

Non-Competitive Contracts with Aimsun Inc. and PTV Group for Aimsun and Vissim Transportation Modeling Software for Transportation Services

Date: April 27, 2026

To: General Government Committee

From: General Manager, Transportation Services; and Chief Procurement Officer, Purchasing & Materials Management

Wards: All

SUMMARY

The purpose of this report is to request City Council authority to negotiate and enter into non-competitive contracts with Aimsun Inc. for the purchase and provision of maintenance and support of five (5) Aimsun Next transportation modelling software licenses, for a five (5)-year term and PTV Group for the purchase and provision of maintenance and support of ten (10) Vissim transportation modelling software licenses, for a five (5)-year term.

Transportation Services has used Aimsun Next and Vissim extensively over the years to conduct traffic operations assessments for a wide range of transportation projects.

These software products are proprietary and provided exclusively by their respective vendors. Aimsun's headquarters are in Spain, and the main distributor for North America is based in the United States. Vissim is a traffic simulation software developed by PTV Group, headquartered in Karlsruhe, Germany. The main distributor for Vissim in North America is based in the United States.

Aimsun Next and Vissim are essential industry standard tools for modelling and predicting traffic behaviour in response to changes in the transportation network. Aimsun and Vissim are critical for studies such as:

- Transportation Master Plans (TMPs)
- Environmental Assessments (EAs)
- Traffic Management Plans during construction
- Multimodal movement analysis for people and goods
- Transit and vehicle operations planning
- Traffic diversion planning

To ensure continued support for these critical transportation studies and initiatives, new non-competitive contracts for the software licenses are required.

A non-competitive procurement may be undertaken where both the proposed procurement and supplier can be justified in good faith based on an exception set out in Toronto Municipal Code Chapter 195, Procurement. This procurement will be proceeding under the exception related to Exclusive Rights, where Aimsun Inc. and the City have determined in good faith that both the proposed procurement and the selected supplier, along with the terms and conditions of the contract, are beneficial to the City (Toronto Municipal Code, Chapter 195, Procurement, Section 7.1.C).

A non-competitive procurement may be undertaken where both the proposed procurement and supplier can be justified in good faith based on an exception set out in Toronto Municipal Code Chapter 195, Procurement. This procurement will be proceeding under the exception related to Exclusive Rights, where PTV Group and the City have determined in good faith that both the proposed procurement and the selected supplier, along with the terms and conditions of the contract, are beneficial to the City (Toronto Municipal Code, Chapter 195, Procurement, Section 7.1.C).

City Council approval is required in accordance with Municipal Code Chapter 195, Procurement, where the current request exceeds the Chief Procurement Officer's authority of the cumulative five (5) -year commitment for each supplier, under Article 7, Section 195-7.3 (D) of the Purchasing By-Law or exceeds the threshold of \$500,000 net of HST allowed under staff authority as per the Toronto Municipal Code, Chapter 71, Financial Control, Section 71-11A.

RECOMMENDATIONS

The General Manager, Transportation Services, and Chief Procurement Officer recommend that:

1. City Council authorize the General Manager, Transportation Services to enter into a non-competitive contract with Aimsun Inc. in the amount of \$115,000 USD net of all taxes and charges (\$117,024 USD net of HST recoveries) for the provision of five (5) Aimsun Next software licenses for a term of five (5) years, from the date of award to 2030 on terms and conditions satisfactory to the General Manager, Transportation Services and in a form satisfactory to the City Solicitor.
2. City Council authorize the General Manager, Transportation Services to enter into a non-competitive contract with PTV Group in the amount of \$219,861 UDS net of all taxes and charges (\$223,731 USD net of HST recoveries) for the provision of ten (10) Vissim software licenses for a term of five (5) years, from the date of award to 2030 on terms and conditions satisfactory to the General Manager, Transportation Services and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

The total potential contract award identified in this report is \$334,861.10 USD, net of all applicable taxes and charges (\$CDN482,199.98 net of all applicable taxes and charges). The total potential cost to the City is \$US340,754.53 net of HST Recoveries or \$CDN490,686.52.

