
Considerations	<ul style="list-style-type: none">• Initial expectations were that construction of HS1 could be entirely financed by the private sector against expected revenues from Eurostar UK; traffic forecasts were overly optimistic and government had to intervene and assume project delivery.• Government brought project in-house in 1998 and established ridership and revenue streams, and in 2010 sold operating concession for track infrastructure to Borealis and Teachers' Infrastructure Group, recouping some project costs through track access charges.⁵ These operators have little direct exposure to passenger risk. The sale of the operating concession is generally regarded as well-handled and achieving a higher-than-expected price for government.

Project Phasing

The market unanimously suggested that developing HSR in stages would reduce the overall risk premium paid by government. It was suggested that building HSR first from Toronto to London, and then extending the track to Windsor in a second phase would be a measured approach, and would generate a number of benefits including balancing costs over time and reducing ridership risk/revenue risk.

In this context, a few of the market sounding participants mentioned the example of California's high speed rail system, which is currently under construction and described below in Case Study 3. The project is experiencing a number of challenges including cost uncertainty, delays, and reduced public support, which sounding participants suggested might be attributed to building too much at one time, which has introduced integration risk.

Case Study 3: California HSR⁶

Key Lesson	Project size and various construction "packages" have created high integration risk and challenges to remaining on budget.
Considerations	<ul style="list-style-type: none">• The California High Speed Rail Authority (CHRSA) is delivering its HSR system through a Design-Build model.• Because of its size the project is being delivered in phases, broken down into three construction packages per phase since the sections under construction are quite large: Phase 1, for example, covers the 840-km distance from Anaheim to San Francisco.• The total cost is expected to be approximately \$64 billion USD.

Capital Structure

When private-sector respondents were asked about the size of project that the market could bear, many of them indicated that the maximum capital costs of a single contract to deliver HSR should be \$5 billion, as a general estimate, and that if the project's capital costs were beyond \$5 billion, the project would have to be broken down into smaller, more manageable contracts. Some projects with capital costs above \$5 billion can be found, however. For example, an approximately \$10 billion HSR project is being delivered in France under one AFP contract. Another influencing factor will be the number of other projects underway at the same time, since how much market capital is available for any one project depends on how much is already tied up in other projects.

If the project is over \$5 billion, there could be benefits to breaking it up into various contracts, including potentially increasing market competition. When a single project is too large only one or two private-sector proponents may have the capacity to deliver it, thereby reducing cost competitiveness in the bidding process.

Role of Government

Every participant emphasized that to successfully deliver an HSR solution there is no role for "passive government." The project is not financeable without government involvement, largely due to the risks described earlier in the chapter. To protect its interest and to ensure value for money, government must actively ascertain and properly allocate risks under the appropriate funding model.

The private sector expects that EA processes and related engagement with stakeholders and Indigenous communities are part of government's role. They also indicated that government must reduce the risk of over-serving the corridor by managing the various "moving parts" including the coordination of VIA Rail, UP Express, GO RER, and ensuring that the majority of freight is successfully taken off the corridor. These were considered significant strategic decisions related to the delivery of HSR in Ontario and participants made clear that these are prerequisites for private-sector involvement in the project.

Delivery Model

Almost all respondents recommended that the government pursue an AFP model to finance and deliver HSR in Ontario. Most of those recommending such an approach indicated a strong preference for a DBFOM model. Others recommended a Design-Build-Finance-Maintain (DBFM) model, which is currently being used to deliver the Eglinton Crosstown LRT. Respondents indicated that including the “O” (Operate) component for HSR would generate a more integrated solution and a higher likelihood that the infrastructure would be operated smoothly once delivered.

This approach is not unprecedented in Canada. The country’s first DBFOM model for a transit project, Vancouver’s Canada Line LRT, was delivered under a 35-year contract and in October 2016 the DBFOM model was announced as the chosen approach for Ontario’s Hurontario-Main LRT, connecting the lakeshore in Mississauga to Brampton.

Under a DBFOM model, every component of the HSR project would be delivered by one private-sector consortium (i.e., a group of companies with varied project-area expertise that agree to bid on a project as one entity). Private financing of the Design and Build components provides an incentive for on-time/on-budget construction of the asset; the integration of Design and Build transfers “constructability” risk; and the inclusion of Operate and Maintain reduces integration and lifecycle risks. Because the party that designs and builds the system will also operate and maintain the trains and infrastructure they have an incentive to deliver an efficient and high-quality system over the duration of the concession.

As with all AFPs, DBFOM contracts include the number of years the concession will be held by the private-sector consortium: the government retains ownership of the infrastructure and the private sector operates and maintains it for the number of years specified in the contract. For example, France’s Tours-Bordeaux HSR line, which is considered a strong example of on-time, cost-effective delivery, is being financed and delivered, operated and maintained by LISEA, a consortium of companies, over a 50-year period as part of its DBFOM contract.⁷ Highlights of this project are described in Case Study 4.

Case Study 4: Tours-Bordeaux HSR, France⁸

Key Lesson	<p>The French Government transferred most risks to the private sector through a DBFOM model; the private sector is financing approximately 45% of the project.</p> <p>To date, the project is an international example of DBFOM achieving desired outcome on an HSR project.</p>
Considerations	<ul style="list-style-type: none">• This project represents the first time France has used this kind of AFP model: a single company essentially designs, finances, builds, runs and maintains a major railway line.

	<ul style="list-style-type: none"> • To date, the project is considered an excellent example of on-time, cost-effective infrastructure delivery in Europe; project complexity is relatively low, however, due to the absence of a need for tunnels and the largely greenfield construction. • The government ensured that the contract has reliability and availability targets with built-in penalties if they are not met and financial incentives for early delivery and performance.
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As discussed earlier, real capital risk is best transferred to the private sector through AFP models, including DBFOMs. Payments to the private sector are structured to give consortia financial incentives to deliver on time and on budget.

Innovative Funding Tools

Although not a major focus of the market sounding, questions were also asked about other innovative ways that the government could reduce out-of-pocket costs for HSR. The following section outlines potential funding tools that warrant further consideration.

Land Value Capture

The general premise of land value capture (LVC) is that improved connectivity generated by new transit or transportation services increases land and development value around station areas. LVC tools seek to capture some of this increased value generated by a new transportation facility (i.e., station), to apply it toward funding the transportation project.⁹

One LVC tool that has gained media attention in recent years is tax increment financing (TIF), which forecasts increases in property values due to new transportation facilities (such as a new HSR station) and earmarks the forecasted property tax revenue increases to fund construction. In general, the market sounding respondents who commented on the application of LVC tools indicated that governments tend to overestimate the value that can be captured through such tools. It was also noted that the Province may be limited in its ability to capture such value, since the lands developed are generally owned by municipalities.

Overall, enthusiasm for these types of tools was relatively low; however, respondents did express interest in development opportunities that could be associated with HSR in Toronto, specifically at Union Station; if the Province were to pursue LVC tools in the future, any development or opportunities associated with Union Station and the surrounding area would certainly receive attention from the private sector. In September 2016 the City of Toronto proposed a Rail Deck Park over the western approach tracks to Union Station. If adopted, this future development would also have to be taken into consideration.

Station Retail and Parking

A number of respondents were interested in the potential for retail opportunities at HSR stations, suggesting that the Province could offer separate contracts for retail concourses, parking lots, air rights, and other ancillary businesses at HSR stations, for example, recouping costs by selling these rights to the private sector. Such place-making—that is, creating stations that themselves are “go-to” destinations—has been successful in other jurisdictions; in the U.K. HS1 retail and parking concessions account for approximately 10% of revenue.¹⁰

Opportunities connected to Union Station interested respondents the most but, as HSR ridership expands, key hubs such as Kitchener-Waterloo and London could also offer promising opportunities. Kitchener-Waterloo is currently developing a large multimodal hub for VIA Rail and GO services to connect to local feeder systems, such as the Waterloo ION LRT; London’s VIA Rail station is located on prime downtown lands that are largely undeveloped.

Neither potential opportunities associated with joint development nor revenue tools such as business levies and development charges were discussed during the market sounding. These tools have been successfully applied in the U.K. and future market soundings and analysis for HSR should consider researching them in greater depth. Below is a brief analysis of both of these tools.

Business Levies

Levies are a type of tax typically collected within a certain geographic area. Levies create a mechanism to ensure that those who will benefit from the construction of certain infrastructure (such as local residents or businesses) contribute to its cost. For example, in the U.K., London’s business community was highly supportive of the construction of the London Crossrail system, which will provide a crucial east-west link across the city and connect London Heathrow Airport to Canary Wharf, a major financial centre in the city’s east end. (See Case Study 5.)

A property impact study commissioned by Crossrail in 2012 concluded that property values around Crossrail stations would increase as a result of the project, with commercial office values around Crossrail stations in central London increasing by 10% over the next decade. Residential capital values immediately adjacent to the stations are projected to increase by 25% in Central London above an already rising baseline projection, and by 20% in the suburbs.¹¹ Acknowledging the future Crossrail’s role in this “land value uplift,” London’s business community let Transport for London and the Greater London Authority implement a Crossrail Business Rate Supplement and a Community Infrastructure Levy to help pay for Crossrail.

Although these types of tools are sometimes criticized as disincentives for business and development, when the private sector recognizes the benefits of a project there is the potential for their involvement.

Case Study 5: London Crossrail, U.K.¹²

Key Lesson	International example of a unique/alternative approach to working with the business community to fund and deliver a major transit project.
Considerations	<ul style="list-style-type: none">• The Crossrail commuter rail project has gained an international reputation for its application of joint development; the cost of the project has been largely shared between the government, Transport for London (TfL) and the business community.• TfL and the Greater London Authority (GLA) are contributing over \$11 billion, which includes levies paid by businesses that will benefit from the service, through the Crossrail Business Rate Supplement (BRS) and the Community Infrastructure Levy (CIL).• London businesses will contribute through a variety of mechanisms including joint development and the BRS, which alone will yield \$6.8 billion.

Joint Development

Similarly, the London Crossrail project has had success with ventures such as “joint property development,” a term that in cases of railway station development applies when a private partner obtains the right to develop part of the site—either around or above the station—and in exchange participates in building the station, either by contributing financially or in kind, usually by constructing the station).¹³

Currently Crossrail Ltd. has joint ventures in place for six of its station sites, including at Canary Wharf, which includes plans for 9,000 square meters of retail space and a rooftop park. In exchange for agreeing to contribute \$250 million towards the design and construction of the station and bearing the risk of any cost overruns, Canary Wharf Group plc obtained the rights to build a four-storey shopping centre above the station.¹⁴

This development-based land value capture tool requires a clear and strong business case and extensive engagement with the private sector. Further analysis to determine the applicability of joint property development for HSR stations in Southwestern Ontario would be worth pursuing.

Recommended Approach

The HSR project is still in early phases of planning. Although it is important to begin to consider financing and delivery models that could be applied to HSR, design and cost certainty cannot be known or understood until completion of the pre-design, assessment of the technical planning work

and initiation of the EA process. Conducting a full VfM analysis on optional models for HSR before these key project phases are completed is challenging.

It is evident from the market sounding results that private-sector interest is high and that the market generally feels some form of AFP is both a reasonable and preferred way to finance and deliver the HSR project in Ontario, particularly a DBFOM model with a large private-sector consortium delivering it, potentially in packages of \$5 billion.

Based on an assessment of international jurisdictions and feedback received during the market sounding, it is also evident that traditional models are a viable option. These are generally applied in markets where government knowledge of and experience with HSR is extensive (i.e., the U.K., Germany). However, not all European countries are continuing to pursue traditional models of delivery. As noted earlier, France, a country with an extensive history of HSR infrastructure delivery, has chosen to pursue a DBFOM approach for its new Tours-Bordeaux HSR line.

Given these considerations and others outlined throughout the chapter, the recommended approach at this point for the financing and delivery of HSR is as follows:

Recommendation 26: Financing and Delivery Models

The Province should conclude at a principles level that an AFP model (potentially DBFOM) is a viable option to finance and deliver HSR while ensuring that a full VfM analysis is conducted on AFP versus traditional models during the EA process.

Recommendation 27: Private-Sector Engagement

The Province should continue to engage key private-sector partners throughout the HSR project, including by potentially engaging in a follow-up market sounding during the environmental assessment process and once more project details become available. This should include re-engaging former participants as well as potentially broadening to other private-sector interests.

Recommendation 28: Federal Financing Experience

The federal experience with private-sector airport financing under the National Airports Policy should be examined to ascertain whether aspects of this model could be applied to HSR.

Recommendation 29: Innovative Funding Tools

The Province should consider innovative funding tools to help pay for HSR and/or stations, such as business levies, land value capture tools, and joint development.

REFERENCES

¹ Roll, M. and A. Verbeke. "Financing the Trans-European High-Speed Rail Networks: New Forms of Public-Private Partnerships." *European Management Journal* 16, no. 6 (December 1998): 706–713.

² All Aboard Florida (2015). *Passenger Train Travel*. <http://www.allaboardflorida.com>.

³ Canada Line Rapid Transit Inc. (April 2006). *Canada Line Final Project Report: Competitive Selection Phase*. https://www.partnershipsbcc.ca/files-4/documents/Canada-Line-Final-Project-Report_12April2006.pdf.

⁴ National Audit Office (March 28, 2012). *The Completion and Sale of High Speed 1*. HC 1834 SESSION 2010–2012. <https://www.nao.org.uk/wp-content/uploads/2012/03/10121834.pdf>.

⁵ Ontario Teachers' Pension Plan (November 5, 2010). *Borealis and Teachers' agree to acquire HS1, UK's only high-speed rail network*. <https://www.otpp.com/news/article/-/article/22888>.

⁶ California High-Speed Rail Authority (May 1, 2016). *Connecting and Transforming California: 2016 Business Plan*. https://www.hsr.ca.gov/docs/about/business_plans/2016_BusinessPlan.pdf.

⁷ VINCI and Réseau Ferré de France (June 16, 2011). *High-speed rail between Tours and Bordeaux: Réseau Ferré de France and VINCI sign world's biggest rail concession contract*. <http://www.eib.org/attachments/press/lgv-sud-europe-atlantique-en.pdf>; and Balfour Beatty (2016). *Innovation for the future – Better delivery of Mega Projects*. <http://www.balfourbeatty.com/about-us/public-policy/innovation-for-the-future-better-delivery-of-mega-projects/>.

⁸ Ibid.

⁹ Metrolinx (August 2013). *Land Value Capture Discussion Paper*. [http://www.metrolinx.com/en/regionalplanning/funding/Land Value Capture Discussion Paper EN.pdf](http://www.metrolinx.com/en/regionalplanning/funding/Land%20Value%20Capture%20Discussion%20Paper%20EN.pdf).

¹⁰ Dusina, Manuel (March 5, 2014). *High Speed Rail Finance 1 PLC*. Standard & Poor's RatingsDirect. http://highspeed1.co.uk/media/1966/splusp_march_2014.pdf.

¹¹ GVA (October 2012). *Crossrail Property Impact Study: Executive Summary*. http://74f85f59f39b887b696f-ab656259048fb93837ecc0ecbcf0c557.r23.cf3.rackcdn.com/assets/library/document/c/original/crossrail_property_impact_study_exec_summary.pdf.

¹² Crossrail Ltd. (2016). *Funding*. <http://www.crossrail.co.uk/about-us/funding>; and Greater London Authority (2016). *Paying for Crossrail: business rate supplement*. <https://www.london.gov.uk/what-we-do/business-and-economy/promoting-london/paying-crossrail-business-rate-supplement>.

¹³ Abadie, Richard and Philippe Bozier (March 12, 2013). *Which financial mechanisms for urban railway stations? A study conducted by PwC*. La Fabrique de la Cité. [http://www.thecityfactory.com/fabrique-de-la-cite/data.nsf/01771FA4413266A2C1257BF300556EC7/\\$file/financial_mechanisms_railway_stations.pdf](http://www.thecityfactory.com/fabrique-de-la-cite/data.nsf/01771FA4413266A2C1257BF300556EC7/$file/financial_mechanisms_railway_stations.pdf).

¹⁴ Crossrail Ltd. (2016). *Construction of Crossrail Begins as Foundations Laid for New Canary Wharf Station*. <http://www.crossrail.co.uk/news/articles/construction-crossrail-begins-as-foundations-laid-for-new-canary-wharf-station>.

Chapter 7

Implementation of High Speed Rail – Next Steps

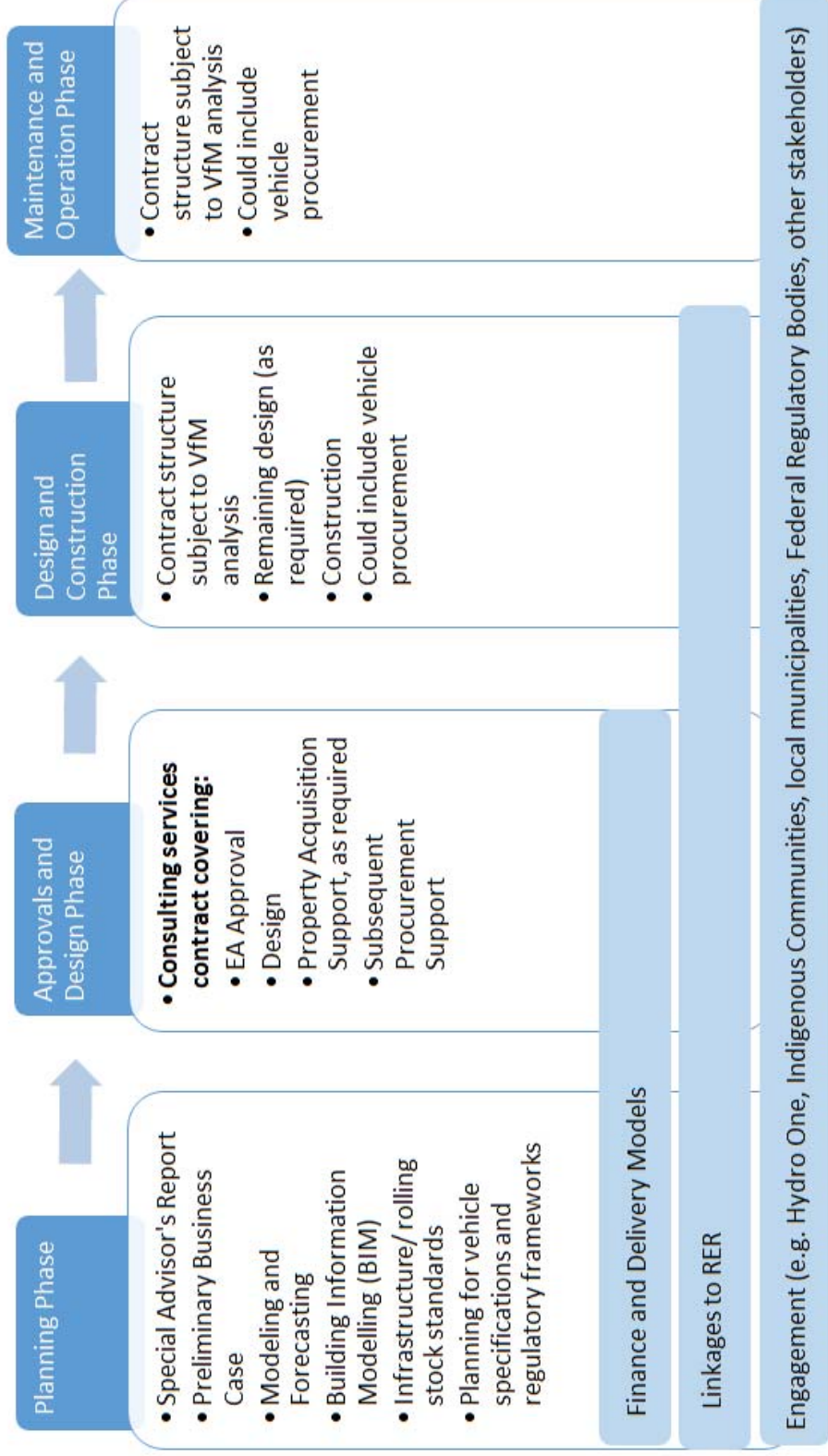
The Special Advisor has provided numerous recommendations for the implementation of HSR in the Toronto-Windsor corridor. This chapter contains recommended next steps to reach an operational target of 2025 for HSR.

In parallel to the work the Special Advisor has conducted over the course of the past year, MTO has continued to advance the planning work for HSR in the Toronto-Windsor corridor. This has included supporting the Special Advisor with the development of the preliminary business case, as well as undertaking modelling and forecasting work and early preparations for the EA process. In September 2016, the Minister's mandate letter indicated that MTO is to issue the Request for Proposal (RFP) for the EA process for HSR in 2017.

As mentioned earlier in the report, the provincial EA process for transportation projects is the TPAP. Additionally, due to the recommended speed of 250 km/h, HSR from Toronto to Windsor will also require the completion of a federal EA, the CEAA. These processes require several precursor studies to inform their scope.

To support the further advancement of HSR, the Province should undertake a number of key next steps. These include the phases of Planning, Approvals and Design, Design and Construction, and Maintenance and Operation. In addition, the Province should pursue the analysis of financing and delivery models and linkages to GO RER planning and extensive external engagement in parallel with the above phases. (See Figure 7.1.)

Figure 7.1: Next Steps for HSR



Planning Phase

This report and the preliminary business case are the first initiatives to be completed in the Planning phase of HSR. A modelling and forecasting study is also underway that will analyze the modal splits within the corridor in more detail and be used to verify some of the assumptions that were used in the preliminary business case. The completion of the modelling and forecasting study is anticipated in late summer 2017.

In addition, to effectively inform the work required under the Approvals and Design stage, it is recommended that the Province undertake preliminary investigations into appropriate Building Information Modelling (BIM), HSR infrastructure and rolling stock standards, procurement strategies, vehicle specifications and regulatory frameworks under the current planning phase. This work would complete the preparatory planning studies.

The completion of the Planning Phase will provide the Province with a key decision point for the rollout of this ambitious project.

Parallel Work (Finance and Delivery Models, Linkages to RER, Stakeholder Engagement)

As illustrated in Figure 7.1, there are also three requirements that will continue through more than one of the phases. These include

- A detailed study of the appropriate financing and delivery models.
- The integration with and linkages to GO RER.
- Engagement with Indigenous communities, municipalities, and key stakeholders (e.g., Hydro One, CN, CP and regulatory bodies of the Government of Canada).

Finance and Delivery

As detailed in Chapter 6, further study of appropriate financing and delivery models is required in conjunction with IO to determine the best configuration of project contract(s) to ensure VfM and efficient execution. It is expected that a number of competitive procurement packages will be needed for the project. The overarching delivery strategy will be to seek to maximize economies of scale, capture innovation from the private sector and minimize interface risks. Over the project's lifetime it is equally important to have a clear focus on minimizing the project's lifecycle costs and allowing for expansion of the HSR network and service pattern.

Linkages to GO RER

As described in Chapter 3, HSR will share tracks with GO RER between Toronto and Kitchener; therefore, coordination with GO RER service delivery and infrastructure provision is key to the

efficient rollout of HSR. A working group should be established to ensure that planning assumptions are aligned between the two projects, infrastructure rationalization opportunities are realized, construction is coordinated and service is optimized. As planning progresses and more opportunities for efficient delivery are recognized, the business cases for both HSR and the Kitchener corridor portion of GO RER will require revision.

Engagement

Hydro One

Engagement with key power-supply stakeholders is also critical; it should be undertaken as a next step and should continue through to the Operations and Maintenance phase.

Hydro One will be the supplier of electric power (i.e., traction power) for the electrified HSR system; therefore, MTO must perform various electrical/induction studies in coordination with Hydro One to ensure proper functioning of the infrastructure and public safety. Indeed, connection to Ontario's power grid is a rigorous process governed by the Independent Electricity System Operator (IESO).

Also, the existing hydro right-of-way between Kitchener and London is protected for future hydro expansion; however, the HSR train between these two cities could run adjacent to but outside of the current hydro corridor. It is recommended that MTO work closely with Hydro One throughout the duration of the project.

Federal Bodies

Federal bodies will have a role to play in the EA process and potentially with the operational aspects of HSR. Average operational train speeds of over 200 k/hr require a federal CEAA approval process. While it is understood that the provincial TPAP can run in parallel with the CEAA process (indeed, CEAA documentation is often included as an appendix to the environmental project report developed for the TPAP), internal discussions are required prior to consultation with the CEAA. This will ensure both authorities have been briefed on the current developments and are comfortable with the agreed approach.

While operations on this section of the corridor are contained within Ontario, it is possible that in the long term development of the corridor could expand into Quebec and the United States, given proposals currently under consideration by VIA Rail for HFR between Toronto-Ottawa-Montreal, and Amtrak's plans for some form of HSR in the Detroit-Chicago corridor. Since this project represents the first HSR undertaking in Canada, a briefing should be conducted at an early date with Transport Canada to discuss the appropriate regulatory scheme for HSR and what cooperation is required with VIA Rail, which owns some stations on the HSR line and a small portion of the required track west of Chatham Station.

Indigenous Communities, Municipalities, and other Stakeholders

As detailed in Chapter 2, engagement with Indigenous communities, municipalities and stakeholders is critical to the success of the HSR project. Recommendations described in Chapter 2 should be put into action in the near term.

Furthermore, the stakeholders, municipalities, and Indigenous communities that met with the Special Advisor throughout his term will be engaged again and expanded upon. Indeed, as the project progresses it will be essential for MTO to continue engaging with these groups, as well as many others, such as additional Indigenous communities, environmental groups, and others.

Canada's two national railway companies will also need to be engaged extensively. CN and CP are key stakeholders since there would be interface with the CN and CP corridors west of London. It is likely that agreements with these companies for some sections of the HSR corridor will be required.

Approvals and Design Phase

Following the completion of the Planning phase, the next major step required is the procurement of services for the Approvals and Design phase, which include EA approvals, engineering design, property acquisition support, as required, and subsequent procurement support. EA approvals will include the TPAP and CEAA processes outlined above as well as identifying other environmental impacts and obtaining the requisite approvals (like potential amendments to existing TPAPs in the Kitchener Corridor or EAs required for any upgrades to Hydro One's supply networks).

The extent of design work required will depend on the configuration of contracts for the next procurement phase, subject to the VfM analysis discussed above. At a minimum, design work should include a Reference Concept Design (RCD) as a basis for environmental impact assessment as well as a proof of concept for subsequent design stages. It is recommended that the Province consider the inclusion of exercisable options to complete design work for the whole corridor as well as to design direct access to Pearson Airport. The options would be aimed at future capacity and speed improvements that could be implemented in phases.

Design, Construction, Operations and Maintenance Phases

The Design and Construction and Maintenance and Operation phases will be pursued in the future. Design and Construction should generally start by 2022 to ensure HSR is operational by 2025. Maintenance and Operations will commence following operations.

Recommendations

Based on the phases described above it is recommended that the Province pursue the following recommendations as next steps to implement HSR in Ontario.

Recommendation 30: EA Funding and Procurement Approvals

The Province should continue to seek funding and procurement approvals required to obtain consultant services for the EA and associated design work in 2017.

Recommendation 31: MTO-Metrolinx Working Group

The Province should establish a formal working group with representatives from MTO and Metrolinx to ensure alignment between planning for HSR and GO RER.

Recommendation 32: Hydro and Electricity-Grid Stakeholders

The Province should develop a plan to ensure timely engagement with key hydro and electricity-grid stakeholders. To support this, it should retain a technical consultant to identify proposed connection points, facilitate technical coordination with Hydro One, and provide advice regarding a potential ministerial agreement.

Recommendation 33: Studies to Inform Environmental Assessment Scope

The Province should proceed with the required studies as soon as possible to inform the consultant scope for the Environmental Assessment in 2017.

- Ensure that the procurement protects for interoperability with systems and technologies used elsewhere (e.g., the United States), recognizing the longer-term potential for an international service.

Recommendation 34: Provincial-Federal Environmental Assessments

To support the environmental assessment process, after internal provincial discussions between MTO, MOECC, and others as appropriate, the Province should arrange a discussion with the Canadian Environmental Assessment Agency to ensure all parties are aware of the details of Ontario's HSR plans.

Recommendation 35: Coordination with Transport Canada

The Province should establish a formal working group with Transport Canada to discuss the appropriate regulatory scheme for HSR and seek advice regarding requirements for potential future connections to the United States.

Recommendation 36: Coordination with National Freight Rail Companies

The Province should arrange briefings with the national freight rail companies to discuss Ontario's HSR plans and seek their input.

