

Right-Turn-on-Red Prohibition - Davenport Road and Osler Street

Date: January 31, 2022

To: Toronto and East York Community Council.

From: Director, Traffic Management, Transportation Services

Wards: Ward 9, Davenport

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Davenport Road, City Council approval of this report is required.

Transportation Services is requesting approval for right-turn-on-red prohibitions for eastbound and westbound motorists at the intersection of Davenport Road and Osler Street. These regulations are recommended to address potential conflicts between these turning motorists and other intersection users as a result of the intersection geometry.

RECOMMENDATIONS

The Director, Traffic Management, Transportation Services recommends that:

1. City Council prohibit eastbound and westbound right turns on a red signal at all times at the intersection of Davenport Road and Osler Street.

FINANCIAL IMPACT

The estimated cost of installing the signs is \$500.00. Funding is anticipated to be available within the Transportation Services 2022 interim Operating Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services received a request from the Ward Councillor, on behalf of a local resident, to review pedestrian safety concerns at the intersection of Davenport Road and Osler Street. The review disclosed that an east-west right turn on red prohibition should be implemented at this intersection. This prohibition will improve safety for pedestrians resulting from the intersection geometry.

Existing Conditions

Davenport Road is characterized by the following conditions:

- It is an east-west, minor arterial roadway that provides a single lane in each direction for general traffic, as well as exclusive left-turn lanes at the intersection with Osler Street
- There are dedicated bicycle lanes in each direction
- It operates two-way traffic on a pavement width of approximately 14 metres
- The daily two-way traffic volume is approximately 18,000 vehicles
- The speed limit is 40 km/h
- TTC service is provided by bus routes 127 and 168 and there are near-side transit stops located at Osler Street
- There are sidewalks provided on both sides of the street

Osler Street intersects the north and south sides of Davenport Road in an offset intersection. Both streets are included in the traffic signal control. The centrelines of the north and south legs are separated by approximately 15 metres.

The north leg of Osler Street is characterized by the following conditions:

- It is a two-lane, north-south, local roadway
- It operates two-way traffic on a pavement width of approximately 7.3 metres
- The speed limit is 30 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks provided on both sides of the street
- Southbound right turns on a red signal are prohibited at all times at Davenport Road

The south leg of Osler Street is characterized by the following conditions:

- It is a two-lane, north-south, collector roadway
- It operates two-way traffic on a pavement width of approximately 8.5 metres
- Traffic calming measures (speed humps) are in place
- The speed limit is 30 km/h
- Heavy trucks are prohibited from 7:00 p.m. to 7:00 a.m. of the next following day.
- There is no TTC service provided
- There are sidewalks provided on both sides of the street

A map of the area and proposed turn prohibitions is included in Attachment 1.

As noted, the north and south legs of Osler Street are offset at Davenport Road. An offset intersection, as opposed to a typical four-leg intersection, occurs when the side street legs are not aligned. In order to address concerns resulting from this geometry, a three-phase signal operation has been implemented to separate the northbound and southbound movements. Additionally, southbound right-turn-on-red movements are prohibited at all times. However, potential conflicts can still occur for eastbound and westbound motorists turning right on a red signal indication.

- Eastbound motorists on Davenport Road travel a greater distance when proceeding from a stopped position to make a right-turn to travel southbound. The geometry of the intersection means they travel through two north-south pedestrian crossings, which is not typical and may not be expected by motorists
- Westbound motorists on Davenport Road also travel a significant distance when proceeding from a stopped position to make a right-turn to travel northbound. Crossing pedestrians may not be as visible when they begin their movement and they will be travelling at a higher rate of speed

Accordingly, prohibiting eastbound and westbound right-turns on red signals at all times at the intersection of Davenport Road and Osler Street will reduce the number of potential conflicts and improve the safety for all road users.

The Ward Councillor has been advised of the recommendation of this staff report.

CONTACT

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SIGNATURE

for
Roger Browne, M.A.Sc., P. Eng.
Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - No Right-Turn-on-Red - Eastbound and Westbound on Davenport Road and Osler Street

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