Minute No. 156
Report – Standing Policy Committee on Infrastructure Renewal and Public Works – January 8, 2019

Item No. 1 Bus Operator Compartment Safety Shields

COUNCIL DECISION:

Council concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and adopted the following:

1. That the funding for the purchase and installation of bus operator safety shields of up to $3,150,000, be included in the 2019 draft capital budget.

2. Subject to the approval of funding outlined in Recommendation 1, the Winnipeg Public Service do all things necessary to purchase and install bus operator safety shields on the entire existing Transit fleet within one year.

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

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DECISION MAKING HISTORY:

Moved by Councillor Allard,

That the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works be adopted.

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On January 22, 2019, the Executive Policy Committee passed the following motion:

WHEREAS Transit safety continues to be a priority for Council and Winnipeggers;

AND WHEREAS research suggests that installing bus operator safety shields is consistent with best practices and provides the most protection to Transit operators;

AND WHEREAS Winnipeg Transit has estimated the cost to purchase and install bus operator safety shields on the entire existing Transit fleet to be $3,150,000;

AND WHEREAS on January 8, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works recommended to Council to fund the purchase and installation of bus operator safety shields on the Transit fleet through 2018 Transit retained earnings within up to 18 months;

AND WHEREAS purchasing and installing bus operator safety shields as soon as possible on the entire existing Transit fleet would be a positive step towards increasing Transit safety;

THEREFORE BE IT RESOLVED that Recommendations 1 and 2 from Item No. 1 of the Report of the Standing Policy Committee on Infrastructure Renewal and Public Works dated January 8, 2019, be deleted and replaced with the following:

1. That the funding for the purchase and installation of bus operator safety shields of up to $3,150,000, be included in the 2019 draft capital budget.

2. Subject to the approval of funding outlined in Recommendation 1, the Winnipeg Public Service do all things necessary to purchase and install bus operator safety shields on the entire existing Transit fleet within one year.

and submitted the matter to Council.

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – January 8, 2019

DECISION MAKING HISTORY (continued):

STANDING POLICY COMMITTEE RECOMMENDATION:

On January 8, 2019, the Standing Policy Committee on Infrastructure Renewal and Public Works did not concur in the recommendation of the Winnipeg Public Service and recommended the following:

1. That funding to purchase and install the identified bus operator safety barriers be funded through 2018 Transit retained earnings.

2. That Transit do all things reasonably possible to implement the safety barrier shields within up to 18 months.

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

and submitted the matter to the Executive Policy Committee and Council.

Further on January 8, 2019, Randy Tonnellier, Manager of Transportation, Winnipeg Transit, submitted documentation with respect to the matter.

ADMINISTRATIVE REPORT

Title: **Bus Operator Compartment Safety Shields**

Critical Path: **Standing Policy Committee on Infrastructure Renewal and Public Works**

AUTHORIZATION

Author	Department Head	CFO	CAO
R. Tonnellier	G. Ewankiw	M. Ruta	D. McNeil

EXECUTIVE SUMMARY

A pilot project to test bus operator compartment safety shields concluded on August 31, 2018. It resulted in one successful proponent being identified. It is anticipated that installation of their shield model will enhance bus operator safety.

The total cost to purchase and install shields on all of Transit's 630 buses is estimated at $3,150,000. Pending approval in the 2019 budget, an additional report will be put forward to request approval to award phase two of the RFP and if approved, the shields will be purchased and installed.

RECOMMENDATIONS

1. That funding to purchase and install the identified bus operator safety barrier on the Transit fleet be referred to the 2019 budget process.

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

REASON FOR THE REPORT

The Standing Policy Committee on Infrastructure Renewal and Public Works met on May 30, 2017 and concurred with the following recommendation of the Winnipeg Public Service:

> "That a pilot project to test Bus Operator safety barriers to reduce the opportunity for Operator assaults be implemented".

This report is an update on the pilot project and is necessary to secure funding.

IMPLICATIONS OF THE RECOMMENDATIONS

The total cost to purchase and install shields on all of Transit's 630 buses is estimated at $3,150,000.

HISTORY/DISCUSSION

On May 30, 2017, an Administrative Report titled Transit Safety Management Practices, was adopted by the Standing Policy Committee on Infrastructure Renewal and Public Works which outlined current and potential new safety initiatives. One of the initiatives listed in this report was a pilot project to test bus operator compartment safety shields.

A committee was formed for the purpose of researching safety shields and providing guidance to the pilot project. This committee included representatives from Transit management, the Operations Workplace Safety and Health Committee, Amalgamated Transit Union – Local 1505 (ATU) executive and the bus operator workforce.

Through its research, the committee learned that the following properties either had existing safety shields or were in the process of installing them:

- Toronto Transit Commission
    - Shields were installed on a fleet of 1,800 buses beginning in 2008, which took approximately two years to complete.
- Translink (metro Vancouver)
    - Shields to be installed on a fleet of 1,300 buses beginning in 2017, with anticipation that 75% of the fleet will be complete within 10 years.
- Brampton Transit
    - Shield to be installed on a fleet of 422 buses, announced in 2018, with an anticipated completion length of 18 months.
- Edmonton Transit
    - Shield to be installed on a fleet of approximately 900 buses, announced in November 2018, with a completion date not yet known.

