Agenda – Council – January 30, 2025

Report – Standing Policy Committee on Public Works – January 9, 2025

Item No. 4 TRAINFO Corporation and Federal RSIP Grant

STANDING COMMITTEE RECOMMENDATION:

On January 21, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the following to Council:

1. That the acceptance of grant funding in the estimated amount of $417,272.00 from Transport Canada, or their legal designate, to enhance/upgrade a train-detection System within Winnipeg and to enhance/upgrade the Gaboury Park rail crossing project be approved.

2. That the acceptance of developer funding in the amount of $80,000 from Olexa Developments Ltd. or their legal designate ("The Developer") for the TRAINFO project be approved.

3. That the City enter into, execute and deliver a contribution agreement with Transport Canada, or their legal designate, and such other agreements as may be determined necessary by the City Solicitor / Director of Legal Services to implement the intent of Recommendation 1 and this report (the "Ancillary Agreements").

4. That the City enter into, execute and deliver a contribution agreement with The Developer, and such other agreements as may be determined necessary by the City Solicitor / Director of Legal Services to implement the intent of Recommendation 2 and this report (the "Ancillary Agreements").

5. That authority be delegated to the Chief Financial Officer to negotiate and approve the terms and conditions of the contribution agreement with Transport Canada, or their legal designate, and the Ancillary Agreements, in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

6. That authority be delegated to the Chief Financial Officer to negotiate and approve the terms and conditions of the contribution agreement with The Developer and any Ancillary Agreements, in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

7. That a single source contract with TRAINFO be approved not to exceed five years and the amount of $421,680.00 (plus applicable taxes). The contract is to cover the cost of the installations and the provision of data for five years.

Report – Standing Policy Committee on Public Works – January 9, 2025

STANDING COMMITTEE RECOMMENDATION (continued):

8. That, subject to approval of Recommendation 7, a single source contract for TRAINFO project be awarded to TRAINFO Corporation not to exceed five years and the amount of $421,680, plus applicable taxes, and that the City enter into, execute, and deliver a contract for same

9. That an increase in the estimated amount of $497,272.00 be made to Public Works Roadside Safety Improvement Program Capital Budget (1831000124) to include the contribution funding from Transport Canada (or their legal designate) and The Developer, conditional upon the successful negotiation and approval of the relevant contribution agreements and the Ancillary Agreements. Final budget adjustments will reflect actual amounts earned and received through the agreement(s).

10. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report – Standing Policy Committee on Public Works – January 9, 2025

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On January 21, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On January 9, 2025, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

David Grant submitted a communication in opposition to the matter.

ADMINISTRATIVE REPORT

Title: TRAINFO Corporation and Federal RSIP Grant

Critical Path: Standing Policy Committee on Public Works – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
D. Patman, P. Eng.	J. Berezowsky	T. Graham	S. Armbruster, Interim CAO

EXECUTIVE SUMMARY

The Public Service is requesting approval to enter into two contribution agreements:

1. With Transport Canada to receive an estimated $337,344 towards a TRAINFO Corporation-brand train detection and sensor system, and an additional estimated $79,928 for the Notre Dame Street rail crossing project in Gaboury Park; and

2. With the Developer of the Marion Stockyards lands for $80,000 towards the TRAINFO Corporation-brand sensor system.

TRAINFO is a system of smart sensors that detect and communicate information about approaching trains to traffic control centers and emergency response centers. It can also communicate anticipated intersection disruptions that would allow signal timing adjustments.

TRAINFO sensors are already in place within Winnipeg as the city served as a test market for the technology. The Public Service has not made active use of the technology in recent years as it is a subscription-based service.

Such technology could mitigate concerns regarding access in and out of the planned redevelopment of the stockyard lands. Emergency services stakeholders have previously expressed concern about not being able to access the site when trains are active on Marion Street. TRAINFO Corporation could help reroute emergency vehicles in advance if they know the locations of rail activity at the time of dispatch. This benefit would not be exclusive to Marion Street and would be seen at rail crossings throughout the city.