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7	The Province should commit to protecting the natural environment, culturally sensitive lands and archaeological sites throughout the Toronto-Windsor corridor, recognizing that Indigenous communities are experts in these areas of knowledge.	27

#	Recommendation	Page #
8	The Province should provide opportunities to showcase Indigenous culture, history and traditions throughout the HSR project, including showcasing Indigenous art and culture at future HSR stations, and consider Indigenous traditional naming opportunities for HSR-related infrastructure.	28
9	The Province should consider providing capacity funding to Indigenous communities in the study area to facilitate engagement on the HSR project.	28
Chapter 3: The Business Case for High Speed Rail		
10	<p>The Province should proceed with a phased approach to implementing HSR to maximize benefits and reduce costs.</p> <ul style="list-style-type: none"> ■ Phase 1 would be implemented from Toronto to London with a target operational date of 2025. <ul style="list-style-type: none"> ○ This phase would build on GO RER investments between Toronto and Kitchener-Waterloo. ■ Phase 2 would be implemented from London to Windsor with a target operation date of 2031, as demand for HSR develops. 	33
11	<p><i>Union Station</i></p> <p>The Province should work to ensure that</p> <ul style="list-style-type: none"> ■ Station capacity is addressed to accommodate future growth in ridership that will occur due to use by HSR, GO RER and VIA Rail services. ■ Further consideration is given to developing a new concourse and platforms west of the existing station, building them under the approach tracks. ■ A minimum of two level-boarding HSR platforms are constructed. 	35

#	Recommendation	Page #
12	<p><i>Pearson Airport</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Expand Malton GO Station as necessary to accommodate an HSR stop. ▪ Work with the Greater Toronto Airports Authority (GTAA) to provide a people-mover system linking HSR at Malton Station to the airport terminals. ▪ Coordinate the infrastructure requirements for GO RER and UP Express with those for HSR through this segment of the corridor. ▪ Work with the GTAA to provide direct access for HSR as air passenger volumes increase and to support its plans for the future Pearson Airport multimodal hub, most likely by 2031. 	36
13	<p><i>Guelph</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Work closely with the City of Guelph to deliver on infrastructure requirements to accommodate GO RER and an HSR stop at the historic Guelph Station. ▪ Ensure that all necessary measures are undertaken to protect the historically significant architecture in the station precinct. ▪ Coordinate the infrastructure requirements for GO RER with those for HSR through this stretch of the corridor. 	37
14	<p><i>Kitchener-Waterloo</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Work closely with the Cities of Kitchener and Waterloo to ensure that planning for the new multimodal station accommodates HSR. ▪ Coordinate the infrastructure requirements for GO RER with those for HSR to Kitchener-Waterloo. ▪ Work to ensure that station upgrades do not preclude future HSR service. 	37

#	Recommendation	Page #
15	<p><i>London</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Build a new, dedicated HSR line between Kitchener-Waterloo and London adjacent to the existing Hydro One corridor. ▪ Work closely with Hydro One throughout the duration of the project. ▪ Work with VIA Rail and the City of London to expand the existing VIA Rail station to accommodate HSR and ensure seamless connection with the future Shift BRT service. ▪ Work with CN on requirements for the new HSR line to run adjacent to the CN South Main line into London. 	38
16	<p><i>Chatham</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Work with CN to explore options to build a new electrified track, adjacent to the existing CN corridor. ▪ Work with VIA Rail and the Municipality of Chatham-Kent to explore options to expand Chatham Station to accommodate HSR. 	38
17	<p><i>Windsor</i></p> <p>It is recommended that the Province</p> <ul style="list-style-type: none"> ▪ Work with CP to explore the implementation of a new track and passing tracks along the existing CP Windsor corridor. ▪ Work with CP and the City of Windsor to identify options for the building of a new HSR station that will provide access to downtown Windsor. ▪ Work with CP, Amtrak and the State of Michigan on plans for future expansion of the HSR service to the U.S. via Detroit through the existing rail tunnel under the Detroit River. 	39

#	Recommendation	Page #
18	<p>The Province should implement electrified 250 km/h HSR technology for the Toronto-Windsor corridor.</p> <ul style="list-style-type: none"> ▪ This would offer a distinct intercity service that meets the UIC definition for HSR. ▪ To reduce infrastructure costs, the Province could investigate the procurement of HSR trains with tilting capability, which can allow trains to achieve higher speeds on less optimal alignments, such as curves. 	47
19	<p>The Province should ensure that GO RER commitments, planning and capital works accommodate future HSR on the Kitchener corridor.</p> <ul style="list-style-type: none"> ▪ The development of GO RER with a view to its interoperability with HSR on the Kitchener corridor will support the Province in advancing both commitments. ▪ The Province should <ul style="list-style-type: none"> ○ Ensure that electrification and railway on the Kitchener corridor is built to accommodate speeds of 250km/h. ○ Protect the Kitchener corridor and stations for future capacity expansion wherever feasible. ○ Ensure level boarding platforms are not precluded at the designated HSR/GO RER station stops. ○ Prioritize the implementation of Enhanced Train Control (ETC) and ensure that signalling systems and other technologies do not preclude HSR operations. 	48
20	<p>Based on ridership demand and corridor capacity, it is recommended that during peak periods the Province provide, in both directions, a frequency of 3 HSR trains and 1 GO RER train between Union Station and Kitchener.</p> <ul style="list-style-type: none"> ▪ The Province should also provide the following service levels during off-peak periods: <ul style="list-style-type: none"> ○ 2 HSR trains per hour. ○ 1 GO RER train per hour. 	49

#	Recommendation	Page #
21	<p>The Province should align provincial mandates to optimize rail services by directing Metrolinx and MTO to collaborate on the development of an Integrated Rail Strategy for the Toronto-Kitchener corridor, which would</p> <ul style="list-style-type: none"> ▪ Clarify the mandates of GO RER, UP Express and HSR on the corridor. ▪ Assess ridership and service frequencies. ▪ Recommend how the Province might optimize GO RER, UP Express and HSR ridership to maximize the benefit to Ontarians. 	50
22	<p>The Province should coordinate the integration of Southwestern Ontario passenger services with VIA Rail.</p> <ul style="list-style-type: none"> ▪ MTO should engage VIA Rail with the objective of rationalizing VIA Rail and HSR service patterns in the Toronto-Windsor corridor. <ul style="list-style-type: none"> ○ On the Toronto-Kitchener corridor, HSR would replace VIA Rail service. ○ VIA Rail would continue operations from Union Station to London on the CN South Main line (not on the Kitchener corridor), serving a number of communities, including Oakville, Aldershot, Brantford, Woodstock, and Ingersoll. ○ Between Kitchener and London, VIA Rail would continue to operate on the CN North Main line via St. Marys and Stratford. ○ Between London and Windsor, VIA Rail would continue providing existing services until HSR is introduced in this segment of the corridor. ○ To ensure an integrated system, VIA Rail and HSR would enter into a codeshare agreement (i.e., a business arrangement where two operators share services) that would allow users to seamlessly use the two services with the same ticket. 	50
23	<p>As work on the intercommunity bus modernization initiative advances, the Province should work closely with the bus industry and other stakeholders to develop a partnership strategy with HSR for mutual benefit.</p>	51

#	Recommendation	Page #
Chapter 4: Benefits of HSR		
24	<p>It is recommended the Province develop and/or encourage, as appropriate, regional development initiatives, tax incentives and/or grants to mitigate any urban sprawl HSR might create, and encourage transit-oriented development in station areas.</p> <ul style="list-style-type: none"> ▪ Since growth and development policies are implemented at the municipal level the Province should work closely with municipalities to achieve this objective. 	61
Chapter 5: Governance		
25	<p>The Province should establish, at an early date, a new independent Crown corporation to oversee HSR (HSRCO):</p> <ul style="list-style-type: none"> ▪ The corporation would be a legislated entity with authority over the operations of HSR and all railway assets owned by the Province beyond Kitchener to Windsor. ▪ HSRCO would be established in the near term as the EA process proceeds under MTO's direction and would be in place prior to the start of HSR construction. ▪ Its mandate would include <ul style="list-style-type: none"> ○ Oversight of all aspects of the project from financing and delivery to operations. ○ Responsibility for ensuring value for money and wider benefits from HSR implementation and operations. ○ Coordination with VIA Rail and Metrolinx on service plans. ▪ HSR operations from Toronto's Union Station to Kitchener would be detailed in an MOU with Metrolinx. ▪ A provincially-appointed board of directors would oversee the corporation. 	72

#	Recommendation	Page #
Chapter 6: Financing and Delivery		
26	The Province should conclude at a principles level that an AFP model (potentially DBFOM) is a viable option to finance and deliver HSR while ensuring that a full VfM analysis is conducted on AFP versus traditional models during the environmental assessment process.	90
27	The Province should continue to engage key private-sector partners throughout the HSR project, including by potentially engaging in a follow-up market sounding during the environmental assessment process and again once more project details become available. This should include re-engaging former participants as well as potentially broadening to other private-sector interests.	90
28	The federal experience with private-sector airport financing under the National Airports Policy should be examined to ascertain whether aspects of this model could be applied to HSR.	91
29	The Province should consider innovative funding tools to help pay for HSR and/or stations, such as business levies, land value capture tools, and joint development.	91
Chapter 7: Next Steps		
30	The Province should continue to seek funding and procurement approvals required to obtain consultant services for the EA and associated design work in 2017.	98
31	The Province should establish a formal working group with representatives from MTO and Metrolinx to ensure alignment between planning for HSR and GO RER.	98
32	The Province should develop a plan to ensure timely engagement with key hydro and electricity-grid stakeholders. To support this, it should retain a technical consultant to identify proposed connection points, facilitate technical coordination with Hydro One, and provide advice regarding a potential ministerial agreement.	98

#	Recommendation	Page #
33	<p>The Province should proceed with the required studies as soon as possible to inform the consultant scope for the environmental assessment in 2017.</p> <ul style="list-style-type: none"> ▪ Ensure that the procurement protects for interoperability with systems and technologies being used elsewhere (e.g., the United States), recognizing the longer-term potential for an international service. 	98
34	<p>To support the environmental assessment process, after internal provincial discussions between MTO, MOECC, and others as appropriate, the Province should arrange a discussion with the Canadian Environmental Assessment Agency to ensure all parties are aware of the details of Ontario's HSR plans.</p>	99
35	<p>The Province should establish a formal working group with Transport Canada to discuss the appropriate regulatory scheme for HSR and seek advice regarding requirements for potential future connections to the United States.</p>	99
36	<p>The Province should arrange briefings with the national freight rail companies to discuss Ontario's HSR plans and seek their input.</p>	99

Glossary

Alternative Financing and Procurement (AFP): AFP is the name by which public-private partnerships (or P3s) are known in Ontario. P3s represent a long-term, performance-based approach to the procurement and delivery of public infrastructure where the private sector assumes a share of the risks in financing, design, construction, operations and maintenance.

Benefit-Cost Ratio (BCR): A measure of the value for money of a project expressed as a ratio of the total benefits divided by the total costs associated with a project.

Building Information Model (BIM): A digital model of a proposed project as well as the terrain (landscape) in which it will be built. These accurate virtual models support project design, allowing better analysis, integration and control than manual processes. When completed, the model contains precise geometry and data needed to support construction activities. After construction, the model can be updated and used to digitally monitor how well the infrastructure is working once it is operational, and can help determine when and where maintenance is needed.

Bus Rapid Transit (BRT): A system of dedicated bus lanes, often separated from the roadway by curbs or barriers, which combines features of a rail system (such as stations, payment on the platform instead of on the vehicle, and all-door boarding) with the flexibility of a bus system.

Codeshare: business arrangement where two operators share services along a route or corridor.

Commute Shed: A geographic area from which workers commute into an employment zone or neighbourhood, assuming maximum travel time or distances.

Design-Build-Finance-Operate-Maintain (DBFOM) Model: The private partner designs, builds and finances a public asset (e.g., a hospital, highway, or transit system), provides facility management services and operates the asset under a long-term agreement.

Design-Build-Finance-Maintain (DBFM) Model: The private partner designs, builds and finances a public asset (e.g., a hospital, highway, or transit system) and provides maintenance services under a long-term agreement.

Diesel Multiple Unit (DMU): The generic term for a diesel-powered train where a separate locomotive is not required because the traction system is contained under various cars in the train.

Employment Lands: Privately- and publicly-owned properties that are used or designated for commercial, industrial, or institutional purposes. Commercial includes both office and retail uses.

Environmental Assessment: A process used to predict and mitigate the adverse environmental effects of a project before it is started. It is a planning tool that provides decision-makers with the

information they need to ensure all approved projects support a healthy, sustainable environment for present and future generations.

Feeder Services: Local transit services that pick up and deliver passengers to a rail transit station or express bus stop, transfer point, or terminal.

First-mile/Last-mile: First-mile/last-mile refers to how a person connects to and from public transportation services, using a wide range of travel modes.

Greenhouse Gases (GHGs): Gases that trap heat in the atmosphere, including carbon dioxide, methane, nitrous oxide and fluorinated gases, and which are emitted primarily as a result of burning carbon-based fuels.

High Speed Rail (HSR): Systems that operate at speeds on the order of 200 km/h on upgraded, existing corridors and at speeds equal to or greater than 250 km/h on new corridors.

Interoperation: Technical compatibility of infrastructure, rolling stock, signalling and other subsystems of the rail system, as well as less complex procedures for the authorization of rolling stock to ensure that various types of rail vehicles can safely use the same rail corridor.

Land Value Capture: A way to fund infrastructure improvements by calculating the increased property values that a new transportation project will create and establishing a levy or tax on land or development to reflect this higher value. This is intended to “capture” the increase in property values that will be generated by improved access to transportation, which, like waterfront views or other valued features, can increase property values.

Level-Access Platforms: A platform that is at approximately the same level as the rail or train car floor.

Level Boarding: Refers to interior train floors that are level with station platforms so that a passenger does not have to climb steps to board the train.

Light Rail Transit (LRT), sometimes also defined as “**light rapid transit**”: A metropolitan electrical railway system characterized by its ability to operate single cars or short trains along exclusive rights-of-way at ground level, on aerial structures, in subways or, occasionally, in streets and to board and discharge passengers at track- or car-floor level.

Modal Split: The proportion of total person-trips using each of the various different modes of transportation, generally expressed as a percentage.

Multimodal Transportation Hub: A place where passengers and/or cargo move between vehicles or between transport modes, which all serve a common location. Public transport hubs can include train stations, rapid transit stations, bus and tram stations or stops, airports and ferry slips.

Net Present Value (NPV): The sum of the present values (i.e., costs subtracted from benefits) of all aspects of a project (design, construction, maintenance and financing) throughout its lifecycle as expressed in today's dollars.

Over-Serviced/Over-Served: Multiple transit services travelling the same route and visiting the same stops with similar frequency, leading to more services than are needed by travellers.

Reference Concept Design (RCD): A functional design used in the Alternative Financing and Procurement (AFP) model, which is intended to provide proof of concept and is often used as a basis of design for subsequent design stages. The RCD typically represents approximately 30% of the total design.

Rolling Stock: Any vehicles that operate on a railway track, including train cars and engines.

Stopping Services: Train service that makes stops at local stations between the main stations on the line, as opposed to an express service.

Substantial Completion Payment: A payment made upon completion of one of the more significant milestones in a construction project, affecting the rights and responsibilities of the owner and contractor. At substantial completion, the owner of the asset under construction can assume beneficial occupation (i.e., is able to use the infrastructure).

System and Safety Integrator: A person or persons whose function is to coordinate the design, construction and operation of various rail systems (electrification, signalling, and communications) to ensure safe and reliable operations.

Tilting Train Technology: One of a number of techniques that allows trains to manoeuvre curves safely and more comfortably at higher speeds than the curve may have been designed for.

Traditional Procurement Model: The funding and delivery of infrastructure and services by the public sector using a design-bid-build model.

Transit Project Assessment Process (TPAP): An EA process specifically tailored to transit projects in Ontario. A TPAP sets defined consultation and review guidelines for transit projects and does not require the study of alternative routes or designs.

Transit-Oriented Development: A planning approach that calls for high-density, mixed-use business/residential neighbourhood centres to be clustered around transit stations and corridors. Transit-oriented development is focused within an 800-metre radius of transit stops, with the highest intensity and mix of land uses concentrated within 400 metres of or adjacent to the station. A transit-supportive approach to land-use planning, urban design and transit operations may include transit-oriented development as well as a variety of other strategies that make transit viable and improve

the quality of the transit-using experience. These strategies may be implemented near transit stops or stations or at on broader scale, as appropriate.

Value for Money (VfM): Describes the quantitative and/or qualitative benefit to the public expected from a particular procurement method. Quantitative value is achieved through lower cost of a particular procurement method, whereas qualitative value is achieved when a procurement method better supports the goal of the project without costing more.

Wider Economic Benefits (WEBs): The wider benefits to the economy from an increase in accessibility provided by a transport investment, typically quantified due to their impact on agglomeration.

Criteria for Oxford Community Sustainability Bursary

To the Student:

The criteria for a bursary of up to \$1000 from the County of Oxford are as follow:

1. You must be a permanent resident of one of the municipalities of Oxford County
2. You must participate in an international exchange organized by ISE Ontario
3. You must define a research project for the time you will be in France, Switzerland, Italy, Germany or Spain which will result in the sharing of knowledge with groups in Oxford about sustainability. Your research may be face-to-face, lived, by interview by visits or electronic.
4. Your research must address items in the Future Oxford Community Sustainability Plan, either by focussing on one or more goals in a pillar – environmental, social or economic – or by focussing on connected goals across two or three pillars
5. You must locate community groups to whom to present your research and ideas about sustainability.
6. Upon returning from the exchange, you must present to those groups, and obtain a signed form indicating that you have completed a presentation to the group.
7. An electronic copy of your presentation of the research must be deposited with Future Oxford

Acceptance for the bursary

1. Completed applications shall consist of the following:
 - A single-page letter outlining the topic or research questions on sustainability
 - A copy of the personal profile pages of your ISE application form
 - A list of community groups who have expressed an interest in your presentation on sustainability upon your return, with contact information for an authorized representative of the group.
 - Optional letters of support from community groups and/or members for the bursary.
2. Applicants to be accepted for the bursary will
 - Be resident in one of the municipalities in the County of Oxford, and in the case of more than one application in a municipality be deemed the better for the purpose of the bursary
 - Complete the exchange with ISE Ontario to one of the host countries
 - Complete the presentation as described in the application
 - Complete all required elements of the application, research and presentation within the times of the agreement between ISE and Oxford.
3. There is no requirement that a minimum number of bursaries be given.

Application Evaluation form

Part A: Completion

Element is complete	Yes	No
One-page letter describing research		
ISE Application form		
List of interested Community Groups		

Part B: Qualitative Analysis

Research Topic	Questions	Scale 1-4
Pillar	Does the topic address one or more goals in a useful way?	
	Does the topic relate to specific actions?	
	Does the topic relate to promising innovations in and/or for Oxford County?	
Sharing	Questions	Scale 1 – 4
Community Groups	Are community groups sufficiently interested in the topic?	
	Are the community groups interested in the topic sufficient to make use of the ideas and/or innovation?	

Oxford Youth on Exchange

COLLABORATION FOR THE FUTURE

OXFORD COMMUNITY SUSTAINABILITY



WHO IS ISE?

- ✘ International Student Exchange – Ontario is a registered not-for-profit corporation offering Ontario students reciprocal, school-board approved exchange programs with Europe and Quebec. Our dedicated staff works in close collaboration with reliable exchange partner organizations and Ontario school boards to provide Ontario students and families with the best possible exchange experience.

WHAT DOES ISE ALREADY OFFER YOUTH?



DESTINATIONS

- ✘ 9 and 12 week reciprocal exchanges with
 - + France
 - + Switzerland
 - + Germany
 - + Spain
 - + Italy
- during the school year with 2018 departures.

FRANCE



SWITZERLAND



GERMANY



SPAIN



ITALY



HOW COULD THAT CHANGE?

- ✘ Alignment with Sustainability Goals including
 - a more vibrant, prosperous and responsible Oxford
 - an increased percentage of volunteers
 - engagement in self-directed learning
 - innovation in social, economic and environmental pillars ...

WHICH STUDENTS?

One per municipality ...

Blandford-Blenheim

East-Zorra Tavistock

Ingersoll

Norwich

South-West Oxford

Tillsonburg

Woodstock

Zorra

WHO DOES WHAT?

OXFORD COUNTY

- provide incentives to qualifying students
- publicize sustainable exchange

STUDENTS

- apply to ISE for exchange matching
- apply to Future Oxford to qualify
- locate audiences for presentations
- present sustainability ideas to local businesses, clubs, associations, etc.

ISE ONTARIO

- provide information, matching, travel and accompaniment arrangements
- insure students for travel,
- partner with European agencies

FUTURE OXFORD

- select students among applications who qualify for incentive
- suggest forums for presentations by students on their return
- verify completion of presentations

TIME-LINES AND RESPONSIBILITIES

- ✘ Spring 2017 – co-planning by Oxford County Future Oxford and ISE Ontario
- ✘ Spring – development of criteria for selection
- ✘ Spring, Summer, Fall 2017 – application
- ✘ Fall 2017 – acceptance by ISE Ontario, qualification for incentive by Future Oxford
- ✘ Winter 2018 – travel and research
- ✘ Spring 2018 – students' presentations

NEXT STEPS

- ✘ Questions
- ✘ Comments
- ✘ Bon voyage



THIS AGREEMENT made the 6th day of September, 2017.

B E T W E E N: **Dennis and Lorraine Willms**

Hereinafter referred to as the "Owners"
PARTY OF THE FIRST PART

- and -

**THE CORPORATION OF THE TOWNSHIP OF
BLANDFORD BLENHEIM**

Hereinafter referred to as the "Township"
PARTY OF THE SECOND PART

WHEREAS the Owners wish to obtain a building permit to build a new home on their property at 896941 Washington Road being Roll# 3245-020-070-11500, and referred to herein as "the subject property";

AND WHEREAS as a condition of issuance of the said permit, the Owners have agreed to remove the existing home on the property within six (6) months of completion and or occupancy of the new single family dwelling and they confirmed with the Township that two dwelling units on the same lot zoned as General Agriculture (A2) do not comply with the Township's Zoning By-Law #1360-2002;

AND WHEREAS the parties have agreed to enter into this Agreement to ensure proper removal of the first home on the subject property;

NOW THEREFORE THIS AGREEMENT WITNESSETH:

1. That in consideration for the Township's covenants set forth here within, and more particularly in consideration for the Township's agreement to allow the issuance of a permit for a new dwelling, the Owners shall forthwith provide to the Township a deposit in the amount of Five Thousand (\$5,000.00) Dollars, said deposit to be in the form of a certified cheque or money order.

2. That, within six (6) months of completion or occupancy of the new dwelling, the original dwelling, being that structure referred to as the "existing home", shall be removed from the subject property in a manner satisfactory to the Township, said manner to be determined at the sole discretion of the Township.

3. That, within six (6) months of completion or occupancy of the new dwelling, that portion of the subject property associated with the original dwelling shall be in a

completely leveled in an earthen state and that all building materials associated with or which formed part of the original dwelling shall be removed from the subject property in a manner satisfactory to the Township, said manner to be determined at the sole discretion of the Township.

4. That should the Owners, at any time, not be in complete compliance with terms and conditions as set forth in paragraph 2 and 3 above, said Owners hereby authorize the Township and/or its agents to enter upon the subject property for the purpose of implementing the terms of this Agreement in a manner satisfactory to the Township, said manner to be determined at the sole discretion of the Township.
5. That the Owners hereby indemnify, save and release the Township and/or its agents from any claim which may arise as a result of any action on the part of the Township, which in the Township's sole discretion, is deemed necessary to implement the terms of this Agreement. More particularly, the Owners hereby indemnify, save and release the Township and/or its agents from any claim which may arise from the exercise of the Township's rights of entry and removal as set forth in Paragraph 4 above.
6. That the Township shall be compensated for any costs accruing to the Township as a result of this Agreement, including any costs associated with the Township's removal of the original dwelling as set forth in paragraph 4 above, from the funds deposited by the Owners as set forth in paragraph 1 above. Should the costs of the Township exceed the amount deposited by the Owners, then the Owners hereby authorize the balance of these costs be levied against the property, and agrees and acknowledges that they may be collected in the same manner as an arrears in municipal taxes as set forth in section 326 of the *Municipal Act*, R.S.O. 1990, c. M-45, as amended.
7. That the Owners hereby agree not to question the validity of any of the terms of this Agreement, or the Township's exercise of its discretion as set forth here within, or to initiate any legal proceedings for the purpose of questioning the validity of any provision of this Agreement or any exercise of the Township's discretion associated thereto, and agrees that any such action on the part of the Owners shall result in the forfeit of the deposit provided to the Township in its entirety, in addition to all other remedies available to the Township under this Agreement or otherwise.
8. The Owners agree to commence construction of the new home within six (6) months of the issuance of a building permit by the Township or the Township shall be entitled to cancel the said permit and this Agreement.

9. The Owners agree that this Agreement shall expire two (2) years after the date of its execution. In the event the new home is not completed and the existing home removed within 2 (two) years, the Owners agree that their deposit shall be forfeited to the Township in addition to all other remedies available to the Township under this Agreement or otherwise.
10. Each party acknowledges that he or she has read the Agreement in its entirety and has full knowledge of its contents, and has obtained whatever Independent Legal Advice they may require in association with this Agreement.
11. Each party acknowledges that he or she understands his or her respective rights and obligations under this Agreement, as well as the potential liabilities and/or consequences which may be associated thereto.
12. Each party acknowledges that the terms of this Agreement are fair and reasonable, that he or she is subject to no coercion or undue influence, and that he or she is signing this Agreement voluntarily.
13. Time is to be of essence in this Agreement.
14. This Agreement may be amended only by further agreement in writing which is signed and witnessed by the parties.
15. No promises, representations, collateral agreements, warranties or conditions which may have been made before or at execution of this Agreement will be enforceable or give any right to vary or set aside all or any part of this Agreement, unless repeated in this Agreement.
16. The Township is authorized by the Owners to register this Agreement against the subject lands, if required by the Township. If the Township requires registration of this Agreement to protect the Township's interest, the Owners agree the costs of the registration and release of the said Agreement shall be at the cost of the Owners. The Township is authorized to retain sufficient funds from the deposit in paragraph 1 to cover the said costs.
17. This agreement may be released when all conditions have been met and all funds remaining from deposit shall be released to the owner
18. This Agreement shall be binding upon and enure to the benefit of the heirs, executors, administrators, successors and assigns of the Parties hereto.

IN WITNESS WHEREOF the Parties hereto have executed this Agreement this _____ day of September, 2017.

_____)
Witness) _____
Dennis Willms, Owner

_____)
Witness) _____
Lorraine Willms , Owner

The Corporation of the Township of Blandford-Blenheim

Per: _____
Rodger Mordue, CAO

I/WE have authority to bind the Corporation.

To: Mayor and Members of Blandford-Blenheim Council

From: Rebecca Smith, Development Planner, Community Planning

Application for Zone Change ZN 1-17-08 – Lorne & Laurie Loree

REPORT HIGHLIGHTS

- The application for zone change proposes to rezone the subject lands from 'Limited Agricultural Zone (A1)' to 'Special Limited Agricultural Zone (A1-G5)' to permit a garden suite on the subject property for a temporary time period.
- A special provision is also required to increase the maximum ground floor area of the proposed dwelling from 93 m² (1,001 ft²) to 130 m² (1,400 ft²).
- Planning Staff are recommending that the garden suite be located on the property for a temporary period of five years, being September 6, 2017 to September 6, 2017, 2022. It is further recommended that the existing 'A1' zoned portion of the property be zoned 'A2' to coincide with the remainder of the lands.
- The proposal appears to be consistent with the Provincial Policy Statement and generally maintains the intent and purpose of the Official Plan.

DISCUSSION

Background

OWNERS: Lorne & Laurie Loree
847608 Township Road 9, R.R. #3, Ayr ON, N0B 1E0

AGENT: Dryden, Smith & Head (Samuel Head)
54 Cedar Street North, Kitchener ON, N2H 2X1

LOCATION:

The subject lands are described as Part Lot 4, Concession 8 (Blenheim), Part 1, 41R-649, Township of Blandford-Blenheim. The lands are located on the south side of Township Road 9, east of Trussler Road, and are municipally known as 847608 Township Road 9.

COUNTY OF OXFORD OFFICIAL PLAN:

Schedule "C-1"	County of Oxford Environmental Features Plan	Significant Valleylands
Schedule "C-2"	County of Oxford Development Constraints Plan	Erosion Hazard & Unstable Soil
Schedule "B-1"	Township of Blandford-Blenheim Land Use Plan	Agricultural Reserve & Open Space

TOWNSHIP OF BLANDFORD-BLENHEIM ZONING BY-LAW 1360-2002:

Existing Zoning:	Limited Agricultural Zone (A1) & General Agricultural Zone (A2)
Recommended Zoning:	Special General Agricultural Zone (A2-G5)

PROPOSAL:

The application for zone change proposes to rezone the subject lands from 'Limited Agricultural Zone (A1)' to 'Special Limited Agricultural Zone (A1-Sp)' to permit a garden suite on the property for a temporary time period. A special provision is also required to increase the ground floor area of the proposed garden suite from 93 m² (1,001 ft²) to 130 m² (1,400 ft²). As shown on Plate 2, the garden suite is proposed to be located to the south of the existing bank barn on the property.

For Council's information, the subject property currently contains split zoning. The 'A1' zoned portion of the property comprises approximately 8 ha (19.8 ac), while the 'A2' portion comprises approximately 30.4 ha (75.1 ac). To resolve this discrepancy, Planning staff are recommending that the zoning of the entire property be amendment to 'A2-G5' to ensure consistency.

The subject property is currently being used for cash crop purposes, and contains an existing accessory farm dwelling, barn and several sheds. Surrounding uses are predominately agricultural lands, with a number of existing non-farm rural residential lots in the vicinity and a recreational use to the immediate south (Boy Scouts Camps).

Plate 1, Existing Zoning & Location Map, shows the location of the subject property and existing zoning in the immediate vicinity.

Plate 2, Aerial Map (2015) with Existing Zoning, provides an aerial view of the subject lands and surrounding area.

Plate 3, Close-up of Subject Property, provides an aerial view of the subject lands and surrounding area, as well as the location of the proposed garden suite.

Plate 4, Applicant Sketch, shows the existing development on the subject property, as well as the location of the proposed garden suite.

Application Review

PROVINCIAL POLICY STATEMENT:

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. Under Section 3 of the Planning Act, where a municipality is exercising its authority affecting a planning matter, such decisions “shall be consistent with” all policy statements issued under the Act.

Section 2.1 of the PPS directs planning authorities to protect natural features and areas for the long term. Furthermore, Section 2.1.5 does not permit development or site alteration in significant Valleylands unless it has been demonstrated that there will be no negative impacts on the natural feature or their ecological function. Section 3.1 further directs that development shall generally be directed to areas outside of hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards.

Section 2.3 of the PPS directs that prime agricultural areas shall be protected for long term agricultural use. In prime agricultural areas, permitted uses and activities include agricultural uses, agriculture-related uses and on-farm diversified uses. All types, sizes and intensities of agricultural uses and normal farm practices shall be promoted and protected in accordance with provincial standards.

OFFICIAL PLAN:

The subject property is primarily designated ‘Agricultural Reserve’ according to the Township of Blandford-Blenheim Land Use Plan, as contained in the County Official Plan. A small portion of the northwest corner of the property is also designated ‘Open Space’, which is reflective of the floodplain associated with the Nith River. This portion of the property is also identified as ‘Significant Valleylands’ according to the County of Oxford Environmental Features Plan, as well as ‘Erosion Hazard Land’ and ‘Unstable Soil’ according to the County Development Constraints Plan.

In the Agricultural Reserve lands are to be developed for a wide variety of agricultural land uses, including general farming, animal or poultry operations, regulated livestock farms, cash crop farms and specialty crop farms, together with farm buildings and structures necessary to the farming operation, and accessory residential uses required for the farm.

Section 10.3.9 of the Official Plan also states that garden suites may be permitted in rural areas for the retired parents or grandparents of a farm owner, provided that the principal dwelling is occupied by the son or daughter or grandchild of the retiring property owner.

Prior to permitting a garden suite, an amendment to the Zoning By-law is required. The zone change will be subject to the following criteria:

- The garden suite can be accommodated using private services;
- The proposal is compatible with the surrounding area and able to satisfy the Minimum Distance Separation Formula I (MDS I);
- The subject property is suitable for an additional temporary dwelling unit with respect to relevant zone provisions;
- The garden suite will generally use the existing road access; and,

- The garden suite will not be located to the front of the principal dwelling on the lot.

If approved, the owner of the property will be required to enter into an occupancy agreement with the Township specifically related to the use of the garden suite. It is also noted that garden suites are intended to be temporary in nature and as such, consent to sever a surplus garden suite will not be permitted by the County Land Division Committee.

Development and site alteration within 50 m (164 ft) of 'Significant Valleylands' also requires the preparation of an EIS, unless the Conservation Authority has no concerns with a proposal. As no development is proposed with the vicinity of identified 'Significant Valleylands', Staff have no concerns in this regard.

'Open Space' areas are also intended to maintain and enhance important ecological functions. Areas within the 'OS' area include Conservation Authority lands and areas within regulatory flood plains. This portion of the property also contains 'Erosion Hazard Land' and 'Unstable Soil'. Very limited development is permitted within 'Open Space Areas', including, but not limited to, passive recreational uses and structures that are accessory or ancillary to the Open Space use. Staff note that the proposed garden suite will be located outside of the Open Space Area.

TOWNSHIP OF BLANDFORD-BLENHEIM ZONING BY-LAW:

The subject property is currently zoned 'Limited Agricultural Zone (A1)' & 'General Agricultural Zone (A2)' according to the Township of Blandford-Blenheim Zoning By-law. Both the 'A1' and 'A2' zones permit a wide range of agricultural uses, including farm buildings and accessory dwellings.

For Council's information, 'A1' zoning was generally applied to existing undersized agricultural parcels that contained a dwelling at the time of passing of the previous Zoning By-law. In this case, as the 'A1' zoned parcel has been consolidated with the 'A2' zoned parcel to the immediate west, and the parcel is no longer considered to be undersized, it is appropriate to rezone the entire property 'A2' to ensure consistency.

Section 6.2.4 of the Zoning By-law, directs that one (1) single detached dwelling and one (1) garden suite (temporary dwelling) may be located on a farm subject to Council approval. The provisions of Section 5.9 (Garden Suites) further require the owner to secure approval of the appropriate zoning prior to establishing the temporary use.

Occupancy is also limited to the retired parents or grandparents of the lot owner or lot owner's spouse, or a retiring lot owner, provided that the main dwelling is occupied by the son, daughter or grandchild of the retiring lot owner. In addition, garden suites are permitted to a maximum ground floor area of 93 m² (1,001 ft²), shall not be located in the front yard of the main dwelling and shall satisfy MDS requirements, or not further reduce an existing insufficient setback.

It should be noted that the front yard is defined as the area extending across the full width of the lot between the front lot line and the nearest part of any building, structure or excavation on the lot. In this case, the front yard is considered to be the area extending from the front lot line to the existing storage shed on the property. While this is the case, the Zoning By-law more specifically states that a garden suite may not be located within the front yard of the main dwelling. As such, a special provision is also required to permit the garden suite to the north of the existing dwelling on the property.

AGENCY COMMENTS:

This application has been circulated to those agencies that were considered to have an interest in the proposal. The following comments were received.

The County Public Health & Emergency Services Department indicated that the property appears to be sufficiently large enough to accommodate a private septic system. A septic permit will be required to support the garden suite.

The Township Public Works Department, Township Drainage Superintendent, County Public Works Department and Grand River Conservation Authority indicated that they have no concerns with the proposal.

PUBLIC CONSULTATION:

Notice of public meeting regarding this application was circulated to surrounding property owners August 17, 2017. At the time this report was written, no comments or concerns had been received from the public.

Planning Analysis

The applicants propose to rezone the subject property to permit a garden suite for a temporary time period.

As previously mentioned, the subject property currently contains split zoning. To resolve this discrepancy, Planning staff are also recommending that the entire property be rezoned 'A2-G5' to permit the proposed garden suite.

