CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: February 19, 2026

TO: Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Heather Hutt, Chair, Transportation Committee

FROM: Laura Rubio-Cornejo, General Manager
Department of Transportation

SUBJECT: **DWELL RECALL, TRANSIT SIGNAL PRIORITY, AND PREEMPTION**

SUMMARY

As directed by Council File (CF) 24-1222, this report outlines the Los Angeles Department of Transportation's (LADOT) guidelines for establishing "dwell recall" for signals along at-grade Light Rail Transit (LRT) lines and Bus Rapid Transit (BRT) lines, and describes LADOT efforts to modify signal timing citywide to operate traffic signals with dwell recall, transit signal priority, or preemption along at-grade LRT lines, BRT lines, full-time transit lanes, and part-time transit lanes, with the goal of reducing signal delay to transit vehicles and reducing transit end-to-end travel times to the greatest extent possible.

RECOMMENDATION

That the Council NOTE and FILE this report.

BACKGROUND

The Los Angeles County Metropolitan Transportation Authority (Metro) and LADOT have a long history of collaborating to prioritize Metro buses and trains through congested corridors. Metro currently operates several LRT and BRT lines within the City, with extensive plans to extend and upgrade some of these existing lines while also building new lines.

In October 2024, Council directed LADOT, in collaboration with Metro, to report back with guidelines establishing dwell recall for signals along at-grade rail lines and BRT lines. Council also directed LADOT to report back with a draft policy and implementation plan and timeline to modify signal timing citywide to operate traffic signals with dwell recall, transit signal priority, or preemption along at-grade LRT lines, BRT lines, full-time transit lanes, and part-time transit lanes, with the goal of reducing signal delay to transit vehicles and reducing transit end-to-end travel times to the greatest extent possible.

DISCUSSION

Where transit vehicles operate in shared lanes with general traffic, they observe the same traffic signal indications as general traffic and are not served by special phasing or transit signal indications. However, LADOT deploys various signal timing tools and strategies to enhance transit service.

Along some segments of Metro's LRT and BRT lines, where transit vehicles operate in their own guideway or busway, transit vehicles often operate in "street running" mode where they are controlled

by traffic signals at intersections. For these segments, LADOT adapts traffic signals with special phasing and display indications exclusively for the transit vehicles. Other light rail or heavy rail segments have preemption, where transit vehicles fully preempt traffic signals so that they do not stop or slow at intersections. These intersections feature flashing lights, gates, and other active devices to prevent vehicle and pedestrian intrusion.

Each of these features is distinct, and there is not a "one size fits all" solution that can be applied at all traffic signals that transit vehicles operate through. These features must be individually assessed at each traffic signal to ensure they are compatible with the unique geometries, phase sequences and timing, and operational characteristics.

Dwell Recall

Traffic signal "recall" settings are programmed commands that activate a specific traffic signal phase even without vehicle or pedestrian demand. For example, at some signals Pedestrian Recall activates the WALK phase to be displayed at traffic signal-controlled intersections for every signal cycle, even when no pedestrian is present or has actuated the signal via a push button.

Similarly, Dwell Recall is a setting that activates the "proceed" indication for transit vehicles, whenever the parallel street Green is displayed, and there are no other conflicting vehicle or pedestrian movements, regardless of the presence of a transit vehicle. Dwell recall allows transit vehicles to be more readily served when approaching traffic signals where previously they often had to slow down before putting in a "call" via the detector loop. It also allows for transit vehicles to be served during later periods of the parallel Green phase where previously it would have been too late and transit vehicles would have had to wait for the subsequent cycle before being served.

LADOT originally developed dwell recall to be deployed at traffic signals near transit stations to accommodate the variability in dwell times at those stations. In recent years, dwell recall has been piloted at other intersections not adjacent to stations and modest benefits to transit service have been observed.

Generally, dwell recall can provide some performance benefits without any adverse impacts. However, in certain circumstances where the operation and signal timing at a given intersection is unique, dwell recall is not a good solution. Dwell recall is also not feasible at intersections where there is opposed signal phasing in which each direction moves independently.

Today, LADOT has installed dwell recall at all intersections of street running LRT and BRT lines, except for those locations where it is technically infeasible, where there is already full signal preemption, or where Metro has deemed the phasing ineffective. These intersections and their signal phasing type are outlined in Attachment A. LADOT recently piloted dwell recall along the A Line segment along Marmion Way but received feedback from Metro that it was not working well there (see Attachment B).