The City's Traffic Management Centre would also have access to the data and could feed it to road users via social media and the new variable message signs.

TRAINFO Corporation received conditional approval from Transport Canada's Rail Safety Improvement Program (RSIP) for a grant of approximately $417,272.00 for both the Gaboury Park rail crossing project plus the TRAINFO Corporation project. The developer has also agreed to contribute an additional $80,000.

The TRAINFO Corporation project would be a new project (not previously planned) for the Public Service. An increase to the Road Safety Improvement Program Capital Budget would be required so that funding from Transport Canada and the Developer can be added to the total.

If the Transport Canada funding was to be rescinded, an alternative solution to TRAINFO would be needed; such as modification to the access points to the Marion site. No alternate funding source has been identified.

RECOMMENDATIONS

1. That the acceptance of grant funding in the estimated amount of $417,272.00 from Transport Canada, or their legal designate, to enhance/upgrade a train-detection System within Winnipeg and to enhance/upgrade the Gaboury Park rail crossing project be approved.

2. That the acceptance of developer funding in the amount of $80,000 from Olexa Developments Ltd. or their legal designate ("The Developer") for the TRAINFO project be approved.

3. That the City enter into, execute and deliver a contribution agreement with Transport Canada, or their legal designate, and such other agreements as may be determined necessary by the City Solicitor / Director of Legal Services to implement the intent of Recommendation 1 and this report (the "Ancillary Agreements").

4. That the City enter into, execute and deliver a contribution agreement with The Developer, and such other agreements as may be determined necessary by the City Solicitor / Director of Legal Services to implement the intent of Recommendation 2 and this report (the "Ancillary Agreements").

5. That authority be delegated to the Chief Financial Officer to negotiate and approve the terms and conditions of the contribution agreement with Transport Canada, or their legal designate, and the Ancillary Agreements, in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

6. That authority be delegated to the Chief Financial Officer to negotiate and approve the terms and conditions of the contribution agreement with The Developer and any Ancillary Agreements, in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

7. That a single source contract with TRAINFO be approved not to exceed five years and the amount of $421,680.00 (plus applicable taxes). The contract is to cover the cost of the installations and the provision of data for five years.

8. That, subject to approval of Recommendation 7, a single source contract for TRAINFO project be awarded to TRAINFO Corporation not to exceed five years and the amount of $421,680, plus applicable taxes, and that the City enter into, execute, and deliver a contract for same

9. That an increase in the estimated amount of $497,272.00 be made to Public Works Roadside Safety Improvement Program Capital Budget (1831000124) to include the contribution funding from Transport Canada (or their legal designate) and The Developer, conditional upon the successful negotiation and approval of the relevant contribution agreements and the Ancillary Agreements. Final budget adjustments will reflect actual amounts earned and received through the agreement(s).

10. That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

Council approval is required for:

1. The City to receive grants and enter into the contribution agreements with Transport Canada and the Developer.

2. To increase adopted capital budgets by the amounts received.

3. To approve a contract that commits funds to future budgets.

IMPLICATIONS OF THE RECOMMENDATIONS

This project will be additional work tasks for the Public Service and will need to be worked into the workplans for staff in the Public Service, specifically Traffic Signals in Public Works – Transportation related to installing the systems. Signals costs to install systems is between $25,000 to $30,000 which is intended to be supported by the Roadside Safety Program.

If it is later determined that monitoring services from TRAINFO needed to be continued beyond the initial five-year period, the annual cost is currently estimated at approximately $32,200 a year and would need to be funded by the Transportation Division operating budget.

From the procurement perspective, this procurement requires Council approval as (a) it effectively binds the City to commit budget funds not yet approved by Council (for the future years' subscriptions), and (b) that the proposed procurement from TRAINFO Corporation needs to be compliant with the applicable Trade Agreements or Purchasing Division Policy.

If the Transport Canada agreement were to be rescinded by Transport Canada at any time throughout the project and no alternate funding is identified, an alternative solution to provide emergency access to/from the Marion stockyards lands would have to be sought out to the satisfaction of the Director of Public Works and the Director of Emergency Services.