Section 39.1 of the Planning Act allows municipalities to permit garden suites as temporary residential uses for up to twenty (20) years. Furthermore, Section 39.1(4) specifies that Council may grant further extensions of not more than three (3) years, if so requested. While the applicants have requested a temporary use by-law for a period of 10 years, to maintain consistency throughout the Township and previous garden suite approvals granted by Township Council, Staff are recommending that the proposed garden suite be permitted for a period of five (5) years, being September 6, 2017 to September 6, 2022.

With regard to the Provincial Policy Statement, Staff are satisfied that the proposed garden suite will not hinder surrounding agricultural uses. In addition, as no new development is proposed within the identified Significant Valleylands, the proposal is considered to be consistent with the Natural Heritage policies of the PPS.

As indicated by the applicants, the proposed garden suite will be occupied by the farm operator's son, while the main dwelling will continue to be occupied by the farm operator. The garden suite is proposed to be connected to the existing septic system and well on the property, and will make use of the existing driveway access.

While the temporary use is proposed to be located in front of the main dwelling, Staff note that a number of existing buildings/structures are already located in front of the existing dwelling on the property. In addition, the location of the proposed garden suite appears to make use of existing services on the property, without interfering with normal farming practices. As such, Planning Staff

are satisfied that the proposal generally conforms to the policies of the Official Plan. Should Council be favourable of the proposal, it is recommended that the owners enter into an occupancy agreement with the Township.

The subject property meet the relevant provisions of the 'A2' zone. As previously noted, a special provision is required to increase the maximum ground floor area of the proposed garden suite from 93 m² (1,001 ft²) to 130 m² (1,400 ft²). Planning Staff are of the opinion that this represents a minor deviation from the Zoning By-Law and are satisfied that the size of the garden suite is appropriate and will remain secondary to the existing single detached dwelling. As previously mentioned, a special provision is also required to recognize the proposed location of the garden suite to the north of the existing dwelling.

In light of the foregoing, Planning staff recommend that the entire property be rezoned to 'A2-G5' to permit a garden suite in the front yard of the main dwelling for a period of five (5) years, as well as eliminate the existing split-zoning that currently applies to the property.

RECOMMENDATION

It is recommended that the Council of the Township of Blandford-Blenheim approve the zone change application submitted by Lorne & Laurie Loree, whereby the lands described as Part Lot 4, Concession 8 (Blenheim), Part 1, 41R-649, Township of Blandford-Blenheim, are to be rezoned from 'Limited Agricultural Zone (A1)' & 'General Agricultural Zone (A2)' to 'Special General Agricultural Zone (A2-G5)' to permit a garden suite in the front yard of the main dwelling with an increased ground floor area of 130 m² (1,400 ft²), for a temporary period of five years, being September 6, 2017 to September 6, 2022, and eliminate the split zoning that currently applies to the property.

SIGNATURES

Authored by: *original signed by* Rebecca Smith, Development Planner

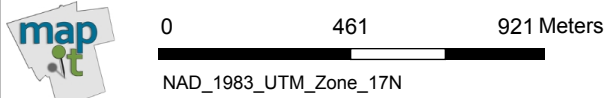
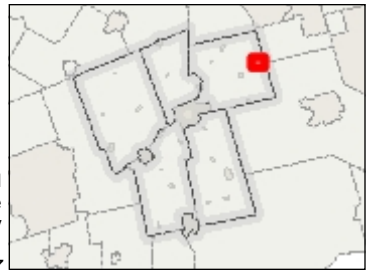
Approved for submission: *original signed by* Eric Gilbert, Senior Planner, MCIP, RPP



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Environmental Protection/Flood Overlay**
 - Flood Fringe
 - Floodway
 - Environmental Protection (EP1)
 - Environmental Protection (EP2)
- Zoning Floodlines/Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Zoning (Displays 1:16000 to 1:500)**

Notes



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. This is not a plan of survey

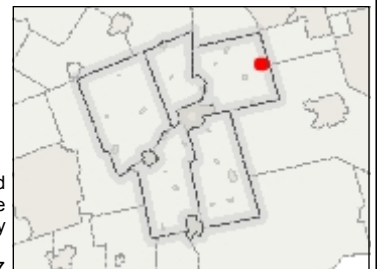
July 20, 2017



Legend

- Parcel Lines**
 - Property Boundary
 - - - Assessment Boundary
 - - - Unit
 - - - Road
 - - - Municipal Boundary
- Environmental Protection/Flood Overlay**
 - ▨ Flood Fringe
 - ▨ Floodway
 - ▨ Environmental Protection (EP1)
 - ▨ Environmental Protection (EP2)
- Zoning Floodlines/Regulation Limit**
 - ◆ 100 Year Flood Line
 - ▲ 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- ▣ Zoning (Displays 1:16000 to 1:500)

Notes



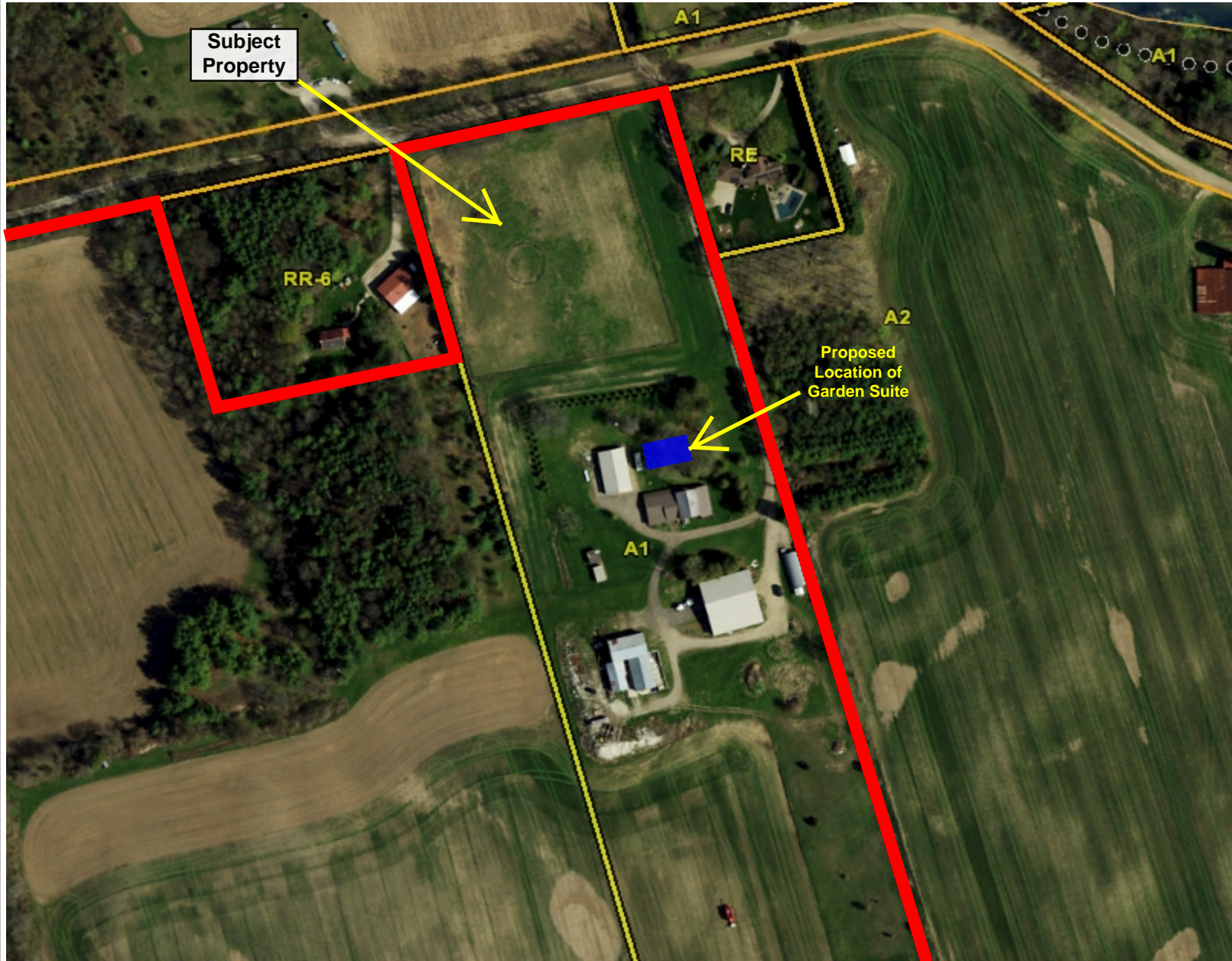
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NAD_1983_UTM_Zone_17N



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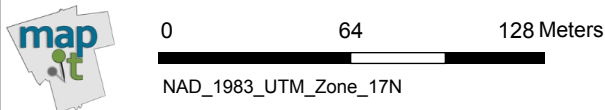
July 20, 2017



Legend

- Parcel Lines**
 - Property Boundary
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 - - - Unit
 - - - Road
 - - - Municipal Boundary
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Notes



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Plate 4: Applicant Sketch

File No. ZN1-17-08 - Lorne & Laurie Loree

Part Lot 4, Concession 8 (Blenheim), Part 1, 41R-649, Township of Blandford-Blenheim - 847608 Township Road 9

COMMITTEE OF ADJUSTMENT MINUTES

The Township of Blandford-Blenheim Committee of Adjustment met at 4:02 p.m.

Present: Mayor Wearn, Members Balzer, Banbury, Cowan and Peterson.

Staff: Borton, Harmer, Krug, Mordue, Richardson and Wood.

Others: Rebecca Smith, Planner, Oxford County.

Mayor Wearn in the Chair.

Minutes

RESOLUTION #4

Moved by – Councillor Balzer
Seconded by – Councillor Peterson

That the minutes of the April 5, 2017 Committee of Adjustment session of Council be adopted, as printed and circulated.

.Carried

Applications

i. Minor Variance Application A-07/17 – Zachary & Dana Jancsar

The Planner presented the report and recommended that the application not be approved. Zachary & Dana Jancsar were in attendance. Mr. Jancsar spoke in favour of approval.

RESOLUTION #5

Moved by – Councillor Balzer
Seconded by – Councillor Peterson

That the Township of Blandford-Blenheim Committee of Adjustment not approve Application A07-17 submitted by Zachary and Dana Jancsar for lands described

as Part Lot 7, Concession 7 (Blandford), Township of Blandford-Blenheim, as it relates to:

1. Relief from Table 5.1.1.3 – Regulations for Accessory Uses, to increase the maximum permitted lot coverage of a building accessory to a residential use from 100 m² (1,076.4 sq ft) to 350 m² (3,767 sq ft) and maximum height from 5 m (16.4 ft) to 7 m (23 ft) to facilitate the construction of a detached garage on the subject property.

As the proposed variances are not deemed to be:

- (i) minor variances from the provisions of the Township of Blandford-Blenheim Zoning By-law number 1360-2002;
- (ii) desirable for the appropriate development or use of the land;
- (iii) in keeping with the general intent and purpose of the Township of Blandford-Blenheim Zoning By-law No. 1360-2002; and,
- (iv) in keeping with the general intent and purpose of the Official Plan of the County of Oxford.

.Carried

The Committee adjourned at 4:40 p.m. and the open Council meeting resumed.



Community Planning

P. O. Box 1614, 21 Reeve Street

Woodstock Ontario N4S 7Y3

Phone: 519-539-9800 • Fax: 519-421-4712

Web site: www.oxfordcounty.ca

Our File: A08-17

APPLICATION FOR MINOR VARIANCE

TO: Township of Blandford-Blenheim Committee of Adjustment
MEETING: September 6, 2017
REPORT NUMBER: 2017-242

OWNERS: Andrew & Ashley Neves
975625 Brant-Oxford Road, Paris ON, N3L 3E2

VARIANCES REQUESTED:

1. Relief from **Table 5.1.1.3 - Regulations for Accessory Uses**, to increase the maximum permitted lot coverage of a building accessory to a residential use from 100 m² (1,076.4 ft²) to 120.7 m² (1,300 ft²); and,
2. Relief from **Table 5.1.1.3 - Regulations for Accessory Uses**, to increase the maximum height from 4 m (13.1 ft) to 4.6 m (15 ft), to facilitate the construction of a detached garage on the subject property.

LOCATION:

The subject property is described as Part Lot 1, Concession 5 (Blenheim), Part 1, 41R-1270, Township of Blandford-Blenheim. The property is located on the west side of Brant-Oxford Road, between Township Road 5 and Township Road 6 and is municipally known as 975625 Brant-Oxford Road.

BACKGROUND INFORMATION:

COUNTY OF OXFORD OFFICIAL PLAN:

Schedule 'B-1' Township of Blandford-Blenheim Land Use Plan Agricultural Reserve

TOWNSHIP ZONING BY-LAW NO. 1360-2002: Residential Existing Lot Zone (RE)

SURROUNDING LAND USES: predominately agricultural lands, with the County of Brant to immediate east.

COMMENTS:(a) Purpose of the Application:

The applicants are requesting relief from the above-noted provisions of the Township's Zoning By-law to facilitate the construction of a detached garage on the subject property. The proposed garage will be located to the east of the existing dwelling on the property and will comprise approximately 96.6 m² (1,040 ft²), with a height of 4.6 m (15 ft).

For the Committee's information, the property is currently occupied by an existing shed comprising approximately 22.3 m² (240 ft²). As a result, the total accessory building lot coverage on the property will equate to approximately 120.7 m² (1,300 ft²).

The subject comprises approximately 0.4 ha (1 ac) and is currently occupied by an existing single detached dwelling and shed.

Plate 1, Existing Zoning & Location Map, shows the location of the subject property and the zoning in the immediate vicinity.

Plate 2, Aerial Map (2015) with Existing Zoning, provides an aerial view of the subject property and surrounding area.

Plate 3, Applicants' Site Sketch, shows the location of the existing buildings/structures on the property as well as the location and setbacks of the proposed detached garage.

Plate 4, Applicants' Elevation Sketch, shows the front elevation of the proposed detached garage, as well as the proposed height.

(b) Agency Comments:

This application has been reviewed by a number of public agencies. The Township Chief Building Official, County Public Works Department & Grand River Conservation Authority had no comments or concerns regarding the proposal.

(c) Public Consultation:

Public Notice was sent to the neighbours on August 18, 2017. At the time of writing this report, no comments or concerns had been received from the public.

(d) Intent and Purpose of the Official Plan:

The subject property is located within the 'Agricultural Reserve' designation according to the Township of Blandford-Blenheim Land Use Plan, as contained in the County Official Plan. The development of a single detached dwelling and accessory structure on an existing rural residential property generally meets the intent of the Agricultural Reserve policies, providing such development occurs in accordance with the provisions of the Zoning By-law.

(e) Intent and Purpose of the Zoning By-law:

The subject property is zoned 'Residential Existing Lot Zone (RE)', which permits single detached dwellings and accessory structures thereto.

Accessory structures are also permitted on an 'RE' zoned lot to a maximum lot coverage of 100 m² (1,076 ft²) of ground floor area or 10% of the lot area, whichever is less, and a maximum

height of 4 m (13.1 ft). These provisions are intended to ensure such structures/buildings remain clearly secondary and ancillary to the main use of the property, while having minimal impacts on neighbouring properties. These provisions also assist to ensure sufficient space is maintained on the property to accommodate private services, grading/drainage and amenity space.

In this case, the applicants propose to construct a detached garage comprising approximately 96.6 m² (1,040 ft²), with a height of 4.6 m (15 ft). In combination with the existing shed on the property, the total accessory building coverage will equate to 120.7 m² (1,300 ft²).

Given the large nature of the property and relatively minor deviation from the Zoning By-law, Planning Staff are satisfied that the proposed accessory structure will remain clearly secondary to the existing residential use. Sufficient area is also available for drainage, parking and amenity space. As such, Staff are satisfied that the general intent and purpose of the Zoning By-law will be maintained.

(f) Desirable Development/Use:

It is the opinion of this Office that the applicants' request can be considered minor and desirable for the development of the subject property.

The requested relief can be considered minor as the applicants only propose a slight deviation from the relevant provisions of the Zoning By-law. The property is also large enough to accommodate parking, drainage and amenity area, and the proposed detached garage will be setback sufficiently from the front lot line. In light of this, Planning Staff are satisfied that the proposed relief can be considered minor.

The proposed relief will also facilitate the construction of an accessory building on an existing rural residential lot, which is in keeping with development on similar zoned properties. In this regard, the proposed development can be considered desirable.

In light of the foregoing, it is the opinion of this Office that the requested relief is in keeping with the general intent and purpose of the County Official Plan and Township Zoning By-law and can be given favourable consideration.

RECOMMENDATION

That the Township of Blandford-Blenheim Committee of Adjustment **approve** Application A08-17, submitted by Andrew & Ashley Neves, for lands described as Part Lot 1, Concession 5 (Blenheim), Part 1, 41R-1270, Township of Blandford-Blenheim, as it relates to:

1. Relief from **Table 5.1.1.3 - Regulations for Accessory Uses**, to increase the maximum permitted lot coverage of a building accessory to a residential use from 100 m² (1,076.4 ft²) to 120.7 m² (1,300 ft²); and,
2. Relief from **Table 5.1.1.3 - Regulations for Accessory Uses**, to increase the maximum height from 4 m (13.1 ft) to 4.6 m (15 ft), to facilitate the construction of a detached garage on the subject property.

As the proposed variances are deemed to be:

- (i) minor variances from the provisions of the Township of Blandford-Blenheim Zoning By-Law No. 1360-2002;

- (ii) desirable for the appropriate development or use of the land, building or structure;
- (iii) in keeping with the general intent and purpose of the Township of Blandford-Blenheim Zoning By-Law No. 1360-2002; and
- (iv) in keeping with the general intent and purpose of the Official Plan of the County of Oxford.

Authored by: *original signed by* Rebecca Smith, Development Planner

Approved by: *original signed by* Eric Gilbert, MCIP, RPP, Senior Planner

RS
August 28, 2017



Legend

Environmental Protection/Flood Overlay

- Flood Fringe
- Floodway
- Environmental Protection (EP1)
- Environmental Protection (EP2)

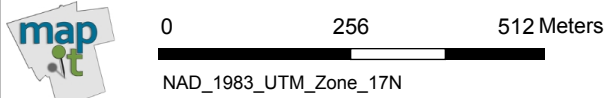
Zoning

Floodlines/Regulation Limit

- 100 Year Flood Line
- 30 Metre Setback
- Conservation Authority Regulation Limit
- Regulatory Flood And Fill Lines

Zoning (Displays 1:16000 to 1:500)

Notes



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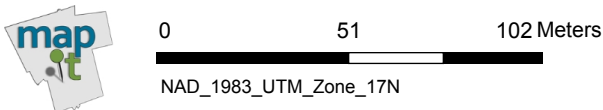
August 10, 2017



Legend

- Environmental Protection/Flood Overlay
 - Flood Fringe
 - Floodway
 - Environmental Protection (EP1)
 - Environmental Protection (EP2)
- Zoning
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Notes



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August 10, 2017

Plate 3 - Applicants Site Sketch

File No.: A-08/17 - Andrew & Ashley Neves

Part Lot 1, Concession 5 (Blenheim), Part 1, 41R-1270, Township of Blandford-Blenheim - 975625 Brant-Oxford Road

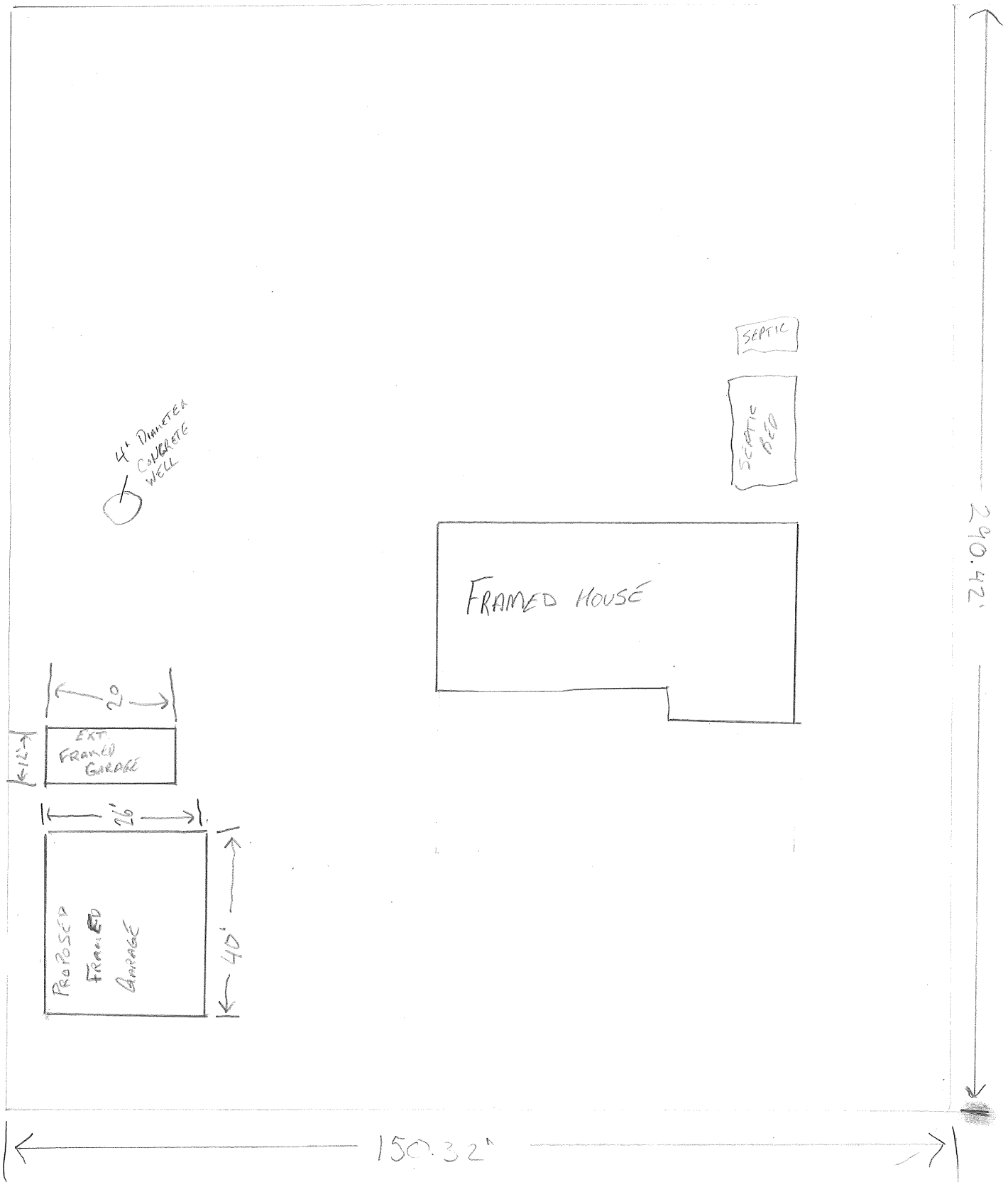
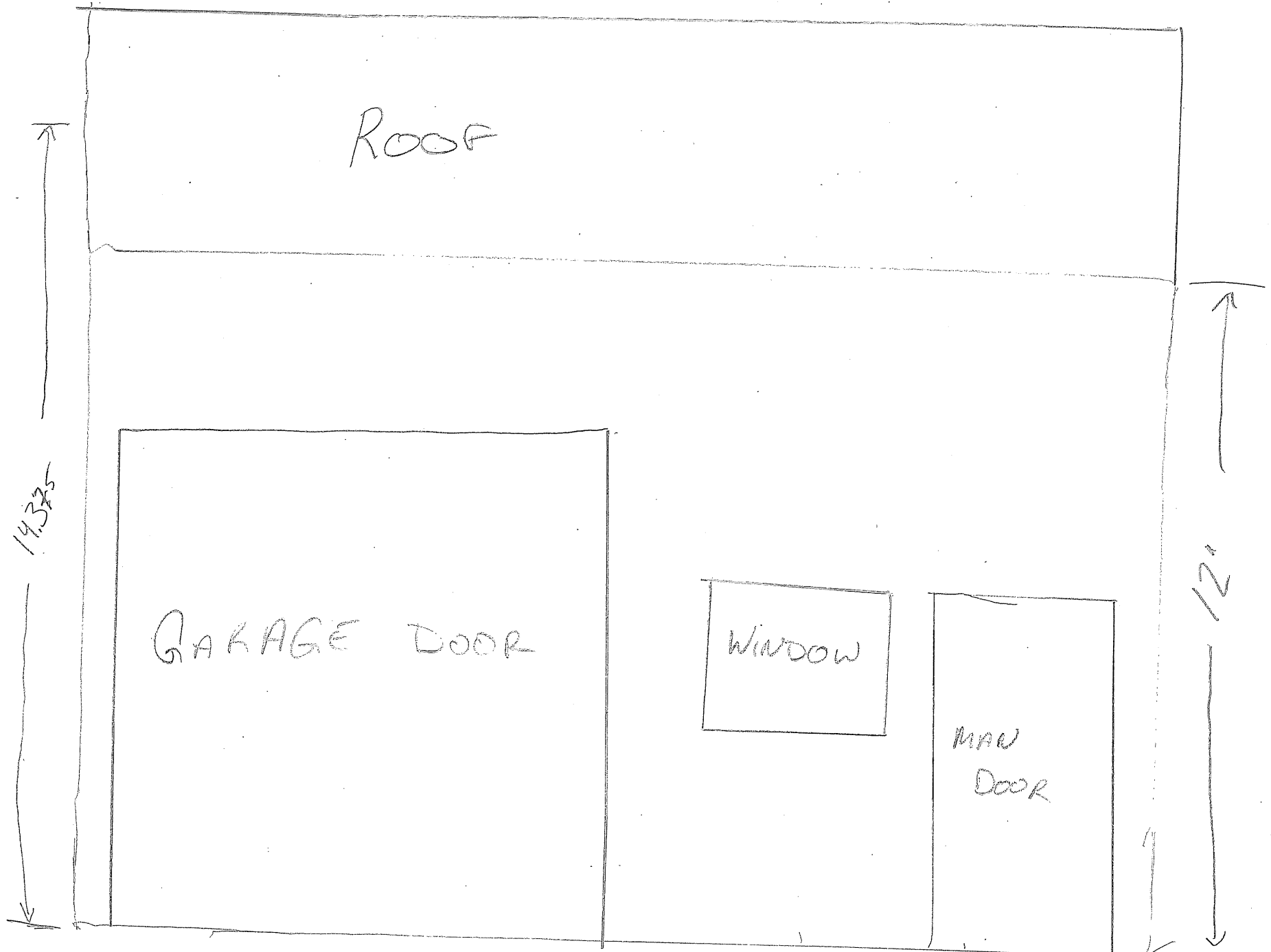


Plate 4 - Applicants Elevation Sketch

File No.: A-08/17 - Andrew & Ashley Neves

Part Lot 1, Concession 5 (Blenheim), Part 1, 41R-1270, Township of Blandford-Blenheim - 975625 Brant-Oxford Road





TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Rick Richardson – Director of Protective Services
Reviewed By:	Rodger Mordue	Date:	August 9 th , 2017
Subject:	Tiered Response Agreement	Council Meeting Date:	Sept 6 th ,2017
Report #:	FC-17-13		

Recommendation:

That Report FC-17-13 is received as information;

And further that Council approve and support the necessary changes of a new Tiered Response Agreement between the Township of Blandford-Blenheim and the County of Oxford. And further that Council approve the administration requirements and fire department operations in order to reduce the present volume of non Code 4 medical calls.

Background:

In April 2008 staff presented a report to Council requesting support that would permit our Township to enter into a new Tiered Response (MERIT) Agreement with Oxford County. This new agreement would see our Fire Department dispatched to all Code 4 medical calls or (life and death situations). This agreement appeared to meet our needs at that time.

When a person in our Township requests an ambulance through 911 their request is transferred to (CACC) London Central Ambulance Communications Centre. CACC would then triage this call and notify Fire Dispatch to send one of our fire stations if it meets the requirements of our Tiered Response Agreement.

Over the past few years our fire department appear to be attending more medical calls in our Township that do not meet the requirement of Code 4 (life and death situations) which in turn has caused a major increase in medical calls, firefighter wages and valuable time away from their fulltime employer

Increases in our medical calls have also been identified in the fire service review that was completed by APEXPRO Consulting Inc. in late 2016. The data in this review stated that 45% of our fire pages in the last 3 years were for medical assistance. 62% of these medicals calls were requested during the daytime. APEXPRO Consulting Inc. made the following recommendations in their final report:

More specifically, our recommendations are as follows:

- 1) In lieu of responding to all Code 4 medical calls, Blandford-Blenheim should specify the Code 4 calls of high severity to which the Fire Department will respond. This approach is consistent with that taken by other fire departments (as shown in Exhibit 10.5). The specified criteria should reflect the resource capacity of the Department and the medical training that firefighters receive (per Appendix C).
- 2) Internal call out protocols, and SOPs/SOGs pertaining to medical assists, should be adjusted to restrict turnout to 1 fire vehicle and a maximum of 2 firefighters. This recommendation does not apply to multi-vehicle collisions or other instances where a response with larger numbers of resources are required.
- 3) Blandford-Blenheim should inform Woodstock Police Services and Oxford County Paramedic Services of the decisions that have been taken. They should jointly revise the governing agreement (MERIT).
- 4) East Zorra-Tavistock, Wilmot and North Dumfries Townships, and the County of Brant, should also be informed of these decisions. They should jointly revise the automatic aid agreements. Also, MOHLTC CACC (dispatch) should be informed so that they may realign their dispatch protocols, giving effect to the new protocols and automatic aid agreements.

By adopting the above recommendations, Blandford-Blenheim will not only be able to reduce the present volume of medical assist calls, but it also will be better able to effectively manage Fire operations going forward, despite the anticipated rapid escalation in future ambulance call volumes.

In January 2017 Staff meet with Oxford County Manager of EMS, Ben Addley to discuss the possibilities of reducing the number of non Code 4 calls that our fire service currently attends. Ben could not understand why we were being sent to so many "non Code 4" calls in the number of past years. Ben shared a "new" Tiered Response Criteria card where the provider of this service would select what types of Medical calls they would attend to. This card would be the document used by CACC to send one of our fire stations to a required medical emergency. Ben suggested that he would support fire attending a number of calls on this criteria sheet as Code 4 calls. Staff advised Ben that fire should be sent to all motor vehicle, farm and industrial accidents without delay as we are the only emergency group that have the required training and equipment to deal with fire / hazmat situations for these types of emergencies.

Ben also suggested that if EMS is more than 15 minutes away that fire should be paged. Staff advised Ben that we had a request that fire not be sent if the 911 when the caller does not want fire to attend to their medical emergency or if the medical emergency is for a signed DNR. In February 2017 Staff meet with all Fire Department officers for their input in completing this new Criteria Card. Staff explained that reducing our current medical calls was identified in the Fire Review report and that Council and the majority of firefighters in our Township support the idea of reducing our non Code 4 medical calls moving forward.

During the month of March staff meet with all firefighters at their stations to explain how we intend to reduce all non Code 4 emergency calls and the details of the new Criteria Card.

Analysis Discussion:

Proceeding forward with this plan to reduce our current non Code 4 medical calls as per "fire review" will require a number of changes to our fire department services

- Staff would support revising our current MERIT agreement and specifying that our fire department attend to Code 4 calls of high severity and that this service be completed by having only (1) apparatus attend
- Staff would support informing Fire Dispatch and Oxford County EMS of any changes to our current MERIT agreement.
- Staff would not support adjusting our current SOG to state that only (2) firefighters attend medical calls. In order to meet our current SOG we would require minimum of (4) firefighters to attend medical calls.
- Staff would support advising EZT, Wilmot, North Dumfries Township and Brant County of the changes to our Tiered Response agreement in principal.
- Staff would not support reducing the number of fire apparatus attending to medical calls in Brant County as this would mean a 50% funding reduction to Blandford-Blenheim under the current fire agreement.

Financial Considerations:

- APEXPRO Consulting Inc. have suggested that if we adopt all of their changes there would be potential savings of \$75,000 in 2016 and projected savings of \$100,000 a year by 2026 by reducing our service levels to medical assists.
- Staff has removed a number of APEXPRO Consulting Inc. recommendations that we believe would better suit our needs, but a reduction in operating cost will still be obtainable moving forward.