When Metro constructs new transit lines that operate with transit signals, LADOT will implement dwell recall at all intersections as a default feature unless it falls within one of the categories stated above.

Transit Signal Priority

Transit Signal Priority (TSP) is technology that allows transit vehicles to communicate directly with traffic signals. TSP aims to reduce dwell time at traffic signals for transit vehicles by holding longer green phases or shortening red times to serve an early green, making transit faster and more reliable. It is generally appropriate along corridors with moderately-spaced traffic signals (typically in suburban or semi-urban environments). TSP can support transit vehicles operating in street running mode within their own guideway or busway, or in shared lanes or traditional bus lanes with mixed traffic. In the City, the legacy TSP system is loop detector-based and relies on buses equipped with transponders to actuate those loops as they approach intersections to extend the green or bring up an early green. It was implemented primarily on select corridors to support Metro's Rapid Bus program which began in the early 2000's. That program featured Rapid Lines on two dozen major arterials which ran with limited stop service, and included streets such as Santa Monica Boulevard, Vernon Avenue, and Crenshaw Boulevard. In 2020 and as part of Metro's NextGen reorganization of the bus network, the majority of the Rapid lines were suspended and merged into their local counterpart lines.

Metro is currently working with LADOT to fund, develop, and implement a new cloud-based TSP system using Global Positioning System (GPS) technology. Modern cloud-based/GPS TSP systems are expected to be more responsive, nimble, and capable than traditional loop detector-based systems. However, even these modern systems have limits on how much they can extend transit phases or shorten conflicting phases, based on intersection geometry, minimum durations of all signal phases, and constraints of coordination operation. Metro expects this new system to be up and running at 280 traffic signals by the end of 2026. If the project is successful, Metro and LADOT hope to expand the project to include other corridors and signals, with a larger footprint than the original legacy system and which would support local bus lines that operate on many corridors not part of the original Rapid program.

Preemption

Preemption is the interruption of a normal traffic signal cycle to serve higher priority users. Preemption can be "full" as is the case with where transit vehicles do not stop or reduce their speed when crossing intersections.

Full preemption is costly and may increase delay for intersecting traffic including buses, cyclists, and pedestrians. These impacts are more severe where trains run more frequently and where intersecting traffic is more substantial.

Limited Preemption can be achieved without gated crossings, using modern traffic signal controller technology and without gates or other intensive hardware deployment. Limited preemption can allow for substantial transit travel time savings to be achieved, often well beyond the limits of dwell recall and TSP systems.

Metro is in the late stages of design for a funded project to add full preemption and gates along the eastern portion of the G Line. Meanwhile, Metro and LADOT are testing and exploring new traffic signal controller hardware and timing for limited preemption where full preemption cannot be achieved in the near-term, and where there is a desire and need to achieve benefits beyond what dwell recall and TSP can provide.

FINANCIAL IMPACT

There is no impact to the General Fund.