\$1US = 1.44 \$CAD

Source: - April 2026 SAP Financial Systems Currency Exchange Rate

Funding is available in the 2026 Operating Budget for Transportation Services. Additional funding will be included for consideration in future Operating Budget Submissions for Transportation Services, as detailed in Table 1 to follow.

Table 1: Financial Impact Summary (Net of HST Recoveries)

Year	Cost Centre	Cost Element GL	Cost (Net of HST Recoveries) - \$US	Cost (Net of HST Recoveries) - \$CDN
2026	TS7040	5050302	\$25,541.76	\$36,780.13
	TS3020	5050302	\$17,706.24	\$25,496.99
	TS4040	5050302	\$17,706.24	\$25,496.99
	TS3050	5050302	\$4,172.16	\$6,007.91
2027	TS7040	5050302	\$26,271.89	\$37,831.52
	TS3020	5050302	\$17,998.29	\$25,917.54
	TS4040	5050302	\$17,998.29	\$25,917.54
	TS3050	5050302	\$4,318.18	\$6,218.18
2028	TS7040	5050302	\$27,027.56	\$38,919.69
	TS3020	5050302	\$18,300.56	\$26,352.81
	TS4040	5050302	\$18,300.56	\$26,352.81
	TS3050	5050302	\$4,469.32	\$6,435.82
2029	TS7040	5050302	\$27,809.68	\$40,045.94
	TS3020	5050302	\$18,613.41	\$26,803.31
	TS4040	5050302	\$18,613.41	\$26,803.31
	TS3050	5050302	\$4,625.74	\$6,661.07
2030	TS7040	5050302	\$28,619.18	\$41,211.62
	TS3020	5050302	\$18,937.21	\$27,269.58
	TS4040	5050302	\$18,937.21	\$27,269.58
	TS3050	5050302	\$4,787.64	\$6,894.20

Total			\$340,754.53	\$490,686.52
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The Chief Financial Officer and Treasurer has reviewed this report and agrees with information included in the Financial Impact section.

DECISION HISTORY

There is no previous decision history.

COMMENTS

Transportation Services has long utilized Aimsun Next and Vissim software tools to support a wide range of transportation planning and operational projects, and it is essential to renew and expand our licenses to ensure continued access to the latest versions and capabilities of these tools.

Over the years, these tools have been, and continue to be, used in various projects for a wide range of purposes, including:

- Environmental Assessments (EA): Lower Yonge Precinct, Gardiner EA, Broadview Extension, YongeTOmorrow, etc.
- Transportation Master Plans: Finch Goods Movement TMP, Yonge Street North TMP, etc.
- Rapid Transit Projects: Eglinton East LRT (EELRT), Ontario Line, etc.
- RapidTO Projects: Finch RapidTO, Dufferin RapidTO, Bathurst RapidTO, Jane Street RapidTO, Steeles Avenue RapidTO, etc.
- Road Closures and Construction Staging: Gardiner Rehabilitation Projects, Traffic Management Plans associated with the Ontario Line, etc.

The Aimsun Next software offers both mesoscopic and microscopic simulation capabilities, dynamic traffic assignment, and real-time modelling. It is widely applied in rapid transit planning, environmental assessments, master plans, large-scale network modelling, construction staging plans, and traffic diversion strategies.

The Vissim software provides high-fidelity microscopic simulation and supports multimodal modelling. It is particularly valuable for environmental assessments, master plans, transit priority analysis, and modelling pedestrian and cyclist movements.

Many existing transportation models were built using these tools. Access to the latest versions is necessary to review, update, and modify these models as projects evolve. Aimsun and Vissim are industry-standard tools widely adopted by municipalities, consultants, and peer agencies for transportation modelling and analysis. Their unique capabilities, compatibility with existing models, and integration with current workflows make them essential. As such, procurement must proceed on a sole-source basis to

ensure continuity, maintain interoperability, and avoid significant disruptions to ongoing and future projects.

The Fair Wage Office has reported that the recommended suppliers, Aimsun Inc. and PTV Group have indicated that they have reviewed and understand the Fair Wage Policy and Labour Trades requirements and have agreed to comply fully.

CONTACT

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SIGNATURE

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