

ACCESS ADVISORY COMMITTEE

TO: *MAYOR AND COUNCILLORS*

SUBJECT: ACCESSIBLE PEDESTRIAN SIGNALS

RECOMMENDATION:

THAT the report titled “Accessible Pedestrian Signals” dated November 28, 2024, of the Access Advisory Committee meeting, be received for information.

REPORT

The Access Advisory Committee, at its meeting held on November 28, 2024, received and adopted the attached report providing Council with information regarding Accessible Pedestrian Signals.

On behalf of the Access Advisory
Committee,

Councillor D. Tetrault
Chair

Councillor R. T. Lee
Vice Chair

ACCESS ADVISORY COMMITTEE

TO: *MAYOR AND COUNCILLORS*

SUBJECT: ACCESSIBLE PEDESTRIAN SIGNALS

RECOMMENDATION:

THAT the report titled “Accessible Pedestrian Signals” dated November 28, 2024, of the Access Advisory Committee meeting, be received for information.

REPORT

The Access Advisory Committee, at its meeting held on November 28, 2024, received and adopted the attached report providing Council with information regarding Accessible Pedestrian Signals.

On behalf of the Access Advisory
Committee,

Councillor D. Tetrault
Chair

Councillor R. T. Lee
Vice Chair

TO: ACCESS ADVISORY COMMITTEE (AAC)
FROM: GENERAL MANAGER ENGINEERING
SUBJECT: **ACCESSIBLE PEDESTRIAN SIGNALS**
PURPOSE: To provide information regarding Accessible Pedestrian Signals.

RECOMMENDATION

THAT the report titled “Accessible Pedestrian Signals” dated November 28, 2024, of the meeting of the Access Advisory Committee, be received for information.

1.0 POLICY SECTION

Accessible Pedestrian Signals (APS) help create a safe, secure and accessible transportation system, aligning with the Council-adopted goals and targets outlined in the Burnaby Transportation Plan and the transportation safety initiatives in the Community Safety Plan.

2.0 BACKGROUND

Walking and rolling are sustainable transportation modes that are prioritized in the Burnaby Transportation Plan together with cycling and transit. At busy intersections, traffic signals can pose challenges for pedestrians with vision and/or hearing loss. The City is continuing to improve APS implementations with the introduction of touchless technology to enhance accessibility together with its consistent implementation to better help people walking and rolling to safely cross signalized intersections.

3.0 GENERAL INFORMATION

3.1 APS Elements

APS provides audible, vibration and tactile indicators to assist pedestrians with vision and/or hearing loss to safely cross intersections. The City’s APS implementations follow national traffic signal design guidelines and regional practices, which include the following elements:

- Audible indication:
 - Locator tones to help locate the pushbutton
 - Indication at the start of the “walk” signal to identify crossing direction
 - North-south: “cuckoo” sound
 - East-west: “chirp-chirp” sound
 - Increased volume at busier intersections
- Vibration and tactile indication:

- Pushbutton vibrates at the start of the “walk” signal in addition to audio to assist individuals with both vision and hearing loss
- Raised arrow on the pushbutton to indicate crossing direction
- Pushbutton placement:
 - Accessible height
 - Parallel to travel direction
 - Near the crosswalk, facing the pedestrian waiting area
 - Outside of conflicting pedestrian walking paths
- Touchless function:
 - Option to detect a waving hand or similar gesture
 - Avoids the need for touching the pushbutton, enhancing hygiene and improving access for people with low dexterity

3.2 APS Implementation

The City requires all new traffic signals to be equipped with the APS touchless function as a standard requirement, including those implemented as part of capital and development projects. The City will continue to upgrade existing traffic signals and older APSs at the end of their useful lifecycle through attrition to the City’s APS standard with touchless function. For consistency, all pushbuttons at a signalized intersection will be upgraded together to the City’s APS standard.

As not every intersection currently has APS, when we receive these requests for APS, they will be prioritized based on the following, and implemented with touchless function:

- A significant number of pedestrians have vision loss or are deaf-blind
- The intersection is large or complex
- Surrounding conditions are challenging (e.g., significant ambient noise)
- There are frequent pedestrian collisions

3.3 Touchless APS Upgrades

Recognizing the advantages of the touchless APS function, several intersections across the City have been updated with this system including the following 10 locations (refer to Attachment 1) as listed:

- Kingsway and Royal Oak Avenue
- Imperial Street and Royal Oak Avenue
- Imperial Street and Gilley Avenue
- Hastings Street and Beta Avenue
- 15th Street and 10th Avenue
- Halifax Street and Rosser Avenue
- Marine Drive and New Haven Close
- Cascade Street and 16th Avenue
- Production Way and Eastlake Drive
- Lougheed Highway and Bainbridge Avenue

4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

The City continues to work with neighboring municipalities and road authorities to help improve consistency across the region in the use of APS. The performance of the touchless APS units is monitored, and feedback is collected to guide further refinements in the use of APS in the City of Burnaby.

5.0 FINANCIAL CONSIDERATIONS

APS upgrades are funded through the Engineering capital plan.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

ATTACHMENTS

Attachment 1 – Map of Intersections with Touchless Accessible Pedestrian Signals

Attachment 2 – Accessible Pedestrian Signals Presentation

REPORT CONTRIBUTORS

This report was prepared by Regent Cheung, P.Eng., RSP1, Transportation Engineer, and reviewed by Eric Tam, P.Eng., PTOE, Senior Manager Transportation, and Amy Choh, P.Eng., PMP, Director Engineering Transportation.