Attachments:

- Tiered Response Criteria card (explanation of this card will be provided by Staff)

Respectfully submitted by:



Rick Richardson
Director of Protective Services

- Fire Department Name - FIRE DEPARTMENT
Tiered Response Criteria

	TIER	TYPE OF CALL	IF EMS RESPONSE GREATER THAN	CODE PRIORITY
1	SELECT Y/N	Abdominal Pain	0 Minutes	Select Code
2	SELECT Y/N	Allergy Reaction	0 Minutes	Select Code
3	SELECT Y/N	Back Pain	0 Minutes	Select Code
4	SELECT Y/N	Behavioral Problems	0 Minutes	Select Code
5	SELECT Y/N	Bleeding (Non-Traumatic)	0 Minutes	Select Code
6	SELECT Y/N	Bleeding in Pregnancy	0 Minutes	Select Code
7	SELECT Y/N	Breathing Problems	0 Minutes	Select Code
8	SELECT Y/N	Burns	0 Minutes	Select Code
9	SELECT Y/N	Cardiac Arrest / VSA	0 Minutes	Select Code
10	SELECT Y/N	Chest Pain / Heart Problem	0 Minutes	Select Code
11	SELECT Y/N	Child Birth / Labour	0 Minutes	Select Code
12	SELECT Y/N	Choking	0 Minutes	Select Code
13	SELECT Y/N	Convulsions/Seizure	0 Minutes	Select Code
14	SELECT Y/N	Diabetic Problem	0 Minutes	Select Code
15	SELECT Y/N	Electrocution	0 Minutes	Select Code
16	SELECT Y/N	Environmental Exposure - Heat	0 Minutes	Select Code
17	SELECT Y/N	Environmental Exposure - Cold	0 Minutes	Select Code
18	SELECT Y/N	Eye Problems	0 Minutes	Select Code
19	SELECT Y/N	Falls	0 Minutes	Select Code
20	SELECT Y/N	Generally Unwell	0 Minutes	Select Code
21	SELECT Y/N	Headache	0 Minutes	Select Code
22	SELECT Y/N	Inhalation	0 Minutes	Select Code
23	SELECT Y/N	MVC – Enclosed Seating	0 Minutes	Select Code
24	SELECT Y/N	MVC – Exposed Seating	0 Minutes	Select Code
25	SELECT Y/N	MVC – Person Struck	0 Minutes	Select Code
26	SELECT Y/N	MVC – Unknown Details	0 Minutes	Select Code
27	SELECT Y/N	Near Drowning	0 Minutes	Select Code
28	SELECT Y/N	Overdose	0 Minutes	Select Code
29	SELECT Y/N	Stroke / CVA	0 Minutes	Select Code
30	SELECT Y/N	Trauma (Blunt) / Assault	0 Minutes	Select Code
31	SELECT Y/N	Trauma (Penetrating) / Wound	0 Minutes	Select Code
32	SELECT Y/N	Unconscious /Decreased Consciousness	0 Minutes	Select Code
33	SELECT Y/N	Unknown	0 Minutes	Select Code

34	SELECT Y/N	Select Code	Farm Accidents
35	SELECT Y/N	Select Code	Industrial Accidents

GACC use only:
Response Plan Name:



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Harmer Drainage Superintendent
Reviewed By:	Rodger Mordue	Date:	August 23, 2017
Subject:	Consideration of Report Section 4 Hamilton Drain B Drain Extension 2017	Council Meeting Date:	September 6, 2017
Report #:	DS-17-18		

Recommendation:

That report DS 17-18 be received as information;

And further that council gives consideration to By-Law No. 2032-2017 for the Hamilton Drain B Extension 2017 for first and second reading (provisional by-laws);

And further that the Court of Revision be set for Wednesday October 4, 2017 at 4:00 p.m.

Lastly it is also recommend that the Engineer be directed to invite tenders for the Hamilton Drain B Extension 2017 with tender closing September 28, 2017 at noon

Background:

On March 15, 2017 Tom Pridham, P.ENG. of R.J. Burnside & Associates Limited was appointed Engineer, to file a reports on the Hamilton Drain B Extension 2017 under Section 4 and 8 of the Drainage Act which provide for drainage in the area of Blandford Road and Oxford County Road 8 at Lot 8 Con 10 for improvement of the existing private drain (formerly An MTO drain)

Analysis/Discussion:

The report has been mailed to the assessed owners and effected agencies in accordance with Section 41 of the Drainage Act. The report will be considered on September 6, 2017 at 4:00 p.m. in accordance with Section 42 of the Drainage Act. All owner and agencies have been invited and the Engineer will be in attendance to present the reports and answer any questions.

Provide no major concern are expressed, the By-Law's (copy's attached) can be provisionally adopted and Court of Revision date set

Financial Considerations:

Cost of report is assess to effected ratepayer as per the Schedule of Assessment in the drain report

Township of Blandford Blenheim road cost is \$ 13,413.00

Attachments:

Draft By-Law's attached to agenda

Copy of Reports attached to agenda

Respectfully submitted by:

Jim Harmer
Drainage Superintendent



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Borton Director of Public Works
Reviewed By:	Rodger Mordue	Date:	August 25, 2017
Subject:	Monthly Report	Council Meeting Date:	September 6, 2017
Report #:	PW-17-23		

Recommendation:

That Report PW-17-23 be received as information.

Road Crew Activities

- See Road Supervisor Activity Report for August.

Capital

- Hofstetter Road extension – Township crews have been hauling and applying B gravel for the base, it is starting to look like a road. Steed and Evans will be starting September 5 on the Urban section.
- CN Bridge on Gobles Rd. – Spoke to CN everything is progressing, bridge is being built at the factory now. Construction is scheduled for October and November 2017.
- New 1 – ton truck is expected in the beginning of September.
- River Rd. – Milling, widening and repaving is scheduled for September.

County Shared Service/Road Association/Training

- Shared Services meeting – Next meeting Sept. 14.
- Road Association – Next meeting August 31.

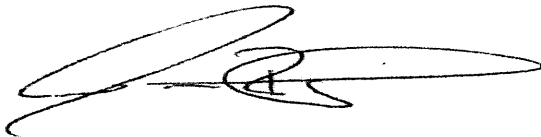
Other

- The gates at Township road 2 in Canning were vandalized again. This time they were unsuccessful at removing them. They did however bend them out of shape and then they tried to push over a post. Photo's have been turned over to police.
- Despite the unsettled weather and occasion down pour the Township roads have held up fairly well. We have had to put crews out more frequently than in years past to maintain them and the wet ground has slowed regular construction jobs.
- I took vacation from August 9 - 11.
- Road tour for 2018 Capital projects. Possible dates Sept. 20 or Oct. 4?

Attachments:

- Road Supervisor Activity Report for June.
- Photos of gate on Township road 2.

Respectfully submitted by:



Jim Borton
Director of Public Works

Monthly Activities for August

Daily Activities

Road crossing culvert replacement Twp 11
Ditching – Canning Rd north of Nith Bridge
Entrance culvert – Gobles Rd
Entrance culvert- Twp 11
Traffic counts
Speed signs put up in Washington
Spot grading various locations
Hofstetter Rd extension activities
Roadside mowing and guardrail trimming
Fill pot holes in our hard surfaced roads with cold mix.
Pickup road side garbage.
Trim trees and pickup branches from the road side.
Maintain regulatory signs.
Daily, weekly, and monthly road inspections.
Preventative maintenance on Township Equipment.
Shoulder maintenance and graveling.
Haul compost and brush to Salford.

Future projects

Oxford waterloo lane settling
Ditching on 17th
Various locations – ditching
River Rd – Widening

Emergency Calls

Tree down Aug 4 10:30am Blenheim Rd @ Silver Bridge
Tree down Aug 4 3:30pm Motheral Rd @ Twp 6
Spot grade 14C Aug 10 4:30pm Vehicle and wagon fire
Stop sign Twp 4 @ Blenheim Rd

General Information

Gravel roads are holding up well considering the amounts of rain we have been receiving some areas are starting to get a little dusty due to the dust control being leached out, but nothing calls for a reapplication of dust control. Areas that have been graded have tighten backup quite nicely due to the moisture. Traffic counts are in full swing. String trimming and roadside mowing have resumed. Hofstetter extension progress has been slow due to rain and wet conditions

Residents' Concerns

Plattsville Parking curbs and weeds on sidewalk

Blenheim Rd ditch issues

Residents dumping non organic matter in brush drop off i.e plywood and building materials







TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To: Members of Council
From: Ken Wood,
Manager of Community Services

Reviewed By: Rodger Mordue, CAO/Clerk
Date: August 17, 2017

Subject: Monthly Report – July
Council Meeting Date:
September 6, 2017

Report #: CS-17-07

Recommendation:

That Report CS-17-07 be received as information.

Background:

The following will provide Council with an update regarding the activities of the Community Services Department, for the month of August.

Analysis/Discussion:

Canada 150 Projects

Drumbo Ball Lights – The contractor confirms that the old poles will be removed on Thursday, August 24th and the grounds will be fixed up as well. This would complete this project within budget. Although the job is less than the project budget, it is expected that once all calculations and considerations regarding the grant is completed the a saving from our reserves of approximately \$20,000 should be realized. Staff will also be pruning some of the trees that currently block some of the new lighting.

Plattsville Skateboard Park and Buildings Restoration

Staff have ordered the new equipment. The company has worked out with staff, at the request of the company, to install the equipment thus offering a 20 year warranty instead of ten. This means that a couple of minor pieces (rails and box) will not be part of the park. Installation is expected to be in October. In the meantime, staff are arranging excavation and installation of the pad.

Also, staff have 99% complete restoration to the pavilion. Including new ceiling, railings and more open concept. Staff also re-stained the pavilion and the storage shed.

Princeton Multi-Purpose Pad – Drawings have arrived and a meeting with the Friends will happen in order to finalize some of the pricing before work begins.

Richwood Community Centre

Drawings have been submitted for permit approval. Early October has been set aside for beginning the work.

Princeton Park Expansion

The rest of the development is now coordinated with funds from the Legacy Committee and approved by staff based upon the original plan approved by Council. At this point many trees have been planted throughout the park and the fitness equipment is installed.

Stolen Property Incident

Still in the hands of our insurance company and waiting for notification of how to move forward. The vehicle is in working operation while all other items are under the insurance for replacement.

Canada's Core Public Infrastructure Survey, 2016

Staff have completed a survey of the parks and recreation infrastructure for Statistics Canada's Centre for Special Business Projects. An interesting point in completing this questionnaire was our ability to refer to our recently completed Asset Management Plan for quantified information regarding the 2016 value of our infrastructure. At just under \$9 million the Community Services infrastructure is second to Roads in asset management 2016 value.

Respectfully submitted by:

Ken Wood
Manager of Community Services

building permits, which was transferred to a building reserve. It had further savings of over \$29,000 contributing to the surplus. Administration saw savings compared to budget of over \$20,000 due to some staffing changes. The fire department contributed \$45,000 to the surplus, due to some additional recoveries and lower than expected expenditures. The By-law department also saw savings over \$19,000 largely due to wages and benefits being allocated elsewhere.

The following are recommendations for the use of the 2016 operating surplus:

Reserve	Current Reserve Balance	Additional amount recommended	Comments
Tax Stabilization Reserve	\$235,682.68	\$11,215.32	This amount will top up the reserve to 10% as per the policy. These funds can be used for one time projects, to offset any prior year's deficit or to reduce requirements from taxation in future years.
Road Construction Reserve	\$432,753.56	\$94,192.31	This reserve was in a deficit position at the end of last year. This year there is a small amount of road work budgeted (more bridge work), allowing the account to catch up; however, the account is expected to be back in a deficit position in a few years due to the large amount of road work to be done in Princeton.

Financial Considerations:

See Above

Attachments:

None

Respectfully submitted by:

Denise Krug
Director of Finance/Treasurer



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Denise Krug, Director of Finance/Treasurer
Reviewed By:	Rodger Mordue	Date:	August 1, 2017
Subject:	Interim Variance Report – 2 nd Quarter – June 30, 2017	Council Meeting Date:	September 6 2017
Report #:	TR-17-07		

Recommendation:

That Report TR-17-07 be received as information;

Background:

On a regular basis, staff will provide a financial report to council that shows the budget and actual expenses for the year to date. This 2nd Quarter report shows the 2017 Total Budget, the 2017 Budget to date (end of 2nd Quarter), the Actuals to date (end of 2nd Quarter), the dollar variance as well as the % variance. The report is attached for Council's review and is for the period ending June 30, 2017.

Analysis/Discussion:

At this point in the year, some departments are over budget, some are under, depending on how revenues are received throughout the year and how expenses are spread throughout the year. There are comments explaining the larger variances.

Transfers to reserves have been completed for the year. This is one of our largest expenditures. Transfers from reserves are done as the expenses come in for the capital projects, making these revenue neutral.

The last page is a summary of all the departments.

Financial Considerations: NA

Attachments:

Interim Variance Report – June 30, 2017

Respectfully submitted by:

Denise Krug
Director of Finance/Treasurer

Township of Blandford-Blenheim

Council

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
Revenue	June		June		June			
Other Revenue								
01-1070-0370 ELECTION NOMINATION FEES	-	-	-	-	-	-	#DIV/0!	
Total Other Revenue	-	-	-	-	-	-	#DIV/0!	
Contribution from Reserves								
01-1180-0525 CONTRIB. FROM RESERVES	-	-	(7,057)	(7,057)	(7,057)	(7,057)	#DIV/0! For Asset Management Plan, approved 2016.	
Total Contribution from Reserves	-	-	(7,057)	(7,057)	(7,057)	(7,057)	#DIV/0!	
Total Revenue	-	-	(7,057)	(7,057)	(7,057)	(7,057)	#DIV/0!	
Expenses								
Salaries, Wages & Benefits								
01-1090-0550 REGULAR EARNINGS	77,417	38,706	38,709	3	0.0%			
01-1090-0555 BENEFITS	2,402	1,200	958	(242)	-20.2%			
Total Salaries, Wages & Benefits	79,819	39,906	39,667	(239)	-0.6%			
Administration Expenses								
01-1092-0612 CONVENTIONS, TRAINING & SEMINARS	4,500	2,250	1,413	(837)	-37.2%			
01-1092-0618 ELECTION EXPENSE	-	-	-	-	#DIV/0!			
01-1092-0620 PUBLIC/EMPLOYEE RELATIONS	6,000	3,000	376	(2,624)	-87.5%			
01-1092-0638 MEALS - COUNCIL MEETING	250	126	93	(33)	-26.2%			
01-1092-0668 SUPPLIES - COUNCIL	100	48	-	(48)	-100.0%			
01-1092-0670 TELEPHONE	264	132	103	(29)	-22.0%			
01-1092-0674 MILEAGE	250	126	-	(126)	-100.0%			
Total Administration Expenses	11,364	5,682	1,985	(3,697)	-65.1%			
Contribution to Reserves								
01-1093-0950 TRANSFER TO ELECTION RESERVE	5,000	2,502	5,000	2,498	99.8%	Transfers to reserves complete for 2017.		
Total Contribution to Reserves	5,000	2,502	5,000	2,498	99.8%			
Total Expenses	96,183	48,090	46,652	(1,438)	-3.0%			
Total Council	96,183	48,090	39,595	(8,495)	-17.7%			

Township of Blandford-Blenheim

General Revenue

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
Revenue	June		June		June			
Levy adjustments (Supps, Omits, Write-offs, etc)								
01-0518-0030 MPAC/ARB/MUNICIPAL ASSESSMENT ADJUSTMENTS	40,000	19,998	7,816	(12,182)			-60.9%	Majority of tax adjustments to be completed late in year.
01-0518-0035 TOWNSHIP SUPPS/OMITS	(50,000)	(25,002)	1,022	26,024			-104.1%	
01-0518-0040 TOWNSHIP WRITE-OFFS	5,000	2,502	-	(2,502)			-100.0%	
01-0518-0042 VACANCY REBATE	2,000	1,002	1,263	261			26.0%	
Total Levy adjustments (Supps, Omits, Write-offs, etc)	(3,000)	(1,500)	10,101	11,601			-773.4%	
Payment-In-Lieu								
01-0520-0045 CANADA POST	(1,609)	(804)	-	804			-100.0%	PIIs to be completed after final tax billing.
01-0520-0050 CPR/CNR - RAILWAYS GRANT IN LIEU	(11,087)	(5,544)	-	5,544			-100.0%	
01-0520-0056 EDUCATION PIL TAXES RETAINED BY TOWNSHIP (COUNTY)	(17,955)	(8,976)	-	8,976			-100.0%	
01-0520-0060 HYDRO ONE - IHN PROPERTIES	(1,144)	(570)	-	570			-100.0%	
01-0520-0065 MANAGEMENT BOARD SECRETARIAT	(1,704)	(852)	-	852			-100.0%	
01-0520-0070 MINISTRY OF TRANSPORTATION	-	-	-	-			#DIV/0!	
01-0520-0075 OXFORD COUNTY	(8,035)	(4,020)	-	4,020			-100.0%	
Total Payment-In-Lieu	(41,534)	(20,766)	-	20,766			-100.0%	
Federal / Provincial Grants								
01-0530-0085 ONT MUNICIPAL PARTNERSHIP FUND	(506,600)	(253,298)	(506,600)	(253,298)			100.0%	Full Grant set up as Receivable.
01-0530-0086 SOURCE PROTECTION MUNICIPAL IMPLEMENTATION FUI	-	-	(11,507)	(11,507)			#DIV/0!	Unexpected, but due to the county 01-1194-0851
Total Federal / Provincial Grants	(506,600)	(253,302)	(518,107)	(264,805)			104.5%	
Revenue from Other Municipalities								
01-0540-0125 CUSTOMER SERVICE - WASTE MANAGEMENT	(7,950)	(3,978)	-	3,978			-100.0%	To be invoiced to County at year end.
01-0540-0140 WOODSTOCK - BASE TAXES	(100,270)	(50,136)	(100,270)	(50,134)			100.0%	Full amount from Woodstock set up as Receivable.
01-0540-0145 WOODSTOCK - ROYALTIES	(20,000)	(10,002)	(21,137)	(11,135)			111.3%	
01-0540-0150 WOODSTOCK - SITE A (TOYOTA)	(926,320)	(463,158)	(1,017,602)	(554,444)			119.7%	
Total Revenue from Other Municipalities	(1,054,540)	(527,274)	(1,139,009)	(611,735)			116.0%	
User Fees								
01-0550-0155 BAG TAGS	(200)	(102)	(228)	(126)			123.5%	
01-0550-0160 BLUE BOX SALES	25	12	139	127			1,058.3%	
01-0550-0170 COMPOSTER SALES	-	-	(85)	(85)			#DIV/0!	
01-0550-0175 CIVIL MARRIAGE SERVICE	-	-	(350)	(350)			#DIV/0!	

Township of Blandford-Blenheim

General Revenue

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
Total User Fees	(175)	(90)	(524)	(434)		482.2%		
Licences & Permits								
01-0560-0225 AUCTIONEER LICENCES	(50)	(24)	-	24		-100.0%		
01-0560-0235 BURIAL PERMIT FEES	(800)	(402)	(260)	142		-35.3%		
01-0560-0245 LOTTERY LICENCES	(1,250)	(624)	(410)	214		-34.3%		
01-0560-0265 HUNTING LICENCES	-	-	-	-		#DIV/0!		
01-0560-0270 MARRIAGE LICENCES	(3,350)	(1,674)	(2,100)	(426)		25.4%		
Total Licences & Permits	(5,450)	(2,724)	(2,770)	(46)		1.7%		
Interest Income								
01-0571-0475 BANK - INTEREST EARNED	(40,700)	(20,352)	(19,282)	1,070		-5.3%		
01-0571-0490 CURRENT YEAR - REALTY TAX INTEREST	(55,000)	(27,498)	(15,334)	12,164		-44.2%		
01-0571-0495 INTEREST CHARGED ON DRAINS	(500)	(252)	-	252		-100.0%		
01-0571-0510 PREV. YEARS - REALTY TAX INTEREST	(75,000)	(37,500)	(70,898)	(33,398)		89.1%		
Total Interest Income	(171,200)	(85,602)	(105,514)	(19,912)		23.3%		
Other Revenue								
01-0540-0130 PRINCETON MUSEUM/LIBRARY ASSOC.	(200)	(102)	-	102		-100.0%		
01-0570-0370 COMMISSIONER OF OATHS	(300)	(150)	(260)	(110)		73.3%		
01-0570-0380 FAX & PHOTOCOPIER	(25)	(12)	(12)	-		-		
01-0570-0395 LEASES	(12,100)	(6,048)	(6,100)	(52)		0.9%		
01-0570-0400 MISC. REVENUE	-	-	(15)	(15)		#DIV/0!		
01-0570-0430 EHT REBATE	(1,500)	(750)	-	750		-100.0%		
01-0570-0445 SALE OF TOWNSHIP PROPERTY	-	-	-	-		#DIV/0!		
01-0570-0450 TAX CERTIFICATES	(4,500)	(2,250)	(2,350)	(100)		4.4%		
01-0570-0470 UTILITY REBATES	(1,000)	(498)	(4)	494		-99.2%		
01-0570-3230 CASH COVERAGE/SHORTAGE	-	-	(135)	(135)		#DIV/0!		
Total Other Revenue	(19,625)	(9,810)	(8,876)	934		-9.5%		
Total Revenue	(1,802,124)	(901,068)	(1,764,699)	(863,631)		95.8%		
Total General Revenue	(1,802,124)	(901,068)	(1,764,699)	(863,631)		95.8%		

Township of Blandford-Blenheim Administration

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
Revenue	June		June		June			
Federal / Provincial Grants								
01-1130-0105 FEDERAL/PROVINCIAL GRANTS	(1,576)	(786)	-	786	-100.0%	Student grant to be received after work term completed.		
Total Federal / Provincial Grants	(1,576)	(786)	-	786	-100.0%			
Other Revenue								
01-1170-0410 ADMIN - MISC. REVENUE	-	-	-	-	#DIV/0!			
Total Other Revenue	-	-	-	-	#DIV/0!			
Development Charges								
01-1175-0515 DEVELOPMENT CHARGES REC'D - ADMIN	(700)	(348)	-	348	-100.0%	Development charges to be allocated at year end.		
Total Development Charges	(700)	(348)	-	348	-100.0%			
Contribution from Reserves								
01-1180-0520 CONTR. DEVELOPMENT RES. - ADMINISTR	-	-	-	-	#DIV/0!			
01-1180-0526 CONTR. FROM RESERVES - OFFICE PROPERTY	(5,000)	(2,502)	-	2,502	-100.0%			
01-1180-0527 CONTR. FROM RESERVES - OFFICE EQUIP	-	-	-	-	#DIV/0!			
Total Contribution from Reserves	(5,000)	(2,502)	-	2,502	-100.0%			
Total Revenue	(7,276)	(3,636)	-	3,636	-100.0%			
Expenses								
Salaries, Wages & Benefits								
01-1190-0550 REGULAR EARNINGS - FULL TIME	285,730	142,866	131,388	(11,478)	-8.0%			
01-1190-0555 BENEFITS - FULL TIME	90,305	45,150	45,209	59	0.1%			
01-1191-0550 REGULAR EARNINGS - PART TIME	38,601	19,302	18,989	(313)	-1.6%			
01-1191-0555 BENEFITS - PART TIME	4,421	2,208	2,113	(95)	-4.3%			
Total Salaries, Wages & Benefits	419,057	209,526	197,699	(11,827)	-5.6%			
Administration Expenses								
01-1192-0602 ADVERTISING	1,000	498	334	(164)	-32.9%			
01-1192-0604 AUDIT FEES	22,500	11,250	-	(11,250)	-100.0%	Audit fee accrual to be set up at year end.		
01-1192-0606 COMPUTER HARDWARE/SOFTWARE	-	-	360	360	#DIV/0!			
01-1192-0607 COMPUTER - IT SERVICES	6,000	3,000	507	(2,493)	-83.1%			
01-1192-0608 COMPUTER - ANNUAL CONTRACTS	24,000	12,000	20,434	8,434	70.3%	Majority of annual contracts have been paid for the year.		
01-1192-0612 CONVENTIONS / TRAINING	7,000	3,498	3,287	(211)	-6.0%			
01-1192-0622 EMPLOYEE/PUBLIC RELATIONS	3,000	1,500	1,491	(9)	-0.6%			
01-1192-0635 LEGAL FEES	5,000	2,502	-	(2,502)	-100.0%			

Township of Blandford-Blenheim

Administration

	2017		YTD		YTD		%		Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	%			
01-1192-0642 MEMBERSHIP DUES	3,800	1,902	3,019	1,117		58.7%	Majority of memberships have been paid for the year.		
01-1192-0644 MISC OTHER EXPENSES	-	-	7	7		#DIV/0!			
01-1192-0655 PHOTO COPIER - LEASE & COPY USAGE	6,500	3,252	3,457	205		6.3%			
01-1192-0660 COURIER / POSTAGE (LEASE & USAGE)	11,500	5,748	4,454	(1,294)		-22.5%			
01-1192-0663 PROFESSIONAL FEES / SERVICES	19,000	9,498	4,452	(5,046)		-53.1%			
01-1192-0666 SUBSCRIPTIONS	400	198	290	92		46.5%			
01-1192-0668 SUPPLIES	9,000	4,500	3,706	(794)		-17.6%			
01-1192-0670 TELEPHONE	6,500	3,252	2,900	(352)		-10.8%			
01-1192-0674 MILEAGE	1,500	750	223	(527)		-70.3%			
Total Administration Expenses	126,700	63,348	48,921	(14,427)		-22.8%			
Building & Property Expenses									
01-1192-0676 INSURANCE	60,289	30,144	60,070	29,926		99.5%	Insurance paid for the full year.		
01-1193-0718 EQUIPMENT MAINT/SUPPLIES	2,400	1,200	227	(973)		-81.1%			
01-1193-0730 GRASS CUTTING	575	288	-	(288)		-100.0%	Grass Cutting Allocation to be done at year end.		
01-1193-0738 HEAT & HYDRO	13,642	6,822	4,088	(2,794)		-40.1%			
01-1193-0794 PROPERTY MAINT / CLEANING SUPPLIES	15,706	7,854	4,519	(3,335)		-42.5%			
01-1193-0804 SNOW REMOVAL	2,000	1,002	1,314	312		31.1%			
01-1193-0818 WATER & SEWER	1,400	702	585	(117)		-16.7%			
01-1193-0901 MINOR CAPITAL	1,000	498	393	(105)		-21.1%			
Total Building & Property Expenses	97,012	48,510	71,196	22,686		46.8%			
Other Expenses									
01-1194-0836 MONTHLY BANK CHARGES / CASH MANAGEMENT FEE	4,000	1,998	1,684	(314)		-15.7%			
01-1194-0850 ECONOMIC DEVELOPMENT	30,000	15,000	30,000	15,000		100.0%			
01-1194-0851 SOURCE PROTECTION MUNICIPAL IMPLEMENTATION	-	-	11,507	11,507		#DIV/0!			
Total Other Expenses	34,000	16,998	43,191	26,193		154.1%			
Capital Expenditures									
01-1196-0915 PROPERTY CAPITAL	-	-	-	-		#DIV/0!			
Total Capital Expenditures	-	-	-	-		#DIV/0!			
Contribution to Reserves									
01-0597-0951 TRANSFER TO ASSESSMENT APPEAL RESERVE	50,000	25,002	50,000	24,998		100.0%	Transfers to reserves complete for 2017.		
01-0597-0952 CONTRIB TO WORKING CAPITAL RESERVE - TOYOTA	120,366	60,186	214,009	153,823		255.6%	Based on full 2017 amount due from Woodstock.		

