



## Adelaide Street / Canadian Pacific Railway (CPR) Grade Separation EA



## Study Background / Context

- ✓ City's highest priority new rail-road grade separation candidate site as per the **2005 Rail Exposure Index Study and 2013 Blockage Study**
- ✓ The **Smart Moves 2030 Transportation Master Plan and Development Charge Background Study (2014)** identifies needs for optimization and for the implementation of the grade separation in the 2031 planning horizon respectively.
- ✓ Subsequently, in 2017 Council approved moving project forward in a 3-5 timeframe to support implementation of the BRT initiative.



## Existing Conditions

- ✓ Adelaide Street North is a key north-south 4-lane arterial roadway that carries over 25,500 vehicles per day and is an important local commercial and service corridor.
- ✓ Frequent train crossings result in the street being blocked significantly affecting EMS, vehicles, transit, cyclists, pedestrians and resulting in **cut-through traffic** onto local streets
- ✓ CPR operations can block the crossing on average **20 times and up to 80 minutes per day**, with more than half of the blockages resulting from shunting activities (2018 study)
- ✓ Excessive delays **increase idling time** and emissions



## Opportunities

- ✓ Grade separating the crossing will **create a safer and more reliable** road crossing of the CPR line by removing potential conflict between railway operations and pedestrian, cyclists and automobiles
- ✓ Provide an uninterrupted north-south road corridor for **emergency planning** and response
- ✓ Improve local transit **reliability** and support the implementation of the BRT north corridor
- ✓ Allow for improvements to surrounding **streetscape** and integration of **heritage character** of the neighborhood and McMahan Park
- ✓ Improve **circulation** for all modes of travel, including integration of separated cycling facilities through a multi-use path within the proposed underpass



## Preliminary Preferred Concept

**Underpass (road under rail) is preferred because:**

- ✓ Fewer overall property impacts
- ✓ Improves connectivity with Central Ave and maintains access to Elias St, Pall Mall Ave and McMahan St.
- ✓ Decreased traffic noise from the depressed roadway
- ✓ Is more attractive to pedestrians and cyclists
- ✓ Relatively little visual intrusion to the surrounding community and provides more opportunities for context sensitive design
- ✓ Preferred by the community



## Preliminary Preferred Concept





## Adelaide St Cross-Section

### SECTION B

View looking north along Adelaide, showing relationship of bridge, abutment walls and sidewalks



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## Intersection Improvements

### Central Ave Realignment



Recommended

### Pall Mall and McMahan Street



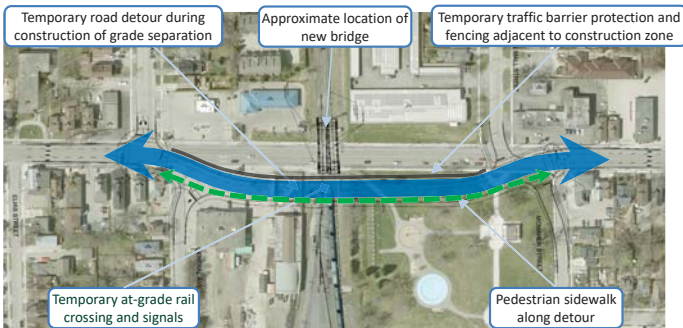
Recommended



Not Recommended



## Temporary Road Detour



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## Temporary Road Detour

- ✓ The specifics of the temporary detour are subject to further design and review with CPR.
- ✓ Significant rail infrastructure constraints exist and implementation of a 2-lane detour with turning lanes is proposed.



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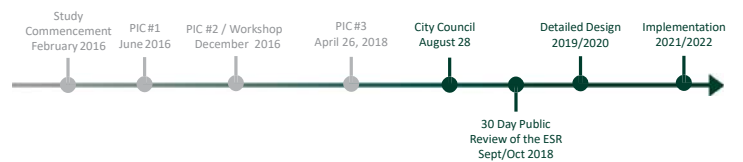
## Estimated Capital Costs

Item	Estimated Cost
Removals	1,139,000
Roadwork	10,826,000
Storm Sewers / Pump Station	8,779,000
CP Structure	9,832,000
Sanitary Sewer	567,000
Watermain	876,000
Temporary Work	660,000
Road Detour	2,027,000
Utility Relocation	4,440,000
CP Railway Infrastructure Costs	4,080,000
Property Acquisition	9,800,000
Engineering	5,250,000
<b>TOTAL (cost sharing with CP is expected at 15%)</b>	<b>\$58,276,000</b>

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## Next Steps



Municipal Class EA Process

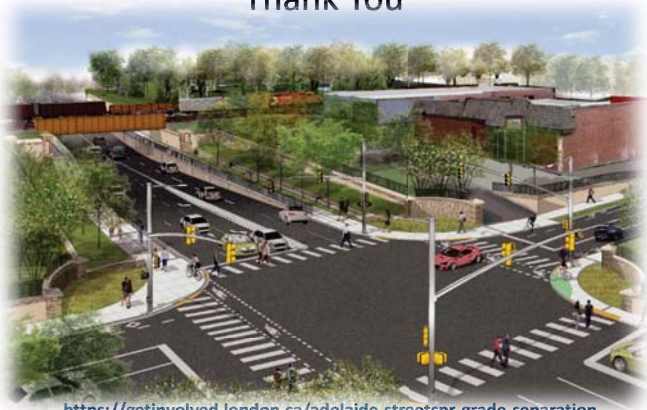
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Thank You



<https://getinvolved.london.ca/adelaidestreetcpr-grade-separation>

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