Transit properties in the process of conducting trials of safety shields include:

- B.C. Transit, began in November 2017,
- Grand River Transit (Kitchener/Waterloo), began in January 2018,
- OC Transpo (Ottawa), began in March 2018,
- London Transit Commission, began in August 2018.

The Committee worked in consultation with City of Winnipeg Materials Management to develop a safety shield Request for Proposal (RFP). This RFP was issued on July 6, 2017 inviting vendors to propose their products for trial. The RFP was a two phase document.

The first phase dealt with supply and install of safety shields for the purpose of a trial. Phase two is the awarding of a contract for the supply and delivery of safety shields for the entire fleet of approximately 630 buses to the preferred vendor.

The award of phase two is dependent on the following scoring formula: 50% on a bus operator survey, 40% on price and 10% on a maintenance survey, with the City reserving the right to not award a contract. The deadline to award the contract was December 15, 2018; however, an extension was requested by the City which has been granted until April 30, 2019.

Two bids were received. New Flyer proposed a fixed pane, one piece door design. Arow Global proposed an adjustable pane one piece door design.

Three safety shields of each type were purchased and installed on six buses for the purposes of the trial. Over the course of the trial, approximately 700 operators had a chance to operate a bus in service that was equipped with an Arow Global safety barrier. 750 operators had the opportunity to operate a bus in service that was equipped with a New Flyer safety shield.

Test drive sessions were also offered at the Transit Fort Rouge and North Garage, on eight separate days, for a total of 96 hours. During these sessions, operators could test drive a bus equipped with either shield.

During the trial period, operators had the option to fill out a survey online or in paper form.

The trial period ended on August 31, 2018. By the end of the trial, 173 bus operator surveys regarding the New Flyer safety shield had been received. 142 surveys were completed for the Arow Global safety shield.

The survey consisted of nine weighted questions. The results showed a slight preference for the Arow Global safety barrier over the New Flyer barrier.

Question	**New Flyer**	**Arow Global**
Overall Impression	6.75/10	7.6/10
Sense of Safety	3.49/5	3.74/5
Entering/Exiting Operator's Compartment	3.88/5	3.74/5
Ease of Operation	4.11/5	4.18/5
Able to Operate Bus Efficiently	3.83/5	3.97/5
Sightlines	3.54/5	3.76/5
Operator's Physical Comfort	3.92/5	3.98/5
Customer Interaction	3.21/5	3.55/5
Glare	3.44/5	3.68/5
Total	**36.17**	**38.33**

In addition to the weighted questions above, operators were also asked “Would you support a fleet wide installation of the selected shield type from the trial?” The results were:

New Flyer	**Arow Global**
Yes – 52.5%	Yes – 67.69%
No – 25.62%	No – 10%
Unsure – 21.88%	Unsure – 22.31%

The cumulative score of all questions for the maintenance survey was Arow Global 6.77/10 and New Flyer 6.70/10.

Despite the Arow Global safety shield having a slight edge on the survey scores and being an overall favorite to install, the New Flyer safety shield scored better given the products lower price. The final overall score for all components of the RFP was New Flyer 82.88 points and Arow Global 66.47 points.

After the trial ended; however, New Flyer entered into a partnership with Arow Global, and discontinued production of their shield. It was confirmed by City of Winnipeg, Materials Management that as a result, Arow Global was now the sole responsive proponent. Pending approval in the 2019 budget, an additional report will be put forward to request approval to award phase two of the RFP and if approved, the shields will be purchased.

The Amalgamated Transit Union has endorsed the fleet wide installation of the Arow Global shields and would like to see the installation occur as soon as possible.

The Transit Advisory Committee (TAC) has also endorsed the installation of bus operator compartment shields.

Research that points to the effectiveness of shields in reducing bus operator assaults includes a 2015 report commissioned by the Federal Transit Administration (FTA) of Washington D.C. Their report titled “Preventing and Mitigating Transit Worker Assaults in the Bus and Rail Transit Industry” reported that:

> *“The recommendations in each section focus on FTA developing and publicizing best practice risk control strategies for transit agencies to prevent assaults. Best practices discussed in this report include: Installing protective barriers, video surveillance, automatic vehicle location systems, and overt or covert alarms on bus and rail transit vehicles.”*
>
> and
>
> *“Out of all the infrastructure and strategy options discussed in this section, barriers provide the most protection because they physically separate the operator from the public.”*

FINANCIAL IMPACT

Financial Impact Statement **Date:** December 18, 2018

Project Name:

Bus Operator Compartment Safety Shields

COMMENTS:

This recommendations of this report have no immediate financial impact as the determination of funding and resources are referred to the budget process for consideration and as such, the financial impact and related recommendations will be put forward as part of the budget process.

The total cost to purchase and install shields on all of Transit's 630 buses is estimated at $3,150,000. The City is currently facing a $85.9 million deficit for the 2019 operating budget.

original signed by:
Laurie Fisher, CPA, CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

n/a

OURWINNIPEG POLICY ALIGNMENT

This initiative is designed to enhance safety and is in accordance with OurWinnipeg, 01-2 “Safety and Security”. Specifically, Direction 6, “Take a broad-scaled, complete and collaborative approach to crime prevention”.

SUBMITTED BY

Department: Transit
Division: Operations
Prepared by: Randy Tonnellier, Manager of Operations
Date: December 18, 2018