HISTORY/DISCUSSION

A mixed-use (residential and commercial use) redevelopment of the stockyard lands on Marion Street is in under review by the City of Winnipeg. During the Public Service review, it was noted there was an issue with access points; specifically, that access to the site could be problematic during times when train activity is blocking vehicle movement on Marion Street, negatively impacting emergency response times to the site in the event of an emergency.

The Developer's consultants identified TRAINFO sensor technology as a potential solution. TRAINFO, the product of Canadian company TRAINFO Corporation, is a system of smart sensors that detect and communicate information about approaching trains to traffic control centers, emergency response centers, etc. It can be used to communicate to decision-makers where and when trains will block intersections in advance so that vehicles can be dispatched along routes that can minimize time spent waiting in queued traffic.

The City of Winnipeg worked with TRAINFO Corporation in the past; a number of Winnipeg's rail crossings served as a testbed for this technology when TRAINFO Corporation was a startup company, but the Public Service has not been making active use of the equipment or data in recent years as it is a subscription-based service. Since the testing was done in Winnipeg, many of the necessary TRAINFO sensors are already in place.

Intending to proactively resolve the issue of the access, TRAINFO Corporation applied for a grant in the estimated amount of $417,272.00 from Transport Canada, and has received approval for a project. The grant is intended to fund upgrades to the TRAINFO sensor grid in Winnipeg, including a number of variable message signs that can be used to relay information to motorists of train traffic. The key purpose of the upgrades is to send information to Emergency Services regarding train traffic in Winnipeg so that emergency vehicles can avoid train-related congestion, both around the site on Marion Street and at other rail crossings in the City as well. The data would be sent to the City's Traffic Management Centre, where it can be disseminated to motorists and other road users (including Transit) via social media feeds, new variable message signs, and more.

The Transport Canada grant does not cover the total estimated cost of the project; the Developer of the Marion site has agreed to also contribute $80,000 towards this project, with the intention that, for the first five years of operation, the cost to the City will be zero. Any incidental costs for materials, installation, site inspections, etc. will be covered by the Public Service through previously-approved budget within the Roadside Safety Program or the annual Transportation Division operating budget. This will be confirmed when the Ancillary Agreements are completed.

Emergency Services has indicated they are open to the concept of using TRAINFO sensors and the data they generate; this would be a brand new process but Emergency Services are interested in the potential for to route vehicles more efficiently and with less delay.

The City's next steps are to advise Transport Canada that the City will proceed with this project, accept the grant and merge it into the budget for Public Works, and then move the project ahead if the development on Marion Street is approved.

TRAINFO Corporation made an application to a grant program in early 2024 and received initial acceptance from Transport Canada, but the City has had to wait to move forward for a number

of reasons. TRAINFO Corporation applied for the Transport Canada grant (working with Public Works staff providing technical support and make the application) to Transport Canada. At the time, the Public Service sought to act pro-actively in that the Transport Canada grant, if accepted, would provide a solution to address the concerns raised by Emergency Services and remove a significant roadblock with respect to the City's approval of the development of the Marion stockyard lands.

The City's efforts to procure the TRAINFO Corporation sensor grid upgrades are contingent on receiving the Transport Canada grant. If the grant is not accepted, the project will not proceed as there is no identified budget for it. If the TRAINFO project does not proceed, there is a risk of the Marion Stockyards project (with the higher density being sought) not proceeding due to the challenging access / rail conflict points.

Note that the grant from Transport Canada also includes a contribution towards a project in Gaboury Park. That project, regarding anti-whistling measures, has already been completed by the Public Service.

