

Give Transit the Green Light

Active Transit Signal Priority for the Crosstown and Finch West LRTs Re: Item - 2025.IE20.3¹

April 3, 2025

Dear members of the Infrastructure and Environment Committee,

TTCriders is a membership-based transit advocacy organization. Fast, reliable, and accessible public transit is the key to tackling congestion. We are writing to encourage you to give rapid transit the green light by implementing active signal priority on the Eglinton Crosstown and Finch West LRTs, and to make transit the better way to get around by continuing to roll out priority measures for buses and streetcars and invest in more frequent service.

Active signal priority on the Eglinton Crosstown and Finch West LRTs

We were encouraged to learn in the report before you that Toronto continues to expand its Transit Signal Priority (TSP) System, and that 50 additional locations will be upgraded or equipped with TSP by the end of 2025. Currently, 420 signalized intersections in Toronto use TSP, mostly along seven major streetcar routes and four major bus routes.

Yet despite the technology being available, transit signal priority is not being used to its fullest extent. Waiting at red lights will be built into the Eglinton Crosstown's schedule, according to the *Toronto Star*,² because the Crosstown will not have active Transit Signal Priority.³ The Eglinton Crosstown LRT will operate along the street and need to go through intersections with traffic signals between Kennedy and Laird, with the exception of the Science Centre Station.

When the \$12.6 billion Eglinton Crosstown and \$2.5+ billion Finch West LRTs finally open, transit riders expect them to be as fast and reliable as possible – not waiting at red lights while single-occupancy vehicles turn left. That's why transit riders are urging you to implement active, or "unconditional," Transit Signal Priority (see chart below) on rapid transit lines.

Clear the way for streetcars

We support the proposal from Mayor Olivia Chow⁴ to increase fines and towing vehicles that block streetcars, especially during snowstorms when a single parked car can delay hundreds of transit riders when multiple streetcars get backed up.

Sincerely, TTCriders

¹ <u>https://www.toronto.ca/legdocs/mmis/2025/ie/bgrd/backgroundfile-254156.pdf</u>

² https://www.thestar.com/news/gta/2021/10/12/a-closer-look-at-eglinton-crosstown-lrt.html

³ https://x.com/BenSpurr/status/1449048385156157449

⁴ https://www.toronto.ca/legdocs/mmis/2025/ie/comm/communicationfile-188843.pdf

Full Active Transit Barbon Strate Provide a wave of Provide a wave of Barbon Strate Up the traffic signal Up the traffic signal <th> Full Active TSP (also called unconditional TSP) Full active TSP will typically detect an approaching transit vehicle and <i>modify</i> the traffic signal cycle to allow a green by either extending a concurring green phase or truncating a red phase This does not necessarily mean that vehicles will consistently receive a "green wave" along a line, but that the system will try to minimize time spent waiting at traffic signals For example, only 5% of trains stopped at signalized intersections when full active TSP was added in Minneapolis.⁵ </th>	 Full Active TSP (also called unconditional TSP) Full active TSP will typically detect an approaching transit vehicle and <i>modify</i> the traffic signal cycle to allow a green by either extending a concurring green phase or truncating a red phase This does not necessarily mean that vehicles will consistently receive a "green wave" along a line, but that the system will try to minimize time spent waiting at traffic signals For example, only 5% of trains stopped at signalized intersections when full active TSP was added in Minneapolis.⁵
Important Active Transit State Important	 Limited Active TSP (also called conditional TSP) A transit vehicle may ask for a green light to be extended a certain period of time, only under certain conditions, such as running behind schedule. Some transit systems use other "conditions" for extending green lights, such as crowding on transit vehicles. The TTC's 420 intersections with TSP use "Advanced Transit Signal Priority," which is a form of limited active TSP that detects vehicles running behind schedule and extends the green phase up to 30 seconds.⁶
Passive Transit Cyling and Priority The traffic light is programmed ahead of time, based on the schedule. It can't respond to any charges in real-time!	 Passive TSP Passive TSP does not actively respond to transit vehicles as they approach intersections. Instead, signal phases are predetermined to provide optimal travel time savings to transit vehicles on a line (Source: <u>TSP control at signalized intersections: a comprehensive review</u>, p.2) Passive TSP is not responsive to delays that occur along the line that push trains behind schedule.

⁵https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/TRB-APTA_Green-Line-Signal-Priority_rev02.pdf
⁶ https://www.toronto.ca/legdocs/mmis/2020/ie/bgrd/backgroundfile-157804.pdf