Township of Blandford-Blenheim

Administration

	2017 Budget	YTD		YTD Actual June	YTD Variance	%	Explanation of Significant Variances
		Budget June	Actual June				
01-1197-0950 DEVELOPMENT CHARGES - ADMIN.	5,700	2,850	5,000	2,150	75.4%	Township Contribution only, DCs at year end.	
01-1197-0954 TRANSFER TO INSURANCE RESERVE	5,000	2,502	5,000	2,498	99.8%	Transfers to reserves complete for 2017.	
01-1197-0955 TRANSFER TO PROPERTY RESERVE	20,000	10,002	20,000	9,998	100.0%	Transfers to reserves complete for 2017.	
01-1197-0957 TRANSFER TO OFFICE EQUIPMENT RESERVE	6,000	3,000	-	(3,000)	-100.0%	Transfers to reserves complete for 2017.	
Total Contribution to Reserves	207,066	103,542	294,009	190,467	184.0%		
Total Expenses	883,835	441,924	655,016	213,092	48.2%		
Total Administration	876,559	438,288	655,016	216,728	49.4%		

Township of Blandford-Blenheim

Livestock/Canine

	2017 Budget	YTD Budget	YTD Actual	YTD Variance	%	Explanation of Significant Variances
Revenue						
Licences & Permits						
01-2260-0240 DOG / PHEASANT LICENCES	(17,500)	(8,748)	(15,070)	(6,322)	72.3%	Dog Licences due at beginning of year.
Total Licences & Permits	(17,500)	(8,748)	(15,070)	(6,322)	72.3%	
Other Revenue						
01-2270-0094 LIVESTOCK CLAIMS	(4,000)	(1,998)	-	1,998	-100.0%	
Total Other Revenue	(4,000)	(1,998)	-	1,998	-100.0%	
Total Revenue	(21,500)	(10,746)	(15,070)	(4,324)	40.2%	
Expenses						
Administration Expenses						
01-2292-0608 CONTRACTED SERVICES - CANINE CONTROL	13,250	6,624	4,446	(2,178)	-32.9%	
01-2292-0616 ADMINISTRATION COSTS	1,000	498	210	(288)	-57.8%	
01-2292-0636 LIVESTOCK COMPENSATION CLAIMS	3,500	1,752	-	(1,752)	-100.0%	
01-2292-0674 MILEAGE	350	174	68	(106)	-60.9%	
Total Administration Expenses	18,100	9,048	4,724	(4,324)	-47.8%	
Total Expenses	18,100	9,048	4,724	(4,324)	-47.8%	
Total Livestock/Canine	(3,400)	(1,698)	(10,346)	(8,648)	509.3%	

Township of Blandford-Blenheim

Grants

	2017 Budget	YTD		YTD Variance	%	Explanation of Significant Variances
		Budget June	Actual June			
Revenue						
Contribution from Reserves						
01-7380-0525 CONTRIBUTIONS FROM RESERVES	(4,000)	(1,998)	(4,000)	(2,002)	100.2%	2017 Entry completed.
Total Contribution from Reserves	(4,000)	(1,998)	(4,000)	(2,002)	100.2%	
Total Revenue	(4,000)	(1,998)	(4,000)	(2,002)	100.2%	
Expenses						
Other Expenses						
01-7394-0832 GENERAL GRANTS - MISC.	-	-	-	-		#DIV/0!
01-7394-0833 GENERAL GRANTS - ORGANIZATIONS	19,000	9,498	17,000	7,502	79.0%	All grants given except for facility usage grants.
Total Other Expenses	19,000	9,498	17,000	7,502	79.0%	
Total Expenses	19,000	9,498	17,000	7,502	79.0%	
Total Grants	15,000	7,500	13,000	5,500	73.3%	

Township of Blandford-Blenheim

Cemeteries

	2017		YTD	Actual	YTD	Variance	%	Explanation of Significant Variances
	Budget	Budget						
	June		June					
Revenue								
User Fees								
01-5050-1195 INTERMENT CHARGES - 9TH LINE	-	-	-	-	-	-	#DIV/0!	
01-5050-2175 CORNERPOSTS INSTALLED - DRUMBO	(750)	(378)	-	-	378	-100.0%		
01-5050-2195 INTERMENT CHARGES - DRUMBO	(2,600)	(1,302)	(475)	(980)	827	-63.5%		
01-5050-2200 LOT SALES - CARE & MAINTENANCE	-	-	(980)	(980)	(980)	#DIV/0!		
01-5050-2205 LOT SALES - GENERAL - DRUMBO	(1,440)	(720)	(1,970)	(100)	(1,250)	173.6%		
01-5050-2210 MARKERS/MONUMENTS - CARE & MAINTENANCE	-	-	(100)	(100)	(100)	#DIV/0!		
01-5050-3195 INTERMENT CHARGES - PLATTSVILLE	-	-	-	-	-	#DIV/0!		
01-5050-3210 MARKERS/MONUMENTS - CARE & MAINTENANCE	-	-	-	-	-	#DIV/0!		
01-5050-4175 CORNERPOSTS INSTALLED - PRINCETON	(500)	(252)	-	-	252	-100.0%		
01-5050-4195 INTERMENT CHARGES - PRINCETON	(5,200)	(2,598)	(1,300)	(1,440)	1,298	-50.0%		
01-5050-4200 LOT SALES - CARE & MAINTENANCE	-	-	-	-	-	#DIV/0!		
01-5050-4205 LOT SALES - GENERAL - PRINCETON	(2,880)	(1,440)	-	-	1,440	-100.0%		
01-5050-4210 MARKERS/MONUMENTS - CARE & MAINTENANCE	-	-	-	-	-	#DIV/0!		
01-5050-4220 NICHE SALES - CARE & MAINTENANCE	-	-	-	-	-	#DIV/0!		
01-5050-6175 CORNERPOSTS INSTALLED - RICHWOOD	(250)	(126)	-	-	126	-100.0%		
01-5050-6195 INTERMENT CHARGES - RICHWOOD	(650)	(324)	(325)	(325)	(1)	0.3%		
01-5050-6205 LOT SALES - GENERAL - RICHWOOD	(720)	(360)	-	-	360	-100.0%		
01-5050-7175 CORNERPOSTS INSTALLED - WOLVERTON	(250)	(126)	-	-	126	-100.0%		
01-5050-7195 INTERMENT CHARGES - WOLVERTON	(650)	(324)	(325)	(325)	(1)	0.3%		
01-5050-7200 LOT SALES - CARE & MAINTENANCE	-	-	(880)	(880)	(880)	#DIV/0!		
01-5050-7205 LOT SALES - GENERAL - WOLVERTON	(720)	(360)	(1,320)	(960)	(960)	266.7%		
01-5050-7210 MARKERS/MONUMENTS - CARE & MAINTENANCE	-	-	-	-	-	#DIV/0!		
Total User Fees	(16,610)	(8,310)	(7,675)	635	635	-7.6%		
Interest Income								
01-5071-1480 CARE & MAINT. GENERAL - INTEREST	(156)	(78)	(15)	(15)	63	-80.8%	Interest rec'd in February, 2017 & 2018.	
01-5071-1485 CARE & MAINT. MARKER - INTEREST	(22)	(12)	(1)	(1)	11	-91.7%		
01-5071-2480 CARE & MAINT. GENERAL - INTEREST	(1,087)	(546)	(90)	(90)	456	-83.5%		
01-5071-2485 CARE & MAINT. MARKER - INTEREST	(225)	(114)	(10)	(10)	104	-91.2%		
01-5071-3480 CARE & MAINT. GENERAL - INTEREST	(204)	(102)	(12)	(12)	90	-88.2%		

Township of Blandford-Blenheim

Cemeteries

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	%		
	June	June	June					
01-5071-3485 CARE & MAINT. MARKER - INTEREST	(82)	(42)	(5)	37	-88.1%			
01-5071-4480 CARE & MAINT. GENERAL - INTEREST	(2,118)	(1,062)	(138)	924	-87.0%			
01-5071-4485 CARE & MAINT. MARKER - INTEREST	(386)	(192)	(37)	155	-80.7%			
01-5071-6480 CARE & MAINT. GENERAL - INTEREST	(278)	(138)	(25)	113	-81.9%			
01-5071-6485 CARE & MAINT. MARKER - INTEREST	(70)	(36)	(8)	28	-77.8%			
01-5071-7480 CARE & MAINT. GENERAL - INTEREST	(501)	(252)	(15)	237	-94.0%			
01-5071-7485 CARE & MAINT. MARKER - INTEREST	(49)	(24)	(4)	20	-83.3%			
Total Interest Income	(5,178)	(2,598)	(360)	2,238	-86.1%			
Other Revenue								
01-5070-1460 TOWNSHIP GRANT TO CEMETERY - 9TH LINE	-	-	-	-	#DIV/0!			
01-5070-2410 MISC. REVENUE - DRUMBO	(250)	(126)	(60)	66	-52.4%			
01-5070-2460 TOWNSHIP GRANT TO CEMETERY - DRUMBO	-	-	-	-	#DIV/0!			
01-5070-3460 TOWNSHIP GRANT TO CEMETERY - PLATTSVILLE	-	-	-	-	#DIV/0!			
01-5070-4360 DONATIONS	-	-	(2,313)	(2,313)	#DIV/0!			
01-5070-4410 MISC. REVENUE - PRINCETON	(1,500)	(750)	400	1,150	-153.3%			
01-5070-4460 TOWNSHIP GRANT TO CEMETERY - PRINCETON	-	-	-	-	#DIV/0!			
01-5070-6410 MISC. REVENUE - RICHWOOD	(500)	(252)	-	252	-100.0%			
01-5070-6460 TOWNSHIP GRANT TO CEMETERY - RICHWOOD	-	-	-	-	#DIV/0!			
01-5070-7460 TOWNSHIP GRANT TO CEMETERY - WOLVERTON	-	-	-	-	#DIV/0!			
Total Other Revenue	(2,250)	(1,128)	(1,973)	(845)	74.9%			
Contribution from Reserves								
01-5085-2530 CONTRIBUTION FROM CEMETERY FUNDS	(870)	(438)	-	438	-100.0%			
01-5085-4530 CONTRIBUTION FROM CEMETERY FUNDS	-	-	-	-	#DIV/0!			
Total Contribution from Reserves	(870)	(438)	-	438	-100.0%			
Total Revenue	(24,908)	(12,474)	(10,008)	2,466	-19.8%			
Expenses								
Salaries, Wages & Benefits								
01-5090-0550 BOARD / MANAGER SALARIES	-	-	385	385	#DIV/0!	Most maintenance taking place summer & fall.		
01-5090-1550 REGULAR EARNINGS - FT BRIGHT	1,904	954	-	(954)	-100.0%			
01-5090-1555 BENEFITS - FT BRIGHT	573	288	-	(288)	-100.0%			
01-5090-1578 BOARD/MANAGER - WAGES - 9TH LINE	-	-	-	-	#DIV/0!			

Township of Blandford-Blenheim

Cemeteries

	2017		YTD	YTD	YTD	%	Explanation of Significant Variances
	Budget	Budget					
			June	June			
01-5090-2550 REGULAR EARNINGS- FT DRUMBO	1,904	954	22	(932)		-97.7%	
01-5090-2555 REGULAR EARNINGS - FT DRUMBO	573	288	2	(286)		-99.3%	
01-5090-2578 BOARD/MANAGER - WAGES - DRUMBO CEMT	-	-	(105)	(105)		#DIV/0!	
01-5090-3550 REGULAR EARNINGS - FT PLATTSVILLE	1,904	954	-	(954)		-100.0%	
01-5090-3555 BENEFITS - FT PLATTSVILLE	573	288	3	(285)		-99.0%	
01-5090-3578 BOARD/MANAGER - WAGES - PLATTSVILLE	-	-	(35)	(35)		#DIV/0!	
01-5090-4550 REGULAR EARNINGS - FT PRINCETON	1,904	954	34	(920)		-96.4%	
01-5090-4555 BENEFITS - FT PRINCETON	573	288	8	(280)		-97.2%	
01-5090-4578 BOARD/MANAGER - WAGES - PRINCETON	-	-	(105)	(105)		#DIV/0!	
01-5090-6550 REGULAR EARNINGS - FT RICHWOOD	1,904	954	-	(954)		-100.0%	
01-5090-6555 BENEFITS - FT RICHWOOD	573	288	-	(288)		-100.0%	
01-5090-6578 BOARD/MANAGER - WAGES - RICHWOOD	-	-	(35)	(35)		#DIV/0!	
01-5090-7550 REGULAR EARNINGS - FT WOLVERTON	1,904	954	-	(954)		-100.0%	
01-5090-7555 BENEFITS - FT WOLVERTON	573	288	-	(288)		-100.0%	
01-5090-7578 BOARD/MANAGER - WAGES - WOLVERTON	-	-	(105)	(105)		#DIV/0!	
01-5090-8550 REGULAR EARNINGS - FT OTHER	4,616	2,310	-	(2,310)		-100.0%	
01-5090-8555 BENEFITS - FT OTHER	1,004	504	-	(504)		-100.0%	
Total Salaries, Wages & Benefits	20,482	10,266	69	(10,197)		-99.3%	
Administration Expenses							
01-5093-0674 MILEAGE	-	-	-	-		#DIV/0!	
Total Administration Expenses	-	-	-	-		#DIV/0!	
Building & Property Expenses							
01-5092-1676 INSURANCE	476	240	476	236		98.3%	Insurance paid in full for 2017.
01-5092-2676 INSURANCE	582	294	582	288		98.0%	
01-5092-3676 INSURANCE	476	240	476	236		98.3%	
01-5092-4676 INSURANCE	719	360	718	358		99.4%	
01-5092-6676 INSURANCE	476	240	476	236		98.3%	
01-5092-7676 INSURANCE	476	240	476	236		98.3%	
01-5093-1730 GRASS CUTTING - 9TH LINE	767	384	-	(384)		-100.0%	Gross cutting allocation at year end.
01-5093-1754 INTERMENT CHARGES - 9TH LINE	312	156	-	(156)		-100.0%	

Township of Blandford-Blenheim

Cemeteries

	2017		YTD		YTD		YTD		Variance	%	Explanation of Significant Variances
	Budget		Budget		Actual		Variance				
	June	June	June	June	June	June	June	June			
01-5093-1770 MISC OTHER EXPENSES - 9TH LINE	500	252	-	-	(252)	-	-	-100.0%			
01-5093-2710 CORNERPOSTS (RESALE) - DRUMBO	501	252	240	240	(12)	-	-	-4.8%			
01-5093-2730 GRASS CUTTING - DRUMBO	2,087	1,044	-	-	(1,044)	-	-	-100.0%			
01-5093-2754 INTERMENT CHARGES - DRUMBO	1,100	552	90	90	(462)	-	-	-83.7%			
01-5093-2766 MARKER/MONUMENT MAINT. - DRUMBO	50	24	-	-	(24)	-	-	-100.0%			
01-5093-2770 MISC OTHER EXPENSES - DRUMBO	600	300	-	-	(300)	-	-	-100.0%			
01-5093-2794 PROPERTY MAINT. - DRUMBO	1,000	498	-	-	(498)	-	-	-100.0%			
01-5093-3730 GRASS CUTTING - PLATTSVILLE	2,524	1,260	-	-	(1,260)	-	-	-100.0%			
01-5093-3754 INTERMENT CHARGES - PLATTSVILLE	-	-	-	-	-	-	-	#DIV/0!			
01-5093-3770 MISC OTHER EXPENSES - PLATTSVILLE	250	126	-	-	(126)	-	-	-100.0%			
01-5093-3794 PROPERTY MAINT. - PLATTSVILLE	1,000	498	-	-	(498)	-	-	-100.0%			
01-5093-4710 CORNERPOSTS (RESALE) - PRINCETON	501	252	-	-	(252)	-	-	-100.0%			
01-5093-4730 GRASS CUTTING - PRINCETON	8,861	4,428	-	-	(4,428)	-	-	-100.0%			
01-5093-4754 INTERMENT CHARGES - PRINCETON	3,400	1,698	1,090	1,090	(608)	-	-	-35.8%			
01-5093-4766 MARKER/MONUMENT MAINT. - PRINCETON	600	300	-	-	(300)	-	-	-100.0%			
01-5093-4770 MISC OTHER EXPENSES - PRINCETON	1,000	498	-	-	(498)	-	-	-100.0%			
01-5093-4792 PROPERTY IMPROVEMENT - PRINCETON	-	-	-	-	-	-	-	#DIV/0!			
01-5093-4794 PROPERTY MAINT. - PRINCETON	1,000	498	-	-	(498)	-	-	-100.0%			
01-5093-4796 PROVINCIAL BURIAL FEE - PRINCETON	200	102	315	315	213	-	-	208.8%			
01-5093-6710 CORNERPOSTS (RESALE) - RICHWOOD	167	84	-	-	(84)	-	-	-100.0%			
01-5093-6730 GRASS CUTTING - RICHWOOD	1,375	690	-	-	(690)	-	-	-100.0%			
01-5093-6754 INTERMENT CHARGES - RICHWOOD	240	120	90	90	(30)	-	-	-25.0%			
01-5093-6766 MARKER/MONUMENT MAINT. - RICHWOOD	60	30	-	-	(30)	-	-	-100.0%			
01-5093-6794 PROPERTY MAINT. - RICHWOOD	500	252	-	-	(252)	-	-	-100.0%			
01-5093-7710 CORNERPOSTS (RESALE) - WOLVERTON	167	84	-	-	(84)	-	-	-100.0%			
01-5093-7730 GRASS CUTTING - WOLVERTON	1,702	852	-	-	(852)	-	-	-100.0%			
01-5093-7754 INTERMENT CHARGES - WOLVERTON	375	186	-	-	(186)	-	-	-100.0%			
01-5093-7766 MARKER/MONUMENT MAINT. - WOLVERTON	120	60	-	-	(60)	-	-	-100.0%			
01-5093-7794 PROPERTY MAINT. - WOLVERTON	500	252	-	-	(252)	-	-	-100.0%			
01-5093-8730 GRASS CUTTING - 6 INACTIVE CEMETERIES	2,873	1,434	-	-	(1,434)	-	-	-100.0%			

Township of Blandford-Blenheim

Cemeteries

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Budget	Actual	Variance	Variance		
			June	June				
01-5093-8770 MISC OTHER EXPENSES - INACTIVE CEMETERIES	500	252	-	-	(252)	-100.0%		
Total Building & Property Expenses	38,037	19,032	5,029	5,029	(14,003)	-73.6%		
Other Expenses								
01-5094-8832 GRANTS - ACTIVE CEMETERIES	-	-	-	-	-	#DIV/0!		
Total Other Expenses	-	-	-	-	-	#DIV/0!		
Total Expenses	58,519	29,298	5,098	5,098	(24,200)	-82.6%		
Total Cemeteries	33,611	16,824	(4,910)	(4,910)	(21,734)	-129.2%		

Township of Blandford-Blenheim

Fire Department

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
	June	June	June					
Revenue								
Federal / Provincial Grants								
01-2030-2115 PROVINCIAL HIGHWAYS - FIRE CALLS	(90,000)	(45,000)	(31,383)	13,617	(31,383)	13,617	-30.3%	401 calls appear to be lower in first half of 2017
Total Federal / Provincial Grants	(90,000)	(45,000)	(31,383)	13,617	(31,383)	13,617	-30.3%	
Revenue from Other Municipalities								
01-2040-0135 RECEIVED FROM BRANT COUNTY - FIRE	(24,000)	(12,000)	(9,189)	2,811	(9,189)	2,811	-23.4%	
Total Revenue from Other Municipalities	(24,000)	(12,000)	(9,189)	2,811	(9,189)	2,811	-23.4%	
User Fees								
01-2050-0185 FIRE INSPECTION SERVICE FEES	(500)	(252)	-	252	(252)	252	-100.0%	
01-2070-0345 COMPLIANCE LETTERS - FIRE	-	-	(240)	(240)	(240)	(240)	#DIV/0!	
Total User Fees	(500)	(252)	(240)	12	(240)	12	-4.8%	
Other Revenue								
01-2070-0360 DONATIONS	(5,000)	(2,502)	-	2,502	(2,502)	2,502	-100.0%	
01-2070-0410 MISC. REVENUE	(1,600)	(798)	(1,616)	(818)	(1,616)	(818)	102.5%	
01-2070-0412 INSURANCE RECOVERIES	(10,000)	(4,998)	(3,118)	1,880	(3,118)	1,880	-37.6%	1 invoice is still outstanding for the first half of 2017
01-2070-0435 SALE OF EQUIPMENT & PROPERTY	-	-	-	-	-	-	#DIV/0!	
01-2070-0495 INTERDEPT TRANSFERS	-	-	-	-	-	-	#DIV/0!	
01-2070-2360 DONATIONS	-	-	-	-	-	-	#DIV/0!	
01-2070-3360 DONATIONS	-	-	-	-	-	-	#DIV/0!	
01-2070-4360 DONATIONS	-	-	(7,600)	(7,600)	(7,600)	(7,600)	#DIV/0!	Additional donations received in 2017 for Ranger.
Total Other Revenue	(16,600)	(8,298)	(12,334)	(4,036)	(12,334)	(4,036)	48.6%	
Development Charges								
01-2075-0515 DEVELOPMENT CHARGES - FIRE	(25,000)	(12,498)	-	12,498	(12,498)	12,498	-100.0%	Development Charges to be allocated at year end.
Total Development Charges	(25,000)	(12,498)	-	12,498	(12,498)	12,498	-100.0%	
Contribution from Reserves								
01-2080-0520 CONTRIB FROM DEVELOPMENT CHARGES	-	-	-	-	-	-	#DIV/0!	
01-2080-0521 CONTRIB FROM FIRE PREV. RESERVE	(10,000)	(4,998)	(10,000)	(5,002)	(10,000)	(5,002)	100.1%	
01-2080-0525 CONTRIB FROM RESERVES - PROPERTY	(89,500)	(44,748)	(51,747)	(6,999)	(51,747)	(6,999)	15.6%	
01-2080-0527 CONTRIB FROM RESERVES - VEHICLES	-	-	(28,048)	(28,048)	(28,048)	(28,048)	#DIV/0!	Princeton Purchase of Ranger from donations, 01-2096-4901
Total Contribution from Reserves	(99,500)	(49,746)	(89,795)	(40,049)	(89,795)	(40,049)	80.5%	
Total Revenue	(255,600)	(127,794)	(142,941)	(15,147)	(142,941)	(15,147)	11.9%	

Township of Blandford-Blenheim

Fire Department

	2017 Budget	YTD Budget	YTD Actual	YTD Variance	%	Explanation of Significant Variances
Expenses						
Salaries, Wages & Benefits						
01-2090-0550 REGULAR EARNINGS	81,957	40,980	44,522	3,542	8.6%	More fire hours worked, less By-law & CEMC.
01-2090-0555 BENEFITS	23,270	11,634	12,425	791	6.8%	
01-2090-1550 REGULAR EARNINGS	38,976	19,488	12,141	(7,347)	-37.7%	VFF paid up to end of May.
01-2090-1555 BENEFITS	4,539	2,268	2,083	(185)	-8.2%	
01-2090-2550 REGULAR EARNINGS	115,710	57,858	34,118	(23,740)	-41.0%	
01-2090-2555 BENEFITS	6,845	3,420	3,061	(359)	-10.5%	
01-2090-3550 REGULAR EARNINGS	56,028	28,014	18,066	(9,948)	-35.5%	
01-2090-3555 BENEFITS	5,951	2,976	2,791	(185)	-6.2%	
01-2090-4550 REGULAR EARNINGS	69,426	34,716	23,074	(11,642)	-33.5%	
01-2090-4555 BENEFITS	5,403	2,700	2,446	(254)	-9.4%	
Total Salaries, Wages & Benefits	408,105	204,054	154,727	(49,327)	-24.2%	
Administration Expenses						
01-2090-0588 EMPLOYEE HEALTH & SAFETY	150	78	-	(78)	-100.0%	
01-2092-0612 CONVENTIONS, TRAINING & SEMINARS	2,000	1,002	1,671	669	66.8%	
01-2092-0642 MEMBERSHIP DUES	205	102	294	192	188.2%	
01-2092-0644 EMPLOYEE CLOTHING	1,000	498	431	(67)	-13.5%	
01-2092-0646 OFFICE SUPPLIES	200	102	27	(75)	-73.5%	
01-2092-0670 TELEPHONE / CELL PHONE	360	180	136	(44)	-24.4%	
01-2092-0674 MILEAGE	200	102	44	(58)	-56.9%	
01-2092-1612 TRAINING / SEMINARS & CONVENTIONS	3,800	1,902	1,359	(543)	-28.5%	
01-2092-1622 EMPLOYEE RELATIONS	175	90	-	(90)	-100.0%	
01-2092-1628 FIRE PREVENTION MATERIAL	1,300	648	-	(648)	-100.0%	Fire Prevention packages will be ordered for fall
01-2092-1643 MEMBERSHIP DUES	145	72	145	73	101.4%	
01-2092-1670 TELEPHONE	1,600	798	602	(196)	-24.6%	
01-2092-1674 MILEAGE	800	402	127	(275)	-68.4%	
01-2092-2612 TRAINING / SEMINARS & CONVENTIONS	6,200	3,102	1,595	(1,507)	-48.6%	
01-2092-2622 EMPLOYEE RELATIONS	500	252	128	(124)	-49.2%	
01-2092-2628 FIRE PREVENTION MATERIAL	1,400	702	-	(702)	-100.0%	Fire Prevention packages will be ordered for fall
01-2092-2643 MEMBERSHIP DUES	145	72	145	73	101.4%	

Township of Blandford-Blenheim

Fire Department

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Actual	Variance		
		June	June					
01-2092-2670 TELEPHONE	1,500	750	601	(149)		-19.9%		
01-2092-2674 MILEAGE	1,400	702	263	(439)		-62.5%		
01-2092-3612 TRAINING / SEMINARS & CONVENTIONS	4,500	2,250	1,229	(1,021)		-45.4%		
01-2092-3622 EMPLOYEE RELATIONS	400	198	-	(198)		-100.0%		
01-2092-3628 FIRE PREVENTION MATERIAL	1,800	900	-	(900)		-100.0%	Fire Prevention packages will be ordered for fall	
01-2092-3643 MEMBERSHIP DUES	145	72	145	73		101.4%		
01-2092-3670 TELEPHONE	1,500	750	601	(149)		-19.9%		
01-2092-3674 MILEAGE	1,500	750	51	(699)		-93.2%		
01-2092-4612 TRAINING / SEMINARS & CONVENTIONS	2,200	1,098	1,726	628		57.2%		
01-2092-4622 EMPLOYEE RELATIONS	400	198	151	(47)		-23.7%		
01-2092-4628 FIRE PREVENTION MATERIAL	1,300	648	-	(648)		-100.0%	Fire Prevention packages will be ordered for fall	
01-2092-4643 MEMBERSHIP DUES	145	72	145	73		101.4%		
01-2092-4670 TELEPHONE	1,500	750	601	(149)		-19.9%		
01-2092-4674 MILEAGE	700	348	244	(104)		-29.9%		
01-2094-1822 DISPATCH CHARGES	4,284	2,142	2,328	186		8.7%		
01-2094-2822 DISPATCH CHARGES	4,284	2,142	2,328	186		8.7%		
01-2094-3822 DISPATCH CHARGES	4,284	2,142	2,328	186		8.7%		
01-2094-4822 DISPATCH CHARGES	4,284	2,142	2,328	186		8.7%		
Total Administration Expenses	56,306	28,158	21,773	(6,385)		-22.7%		
Building & Property Expenses								
01-2092-1676 INSURANCE	2,694	1,350	3,189	1,839		136.2%	Insurance paid in full for 2017.	
01-2092-2676 INSURANCE	4,244	2,124	4,169	2,045		96.3%		
01-2092-3676 INSURANCE	2,938	1,470	4,635	3,165		215.3%		
01-2092-4676 INSURANCE	3,100	1,548	3,148	1,600		103.4%		
01-2093-0686 VEHICLE INSURANCE	1,172	588	1,149	561		95.4%		
01-2093-0813 VEHICLE EXPENSES	5,000	2,502	2,399	(103)		-4.1%		
01-2093-1686 VEHICLE INSURANCE	2,912	1,458	2,752	1,294		88.8%		
01-2093-1694 BLDG & PROPERTY MTCE	3,477	1,740	248	(1,492)		-85.7%		
01-2093-1696 BLDG & PROPERTY SUPPLIES	110	54	235	181		335.2%		
01-2093-1718 EQUIPMENT MAINTENANCE	3,000	1,500	858	(642)		-42.8%		

Township of Blandford-Blenheim

Fire Department

	2017 Budget	YTD		YTD Actual	YTD Variance	%	Explanation of Significant Variances
		Budget	Actual				
01-2093-1722 EQUIPMENT SUPPLIES	3,000	1,500	3,314	1,814	120.9%		
01-2093-1730 GRASS CUTTING	811	408	-	(408)	-100.0%		
01-2093-1738 HEAT & HYDRO	4,158	2,082	1,963	(119)	-5.7%		
01-2093-1780 PAGER REPAIRS	300	150	457	307	204.7%		
01-2093-1804 SNOW REMOVAL	1,000	498	688	190	38.2%		
01-2093-1813 VEHICLE EXPENSES	5,800	2,898	1,370	(1,528)	-52.7%		
01-2093-1818 WATER AND SEWAGE	-	-	131	131	#DIV/0!		
01-2093-2686 VEHICLE INSURANCE	4,306	2,154	4,302	2,148	99.7%		
01-2093-2694 BLDG & PROPERTY MAINT.	3,177	1,590	4,440	2,850	179.2%	Major repairs required to both overhead doors	
01-2093-2696 BLDG & PROPERTY SUPPLIES	250	126	100	(26)	-20.6%		
01-2093-2718 EQUIPMENT MAINT.	5,000	2,502	3,080	578	23.1%		
01-2093-2722 EQUIPMENT SUPPLIES	8,013	4,008	4,286	278	6.9%		
01-2093-2730 GRASS CUTTING	539	270	-	(270)	-100.0%		
01-2093-2738 HEAT & HYDRO	4,268	2,136	1,835	(301)	-14.1%		
01-2093-2780 PAGER REPAIRS	1,000	498	-	(498)	-100.0%		
01-2093-2804 SNOW REMOVAL	1,400	702	954	252	35.9%		
01-2093-2813 VEHICLE EXPENSES	12,000	6,000	8,191	2,191	36.5%	Major repairs required to both pumpers in spring	
01-2093-2818 WATER AND SEWAGE	1,400	702	621	(81)	-11.5%		
01-2093-2901 MINOR CAPITAL	-	-	-	-	#DIV/0!		
01-2093-3686 VEHICLE INSURANCE	3,224	1,614	3,026	1,412	87.5%		
01-2093-3694 BLDG & PROPERTY MAINT.	5,277	2,640	945	(1,695)	-64.2%		
01-2093-3696 BLDG & PROPERTY SUPPLIES	300	150	210	60	40.0%		
01-2093-3718 EQUIPMENT MAINT.	3,600	1,800	949	(851)	-47.3%		
01-2093-3722 EQUIPMENT SUPPLIES	8,000	4,002	3,176	(826)	-20.6%		
01-2093-3730 GRASS CUTTING	863	432	-	(432)	-100.0%		
01-2093-3738 HEAT & HYDRO	5,012	2,508	1,836	(672)	-26.8%		
01-2093-3780 PAGER REPAIRS	800	402	630	228	56.7%		
01-2093-3804 SNOW REMOVAL	1,000	498	1,032	534	107.2%		
01-2093-3813 VEHICLE EXPENSES	10,000	4,988	3,402	(1,596)	-31.9%		
01-2093-3818 WATER AND SEWAGE	1,200	600	702	102	17.0%		

Township of Blandford-Blenheim

Fire Department

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
		June	June					
01-2093-4686 VEHICLE INSURANCE	4,776	2,388	3,158	770		32.2%		
01-2093-4694 BLDG & PROPERTY MAINT.	3,977	1,986	11	(1,975)		-99.4%		
01-2093-4696 BLDG & PROPERTY SUPPLIES	200	102	100	(2)		-2.0%		
01-2093-4718 EQUIPMENT MAINT.	4,000	1,998	1,198	(800)		-40.0%		
01-2093-4722 EQUIPMENT SUPPLIES	8,046	4,026	2,896	(1,130)		-28.1%		
01-2093-4730 GRASS CUTTING	431	216	-	(216)		-100.0%		
01-2093-4738 HEAT & HYDRO	3,533	1,764	1,671	(93)		-5.3%		
01-2093-4780 PAGER REPAIRS	800	402	12	(390)		-97.0%		
01-2093-4804 SNOW REMOVAL	1,000	498	774	276		55.4%		
01-2093-4813 VEHICLE EXPENSES	6,000	3,000	7,143	4,143		138.1%		
01-2093-4818 WATER AND SEWAGE	600	300	276	(24)		-8.0%		
Total Building & Property Expenses	157,708	78,882	91,661	12,779		16.2%		
Other Expenses								
01-2094-0828 FIRE AGREEMENT - AYR - NORTH DUMFRIES	2,450	1,224	-	(1,224)		-100.0%		
01-2094-0830 FIRE AGREEMENT - NEW DUNDEE- WILMOT	4,955	2,478	5,055	2,577		104.0%	Paid in full for 2017	
01-2094-0831 FIRE AGREEMENT - COMMUNICATIONS	7,000	3,488	2,846	(652)		-18.6%		
01-2094-0838 FIRE AGREEMENT - RECEIVER GENERAL	1,408	702	1,408	706		100.6%		
Total Other Expenses	15,813	7,902	9,309	1,407		17.8%		
Capital Expenditures								
01-2096-0901 EQUIPMENT CAPITAL	1,000	498	-	(498)		-100.0%		
01-2096-0915 PROPERTY CAPITAL	-	-	70	70		#DIV/0!		
01-2096-0933 VEHICLE CAPITAL	-	-	-	-		#DIV/0!		
01-2096-1901 EQUIPMENT CAPITAL	-	-	-	-		#DIV/0!		
01-2096-1915 PROPERTY CAPITAL	30,000	15,000	15,660	660		4.4%	Washroom upgrades to be completed in 2nd half	
01-2096-2901 EQUIPMENT CAPITAL	-	-	-	-		#DIV/0!		
01-2096-2915 PROPERTY CAPITAL	24,500	12,252	12,029	(223)		-1.8%		
01-2096-2933 VEHICLE CAPITAL	-	-	-	-		#DIV/0!		
01-2096-3901 EQUIPMENT CAPITAL	-	-	-	-		#DIV/0!		
01-2096-3915 PROPERTY CAPITAL	20,000	10,002	12,029	2,027		20.3%		
01-2096-4901 EQUIPMENT CAPITAL	-	-	28,048	28,048		#DIV/0!		