Single Source

The contract with TRAINFO Corporation will be a single source contract for the purchase of goods and services. This Procurement is subject to the Purchasing Policy and the award is permitted under B4.1(c) of the Purchasing Policy, which states that:

> *Subject to B8, a supply to be made to the City may be negotiated without the solicitation of competitive offers where the Chief Administrative Officer determines that, it is in the best interest of the City, appropriate/necessary, and:*
>
> > (c) the consideration for the supply is to be paid by a third party and that third party designates the supplier;

This procurement is also subject to the Canadian Free Trade Agreement ("CFTA") and the New West Partnership Trade Agreement (NWPTA), which incorporates the requirements of the CFTA. The CFTA permits single source procurement in situations which provides a similar exception to B4.1(c) of the Purchasing Policy in Article 504.11(i)(i) which states that;

> *Non-Application 11.*
> *This Chapter does not apply to:*
> ….
> *(i) procurement of goods or services:*
> *(i) financed primarily from donations that require the procurement to be conducted in a manner inconsistent with this Chapter;*

Transport Canada is providing most of the funding for the project under a grant for up to $417,272.00, which was applied for by the Contractor on behalf of the City for the specific purpose of providing upgrades to the existing TRAINFO sensor grid in Winnipeg. The funding is specifically tied to TRAINFO project. The remainder of the funding for the initial five years is to be provided by the land use developer at the Marion site.

This award is also permitted under 513(1)(b)(iii) of the CFTA, which reads as follows:

Article 513: Limited Tendering 1. Subject to paragraphs 2 and 3, and provided that it does not use this provision for the purpose of avoiding competition among suppliers or in a manner that discriminates against suppliers of any other Party or protects its own suppliers, a procuring entity may use limited tendering in the following circumstances:

(b) if the goods or services can be supplied only by a particular supplier and no reasonable alternative or substitute goods or services exist for any of the following reasons:

(iii) due to an absence of competition for technical reasons;

Based on information obtained by the Public Service, the Department can confirm that TRAINFO Corporation's system appears to be the only one of its type for detecting trains and their interaction with level-crossings and traffic when compared to trying to emulate a TRAINFO Corporation setup using off-the-shelf equipment from other vendors. While it is possible to put together equipment from other vendors to emulate a TRAINFO Corporation solution, such efforts would be problematic for multiple reasons. They would be less reliable, would take longer to implement, and there is no guarantee such solutions would perform satisfactorily. TRAINFO Corporation provides jurisdictions with an easily-implemented system to detect and monitor train activity. TRAINFO Corporation is also a recommended tool by both Transport Canada and the Federal Railroad Administration.

In the opinion of the Department, the proposed contractor has the skills and resources to satisfactorily complete the Work.

Having the work carried out under a single source procurement of TRAINFO Corporation is beneficial to the City as there is no reasonable alternative or substitute for equipment and services provided by TRAINFO Corporation and TRAINFO Corporation is the entity that applied for the grant provided by Transport Canada.

Additional Commentary

TRAINFO Corporation is a patented system which includes machine-learning algorithms and proprietary sensors. It is a single-purpose custom-built solution, and the TRAINFO Corporation company is the only one in North America dedicated to developing tools for the monitoring of blocked rail crossings.

It is designed to be both accurate and consistent in detecting train activity at railroad crossings and the equipment is designed for plug-and-play operation and easy integration with other technology, such as traffic signal controllers and intelligent transportation system technology.

TRAINFO Corporation was compared against the alternative of combining elements from multiple vendors in a head-to-head trial at four rail crossing locations in Houston, Texas in 2022-2023, a project known as the "Smart City Rail Crossing Pilot Project." The TRAINFO system was found to be superior to the multi-vendor approach from multiple perspectives; it had more reliable detection of trains (including false positives where the crossing started operation and then cancelled), was easier to implement/set up, was weather-resistant and able to detect in varying weather conditions, and was easier to use by the operators.

In addition to providing information regarding train delay at level crossings, the TRAINFO technology is useful for collaborating with railroad companies and understanding their operations. The data generated from TRAINFO Corporation allows Public Service agencies

(such as the City of Winnipeg) to enter into more fruitful discussion with railroad operators as it provides factual data about delays. The TRAINFO Corporation tool allows non-railroad personnel to better understand railroad operations and to use data to make cases for proposed changes.