LRC:DM:tf

Attachments

Intersection	Operation	Dwell Recall
A Line		
103rd St & Grandee Ave	Preemption/Gated Control	N/A
Century Bl & Grandee Ave	Preemption/Gated Control	N/A
48th Pl & Long Beach Ave	Preemption/Gated Control	N/A
Long Beach Ave & Vernon Ave	Preemption/Gated Control	N/A
41st St & Long Beach Ave	Preemption/Gated Control	N/A
24th St & Long Beach Ave	Preemption/Gated Control	N/A
20th St & Long Beach Ave	Preemption/Gated Control	N/A
Long Beach Ave & Washington Bl	Street Running	Yes
Hooper Ave & Washington Bl	Street Running	Yes
Naomi Ave & Washington Bl	Street Running	Yes
Central Ave & Washington Bl	Street Running	Yes
Griffith Ave & Washington Bl	Street Running	Yes
San Pedro St & Washington Bl	Street Running	Yes
Trinity St & Washington Bl	Street Running	Yes
Maple Ave & Washington Bl	Street Running	Yes
Los Angeles St & Washington Bl	Street Running	Yes
Main St & Washington Bl	Street Running	Yes
Broadway & Washington Bl	Street Running	Yes
Hill St & Washington Bl	Street Running	Yes
Olive St & Washington Bl	Street Running	Yes
Grand Ave & Washington Bl	Street Running	Yes
Hope St & Washington Bl	Street Running	Yes
Flower St & Washington Bl	Track Switch Control by Metro Rail Operations	N/A
18th St & Flower St & Santa Monica Fwy E/B Ramp	Preemption/Gated Control	N/A
Flower St & Venice Bl	Street Running	Yes
Flower St & Pico Bl	Street Running	Yes
12th St & Flower St	Street Running	Yes
Avenue 45 & Marmion Wy	Preemption/Gated Control	N/A
Avenue 51 & Marmion Wy	Street Running	No per Metro
Avenue 52 & Marmion Wy	Street Running	No per Metro
Avenue 53 & Marmion Wy	Street Running	No per Metro
Avenue 54 & Marmion Wy	Street Running	No per Metro
Avenue 55 & Marmion Wy	Street Running	No per Metro
Avenue 56 & Marmion Wy	Street Running	No per Metro
Avenue 57 & Marmion Wy	Street Running	No per Metro
Avenue 61 & Figueroa St	Preemption/Gated Control	N/A
E Line		
1st St & Gless St	Street Running	Yes
1st St & Clarence St & Garcia Marquez St	Street Running	Yes
1st St & Utah St	Street Running	Yes
1st St & Anderson St	Street Running	Yes
1st St & Mission Rd	Street Running	Yes
1st St & Vignes St	Street Running	No per Metro
21st St & Flower St	Street Running	Yes
Flower St & LA Trade Tech Dwy	Street Running	Yes
23rd St & Flower St	Street Running	Yes
Adams Bl & Flower St	Street Running	No per Metro
28th St & Flower St	Street Running	No per Metro
30th St & Flower St	Street Running	Yes
Jefferson Bl & Flower St	Street Running	Yes
Exposition Bl & Trousdale Pkwy	Street Running	Yes
Exposition Bl & USC Watt wy	Street Running	Yes
Exposition Bl & Bill Robertson Ln	Street Running	Yes
Exposition Bl & Vermont ave	Street Running	Yes
Exposition Bl & Raymond Av	Street Running	Yes
Exposition Bl & Normandie Ave	Street Running	Yes
Exposition Bl & Halldale Ave	Street Running	Yes
Denker Ave & Exposition Bl	Street Running	Yes
Exposition Bl & Western Ave	Street Running	Yes
Exposition Bl, Gramercy Pl, & Obama Bl	Street Running	No due to unusual geometry
Arlington Ave & Exposition Bl	Preemption/Gated Control	N/A
7th Ave & Exposition Bl	Preemption/Gated Control	N/A
11th Ave, Degnan Bl & Exposition Bl	Preemption/Gated Control	N/A
Crenshaw Bl & Exposition Bl	Street Running	Yes
Buckingham Rd & Exposition Bl	Preemption/Gated Control	N/A
Exposition Bl & Farmdale Ave	Preemption/Gated Control	N/A
Hauser Bl & Jefferson Bl	Preemption/Gated Control	N/A
Bagley Av & Exposition Bl	Preemption/Gated Control	N/A
Exposition Bl S/Rdway, Northvale Rd & Overland Ave	Preemption/Gated Control	N/A
Ashby Ave, Exposition Bl & Westwood Bl	Preemption/Gated Control	N/A
Exposition Bl & Military Ave	Preemption/Gated Control	N/A