Township of Blandford-Blenheim

Fire Department

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Budget	Actual	Variance	Variance		
			June	June				
01-2096-4915 PROPERTY CAPITAL	20,000	10,002	12,029	12,029	2,027	20.3%		
01-2096-4933 VEHICLE CAPITAL	-	-	-	-	-	#DIV/0!		
Total Capital Expenditures	95,500	47,754	79,865	79,865	32,111	67.2%		
Contribution to Reserves								
01-2097-0950 DEVELOPMENT CHARGES	25,000	12,498	-	-	(12,498)	-100.0%	DCs allocated at year end	
01-2097-0956 TRANSFER TO VEHICLE RESERVE	120,000	60,000	120,000	120,000	60,000	100.0%	Contributions to Reserves complete for 2017.	
01-2097-0957 TRANSFER TO PROPERTY RESERVE	60,000	30,000	60,000	60,000	30,000	100.0%	Contributions to Reserves complete for 2017.	
01-2097-0960 TRANSFER TO RESERVES - PRINCETON	-	-	7,600	7,600	7,600	#DIV/0!	Additional donations received in 2017.	
01-2097-0965 TRANSFER TO FIRE PREVENTION & TRAINING RESERVE	10,000	4,998	-	-	(4,998)	-100.0%	Dependent on Revenue, to be done at year end.	
Total Contribution to Reserves	215,000	107,496	187,600	187,600	80,104	74.5%		
Total Expenses	948,432	474,246	544,935	544,935	70,689	14.9%		
Total Fire Department	692,832	346,452	401,994	401,994	55,542	16.0%		

Township of Blandford-Blenheim

By-Law Enforcement

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	YTD	Budget	Actual	Variance	Variance		
Revenue	June		June					
User Fees								
01-2562-0345 COMPLIANCE LETTERS - BY-LAW	-	(60)	(60)	(60)	(60)	(60)	#DIV/0!	
Total User Fees	-	(60)	(60)	(60)	(60)	(60)	#DIV/0!	
Fines & Penalties								
01-2561-0271 PROPERTY STANDARDS-BY-LAW INFRACTIONS	-	(800)	(800)	(800)	(800)	(800)	#DIV/0!	
01-2561-0275 PARKING - BY-LAW INFRACTIONS	(50)	(24)	(15)	(15)	9	9	-37.5%	
Total Fines & Penalties	(50)	(24)	(815)	(815)	(791)	(791)	3,295.8%	
Total Revenue	(50)	(24)	(875)	(875)	(851)	(851)	3,545.8%	
Expenses								
Salaries, Wages & Benefits								
01-2590-0550 REGULAR EARNINGS	32,366	16,182	11,258	11,258	(4,924)	(4,924)	-30.4%	More hours in Fire, less in Bylaw, to date. Commissionaires started June 1st.
01-2590-0555 BENEFITS	9,132	4,566	3,237	3,237	(1,329)	(1,329)	-29.1%	
Total Salaries, Wages & Benefits	41,498	20,748	14,495	14,495	(6,253)	(6,253)	-30.1%	
Administration Expenses								
01-2592-0608 CONTRACTED SERVICES	1,050	528	-	-	(528)	(528)	-100.0%	
01-2592-0612 TRAINING / SEMINARS & CONFERENCES	1,200	600	-	-	(600)	(600)	-100.0%	
01-2592-0634 LEGAL FEES	2,500	1,248	-	-	(1,248)	(1,248)	-100.0%	
01-2592-0642 MEMBERSHIP DUES	170	84	-	-	(84)	(84)	-100.0%	
Total Administration Expenses	4,920	2,460	-	-	(2,460)	(2,460)	-100.0%	
Total Expenses	46,418	23,208	14,495	14,495	(8,713)	(8,713)	-37.5%	
Total By-Law Enforcement	46,368	23,184	13,620	13,620	(9,564)	(9,564)	-41.5%	

Township of Blandford-Blenheim

CEMC

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	YTD	Actual	Variance	Variance		
Revenue								
Other Revenue								
01-2470-0410 CEMC - MISC. REVENUE	(1,600)	(798)	-	798	-100.0%			
Total Other Revenue	(1,600)	(798)	-	798	-100.0%			
Expenses								
Salaries, Wages & Benefits								
01-2490-0550 REGULAR EARNINGS	6,222	3,114	1,950	(1,164)	-37.4%	More hours in Fire, less in CEMC to date.		
01-2490-0555 BENEFITS	1,924	960	633	(327)	-34.1%			
Total Salaries, Wages & Benefits	8,146	4,074	2,583	(1,491)	-36.6%			
Administration Expenses								
01-2492-0650 CEMC TRAINING EXERCISE	3,300	1,650	72	(1,578)	-95.6%	Required training will be completed in 2nd half		
01-2492-0670 TELEPHONE	-	-	103	103	#DIV/0!			
Total Administration Expenses	3,300	1,650	175	(1,475)	-89.4%			
Total Expenses	11,446	5,724	2,758	(2,966)	-51.8%			
Total CEMC	9,846	4,926	2,758	(2,168)	-44.0%			

Township of Blandford-Blenheim

Police

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
Revenue								
Federal / Provincial Grants								
01-2330-0085 OMPF - POLICE SERVICE GRANT	-	-	-	-	-	#DIV/0!		
01-2330-0090 COMMUNITY POLICING PARTNERSHIPS (CPP) PROG GRA	(30,000)	(15,000)	(5,306)	9,694		-64.6%		
01-2330-0091 PRIOR YEAR ADJUSTMENT	-	-	-	-	-	#DIV/0!		
01-2330-0092 COURT SECURITY PRISONER TRANSPORTATION PYMT	(4,818)	(2,412)	(1,205)	1,207		-50.0%		
01-2330-0093 R.I.D.E. GRANT PROGRAM	(6,540)	(3,270)	(6,635)	(3,365)		102.9%		
Total Federal / Provincial Grants	(41,358)	(20,682)	(13,146)	7,536		-36.4%		
User Fees								
01-2350-0506 POLICE CHECK	(3,000)	(1,500)	(1,925)	(425)		28.3%		
Total User Fees	(3,000)	(1,500)	(1,925)	(425)		28.3%		
Other Revenue								
01-2370-0360 DONATIONS	-	-	-	-	-	#DIV/0!		
Total Other Revenue	-	-	-	-		#DIV/0!		
Contribution from Reserves								
01-2380-0530 CONTRIBUTION FROM RESERVES	(20,000)	(10,002)	(20,000)	(9,998)		100.0%	Contribution complete for 2017.	
Total Contribution from Reserves	(20,000)	(10,002)	(20,000)	(9,998)		100.0%		
Total Revenue	(64,358)	(32,184)	(35,071)	(2,887)		9.0%		
Expenses								
Salaries, Wages & Benefits								
01-2392-0550 REGULAR EARNINGS	6,500	3,252	3,112	(140)		-4.3%		
01-2392-0555 BENEFITS	400	198	177	(21)		-10.6%		
Total Salaries, Wages & Benefits	6,900	3,450	3,289	(161)		-4.7%		
Administration Expenses								
01-2392-0600 RIDE GRANT EARNINGS	6,540	3,270	969	(2,301)		-70.4%		
01-2392-0602 ADVERTISING	250	126	-	(126)		-100.0%		
01-2392-0612 CONVENTIONS, TRAINING & SEMINARS	4,500	2,250	-	(2,250)		-100.0%		
01-2392-0642 MEMBERSHIP DUES	650	324	684	360		111.1%		
01-2392-0658 POLICE CONTRACT COSTS	940,701	470,352	391,960	(78,392)		-16.7%	June invoice paid in July, on track.	
01-2392-0664 PUBLIC RELATIONS	1,500	750	-	(750)		-100.0%		
01-2392-0666 SUBSCRIPTIONS	200	102	-	(102)		-100.0%		
01-2392-0668 OFFICE SUPPLIES	-	-	17	17		#DIV/0!		

Township of Blandford-Blenheim

Police

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Budget	Actual	Variance	Variance		
Total Administration Expenses	954,341	477,174	393,630	(83,544)	-17.5%			
Building & Property Expenses								
01-2392-0676 INSURANCE	328	162	328	166	102.5%			
01-2393-0722 EQUIPMENT SUPPLIES	1,000	498	-	(498)	-100.0%			
Total Building & Property Expenses	1,328	660	328	(332)	-50.3%			
Other Expenses								
01-2394-0833 DONATIONS	500	252	-	(252)	-100.0%			
Total Other Expenses	500	252	-	(252)	-100.0%			
Contribution to Reserves								
01-2397-0955 POLICE RESERVE	-	-	-	-	#DIV/0!			
Total Contribution to Reserves	-	-	-	-	#DIV/0!			
Total Expenses	963,069	481,536	397,247	(84,289)	-17.5%			
Total Police	898,711	449,352	362,176	(87,176)	-19.4%			

Township of Blandford-Blenheim

Building Services

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
Revenue	June		June		June			
Licences & Permits								
01-2160-0230 BUILDING PERMITS	(170,000)	(85,002)	(98,521)	(13,519)	(13,519)	(98,521)	15.9%	
01-2160-0240 SITE PLAN APPLICATION FEE	(400)	(198)	(1,200)	(1,002)	(1,002)	(1,200)	506.1%	
01-2160-0245 SITE ALTERATION APPLICATION FEE	(400)	(198)	-	198	198	-	-100.0%	
01-2160-0250 SEWER AND WATER PERMITS	(2,000)	(1,002)	(1,000)	2	2	(1,000)	-0.2%	
01-2160-0260 ZONE CHANGE APPLICATIONS / MINOR VARIANCES	(5,000)	(2,502)	(4,900)	(2,398)	(2,398)	(4,900)	95.8%	
Total Licences & Permits	(177,800)	(88,902)	(105,621)	(16,719)	(16,719)	(105,621)	18.8%	
Other Revenue								
01-2170-0345 BUILDING & ZONING STATEMENTS	(1,750)	(876)	(1,295)	(419)	(419)	(1,295)	47.8%	
Total Other Revenue	(1,750)	(876)	(1,295)	(419)	(419)	(1,295)	47.8%	
Contribution from Reserves								
01-2180-0527 CONTRIBUTION FROM RESERVES	(47,000)	(23,502)	(12,000)	11,502	11,502	(12,000)	-48.9%	Transfer for rent complete, vehicle transfer not yet done.
Total Contribution from Reserves	(47,000)	(23,502)	(12,000)	11,502	11,502	(12,000)	-48.9%	
Total Revenue	(226,550)	(113,280)	(118,916)	(5,636)	(5,636)	(118,916)	5.0%	
Expenses								
Salaries, Wages & Benefits								
01-2190-0550 REGULAR EARNINGS	131,500	65,748	64,504	(1,244)	(1,244)	64,504	-1.9%	
01-2190-0555 BENEFITS	36,163	18,084	18,222	138	138	18,222	0.8%	
Total Salaries, Wages & Benefits	167,663	83,832	82,726	(1,106)	(1,106)	82,726	-1.3%	
Administration Expenses								
01-2192-0097 ADMINISTRATION SUPPLIES	450	228	147	(81)	(81)	147	-35.5%	
01-2192-0588 EMPLOYEE HEALTH & SAFETY	450	228	25	(203)	(203)	25	-89.0%	
01-2192-0602 ADVERTISING	200	102	-	(102)	(102)	-	-100.0%	
01-2192-0606 COMPUTER SUPPLIES/IT/CE/SOFTWARE	500	252	604	352	352	604	139.7%	
01-2192-0608 CONTRACTED SERVICES	3,000	1,500	702	(798)	(798)	702	-53.2%	
01-2192-0612 CONVENTIONS AND TRAINING	3,000	1,500	1,166	(394)	(394)	1,166	-22.3%	
01-2192-0614 COUNTY PLANNING FEES	2,000	1,002	595	(407)	(407)	595	-40.6%	
01-2192-0620 EMPLOYEE CLOTHING	300	150	336	186	186	336	124.0%	
01-2192-0624 ENGINEERING	-	-	-	-	-	-	#DIV/0!	
01-2192-0635 LEGAL FEES	3,500	1,752	-	(1,752)	(1,752)	-	-100.0%	
01-2192-0642 MEMBERSHIP DUES	1,000	498	627	129	129	627	25.9%	

Township of Blandford-Blenheim

Building Services

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Actual	Variance		
		June	June		June			
01-2192-0666 SUBSCRIPTIONS	1,000	498	-	(498)	-	(498)	-100.0%	
01-2192-0670 TELEPHONE - CELLULAR	720	360	256	(104)	256	(104)	-28.9%	
01-2192-0674 MILEAGE	500	252	-	(252)	-	(252)	-100.0%	
Total Administration Expenses	16,620	8,322	4,458	(3,864)	4,458	(3,864)	-46.4%	
Building & Property Expenses								
01-2192-0676 INSURANCE	15,257	7,626	15,257	7,631	15,257	7,631	100.1%	Insurance paid in full for 2017.
01-2192-0681 OFFICE SPACE RENTAL	12,000	6,000	6,000	0	6,000	0	0.0%	
01-2193-0686 VEHICLE INSURANCE	2,697	1,350	1,197	(153)	1,197	(153)	-11.3%	
01-2193-0813 VEHICLE EXPENSES	3,500	1,752	225	(1,527)	225	(1,527)	-87.2%	
Total Building & Property Expenses	33,454	16,728	22,679	5,951	22,679	5,951	35.6%	
Capital Expenditures								
01-2196-0933 VEHICLE CAPITAL	35,000	17,502	-	(17,502)	-	(17,502)	-100.0%	
Total Capital Expenditures	35,000	17,502	-	(17,502)	-	(17,502)	-100.0%	
Contribution to Reserves								
01-2197-0956 CONTRIBUTION TO BUILDING RESERVE	-	-	-	-	-	-	#DIV/0!	
Total Contribution to Reserves	-	-	-	-	-	-	#DIV/0!	
Total Expenses	252,737	126,384	109,863	(16,521)	109,863	(16,521)	-13.1%	
Total Building Services	26,187	13,104	(9,053)	(22,157)	(9,053)	(22,157)	-169.1%	

Township of Blandford-Blenheim

Drainage

	2017		YTD	YTD	%	Explanation of Significant Variances
	Budget	Budget				
Revenue	June		June			
Levy adjustments (Supps, Omits, Write-offs, etc)						
01-8018-0010 MUNICIPAL DRAIN DEBENTURE LEVY	(30,959)	(15,480)	-	15,480	-100.0%	To be billed on final tax bills.
01-8018-0020 TILE DRAIN DEBENTURE	(3,560)	(1,782)	-	1,782	-100.0%	
Total Levy adjustments (Supps, Omits, Write-offs, etc)	(34,519)	(17,262)	-	17,262	-100.0%	
Federal / Provincial Grants						
01-8030-0080 MFOA - DRAINAGE SUPERINTENDENT GRANT	(29,703)	(14,850)	-	14,850	-100.0%	To be applied for after year end.
Total Federal / Provincial Grants	(29,703)	(14,850)	-	14,850	-100.0%	
User Fees						
01-8070-0345 COMPLIANCE LETTERS - DRAINAGE	-	-	(245)	(245)	#DIV/0!	
Total User Fees	-	-	(245)	(245)	#DIV/0!	
Other Revenue						
01-8070-0357 DRAINAGE APPORTIONMENTS	(750)	(378)	(1,289)	(911)	241.0%	
Total Other Revenue	(750)	(378)	(1,289)	(911)	241.0%	
Total Revenue	(64,972)	(32,490)	(1,534)	30,956	-95.3%	
Expenses						
Salaries, Wages & Benefits						
01-8090-0550 REGULAR EARNINGS - FULL TIME	45,777	22,890	23,516	626	2.7%	
01-8090-0555 BENEFITS - FULL TIME	5,370	2,688	2,790	102	3.8%	
Total Salaries, Wages & Benefits	51,147	25,578	26,306	728	2.8%	
Administration Expenses						
01-8092-0588 EMPLOYEE HEALTH & SAFETY	200	102	-	(102)	-100.0%	
01-8092-0606 COMPUTER SUPPLIES/MTCE/SOFTWARE	1,000	498	-	(498)	-100.0%	
01-8092-0612 TRAINING / SEMINARS & CONVENTIONS	1,500	750	377	(373)	-49.7%	
01-8092-0620 EMPLOYEE CLOTHING	150	78	-	(78)	-100.0%	
01-8092-0624 ENGINEERING	1,500	750	-	(750)	-100.0%	
01-8092-0642 MEMBERSHIP DUES	175	90	175	85	94.4%	
01-8092-0668 SUPPLIES	350	174	458	284	163.2%	
01-8092-0670 TELEPHONE	300	150	164	14	9.3%	
01-8092-0674 MILEAGE	2,000	1,002	362	(640)	-63.9%	
Total Administration Expenses	7,175	3,594	1,536	(2,058)	-57.3%	
Building & Property Expenses						

Township of Blandford-Blenheim

Drainage

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	June	Actual	June	Variance		
01-8093-0686 VEHICLE INSURANCE	125	60	-	-	(60)	-100.0%		
01-8093-0712 DRAINAGE - TOWNSHIP LANDS	1,700	852	555	555	(297)	-34.9%		
01-8093-0813 VEHICLE EXPENSES	1,200	600	-	-	(600)	-100.0%		
Total Building & Property Expenses	3,025	1,512	555	555	(957)	-63.3%		
Debt Charges								
01-8095-0848 DEBT CHARGES - MUNICIPAL DRAINS INTEREST	2,216	1,110	1,323	1,323	213	19.2%		
01-8095-0850 DEBT CHARGES - MUNICIPAL DRAINS PRINCIPAL	28,744	14,370	14,160	14,160	(210)	-1.5%		
01-8095-0854 DEBT CHARGES - TILE DRAINS INTEREST	996	498	341	341	(157)	-31.5%		
01-8095-0856 DEBT CHARGES - TILE DRAINS PRINCIPAL	2,564	1,284	1,072	1,072	(212)	-16.5%		
Total Debt Charges	34,520	17,262	16,896	16,896	(366)	-2.1%		
Capital Expenditures								
01-8096-0901 DRAINAGE - EQUIPMENT CAPITAL	17,000	8,502	18,214	18,214	9,712	114.2%		
Total Capital Expenditures	17,000	8,502	18,214	18,214	9,712	114.2%		
Total Expenses	112,867	56,448	63,507	63,507	7,059	12.5%		
Total Drainage	47,895	23,958	61,973	61,973	38,015	158.7%		

Township of Blandford-Blenheim

Public Works - Roads

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
Revenue	June		June					
Federal / Provincial Grants								
01-3030-0105 OTHER GRANTS - STUDENT EMPLOYMENT	(3,200)	(1,602)	-	1,602	-100.0%	Student grant to be received after work term completed.		
01-3030-0110 FEDERAL GAS TAX GRANT	(223,737)	(111,870)	(3,961)	107,909	-96.5%	FGT received in July & November.		
01-3030-0116 (OCIF) - ONT COMM INFRASTRUCTURE FUND	(66,513)	(33,258)	-66,513	(33,255)	100.0%	OCIF grant received in full.		
Total Federal / Provincial Grants	(293,450)	(146,730)	(70,474)	76,256	-52.0%			
User Fees								
01-3050-0150 9.1.1. CIVIC ADDRESS SIGNS	(200)	(102)	(201)	(99)	97.1%			
01-3050-0180 CULVERT INSTALLATION	(4,000)	(1,998)	(945)	1,053	-52.7%	Less new entrance request so far this year		
01-3050-0185 SPECIAL ASSESSMENT	-	-	(800)	(800)	#DIV/0!			
Total User Fees	(4,200)	(2,100)	(1,946)	154	-7.3%			
Other Revenue								
01-3070-0370 BRUSH & COMPOST RECOVERY	(43,000)	(21,498)	-	21,498	-100.0%	Invoiced in July for first half of year and then at year end.		
01-3070-0375 EQUIPMENT RENTAL	(8,000)	(4,002)	(1,623)	2,379	-59.4%	Snow removal for Woodstock and unassumed sub. Final billing at year end		
01-3070-0390 GRAVEL EXTRACTION REBATE - PROVINCE	(35,000)	(17,502)	-	17,502	-100.0%	Usually received in September.		
01-3070-0405 MISC. REIMBURSEMENTS	(291,000)	(145,500)	(3,074)	142,426	-97.9%	Will be invoiced after Capital projects are completed.		
01-3070-0435 SALE OF EQUIPMENT	(35,000)	(17,502)	-	17,502	-100.0%	New truck not in till Fall, therefore no sale yet either.		
01-3070-0495 INTERDEPT TRANSFERS	(5,000)	(2,502)	-	2,502	-100.0%	New truck not in till late summer, will transfer to CS then.		
Total Other Revenue	(417,000)	(208,506)	(4,697)	203,809	-97.7%			
Development Charges								
01-3075-0515 DEVELOPMENT CHARGES - ROADS	(9,500)	(4,752)	-	4,752	-100.0%	DCs to be allocated at year end.		
01-3075-0520 DEVELOPMENT CHRGS - BUILDING & FLEET	(20,000)	(10,002)	-	10,002	-100.0%			
Total Development Charges	(29,500)	(14,754)	-	14,754	-100.0%			
Contribution from Reserves								
01-3080-0520 CONTRIB FROM DEV CHARGES - ROADS	(2,120)	(1,062)	-	1,062	-100.0%	Contributions from DCs & reserves as Capital is completed.		
01-3080-0524 CONTRIB FROM PW BLDG RESERVE	(18,000)	(9,000)	-	9,000	-100.0%			
01-3080-0525 CONTRIB FROM RESERVES - VEHICLES / EQUIPMENT	(292,500)	(146,250)	-	146,250	-100.0%			
01-3080-0526 CONTRIB FROM FEDERAL GAS TAX	(390,000)	(195,000)	(37,405)	157,595	-80.8%			
01-3080-0535 CONTRIB FROM RESERVES - BRIDGE	(1,886,000)	(943,002)	(102,453)	840,549	-89.1%			
01-3080-0545 CONTRIB FROM RESERVES - ROADS	(290,167)	(145,086)	(211,034)	(65,948)	45.5%			

Township of Blandford-Blenheim

Public Works - Roads

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
			June					
Total Contribution from Reserves	(2,878,787)	(1,439,400)	(350,892)	1,088,508			-75.6%	
Total Revenue	(3,622,937)	(1,811,490)	(428,009)	1,383,481			-76.4%	
Expenses								
Salaries, Wages & Benefits								
01-3090-0550 REGULAR EARNINGS - FULL TIME	461,681	230,838	229,631	(1,207)			-0.5%	
01-3090-0555 BENEFITS - FULL TIME	139,416	69,708	69,720	12			0.0%	
01-3091-0550 REGULAR EARNINGS - PART TIME	16,204	8,100	16,022	7,922			97.8% Used at the beginning of the year to cover illness	
01-3091-0555 BENEFITS - PART TIME	1,632	816	1,948	1,132			138.7%	
Total Salaries, Wages & Benefits	618,933	309,462	317,321	7,859			2.5%	
Administration Expenses								
01-3092-0612 CONVENTIONS & TRAINING	11,000	5,502	6,868	1,366			24.8%	
01-3092-0620 EMPLOYEE CLOTHING	3,100	1,548	2,508	960			62.0% Clothing purchased in 1st quarter	
01-3092-0642 MEMBERSHIP DUES	1,600	798	1,502	704			88.2% Memberships paid in 1st quarter	
01-3092-0646 OFFICE SUPPLIES	500	252	504	252			100.0% on going various supplies	
01-3092-0650 OTHER PROFESSIONAL EXPENDITURES	2,000	1,002	-	(1,002)			-100.0% Fall seminars/consulting fees	
01-3092-0670 TELEPHONE	2,000	1,002	1,281	279			27.8%	
01-3092-0674 MILEAGE	300	150	123	(27)			-18.0%	
01-3092-0826 ENGINEERING SERVICES	1,000	498	318	(180)			-36.1% Projects started late	
Total Administration Expenses	21,500	10,752	13,104	2,352			21.9%	
Building & Property Expenses								
01-3092-0676 INSURANCE	65,686	32,844	65,685	32,841			100.0% Insurance paid in full for 2017.	
01-3093-0686 VEHICLE INSURANCE	10,374	5,190	10,374	5,184			99.9%	
01-3093-0692 BASE REPAIR	15,000	7,500	770	(6,730)			-89.7% Work will be done in 3rd quarter	
01-3093-0694 BLDG & PROPERTY MTCE - BLANDFORD GARAGE	4,677	2,340	-	(2,340)			-100.0% Overhead doors to be inspected and repaired in 4th quarter	
01-3093-0695 BLDG & PROPERTY MTCE - DRUMBO GARAGE	8,467	4,236	977	(3,259)			-76.9% Overhead doors to be inspected and repaired in 4th quarter. Asphalt repair required in front of Dome.	
01-3093-0696 BLDG & PROPERTY SUPPLIES - DRUMBO GARAGE	1,000	498	148	(350)			-70.3% Purchase of supplies on going as needed	
01-3093-0697 BLDG & PROPERTY SUPPLIES - BLANDFORD GARAGE	250	126	-	(126)			-100.0% Purchase of supplies on going as needed	
01-3093-0698 BRIDGES & CULVERTS	7,500	3,750	-	(3,750)			-100.0% Culvert replacement down so far in 2017.	
01-3093-0699 BRUSH & COMPOST DEPOT	3,250	1,626	-	(1,626)			-100.0% Maintenance needed to depot before year end.	

Township of Blandford-Blenheim

Public Works - Roads

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
			June					
01-3093-0700 BRUSHING, TREE TRIMMING	65,000	32,502	73,078	40,576		124.8%	Tree work completed for 2017. respond to Emergencies only for remainder of year.	
01-3093-0702 CATCHBASIN, CURB & GUTTER	1,000	498	438	(60)		-12.0%		
01-3093-0704 COLD MIX	4,000	1,998	676	(1,322)		-66.2%	More ordered in July	
01-3093-0707 DEBRIS DISPOSAL	1,000	498	246	(252)		-50.6%	Stock pile at Yard. Will be disposed of later in the year.	
01-3093-0710 DRAIN MAINTENANCE	10,000	4,998	-	(4,998)		-100.0%	Catchbasin cleaning to be completed yet.	
01-3093-0714 DUST LAYER	122,000	61,002	85,763	24,761		40.6%	Completed in June.	
01-3093-0726 GAS & OIL	135,000	67,500	65,840	(1,660)		-2.5%		
01-3093-0730 GRASS CUTTING - PUBLIC WORKS GARAGES	2,096	1,050	-	(1,050)		-100.0%	Grass cutting allocation to be done at year end.	
01-3093-0732 GRAVEL RESURFACING - CONTRACT - ROADS	206,000	103,002	201,930	98,928		96.0%	Completed in the spring	
01-3093-0734 GRAVEL RESURFACING OTHER - ROADS	27,500	13,752	-	(13,752)		-100.0%	Fall/Winter activities	
01-3093-0738 HEAT & HYDRO - BLANDFORD GARAGE	5,840	2,922	3,483	561		19.2%		
01-3093-0739 HEAT & HYDRO - DRUMBO GARAGE	10,037	5,016	5,921	905		18.0%		
01-3093-0740 HYDRO CHARGES - STREET LIGHTS	23,306	11,652	9,030	(2,622)		-22.5%		
01-3093-0743 HYDRO CHARGES - BRIGHT (DNU)	-	-	-	-		#DIV/0!		
01-3093-0744 HYDRO CHARGES - DRUMBO (DNU)	-	-	-	-		#DIV/0!		
01-3093-0745 HYDRO CHARGES - GOBLES (DNU)	-	-	-	-		#DIV/0!		
01-3093-0746 HYDRO CHARGES - PLATTSVILLE (DNU)	-	-	-	-		#DIV/0!		
01-3093-0747 HYDRO CHARGES - PRINCETON (DNU)	-	-	-	-		#DIV/0!		
01-3093-0748 HYDRO CHARGES - VINK ESTATES (DNU)	-	-	-	-		#DIV/0!		
01-3093-0749 HYDRO CHARGES - WASHINGTON (DNU)	-	-	-	-		#DIV/0!		
01-3093-0768 MISC MATERIALS FOR STREET LIGHTING	275	138	-	(138)		-100.0%	No materials required to date.	
01-3093-0770 MISC OTHER EXPENSES	500	252	194	(58)		-23.0%		
01-3093-0778 STREET LIGHTING REPAIRS	3,000	1,500	1,718	218		14.5%		
01-3093-0782 PARTS/SUPPLIES & SMALL TOOLS	16,500	8,250	6,264	(1,986)		-24.1%	Tools and supplies purchased as needed.	
01-3093-0784 PATCHING & SPRAY PATCHING	46,000	22,998	12,286	(10,712)		-46.6%	Late summer/fall activity	
01-3093-0798 RAILWAY CROSSING MAINT.	20,000	10,002	8,310	(1,692)		-16.9%		
01-3093-0800 SAFETY DEVICES AND SIGNS	29,000	14,502	270	(14,232)		-98.1%	Addition signs and posts will be purchased in Q3. County line painting invoiced in Q4.	
01-3093-0804 SIDEWALKS	8,000	4,002	611	(3,391)		-84.7%	Inspections completed in June, repair work in July/August	

Township of Blandford-Blenheim

Public Works - Roads

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance			
			June					
01-3093-0806 SWEEPING, FLUSH CLEANING	12,500	6,252	9,691	3,439	55.0%	Sweeping completed in the spring		
01-3093-0812 VEHICLE & EQUIPMENT STOCK	37,000	18,498	6,640	(11,858)	-64.1%	Replacement blades ordered in Q3 for winter.		
01-3093-0813 VEHICLE EXPENSES	120,000	60,000	29,384	(30,616)	-51.0%	Low repairs due to good Preventitive maintenance program		
01-3093-0816 WASHOUTS	12,000	6,000	280	(5,720)	-95.3%	Summer/Fall activity. After heavy rain events.		
01-3093-0818 WATER AND SEWAGE - DRUMBO GARAGE	600	300	233	(67)	-22.3%			
01-3093-0819 ON1 CALL LOCATES	1,600	798	207	(591)	-74.1%	\$500 credit used at the beginning of the year.		
01-3093-0901 MINOR CAPITAL	-	-	-	-	#DIV/0!			
01-3094-0842 PROPERTY SIGNS 9-1-1	200	102	61	(41)	-40.2%	Less property signs required.		
Total Building & Property Expenses	1,036,158	518,094	600,508	82,414	15.9%			
Capital Expenditures								
01-3096-0007 BRIDGE #7	-	-	-	-	#DIV/0!			
01-3096-0020 BRIDGE #20	70,000	34,998	24,198	(10,800)	-30.9%	EA study complete. Engineering working on drawings and Geotechnical study.		
01-3096-0051 BRIDGE #51	353,000	176,502	14,124	(162,378)	-92.0%	EA complete, move to 2018		
01-3096-0114 HOFSTETTER RD. EXT.	1,032,000	516,000	209,600	(306,400)	-59.4%	A wet spring has slowed the earth moving. Tendering for Urban section and forcemain/water main work in Q3.		
01-3096-0116 BRANT OX. RD. & TWP. RD 2	-	-	-	-	#DIV/0!			
01-3096-0879 BOUNDARY BRIDGE	-	-	-	-	#DIV/0!			
01-3096-0896 BRIDGES - ROAD STUDY	21,000	10,500	-	(10,500)	-100.0%	Completed in Q3.		
01-3096-0901 EQUIPMENT CAPITAL - ROADS	332,500	166,248	-	(166,248)	-100.0%	1-ton cost in Q3, tandem truck in Q4		
01-3096-0905 MUNICIPAL DRAINAGE - ROADS	-	-	-	-	#DIV/0!			
01-3096-0915 PROPERTY CAPITAL - ROADS	18,000	9,000	-	(9,000)	-100.0%	2 overhead doors to be replaced with openers in Q4.		
01-3096-0919 ROAD CONST. - PLATTSVILLE STREETS	66,800	33,402	-	(33,402)	-100.0%	Mill and Pave River Rd. out to Twp. 14 in Q4		
01-3096-0924 CNR - GOBLES BRIDGE	660,000	330,000	-	(330,000)	-100.0%	Waiting on agreement from CN		
01-3096-0925 ROAD CONSTRUCTION - ROAD RESURFACING	723,000	361,500	123,207	(238,293)	-65.9%	Resurfacing started, completed in Q3. Blenheim const. at Twp. 14 Q4. Hamilton Drain work in Q4. (Approx. \$15000).		
Total Capital Expenditures	3,276,300	1,638,150	371,129	(1,267,021)	-77.3%			
Contribution to Reserves								
01-3097-0950 DEVELOPMENT CHARGES - ROADS	9,500	4,752	-	(4,752)	-100.0%	DCs to be allocated at year end.		
01-3097-0952 DEVELOPMENT CHARGES - BUILDING & FLEET	20,000	10,002	-	(10,002)	-100.0%			
01-3097-0954 TRANSFER TO RESERVES - BUILDING & PROPERTY	20,000	10,002	20,000	9,998	100.0%	Transfers to reserves complete for 2017.		