The Public Service has investigated and is prepared to vouch for / can attest to TRAINFO Corporation meeting the exception 513(1)(b)(iii) of the CFTA.
Further to the information provided by TRAINFO Corporation, the Public Service contacted representatives from the cities of Houston, Texas and Niagara Falls, Ontario. The Public Service found that:

- Based on a successful initial implementation of the technology, the City of Houston filed a grant application with the US Department of Transportation to expand their TRAINFO Corporation system. TRAINFO Corporation is the only capability endorsed and tested by the Federal Railroad Administration.

- TRAINFO Corporation is also supported/endorsed by Transport Canada; The City of Niagara Falls indicated that Transport Canada has approved TRAINFO at multiple installations throughout Canada through the Federal Rail Safety Improvement Program (RSIP) (not to be confused with the City's RSIP program).

Work will not begin until award of the contract.

Financial Discussion

See Appendix A for detailed calculation. The expected net incremental cost of the project to the City is $13,626; since works already completed by the City using existing budgets for fencing in Gaboury Park being eligible under the grant agreement, the costs for this project are expected to total $510,898 less $497,272 (the combined funding receivable from the Federal RSIP grant and developer).

There are sufficient funds within the 2024 Roadside Safety Improvement program to fund this amount.

The agreement with TRAINFO Corporation is for the installation and maintenance of monitoring equipment also includes data monitoring services for a period of five years. The Public Service is assuming that, at the end of the five-year contract, the development would be fully built-out and there would be an ongoing need to accommodate the access of emergency vehicles in some manner. If it were determined at that time that monitoring services needed to be continued, those costs would be the responsibility of the City and need to be accommodated within the City's annual operating budget.

FINANCIAL IMPACT

Financial Impact Statement

Date: November 25, 2024

Project Name:

TRAINFO and Federal RSIP Grant

First Year of Program **2025**

	2025	2026	2027	2028	2029
Capital					
Capital Expenditures Required	$ 510,898	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	13,626	-	-	-	-
Additional Capital Budget Required	$ 497,272	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Transportation Canada Funding)	417,272	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Developer Agreement funding	80,000	-	-	-	-
Total Funding	$ 497,272	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ 497,272				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	29,700	-	-	-	-
Net Cost/(Benefit)	$ (29,700)	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	(29,700)	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: See Appendix A for detailed calculation. Due to works already completed by the City using existing budgets, the incremental costs for this project are expected to total $510,898, less the combined funding receivable from the Federal RSIP grant and developer ($497,272)), results in an expected net cost to the City of $13,626. Monitoring services beyond the 5 year period of this contract (if required) will be at the expense of the City. For clarity, approval of this report will result in an increase in the 2024 Road Safety Improvement program (project #1831000124) in the amount of $497,272. Recoveries of $29,705 represent the impact of capital project overhead charges on the department's annual operating budget.

J. Ruby, 2024-11-27

J. Ruby CPA, CA
Manager of Finance and Administration

CONSULTATION

This report has been prepared in consultation with:

- Purchasing Division, Corporate Finance
- Legal Services (as to legal issues)
- Winnipeg Fire Paramedic Service
- Planning, Property and Development

OURWINNIPEG POLICY ALIGNMENT

The TRAINFO Corporation tool can be used to improve response times for Emergency Services while allowing for infill development on the Marion property (and will benefit future infill opportunities in proximity to rail corridors).

4.10 Transportation Safety Design, construct, maintain, and regulate an integrated and sustainable transportation system and related infrastructure that optimize safe, connected and reliable mobility, and minimize severe injuries and fatalities for all road users.

6.30 Reinvestment Areas Identify Reinvestment Areas as a subset of Mature Communities that would benefit from expanded partnerships to support community-based revitalization efforts and reinvestment through infill, redevelopment, and affordable housing to help reach full potential as vibrant, healthy, and complete communities.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

4.4 Support Redevelopment of Former Commercial and Industrial Lands into Active Use

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Public Works
Division: Transportation
Prepared by: David Patman, P.Eng. – Manager-PWD-Transportation
Date: November 27, 2024

Attachments:

Appendix A - Financial Summary - Incremental Cost and Funding Receivable