

From: **"Mochrie, Paul"** [REDACTED]

To: **"Direct to Mayor and Council - DL"** [REDACTED]

Date: 4/19/2023 9:32:07 AM

Subject: Council Memo - Side Guards on City of Vancouver Trucks in Urban Areas - RTS 15306

Attachments: Council Memo - RTS 15306 - Side Guards on City of Vancouver Trucks in Urban Areas.pdf

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire. A short summary of the memo is as follows:

- This is a follow-up to Council direction received in 2022 to report back with recommendations and a timeline for implementing side guards and considering side mirrors on all City of Vancouver and City contracted trucks.
- Staff are recommending a phased implementation for side guards and side mirrors on City-owned trucks.
- First phase of 20 pilot trucks in summer 2023 estimated at \$100k. Second phase will be 150 trucks planned for replacement 2023-2026 estimated at \$750k-\$1 million. Third phase will be 350 remaining trucks in 2027-2030 capital plan.
- Implementation of side guards and side mirrors on City-contracted trucks will be on-going through negotiation with each individual supplier considering operational service delivery and financial impacts.

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclaire@vancouver.ca.

Best,
Paul

Paul Mochrie (he/him)
City Manager
City of Vancouver
[REDACTED]



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x m k y m (Musqueam), S wxwú7mesh (Squamish), and s lilw ta (Tsleil-Waututh) Nations.

MEMORANDUM

April 19, 2023

TO: Mayor and Council

CC: Paul Mochrie, City Manager
Armin Amrolia, Deputy City Manager
Karen Levitt, Deputy City Manager
Maria Pontikis, Chief Communications Officer, CEC
Rosemary Hagiwara, Acting City Clerk
Teresa Jong, Administration Services Manager, City Manager's Office
Mellisa Morphy, Acting Chief of Staff, Mayor's Office
Trevor Ford, Director of Operations, Mayor's Office

FROM: Lon LaClaire
General Manager, Engineering Services

SUBJECT: Side Guards on City of Vancouver Trucks in Urban Areas

RTS #: 15306

This memo is a follow-up to Council direction received in 2022 to report back with recommendations and a timeline for implementing side guards and considering side mirrors on all City of Vancouver and City contracted trucks.

Staff has consulted with other municipalities, senior government agencies, and manufacturers to determine the best approach forward for the City of Vancouver fleet. With the information gathered through this consultation process, staff will create a project with 3 phases to complete the required installations.

To determine the work required in this project, staff have determined the following scope:

1. Side guards will meet the US Department of Transportation Volpe (Volpe) standard for Lateral Protective Devices (<https://rosap.ntl.bts.gov/view/dot/55683>)
2. Side mirrors will be determined for each vehicle category based on the existing visibility from the driver's seat
3. That only medium and heavy duty trucks be included, since light duty trucks meet the Volpe standard from the manufacturer

Side guards (otherwise known as Lateral Protective Devices) are frame-mounted safety devices that aim to prevent pedestrians and cyclists involved in a side-impact collision with a medium or heavy duty truck from being run over by the rear wheels of the truck. The most common type of

purpose-design side guard is a horizontal rail system that allows access to the truck frame for maintenance, while meeting the Volpe standard referenced above. Side guards can reduce the injury severity of side-impact collisions substantially, with UK data showing a 61% reduction in cyclist fatalities (https://rosap.ntl.bts.gov/view/dot/12164/dot_12164_DS1.pdf).

Phase 1 of the project will involve the installation of side guards and side mirrors on 20 city owned trucks that represent a cross section of the vehicle categories that make up the medium and heavy duty fleet. The focus will be on vehicle categories that drive significant mileage, and on a cross section of street types where there is frequent potential risk of interaction with pedestrians and cyclists. There will be a selection of different side guard manufacturers tested to gather information about the complexities and costs of installing different side guards, as well as the operational impacts of side guards on operations and maintenance of the fleet. This phase will start in May 2023 and for the remainder of 2023. Costs for Phase 1 (estimated at \$100,000) will be absorbed within the existing fleet capital project CEQ-28.

Phase 2 of the project will take the information gathered in Phase 1 and use that information to determine the installation costs and operational impacts for each different tested side guard. This information will then form the requirements for an RFP to select a single side guard manufacturer to support the installation of side guards on the remainder of the medium and heavy duty truck fleet. In parallel, staff will bring forward a proposal to increase the existing fleet capital replacement plans to reflect the increased costs for vehicle replacements with side guards and side mirrors which are readily available from existing vendors. This will be completed through the 2024 budget process. Using the best current estimates, this will be in the range of \$5,000-\$7,000 per truck across 150 medium and heavy duty trucks currently planned for replacement for an expected cost of \$750,000 - \$1 million.

Phase 3 of the project will focus on the remaining fleet of medium and heavy duty trucks that are not currently scheduled for replacement in the current 2023-2026 capital plan. These remaining 350 trucks will be addressed during the 2027-2030 capital plan.

Phase 3 of the Project will also include the identification, and negotiation of side rail and side mirror requirements for Hired Trucking contracts that supply trucking services to Engineering Services branches. The City will undertake negotiations with individual suppliers to revise existing Supply Service Agreements and evaluate operational service delivery and financial impacts. Revisions to individual agreements will take into account technical specifications, costs, schedules and responsibilities. Responsibilities and costs will be determined through the negotiation process.

If you have any further questions, please do not hesitate to contact me.



Lon LaClaire, M.Eng., P.Eng.
General Manager, Engineering Services

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