Township of Blandford-Blenheim

Public Works - Roads

	2017 Budget	YTD		YTD Actual June	YTD Variance	%	Explanation of Significant Variances
		Budget	Actual				
		June	June				
01-3097-0955 TRANSFER TO RESERVES - BRIDGES	200,000	100,002	200,000	99,998	100.0%		
01-3097-0956 TRANSFER TO RESERVES - ROAD CONSTRUCTION	687,531	343,764	687,531	343,767	100.0%		
01-3097-0957 TRANSFER TO RESERVES - VEHICLES	250,000	124,998	250,000	125,002	100.0%		
01-3097-0958 TRANSFER TO RESERVES - FEDERAL GAS TAX	223,737	111,870	227,698	115,828	103.5%		
01-3097-0959 TRANSFER TO RESERVES - STREET LIGHTS	-	-	300	300	#DIV/0!		
01-3097-0960 TRANSFER TO RESERVES - SIDEWALKS	-	-	500	500	#DIV/0!		
Total Contribution to Reserves	1,410,768	705,390	1,386,029	680,639	96.5%		
Total Expenses	6,563,659	3,181,848	2,688,091	(493,757)	-15.5%		
Total Public Works - Roads	2,740,722	1,370,358	2,260,082	889,724	64.9%		

Township of Blandford-Blenheim

Public Works - Winter Control

	2017 Budget	YTD		YTD Actual	YTD Variance	%	Explanation of Significant Variances
		Budget	Actual				
		June					
Expenses							
Salaries, Wages & Benefits							
01-3590-0550 REGULAR EARNINGS - FULL TIME	126,666	63,336	40,008	(23,328)	-36.8%		Winter control hours down due to lighter winter in Q1
01-3590-0555 BENEFITS - FULL TIME	30,304	15,150	11,683	(3,467)	-22.9%		
Total Salaries, Wages & Benefits	156,970	78,486	51,691	(26,795)	-34.1%		
Building & Property Expenses							
01-3593-0804 SNOW PLOWING & REMOVAL - ROADS	7,500	3,750	2,907	(843)	-22.5%		Lighter winter in Q1 meant less cul-de-sac cleaning by contractor.
01-3593-0820 SAND & SALT - ROADS	90,000	45,000	41,997	(3,003)	-6.7%		Sand and salt will be delivered in Q4.
Total Building & Property Expenses	97,500	48,750	44,904	(3,846)	-7.9%		
Total Expenses	254,470	127,236	96,595	(30,641)	-24.1%		
Total Public Works - Winter Control	254,470	127,236	96,595	(30,641)	-24.1%		

Township of Blandford-Blenheim

Community Services - Administration

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Actual	Variance		
Revenue	June		June		June			
Federal / Provincial Grants								
01-6930-0105 GRANT - STUDENT EMPLOYMENT	(1,576)	(786)	-	786	-100.0%	Student grant to be received after work term completed.		
Total Federal / Provincial Grants	(1,576)	(786)	-	786	-100.0%			
Expenses								
Salaries, Wages & Benefits								
01-6990-0550 REGULAR EARNINGS	85,917	42,960	41,083	(1,877)	-4.4%			
01-6990-0555 BENEFITS	24,825	12,414	13,126	712	5.7%			
01-6991-0550 REGULAR EARNINGS - PART TIME	7,850	3,924	-	(3,924)	-100.0%			
01-6991-0555 BENEFITS - PART TIME	952	474	-	(474)	-100.0%			
Total Salaries, Wages & Benefits	119,544	59,772	54,209	(5,563)	-9.3%			
Administration Expenses								
01-6992-0602 ADVERTISING	300	150	425	275	183.3%	Advertising for facility operator.		
01-6992-0612 CONVENTIONS, TRAINING & SEMINARS	4,500	2,250	3,298	1,048	46.6%			
01-6992-0620 EMPLOYEE CLOTHING	3,500	1,752	2,261	509	29.1%	Readjusted clothing requirements with new employee		
01-6992-0642 MEMBERSHIP DUES	825	414	825	411	99.3%	memberships are paid for the year		
01-6992-0646 OFFICE SUPPLIES	600	300	400	100	33.3%			
01-6992-0670 TELEPHONE	4,500	2,250	2,417	167	7.4%			
01-6992-0674 MILEAGE	200	102	-	(102)	-100.0%			
01-6992-0686 VEHICLE INSURANCE	3,511	1,758	4,709	2,951	167.9%	paid for year		
01-6992-0782 PARTS/SUPPLIES & SMALL TOOLS	1,600	798	276	(522)	-65.4%			
01-6992-0813 VEHICLE EXPENSES	6,000	3,000	209	(2,791)	-93.0%	usually increases in winter when repairs are done.		
Total Administration Expenses	25,536	12,774	14,820	2,046	16.0%			
Capital Expenditures								
01-6992-9995 INTERDEPT TRANSFERS TO	5,000	2,502	-	(2,502)	-100.0%			
Total Capital Expenditures	5,000	2,502	-	(2,502)	-100.0%			
Contribution to Reserves								
01-6997-0955 Contribution to Reserve - Equip	1,000	498	1,000	502	100.8%	Transfers to reserves complete for 2017.		
01-6997-0957 Contribution to Reserve - Vehicles	3,000	1,500	3,000	1,500	100.0%			
Total Contribution to Reserves	4,000	1,998	4,000	2,002	100.2%			
Total Expenses	154,080	77,046	73,029	(4,017)	-5.2%			

Township of Blandford-Blenheim

Community Services - Administration

2017 Budget	YTD		YTD Actual June	YTD Variance	%	Explanation of Significant Variances
	Budget	Variance				
152,504	76,260	73,029	(3,231)	-4.2%		
Total Community Services - Administration						

Township of Blandford-Blenheim

Grass Cutting

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
Expenses								
Grass Cutting								
01-6990-8550 REGULAR EARNINGS - FULL TIME	23,229	11,616	15,235	3,619	31.2%			
01-6990-8555 BENEFITS - FULL TIME	7,160	3,582	4,313	731	20.4%			
01-6991-8550 REGULAR EARNING - PART TIME	2,018	1,008	-	(1,008)	-100.0%			
01-6991-8555 BENEFITS - PART TIME	203	102	-	(102)	-100.0%			
01-6992-9999 Grass Cutting - Inter-Dept Allocation	(47,418)	(23,712)	-	23,712	-100.0%	Grass Cutting Allocation to be done at year end.		
01-7193-0730 GRASS CUTTING	6,758	3,378	870	(2,508)	-74.2%			
01-7197-0951 TRANSFER TO RESERVES - GRASS CUTTING	8,050	4,026	8,050	4,024	100.0%	Transfers to reserves complete for 2017.		
Total Grass Cutting	-	-	28,468	28,468	#DIV/0!			
Total Expenses	-	-	28,468	28,468	#DIV/0!			
Total Grass Cutting	-	-	28,468	28,468	#DIV/0!			

Township of Blandford-Blenheim

Plattsville Arena

	2017		YTD	YTD	Actual	YTD	%	Explanation of Significant Variances
	Budget	Budget						
Revenue								
User Fees								
01-7050-3215 PUBLIC SKATING	(600)	(300)	(499)	(199)			66.3%	
01-7050-3235 TICKET ICE	(1,000)	(498)	(1,133)	(635)			127.5%	
Total User Fees	(1,600)	(798)	(1,632)	(834)			104.5%	
Rents								
01-7065-3315 PRIME TIME - MINOR GROUPS	(105,000)	(52,500)	(55,531)	(3,031)			5.8%	
01-7065-3320 PRIME TIME - ALL OTHERS	(50,000)	(25,002)	(19,436)	5,566			-22.3%	
01-7065-3325 NON PRIME TIME - MINOR GROUPS	(6,000)	(3,000)	(4,855)	(1,855)			61.8%	
01-7065-3330 NON PRIME TIME - ALL OTHERS	(10,000)	(4,998)	(6,810)	(1,812)			36.3%	
Total Rents	(171,000)	(85,500)	(86,632)	(1,132)			1.3%	
Other Revenue								
01-7070-3225 VENDING REVENUE	(2,600)	(1,302)	(1,256)	46			-3.5%	
01-7070-3340 ADVERTISING REVENUE	(7,400)	(3,702)	-	3,702			-100.0% usually done in the fall	
01-7070-3350 SKATE SHARPENING	(1,300)	(648)	(381)	267			-41.2%	
01-7070-3360 HALL RENTAL	(8,000)	(4,002)	(3,466)	536			-13.4%	
01-7070-3410 MISC. REVENUE	(500)	(252)	-	252			-100.0%	
Total Other Revenue	(19,800)	(9,906)	(5,103)	4,803			-48.5%	
Contribution from Reserves								
01-7080-3525 CONTRIB FROM RESERVES - ARENA EQUIPMENT	(6,000)	(3,000)	-	3,000			-100.0%	
01-7080-3530 CONTRIB FROM RESERVES - ARENA BUILDING	(5,000)	(2,502)	(2,930)	(428)			17.1%	
01-7180-0527 CONTRIB FROM DEV CHARGES	(92,770)	(46,386)	-	46,386			-100.0%	
Total Contribution from Reserves	(103,770)	(51,888)	(2,930)	48,958			-94.4%	
Total Revenue	(296,170)	(148,092)	(96,297)	51,795			-35.0%	
Expenses								
Salaries, Wages & Benefits								
01-7090-3550 REGULAR EARNINGS - FULL-TIME	115,698	57,852	50,529	(7,323)			-12.7%	
01-7090-3555 BENEFITS - FULL TIME	34,594	17,298	15,068	(2,230)			-12.9%	
01-7091-3550 REGULAR EARNINGS - PART TIME	9,034	4,518	4,816	298			6.6%	
01-7091-3555 BENEFITS - PART TIME	418	210	472	262			124.8%	
Total Salaries, Wages & Benefits	159,744	79,878	70,885	(8,993)			-11.3%	

Township of Blandford-Blenheim

Plattsville Arena

	2017		YTD		YTD	%	Explanation of Significant Variances
	Budget		Budget	Actual			
			June				
Building & Property Expenses							
01-7092-3602 ADVERTISING	300	150	300	300	150	100.0%	
01-7092-3676 INSURANCE	31,630	15,816	31,629	31,629	15,813	100.0%	Insurance paid in full for 2017.
01-7092-9999 BUILDING MAINTENANCE - INTERDEPT ALLOCATION	(25,908)	(12,954)	-	-	12,954	-100.0%	Maintenance allocation to be done at year end.
01-7093-3608 CONTRACTED SERVICES	4,000	1,998	1,799	1,799	(199)	-10.0%	
01-7093-3670 TELECOMMUNICATION	1,200	600	708	708	108	18.0%	
01-7093-3694 BLDG & PROPERTY MTCE	25,000	12,498	10,502	10,502	(1,996)	-16.0%	
01-7093-3696 BLDG & PROPERTY SUPPLIES	11,500	5,748	6,085	6,085	337	5.9%	
01-7093-3716 EQUIPMENT REPAIRS	2,000	1,002	661	661	(341)	-34.0%	
01-7093-3718 EQUIPMENT MAINTENANCE	5,000	2,502	522	522	(1,980)	-79.1%	
01-7093-3740 HEAT	12,312	6,156	6,947	6,947	791	12.8%	
01-7093-3742 HYDRO CHARGES	141,600	70,800	49,403	49,403	(21,397)	-30.2%	4 months of 2017 hydro bills received to date.
01-7093-3750 ICE MAINTENANCE	7,000	3,498	315	315	(3,183)	-91.0%	
01-7093-3752 ICE REPAIRS	1,000	498	-	-	(498)	-100.0%	
01-7093-3804 SNOW REMOVAL	5,000	2,502	2,687	2,687	185	7.4%	
01-7093-3818 WATER AND SEWAGE	11,000	5,502	4,881	4,881	(621)	-11.3%	
01-7093-3901 MINOR CAPITAL	-	-	-	-	-	#DIV/0!	
Total Building & Property Expenses	232,634	116,316	116,439	116,439	123	0.1%	
Other Expenses							
01-7093-3770 MISC OTHER EXPENSES	-	-	10	10	10	#DIV/0!	
Total Other Expenses	-	-	10	10	10	#DIV/0!	
Debt Charges							
01-7095-0848 DEBT REPAYMENT - INTEREST	50,239	25,122	25,708	25,708	586	2.3%	
01-7095-0850 DEBT REPAYMENT - PRINCIPAL	230,000	115,002	115,000	115,000	(2)	-0.0%	
Total Debt Charges	280,239	140,124	140,708	140,708	584	0.4%	
Canteen							
01-7050-3220 SNACK BOOTH SALES	(15,000)	(7,500)	(4,483)	(4,483)	3,017	-40.2%	canteen sales less in first quarter than expected.
01-7050-3230 CASH OVERAGE / SHORTAGE	-	-	(55)	(55)	(55)	#DIV/0!	
01-7091-3551 REGULAR EARNINGS - CANTEEN	3,400	1,698	930	930	(768)	-45.2%	
01-7091-3552 BENEFITS - CANTEEN	400	198	66	66	(132)	-66.7%	

Township of Blandford-Blenheim

Plattsville Arena

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Budget	Actual	Variance	Variance		
			June	June				
01-7094-3842 SNACK BOOTH EXPENSES	11,200	5,598	4,803	4,803	(795)	-14.2%		
Total Canteen	-	(6)	1,261	1,267	1,267	-21,116.7%		
Capital Expenditures								
01-7096-3897 BUILDING IMPROVEMENTS	-	-	-	-	-	#DIV/0!		
01-7096-3901 EQUIPMENT CAPITAL	6,000	3,000	-	(3,000)	(3,000)	-100.0%		
01-7096-3917 PROPERTY IMPROVEMENT - ARENA	5,000	2,502	2,930	2,930	428	17.1%		
Total Capital Expenditures	11,000	5,502	2,930	2,930	(2,572)	-46.7%		
Contribution to Reserves								
01-7097-3955 TRANSFER TO RESERVES	17,500	8,748	17,500	17,500	8,752	100.0%	Transfers to reserves complete for 2017.	
01-7097-3960 TRANSFER TO RESERVES	25,000	12,498	25,000	25,000	12,502	100.0%	Transfers to reserves complete for 2017.	
Total Contribution to Reserves	42,500	21,246	42,500	42,500	21,254	100.0%		
Total Expenses	726,117	363,060	374,733	374,733	11,673	3.2%		
Total Plattsville Arena	429,947	214,968	278,436	278,436	63,468	29.5%		

Township of Blandford-Blenheim

Parks

	2017		YTD	YTD	YTD	%	Explanation of Significant Variances
	Budget	Budget					
	June		June				
Revenue							
Federal / Provincial Grants							
01-7130-0105 FEDERAL/PROVINCIAL GRANTS	(120,720)	(60,360)	(8,069)	52,291	-86.6%	Deferred Trillium Grant, Canada 150 not yet received.	
Total Federal / Provincial Grants	(120,720)	(60,360)	(8,069)	52,291	-86.6%		
User Fees							
01-7150-0185 SPECIAL ASSESSMENT	-	-	(1,500)	(1,500)	#DIV/0!		
Total User Fees	-	-	(1,500)	(1,500)	#DIV/0!		
Rents							
01-7165-1325 RENTALS BALL DIAMOND	-	-	-	-	#DIV/0!	Ball Diamond invoicing done at season end.	
01-7165-2325 RENTALS BALL DIAMONDS	(4,000)	(1,998)	-	1,998	-100.0%		
01-7165-2330 RENTALS PAVILLION	(700)	(348)	(64)	284	-81.6%		
01-7165-3315 MINOR SPORTS REVENUE	(100)	(48)	-	48	-100.0%		
01-7165-3325 RENTALS BALL DIAMOND	(1,300)	(648)	-	648	-100.0%		
01-7165-3330 RENTALS PAVILLION	(200)	(102)	(191)	(89)	87.3%		
01-7165-4325 RENTALS BALL DIAMOND	(600)	(300)	-	300	-100.0%		
Total Rents	(6,900)	(3,444)	(255)	3,189	-92.6%		
Other Revenue							
01-7170-2360 COMMUNITY DONATIONS	-	-	(3,400)	(3,400)	#DIV/0!		
01-7170-3366 DONATIONS - PLATTSVILLE SKATE PARK	-	-	(5,000)	(5,000)	#DIV/0!		
01-7170-4360 COMMUNITY DONATIONS	(45,600)	(22,800)	(31,291)	(8,491)	37.2%		
01-7170-4366 DONATIONS - PRINCETON PARK EXPANSION	-	-	-	-	#DIV/0!		
Total Other Revenue	(45,600)	(22,800)	(39,691)	(16,891)	74.1%		
Development Charges							
01-7175-0515 DEVELOPMENT CHARGES - PARKS	(65,000)	(32,502)	-	32,502	-100.0%	DC allocation to be done at year end.	
Total Development Charges	(65,000)	(32,502)	-	32,502	-100.0%		
Contribution from Reserves							
01-7180-0520 CONTR. DEVELOPMENT RES. PARKS & REC.	(60,280)	(30,138)	-	30,138	-100.0%		
01-7180-0525 CONTRIB FROM RESERVES - PARKS	(154,600)	(77,298)	-	77,298	-100.0%		
Total Contribution from Reserves	(214,880)	(107,436)	-	107,436	-100.0%		
Total Revenue	(453,100)	(226,542)	(49,515)	177,027	-78.1%		
Expenses							
Salaries, Wages & Benefits							

Township of Blandford-Blenheim

Parks

	2017		YTD		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Actual	Variance	Variance	%		
01-7190-0550 REGULAR EARNING - FULL TIME	-	-	-	-	-	-	-	-	#DIV/0!	
01-7190-0555 BENEFITS - FULL TIME	-	-	-	-	-	-	-	-	#DIV/0!	
01-7190-1550 REGULAR EARNINGS - FULL TIME	5,906	2,952	2,095	(857)				-29.0%		
01-7190-1555 BENEFITS - FULL TIME	1,800	900	516	(384)				-42.7%		
01-7190-2550 REGULAR EARNINGS - FULL TIME	5,906	2,952	2,764	(188)				-6.4%		
01-7190-2555 BENEFITS - FULL TIME	1,800	900	682	(218)				-24.2%		
01-7190-3550 REGULAR EARNINGS - FULL TIME	5,906	2,952	2,351	(601)				-20.4%		
01-7190-3555 BENEFITS - FULL TIME	1,800	900	586	(314)				-34.9%		
01-7190-4550 REGULAR EARNINGS - FULL TIME	5,906	2,952	3,802	850				28.8%		
01-7190-4555 BENEFITS - FULL TIME	1,800	900	941	41				4.6%		
01-7191-1550 REGULAR EARNINGS - PART TIME	1,513	756	-	(756)				-100.0%		
01-7191-1555 BENEFITS - PART TIME	153	78	-	(78)				-100.0%		
01-7191-2550 REGULAR EARNINGS - PART TIME	1,513	756	162	(594)				-78.6%		
01-7191-2555 BENEFITS - PART TIME	153	78	12	(66)				-84.6%		
01-7191-3550 REGULAR EARNINGS - PART TIME	1,513	756	-	(756)				-100.0%		
01-7191-3555 BENEFITS - PART TIME	153	78	-	(78)				-100.0%		
01-7191-4550 REGULAR EARNINGS - PART TIME	1,513	756	245	(511)				-67.6%		
01-7191-4555 BENEFITS - PART TIME	153	78	16	(62)				-79.5%		
Total Salaries, Wages & Benefits	37,488	18,744	14,172	(4,572)				-24.4%		
Building & Property Expenses										
01-7192-1676 INSURANCE	1,917	960	1,917	957				99.7%		
01-7192-2676 INSURANCE	2,281	1,140	2,281	1,141				100.1%		
01-7192-3676 INSURANCE	1,930	966	1,930	964				99.8%		
01-7192-4676 INSURANCE	2,271	1,134	2,271	1,137				100.3%		
01-7193-1694 BLDG & PROPERTY MAINT.	1,000	498	485	(13)				-2.6%		
01-7193-1696 BLDG & PROPERTY SUPPLIES	1,000	498	67	(431)				-86.5%		
01-7193-1730 GRASS CUTTING	2,159	1,080	-	(1,080)				-100.0%	Grass Cutting allocation to be done at year end.	
01-7193-1738 HEAT & HYDRO	534	270	191	(79)				-29.3%		
01-7193-1818 WATER AND SEWAGE	600	300	51	(249)				-83.0%		
01-7193-1901 MINOR CAPITAL	-	-	-	-					#DIV/0!	

Township of Blandford-Blenheim

Parks

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	June	Variance		
01-7193-2694 BLDG & PROPERTY MAINT.	1,000	498	1,026	528		106.0%		
01-7193-2696 BLDG & PROPERTY SUPPLIES	2,000	1,002	1,435	433		43.2%		
01-7193-2730 GRASS CUTTING	5,612	2,808	-	(2,808)		-100.0%		
01-7193-2738 HEAT & HYDRO	3,161	1,578	275	(1,303)		-82.6%		
01-7193-2818 WATER AND SEWAGE	1,200	600	163	(437)		-72.8%		
01-7193-3694 BLDG & PROPERTY MAINT.	1,000	498	502	4		0.8%		
01-7193-3696 BLDG & PROPERTY SUPPLIES	1,000	498	27	(471)		-94.6%		
01-7193-3730 GRASS CUTTING	5,889	2,946	-	(2,946)		-100.0%		
01-7193-3738 HEAT & HYDRO	1,172	588	386	(202)		-34.4%		
01-7193-3901 MINOR CAPITAL	-	-	-	-		#DIV/0!		
01-7193-4694 BLDG & PROPERTY MAINT.	1,500	750	669	(81)		-10.8%		
01-7193-4696 BLDG & PROPERTY SUPPLIES	1,500	750	1,051	301		40.1%		
01-7193-4730 GRASS CUTTING	5,574	2,790	-	(2,790)		-100.0%		
01-7193-4738 HEAT & HYDRO	1,449	726	505	(221)		-30.4%		
01-7193-4818 WATER AND SEWAGE	500	252	74	(178)		-70.6%		
01-7193-4901 MINOR CAPITAL	-	-	5,800	5,800		#DIV/0!	Transfer from Legacy funds to be done at year end.	
01-7193-5730 GRASS CUTTING - VINK ESTATES	784	390	-	(390)		-100.0%		
01-7193-8730 GRASS CUTTING - OPEN SPACES	713	354	-	(354)		-100.0%		
Total Building & Property Expenses	47,746	23,874	21,106	(2,768)		-11.6%		
Capital Expenditures								
01-7196-0901 PARKS - EQUIPMENT CAPITAL	14,000	7,002	-	(7,002)		-100.0%	Capital projects not started as yet.	
01-7196-1897 BUILDING IMPROVEMENTS	-	-	-	-		#DIV/0!		
01-7196-1901 EQUIPMENT CAPITAL	-	-	-	-		#DIV/0!		
01-7196-2915 PROPERTY CAPITAL	214,000	106,998	-	(106,998)		-100.0%		
01-7196-3915 PROPERTY CAPITAL	87,200	43,602	-	(43,602)		-100.0%		
01-7196-4915 PROPERTY CAPITAL	80,000	40,002	827	(39,175)		-97.9%		
01-7196-4920 PRINCETON PARK EXPANSION	-	-	4,481	4,481		#DIV/0!		
Total Capital Expenditures	395,200	197,604	5,308	(192,296)		-97.3%		
Contribution to Reserves								
01-7197-0950 DEVELOPMENT CHARGES	65,000	32,502	-	(32,502)		-100.0%	DCs to be allocated at year end.	

Township of Blandford-Blenheim

Parks

	2017		YTD Actual June	YTD Variance	%	Explanation of Significant Variances
	Budget	Budget June				
01-7197-0956 TRANSFER TO RESERVES	28,500	14,250	30,000	15,750	110.5%	Transfers to reserves complete for 2017.
Total Contribution to Reserves	93,500	46,752	30,000	(16,752)	-35.8%	
Total Expenses	573,934	286,974	70,586	(216,388)	-75.4%	
Total Parks	120,834	60,432	21,071	(39,361)	-65.1%	

Township of Blandford-Blenheim Community Centres

	2017		YTD	YTD	%	Explanation of Significant Variances
	Budget	Budget				
Revenue	June		June			
Federal / Provincial Grants						
01-7130-4105 FEDERAL/PROVINCIAL GRANTS	-	-	-	-	#DIV/0!	
01-7230-0105 FEDERAL/PROVINCIAL GRANT	(16,667)	(8,334)	-	8,334	-100.0%	Canada 150 grant not yet received.
Total Federal / Provincial Grants	(16,667)	(8,334)	-	8,334	-100.0%	
Rents						
01-7265-1285 COMMUNITY CENTRE RENTALS	-	-	-	-	#DIV/0!	
01-7265-4285 COMMUNITY CENTRE RENTALS	(12,000)	(6,000)	(6,198)	(198)	3.3%	
Total Rents	(12,000)	(6,000)	(6,198)	(198)	3.3%	
Other Revenue						
01-7270-0445 SALE OF TOWNSHIP PROPERTY	(250,000)	(124,998)	-	124,998	-100.0%	Sale not yet complete.
Total Other Revenue	(250,000)	(124,998)	-	124,998	-100.0%	
Contribution from Reserves						
01-7280-0525 CONTRIB FROM RESERVES	(92,833)	(46,416)	(1,413)	45,003	-97.0%	Renovations not started as yet
Total Contribution from Reserves	(92,833)	(46,416)	(1,413)	45,003	-97.0%	
Total Revenue	(371,500)	(185,748)	(7,611)	178,137	-95.9%	
Expenses						
Salaries, Wages & Benefits						
01-7290-1550 REGULAR EARNINGS - FULL TIME	-	-	-	-	#DIV/0!	
01-7290-1555 BENEFITS - FULL TIME	-	-	-	-	#DIV/0!	
01-7290-4550 REGULAR EARNINGS - FULL TIME	2,239	1,122	1,110	(12)	-1.1%	
01-7290-4555 BENEFITS - FULL TIME	738	372	1	(371)	-99.7%	
01-7290-6550 REGULAR EARNINGS - FULL TIME	2,239	1,122	-	(1,122)	-100.0%	
01-7290-6555 BENEFITS - FULL TIME	738	372	-	(372)	-100.0%	
01-7291-4550 REGULAR EARNINGS - PART TIME	7,000	3,498	2,222	(1,276)	-36.5%	
01-7291-4555 BENEFITS - PART TIME	665	330	267	(63)	-19.1%	
Total Salaries, Wages & Benefits	13,619	6,816	3,600	(3,216)	-47.2%	
Building & Property Expenses						
01-7292-1676 INSURANCE	-	-	-	-	#DIV/0!	
01-7292-4602 ADVERTISING	200	102	-	(102)	-100.0%	
01-7292-4670 TELEPHONE	475	240	290	50	20.8%	
01-7292-4676 INSURANCE	2,991	1,494	2,991	1,497	100.2%	insurance paid in full for 2017.

Township of Blandford-Blenheim

Community Centres

	2017		YTD		YTD		%	Explanation of Significant Variances
	Budget	Budget	Actual	Variance	Variance	Variance		
		June	June				#DIV/0!	
01-7293-1694 BLDG & PROPERTY MAINT.	-	-	-	-	-	-	#DIV/0!	
01-7293-1696 BLDG & PROPERTY SUPPLIES	-	-	-	-	-	-	#DIV/0!	
01-7293-1738 HEAT & HYDRO	-	-	-	-	-	-	#DIV/0!	
01-7293-4694 BLDG & PROPERTY MAINT.	5,000	2,502	5,324	2,822	(322)	112.8%		
01-7293-4696 BLDG & PROPERTY SUPPLIES	1,000	498	266	(732)	(232)	-46.6%		
01-7293-4738 HEAT & HYDRO	15,332	7,668	6,287	(9,045)	(1,381)	-18.0%		
01-7293-4804 SNOW REMOVAL	1,500	750	252	(1,248)	(498)	-66.4%		
01-7293-4901 MINOR CAPITAL	-	-	-	-	-	-	#DIV/0!	
01-7293-5663 PROFESSIONAL FEES / SERVICES	36,396	18,198	10,584	(25,812)	(7,614)	-41.8%		
01-7293-5676 INSURANCE	1,604	804	1,604	800	800	99.5%		
01-7293-6676 INSURANCE	1,602	804	1,602	798	798	99.3%		
Total Building & Property Expenses	66,100	33,060	29,200	(37,900)	(3,860)	-11.7%		
Other Expenses								
01-7293-5770 MISCELLANEOUS EXPENSE	2,000	1,002	2,163	1,161	1,161	115.9%		
Total Other Expenses	2,000	1,002	2,163	1,161	1,161	115.9%		
Capital Expenditures								
01-7296-1901 EQUIPMENT CAPITAL	-	-	-	-	-	-	#DIV/0!	
01-7296-4915 PROPERTY CAPITAL	40,000	19,998	-	(20,002)	(19,998)	-100.0%		
01-7296-5915 PROPERTY CAPITAL - TRUSSLER	-	-	10	10	10	100.0%		
01-7296-6915 PROPERTY CAPITAL - RICHWOOD	69,500	34,752	1,413	(33,339)	(33,339)	-95.9%		
Total Capital Expenditures	109,500	54,750	1,423	(53,327)	(53,327)	-97.4%		
Contribution to Reserves								
01-7297-0955 TRANSFER TO RESERVES	210,000	105,000	-	(105,000)	(105,000)	-100.0%	Transfer will be done once sale of property is complete.	
Total Contribution to Reserves	210,000	105,000	-	(105,000)	(105,000)	-100.0%		
Total Expenses	401,219	200,628	36,386	(164,242)	(164,242)	-81.9%		
Total Community Centres	29,719	14,880	28,775	(10,944)	13,895	93.4%		

Township of Blandford-Blenheim
 June 2017 Interim Variance Report

	2017 Budget	YTD Budget June	YTD Actual June	YTD Variance	% Variance
Council	96,183	48,090	39,595	(8,495)	-17.7%
General Revenue	(1,802,124)	(901,068)	(1,764,699)	(863,631)	95.8%
Administration	876,559	438,288	655,016	216,728	49.4%
Livestock/Canine	(3,400)	(1,698)	(10,346)	(8,648)	509.3%
Grants	15,000	7,500	13,000	5,500	73.3%
Fire Department	692,832	346,452	401,994	55,542	16.0%
By-Law Enforcement	46,368	23,184	13,620	(9,564)	-41.3%
CEMC	9,846	4,926	2,758	(2,168)	-44.0%
Police	898,711	449,352	362,176	(87,176)	-19.4%
Cemeteries	33,611	16,824	(4,910)	(21,734)	-129.2%
Building Services	26,187	13,104	(9,053)	(22,157)	-169.1%
Drainage	47,895	23,958	61,973	38,015	158.7%
Public Works - Roads	2,740,722	1,370,358	2,260,082	889,724	64.9%
Public Works - Winter Control	254,470	127,236	96,595	(30,641)	-24.1%
Community Services - Administration	152,504	76,260	73,029	(3,231)	-4.2%
Plattsville Arena	429,947	214,968	278,436	63,468	29.5%
Parks	120,834	60,432	21,071	(39,361)	-65.1%
Community Centres	29,719	14,880	28,775	13,895	93.4%
GRAND TOTAL	4,665,864	2,333,046	2,519,112	186,066	8.0%



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Denise Krug, Director of Finance
Reviewed By:	Rodger Mordue	Date:	August 23, 2017
Subject:	2018 Budget Schedule	Council Meeting Date:	September 6, 2017
Report #:	TR-17-08		

Recommendation:

That Report TR-17-08 be received as information;

And further that Council adopt the budget schedule for the 2018 Operating and Capital Budgets, set out in Report TR-17-08.

Background:

The purpose of this report is to present to Council for its consideration a schedule to review and approve the Tax Rate supported 2018 Operating Budget and Capital Budget for the Township of Blandford-Blenheim.

Section 290 of the Municipal Act, 2001, as amended, provides for the following in regard to annual budgets:

Yearly budget, local municipalities

- (1) For each year, a local municipality shall, in the year or the immediately preceding year, prepare and adopt a budget including estimates of all sums required during the year for the purposes of the municipality, including,
 - (a) Amounts sufficient to pay all debts of the municipality falling due during the year;
 - (b) Amounts required to be raised for sinking funds or retirement funds; and
 - (c) Amounts required for any board, commission or other body

Detail and form

- (2) The budget shall, in such detail and form as the Minister may require, set out the following amounts:
 - (a) The estimated revenues, including the amount the municipality intends to raise on all the rateable property in the municipality by its general local municipality levy and the

amount it intends to raise on less than all the rateable property in the municipality by a special local municipality levy under section 312

- (b) The estimated portion of the estimated revenues described in paragraph (a), if any, to be paid into the municipality's reserve, sinking and retirement funds.
- (c) The estimated revenues, are equal to the estimated expenditures
- (d) The estimated portion of the expenses, if any, to be paid out of the municipality's reserves and reserve funds.

Allowance

- (3) In preparing the budget for a year, the local municipality,
 - (a) Shall not include in the estimated revenues, the estimated proceeds of any borrowing during the year;
 - (b) Shall treat any operating surplus of any previous year as revenue that will be available during the current year;
 - (c) Shall provide for any operating deficit of any previous year;
 - (d) Shall provide for taxes and other revenues that in the opinion of the treasurer are uncollectible and for which provision has not been previously made;
 - (e) May provide for taxes and other revenues that it is estimated will not be collected during the year; and
 - (f) May provide for such reserves as the municipality considers necessary.

Analysis/Discussion:

For the upcoming 2018 budget deliberations, staff are proposing the following schedule.

The Capital Budget will be presented on November 15th at the regular Council meeting. Outstanding items will be discussed at the following regular Council meeting on December 6th and the Capital Budget projects can be approved at the final 2017 regular Council meeting on December 20th. Approving the 2018 capital projects at this time will allow capital projects to be tendered in early 2018 and allow more time for scheduling work to be done.