Intersection	Operation	Dwell Recall
Exposition Bl & Barrington Ave	Preemption/Gated Control	N/A
K Line		
48th St & Crenshaw Bl	Street Running	Yes
50th St & Crenshaw Bl	Street Running	Yes
52nd St & Crenshaw Bl	Street Running	Yes
54th St & Crenshaw Bl	Street Running	Yes
57th St & Crenshaw Bl	Street Running	Yes
Crenshaw Bl & Slauson Av	Street Running	Yes
59th St & Creshaw Bl	Street Running	Yes
Redondo Bl & West Bl	Preemption/Gated Control	N/A
G Line		
Chandler, Tujunga & Busway	Street Running	No due to unusual geometry
Chandler. Colfax & Busway	Street Running	Yes
Agnes, Chandler & Busway	Street Running	Yes
Chandler, Laurel Cyn & Busway	Street Running	In Progress
Chandler, Corteen & Busway	Street Running	Yes
Chandler, Whitsett & Busway	Street Running	In Progress
Bellaire, Chandler & Busway	Street Running	Yes
Chandler, Goodland & Busway	Street Running	Yes
Chandler, Coldwater Cyn & Busway	Street Running	Yes
Chandler & Busway	Street Running	Yes
Ethel & Busway	Street Running	In Progress
Burbank, Fulton & Busway	Street Running	Yes
Buffalo, Oxnard & Busway	Street Running	Yes
Woodman & Busway	Street Running	Yes
Bessemer, Hazeltine & Busway	Street Running	Yes
Tyrone & Busway	Street Running	Yes
Aetna, Van Nuys & Busway	Grade Separation Under Construction	N/A
Vesper & Busway	Grade Separation Under Construction	N/A
Kester & Busway	Street Running	Yes
BSS Access Rd & Busway	Street Running	Yes
Sepulveda & Busway	Grade Separation Under Construction	N/A
Densmore, Victory & Busway	Street Running	Yes
VIctory, Woodley & Busway	Street Running	Yes
Busway & Hayvenhurst Ped Xing	Street Running	Yes
Balboa & Busway	Street Running	Yes
Oxnard, White Oak & Busway	Street Running	Yes
Busway & Zelzah Ped Xing	Street Running	Yes
Lindley, Oxnard & Busway	Street Running	Yes
Bessemer, Reseda, Oxnard, Topham & Busway	Street Running	Yes
Oxnard, Wilbur & Busway	Street Running	Yes
Tampa, Topham & Busway	Street Running	Yes
Corbin, Topham & Busway	Street Running	Yes
Topham, VIctory & Busway	Street Running	Yes
Busway & Winnetka	Street Running	Yes
Mason, Victory & Busway	Street Running	Yes
De Soto, Victory & Busway	Street Running	Yes
Busway & Canoga-Station	Street Running	Yes
Canoga, Vanowen & Busway	Street Running	Yes
Canoga, Deering, Sherman Way & Busway	Street Running	Yes
Canoga, Valerio & Busway	Street Running	Yes
Canoga, Saticoy & Busway	Street Running	Yes
Canoga, Roscoe & Busway	Street Running	Yes
Canoga, Parthenia & Busway	Street Running	Yes
Canoga, Nordhoff, & Busway	Street Running	Yes
Canoga, Prairie, & Busway	Street Running	Yes

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November 21, 2025

Mr. Daniel Mitchell
Assistant General Manager
Los Angeles Department of Transportation (LADOT)
100 S. Main Street, 10th Floor, Caltrans Building | Los Angeles, 90012

Subject: Council Motion (CF 24-1222) – Dwell Recall

Dear Mr. Mitchell:

This letter serves as LA Metro's (Metro) acknowledgment of CF 24-1222, directing LADOT and Metro to collaborate on the use of dwell recall to improve travel times for light rail (LRT) and rapid bus (BRT) lines. We understand that LADOT implemented this feature along the A, E, & K LRT lines and the BRT G-Line in the early part of August 2025 in response to the Council Motion.

Metro made observations along the LRTs and BRT lines. While its application demonstrated success in helping buses and trains clear signals where it's compatible with the main green phase, such as along the E Line Exposition Boulevard alignment at the Vermont and Western stations, we also observed other locations however, where it did not perform well. Our Rail Operations Division specifically noted that A-Line trains along the Marmion Way alignment in the Highland Park area are now stopping with this setting activated, whereas prior to the test, they cleared those signals.

We understand that this feature was used in the event of loop failures along LRT tracks to ensure trains would get a "green" (as if a call was placed), and to maximize green time. This was especially helpful in response to the I-10 fires along the A-Line last year, where infrastructure was damaged from copper thefts. More specifically, the ongoing citywide wire thefts has affected and impacted Metro Rail Operations the most, rendering many LRT track loops unserviceable. Dwell Recall in this instance, were a necessity to keep the A-Line moving, albeit with longer travel times.

With both positive and negative results, Metro recognizes that dwell recall should not be implemented uniformly across all LRT and BRT lines. Moving forward, Metro's Engineering and Rail Operations divisions will continue to collaborate with LADOT for any future deployment of Dwell Recall, in addition to exploring other methodologies that will facilitate greater efficiency for LRTs and BRTs. We will continually work together to plan and establish appropriate guidelines for its best application.

Sincerely,

Vijay Khawani

Vijay Khawani
Senior Executive Officer
Risk, Safety, & Asset Management

Cc: Laura R. Cornejo
Steven Gota
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