We are proposing an extra Council meeting, on Wednesday, January 24th, starting at 10 a.m. as an extended budget meeting to present the Operating Budget for all departments. This will allow Council to discuss any outstanding items and consider the tax rates during the two regular Council meetings in February and adopt the 2018 Budget By-law at the first Council meeting in March.

This time-line provides public the ability to have input into the proposed budgets weeks in advance of Council passing the Tax Rate By-Law for 2018.

<i>Date</i>	<i>Staff / Council Involvement</i>	<i>Description</i>
November 1st	Council/Directors	Proposed Capital Project/Road Tour
November 15th	Council/Directors	Presentation of Capital Budget – All Depts
December 6th	Council/Directors	Council Review of Capital Budget Outstanding items
December 6 th	Council/Director of Finance	Council Approval of 2018 Salaries & Wages
December 6th	Council/Director of Finance	Fees & Charges Report provided to Council for approval.
December 20 th	Council/Directors	Council Approval of Capital Budget
December 20 th	Council/Director of Finance	Fees & Charges By-Law to council for approval.
January 12th	Director of Finance	Provide members of Council budget binders.
January 24 th	Council / Directors	Presentation of Operating Budget <ul style="list-style-type: none"> • All departments • Council session to start at 10 a.m.
February 7th	Council / Directors	Council review of outstanding requests. Overall budget discussions.
February 21st	Council / Directors	Council finalization of budget estimates, consideration of tax rates
February 22nd	Director of Finance	Post 2017 budget on website
March 7th	Council	Adoption of 2017 budget estimates By-law
April/May	Council	Tax Rate By-Law to Council for approval.

Financial Considerations:

Not applicable

Attachments:

None

Respectfully submitted by:

Denise Krug
Director of Finance/Treasurer



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To: Members of Council **From:** John Scherer, CBO/
Manager of Building
Services

Reviewed By: Rodger Mordue, CAO/Clerk **Date:** August 9, 2017

Subject: Monthly Report to Council **Council
Meeting Date:** September 6, 2017

Report #: CBO-17-09

Recommendation:

That Report CBO – 17- 09 be received as information.

Background:

To provide Council with an update, regarding the monthly Building activities for the period ending July 31, 2017.

Building Updates:

1. Continuation of steady construction season.
2. Various other day to day responsibilities regarding Building Services, Property Standards & Zoning.

Property Standards/By-Law Updates:

1. Property Standards/Bylaw written complaints received:

	Complaints Received	Complaints Closed/Resolved
July 2017	4	
Year to Date - July 31	14	9

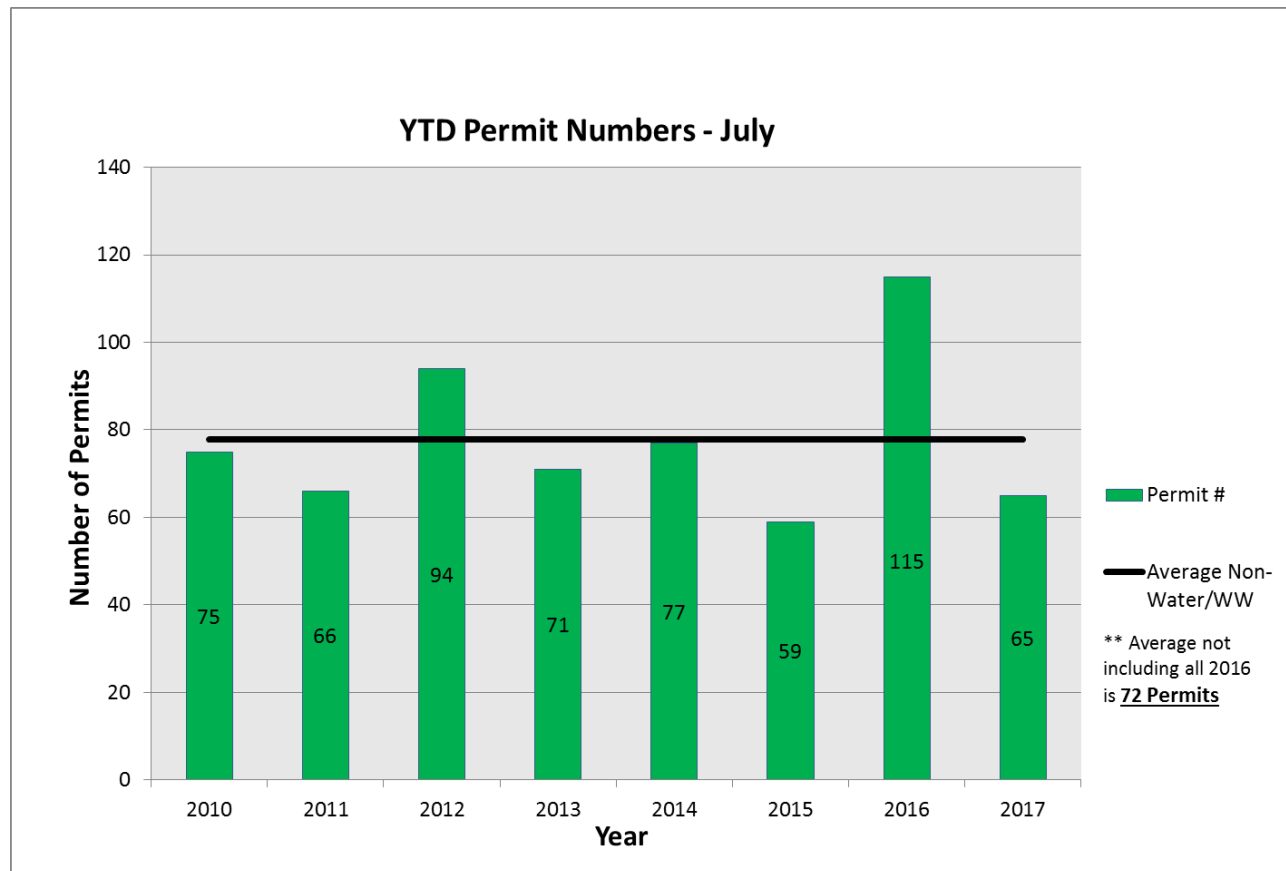
Legislative Updates:

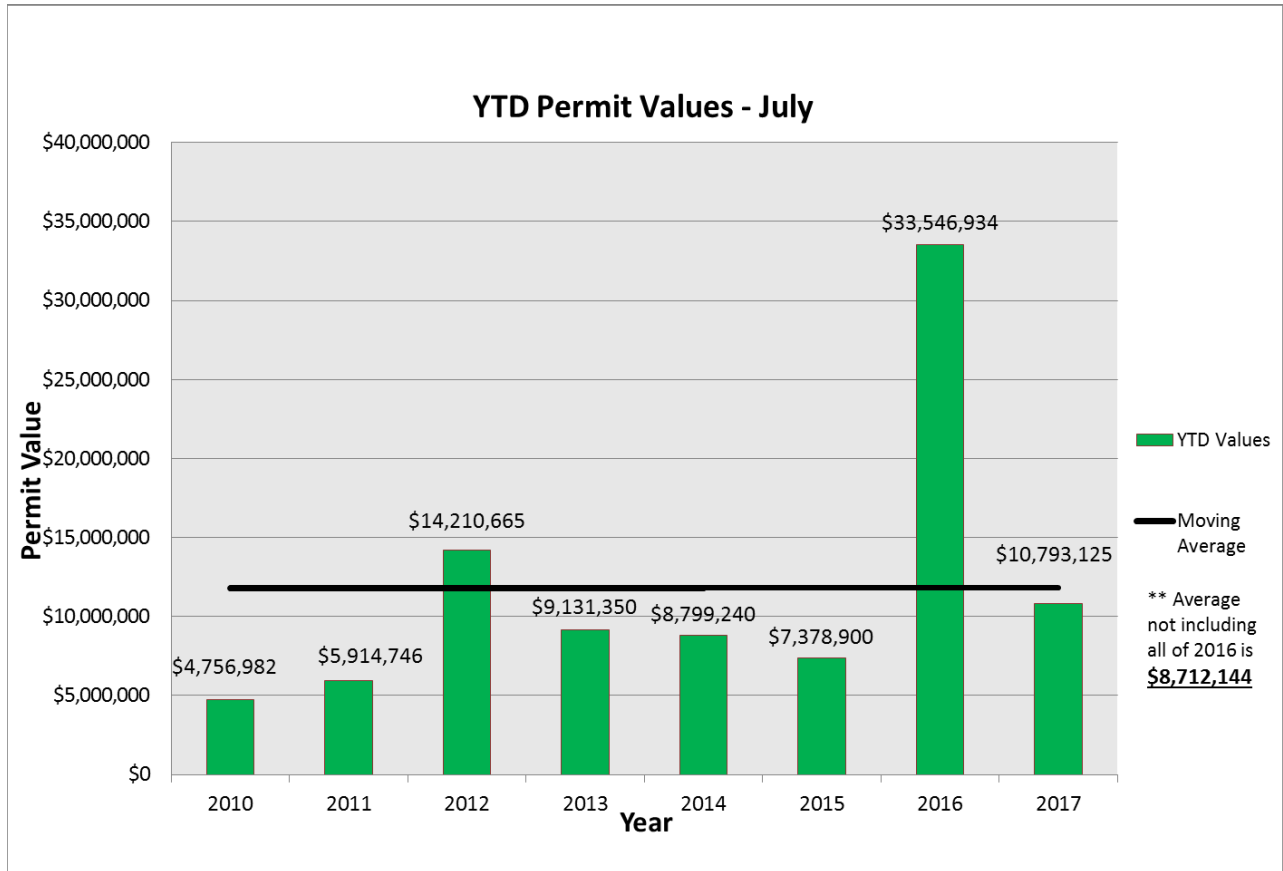
1. None

Monthly Permit Activity

	No. of Permits	Construction Value	Permit Fees
July 2017	10	\$943,840.00	\$9,361.20
Year to Date - July 31	65	\$10,793,125.00	\$108,906.02

Building Description	Permit Value	Permit Fee
Grain Bin/ Vertical Silo	\$ 15,000.00	\$150.00
Construction of farm storage facility	\$ 325,000.00	\$2,436.20
SFD Alterations	\$ 1,000.00	\$150.00
Farm Storage	\$ 100,000.00	\$861.00
SFD Alterations	\$ 30,000.00	\$475.00
SFD Demo	\$ -	\$50.00
New Garage	\$ 25,000.00	\$239.00
Pool & Pool House	\$ 60,000.00	\$400.00
2 Bunker Silos	\$ 80,000.00	\$1,025.00
New SFD	\$ 307,840.00	\$3,575.00
Total	\$943,840.00	\$9,361.20





Respectfully submitted by:

John Scherer
Manager Building Services/CBO



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To: Members of Council

From: Rodger Mordue, CAO/Clerk

Reviewed By: N/A

Date: August 4, 2017

Subject: 2018 Municipal Election candidate nomination requirement

Council Meeting Date: September 6, 2017

Report #: CAO-17-17

Recommendation:

That report CAO-17-17 be received, and;

That Council provide comment to the Ministry of Municipal Affairs that the requirement to collect the endorsement of 25 electors will not present a challenge to candidates in the 2018 municipal election, and,

That Council provide no comment on the appropriate number of electors for the exemption threshold to apply.

Background:

A new requirement in the Municipal Election Act for the 2018 election requires that anyone wishing to run for office on a council must submit the signatures of 25 voters supporting the nomination. The individuals providing the signatures will each have to sign a declaration stating that they were eligible to vote in the municipality on the day that they signed the endorsement.

This requirement is actually a re-introduction of an old requirement that existed prior to the 1997 municipal election where candidates needed to collect the signatures of 10 qualified electors to nominate them before they could submit their papers to run for office.

Analysis/Discussion:

The Ministry of Municipal Affairs has heard from some municipalities stating that the new requirement to collect 25 signatures endorsing a candidates nomination in the upcoming 2018 municipal election will present a challenge. In response to this the Ministry has offered that the Minister has the authority to grant an exemption to this. The Ministry is requesting Council's feedback on two questions:

-
1. Would potential candidates in Blandford-Blenheim have any challenges in fulfilling the requirement to have their nomination endorsed by 25 electors?
 2. The Minister of Municipal Affairs has the authority to provide an exemption for this requirement in a municipality with less than a prescribed number of electors. What number of electors would be appropriate for that threshold to apply?

In the 2014 municipal election there were 5,926 eligible electors in Blandford-Blenheim Township. The requirement for signatures from 25 of them represents 0.004% of the eligible electors. Staff believe that this requirement should not be an issue in this municipality.

It is believed that the requirement for 25 signatures endorsing a candidates nomination may prove a challenge in small, remote communities. In response to the second question posed, staff are unable to comment on the appropriate population threshold that should apply as it is believed that some of the determining factors should also relate to the density of population in a community.

Financial Considerations:

N/A

Attachments:

- Letter from the Ministry of Municipal Affairs

Respectfully submitted by:

Rodger Mordue
CAO/Clerk

**Ministry of
Municipal Affairs**

Office of the Minister

777 Bay Street, 17th Floor
Toronto ON M5G 2E5
Tel.: 416 585-7000
Fax: 416 585-6470

**Ministère des
Affaires municipales**

Bureau du ministre

777, rue Bay, 17^e étage
Toronto ON M5G 2E5
Tél. : 416 585-7000
Télé. : 416 585-6470



17-74433

Dear Clerk:

I am writing you on behalf of the Honourable Bill Mauro, Minister of Municipal Affairs, regarding recent changes to the Municipal Elections Act, 1996 under Bill 68 (Modernizing Ontario's Municipal Legislation Act, 2017).

We heard from a number of municipalities that the requirement to collect 25 signatures endorsing a candidate's nomination, which comes into force on April 1, 2018, may present a challenge to candidates in certain municipalities.

At Standing Committee on Social Policy, the government brought forward an amendment to the Municipal Elections Act, 1996 to provide an exemption to this requirement for candidates in municipalities with fewer than the prescribed number of electors. As a part of that process, we committed to consulting with municipalities to understand any challenges that they anticipate candidates within their municipality may face in meeting this requirement.

To help municipalities attract suitable candidates for their elections, we are looking for your council's feedback regarding the following two questions:

1. Would potential candidates in your municipality have any challenges in fulfilling the requirement to have their nomination endorsed by 25 electors?
2. The Minister of Municipal Affairs now has the authority to provide an exemption from the requirement for municipal council candidates to have their nomination endorsed by 25 electors in a municipality with less than the prescribed number of electors. What number of electors in a municipality is the appropriate threshold for the exemption to apply?

We look forward to hearing back from you by September 15, 2017. Please accept my best wishes.

Sincerely,

Lou Rinaldi
Parliamentary Assistant to the Minister of Municipal Affairs

**Ministry of
Municipal Affairs**

Office of the Minister

777 Bay Street, 17th Floor
Toronto ON M5G 2E5
Tel.: 416 585-7000
Fax: 416 585-6470

**Ministère des
Affaires municipales**

Bureau du ministre

777, rue Bay, 17^e étage
Toronto ON M5G 2E5
Tél. : 416 585-7000
Télééc. : 416 585-6470



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2. The Minister of Municipal Affairs now has the authority to provide an exemption from the requirement for municipal council candidates to have their nomination endorsed by 25 electors in a municipality with less than the prescribed number of electors. What number of electors in a municipality is the appropriate threshold for the exemption to apply?

We look forward to hearing back from you by September 15, 2017. Please accept my best wishes.

Sincerely,

Lou Rinaldi
Parliamentary Assistant to the Minister of Municipal Affairs



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To: Members of Council **From:** Rodger Mordue, CAO/Clerk
Reviewed By: N/A **Date:** August 18, 2017
Subject: Plattsville Estates Letters of Credit **Council Meeting Date:** September 6, 2017
Report #: CAO-17-18

Recommendation:

That Report CAO-17-18 be received as information; and,

That Council authorize the following Letter of Credit reduction on the recommendation of the Township's Consulting Engineer:

- Plattsville Estates Stage 4 from \$1,463,128.15 to \$498,496.65

Background:

When a subdivision is developed all infrastructure (ie roads, sidewalks, drainage, etc.) are installed by the developer. Ultimately all of this infrastructure will become the responsibility of the municipality so it's in the municipality's best interest to ensure that the work is being done properly. Through the subdivision agreement the Township retains securities in the form of a Letter of Credit (LC) issued by a financial institution to ensure that work is completed to the Township's satisfaction. If not the municipality has the authority to draw upon that LC to do that job right.

All work that is needed to be done is identified early on when the subdivision agreement is entered into. As the work is completed the developer has the opportunity to apply to the municipality to have a portion of the retained securities related to the completed works released to them.

Analysis/Discussion:

Stage 4 of the Plattsville Estates subdivision is currently being developed. The original LC value at the start of the developments covered the total value of work on the infrastructure that would be eventually transferred to the municipality. The Township recently received a request from the developer's engineer to reduce the amount of securities held by the municipality for

this stage. The Township's Consulting Engineer has reviewed the request and is recommending a reduction from the original amount of \$1,463,128.15 to \$498,496.65 this being the value of work from the original agreement not yet completed.

Financial Considerations:

- . The Township has received a recommendation to reduce the LC for stage 4 of the Plattsville Estates subdivision. The recommended revised LC amount from the Township's Consulting Engineer will be ample to cover the works that still need to be completed.

Attachments:

- N/A

Respectfully submitted by:

Rodger Mordue
CAO/Clerk

7.4.5.3 All of the other provisions of the A2 Zone in Section 7.2 and all other relevant provisions contained in this Zoning By-Law shall continue to apply mutatis mutandis.”

3. This By-Law comes into force in accordance with Sections 34(21) and (30) of the Planning Act, R.S.O. 1990, as amended.

READ a first and second time this 6th day of September, 2017.

READ a third time and finally passed this 6th day of September, 2017.

Marion Wearn - Mayor

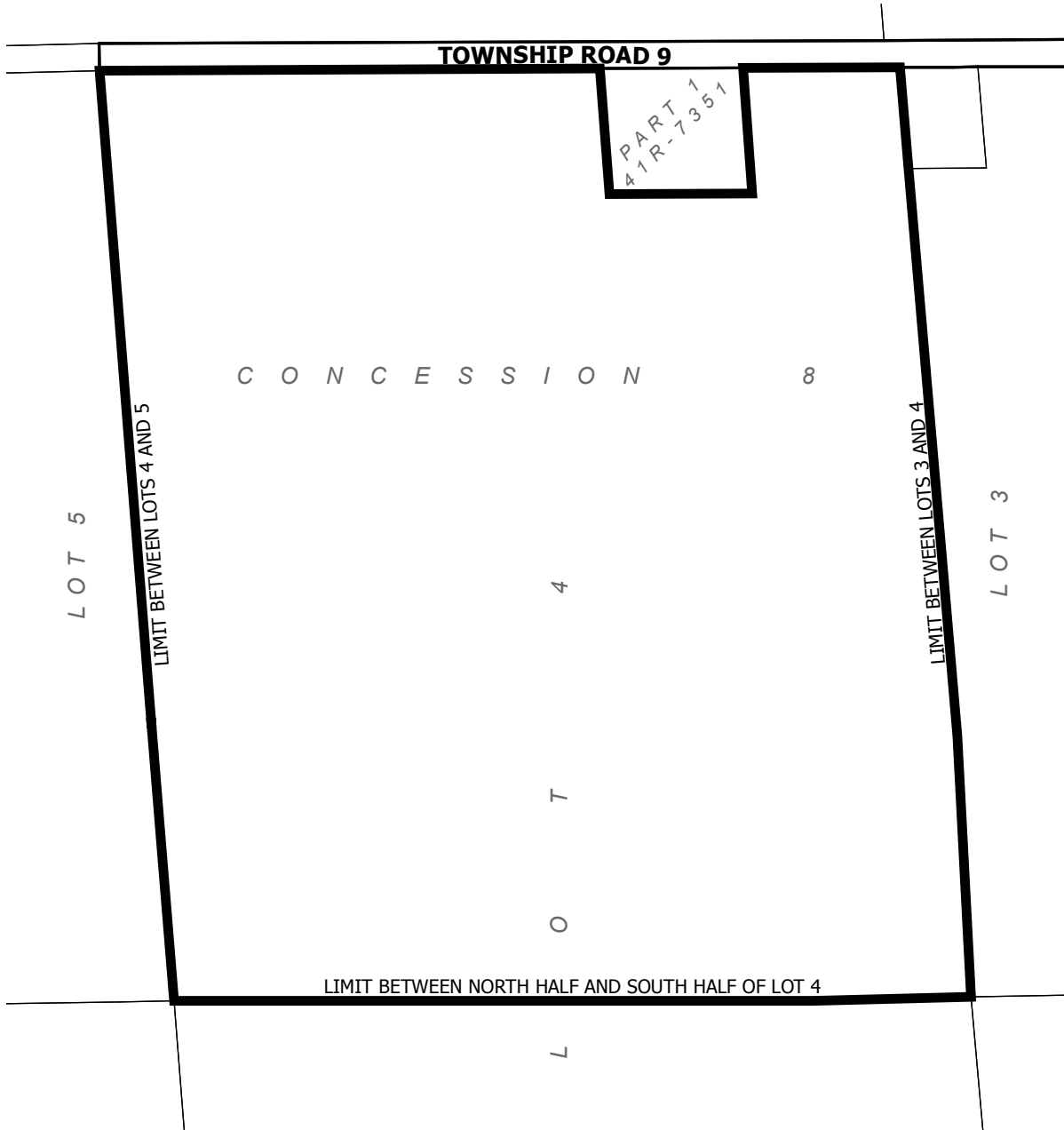
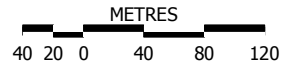
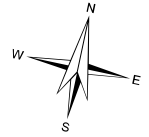
(SEAL)

Rodger Mordue – CAO/Clerk

SCHEDULE "A"

TO BY-LAW No. 2031-2017

PART OF LOT 4, CONCESSION 8 (BLENHEIM)
TOWNSHIP OF BLANDFORD-BLENHEIM



AREA OF ZONE CHANGE TO A2-G5

NOTE: ALL DIMENSIONS IN METRES

THIS IS SCHEDULE "A"

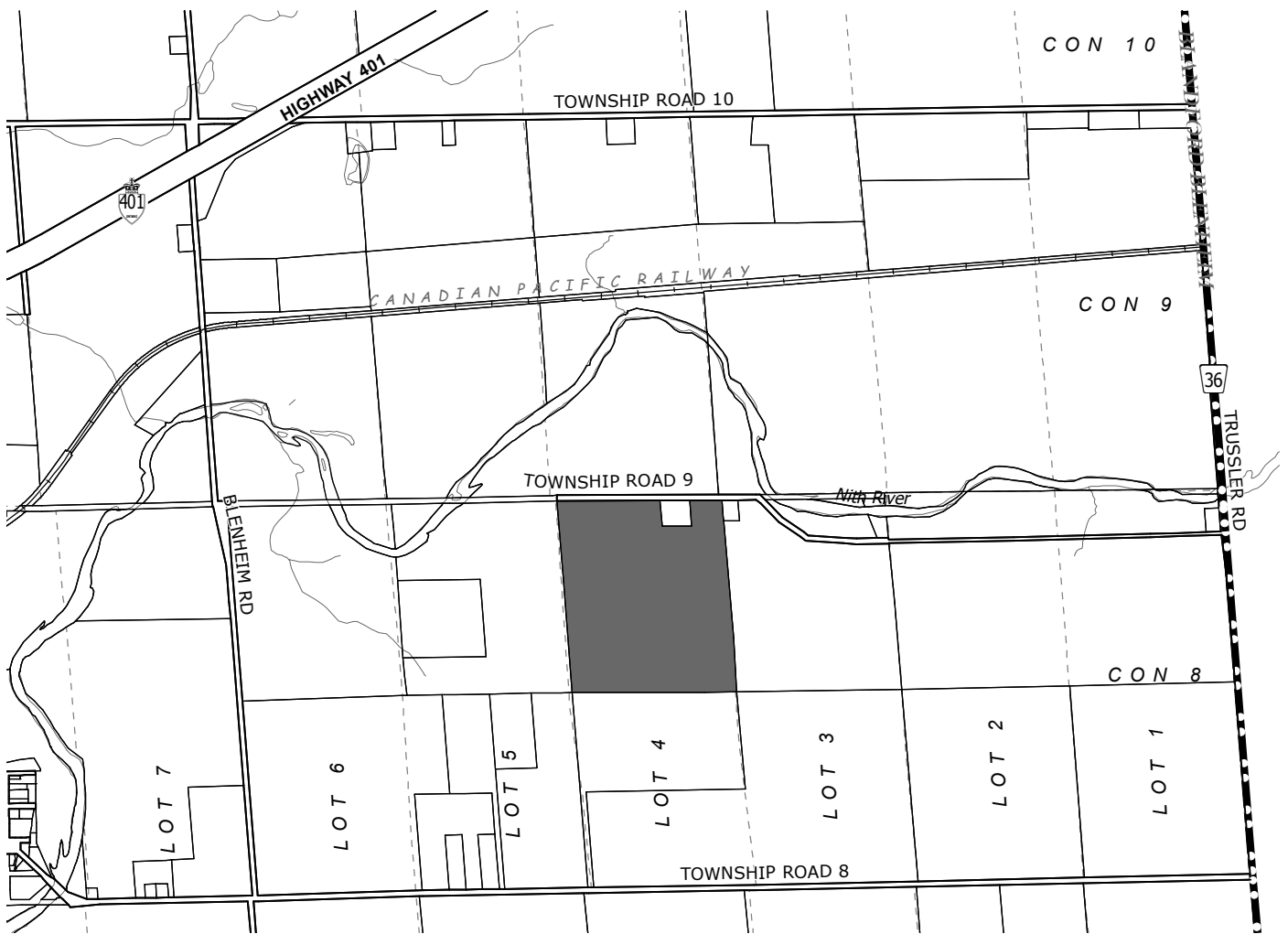
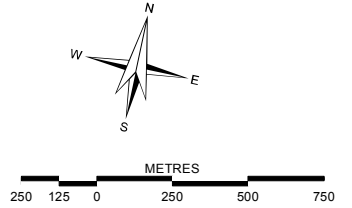
TO BY-LAW No. 2031-2017, PASSED

THE 6th DAY OF September, 2017

MAYOR

CAO/CLERK

KEY MAP



 LANDS TO WHICH BYLAW 2031-2017 APPLIES

ZN 1-17-08

TOWNSHIP OF BLANDFORD-BLENHEIM

BY-LAW NUMBER 2031-2017

EXPLANATORY NOTE

'Limited Agricultural Zone (A1)' & 'General Agricultural Zone (A2)' to 'Special General Agricultural Zone (A2-G5)' to permit a garden suite within the front yard of the main dwelling with an increased ground floor area of 130 m² (1,400 ft²), for a temporary period of five years, being September 6, 2017 to September 6, 2022. The proposed zoning will also eliminate the split zoning that currently applies to the property.

The subject lands are described as Part Lot 4, Concession 8 (Blenheim), Part 1, 41R-649, Township of Blandford-Blenheim. The lands are located on the south side of Township Road 9, east of Trussler Road, and are municipally known as 847608 Township Road 9.

The Township of Blandford-Blenheim adopted the amending By-law Number 2031-2017. Any person wishing further information relative to Zoning By-Law Number 2031-2017 may contact the undersigned. No public input was received respecting this application.

Mr. Rodger Mordue, CAO/Clerk
Township of Blandford-Blenheim
P.O. Box 100
DRUMBO, Ontario
N0J 1G0

Telephone: 463-5347

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM
BY-LAW NUMBER 2032-2017

Hamilton Drain 'B' Drain Extension 2017

A By-law to provide for drainage works in the Township of Blandford-Blenheim in the Restructured County of Oxford.

WHEREAS the Council of the Township of Blandford-Blenheim in the County of Oxford appointed R. J. Burnside & Associates Limited, and the Section 4 and 8 of the report is attached hereto and forms part of this By-law.

AND WHEREAS the estimated total cost of this report consisting of the engineering, construction costs and administration is \$73,000.00.

THEREFORE the Council of The Corporation of the Township of Blandford-Blenheim pursuant to the Drainage Act, R.S.O. 1990, and amendments thereto, enacts as follows:

1. The report dated August 15, 2017 and attached hereto, is hereby adopted and the Drainage Works as therein indicated and set forth is hereby authorized, and shall be completed in accordance therewith.
2. The Corporation may borrow on the credit of the Corporation the amount of **\$73,000.00**, being the necessary amount for construction of the Drainage Works.
3. The Corporation may arrange for the issue of debentures on its behalf for the amount borrowed, less the total amount of,
 - (a) grants received under Section 85 of the Act;
 - (b) commuted payments made in respect of lands and roads assessed within the municipality;
 - (c) moneys paid under subsection 61(3) of the Act; and

such debentures shall be made payable within Five (5) years from the date of the debenture and shall bear interest at a rate to be established at the date of the sale of such debentures.

The County of Oxford shall handle the sale of such debentures, with interest at the prevailing rates at the time of debenture sale. The Municipality of the Township of Blandford-Blenheim shall make annual payments without coupons payable to the County of Oxford.

4. A special equal annual rate sufficient to redeem the principal and interest on the debentures shall be levied upon the lands and roads as set forth in the Schedule to be collected in the same manner and at the same time as other taxes are collected in each year for Five (5) years, the year following the due date of the final invoice that calculates the actual costs of the Drainage Works in accordance with the Schedule contained in this By-law.
5. This by-law comes into force on the passing thereof and may be cited as **Hamilton Drain 'B' Drain Extension**.

Read a First and Second Time this 6th Day of September, 2017.

Rodger Mordue, CAO/Clerk

Marion Wearn, Mayor

Read a Third Time and Finally Passed this _____ of _____, 2017

Rodger Mordue, CAO/Clerk

Marion Wearn, Mayor

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM

BY-LAW NUMBER **2033-2017**

Being a By-law to provide for the acquisition of certain lands and premises from the County of Oxford at 906885 Township Road 12 for the extension of Hofstetter Road

WHEREAS Section 8 of the Municipal Act, S.O. 2001, Chapter 25, and amendments thereto, provides that the power to a municipality shall be interpreted broadly so as to confer broad authority on the municipality to govern its affairs as it considers appropriate.

AND WHEREAS the Township of Blandford-Blenheim desires to obtain lands to accommodate the extension of Hofstetter Road from Oxford County Road 8 to Township Road 12.

NOW THEREFORE, the Council of the Corporation of the Township of Blandford-Blenheim enacts as follows:

1. That Council agrees to acquire an area of land located at 906885 Township Road 12 legally known as Part of Lot 16, Concession 12 (Blenheim), designated as Part 2 of Plan 41R-9409.
2. That the Chief Administrative Officer / Clerk is hereby authorized and instructed to execute all agreements and documents related to the purchase of the property.

By-law **READ** a **FIRST** and **SECOND** time this 6th day of September, 2017.

By-law **READ** a **THIRD** time and **ENACTED** in Open Council this 6th day of September, 2017.

Marion Wearn, Mayor

Rodger Mordue, CAO/Clerk

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM
BY-LAW NUMBER 2034-2017

Being a By-law to confirm the proceedings of Council.

WHEREAS by Section 5 of the *Municipal Act* 2001, S.O. 2001, c.25, the powers of a municipal corporation are to be exercised by its Council.

AND WHEREAS by Section 11 of the *Municipal Act* 2001, S.O. 2001, c.25, the powers of every Council are to be exercised by by-law;

AND WHEREAS it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Blandford-Blenheim at this meeting be confirmed and adopted by by-law;

NOW THEREFORE the Council of the Corporation of the Township of Blandford-Blenheim hereby enacts as follows:

1. That the actions of the Council of the Corporation of the Township of Blandford-Blenheim in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council of the Corporation of the Township of Blandford-Blenheim, at this meeting held on September 6, 2017 is hereby adopted and confirmed as if all such proceedings were expressly embodied in this by-law.
2. That the Mayor and proper officials of the Corporation of the Township of Blandford-Blenheim are hereby authorized and directed to do all things necessary to give effect to the actions of the Council referred to in the proceeding section hereof.
3. That the Mayor and the CAO / Clerk be authorized and directed to execute all documents in that behalf and to affix thereto the seal of the Corporation of the Township of Blandford-Blenheim.

By-law read a first and second time this 6th day of September, 2017.

By-law read a third time and finally passed this 6th day of September, 2017.

MAYOR
MARION WEARN

CAO / CLERK
RODGER MORDUE