



SDOT Policy Memorandum:

To: Dusty Rasmussen, Interim Transportation Operations Division Director
Thru: Venu Nemani, City Traffic Engineer
From: Bradley Topol, SDOT Vision Zero Program
Date: March 2, 2023
Subject: SDOT Policy for No Turn on Red

Statement of intent

The purpose of the document is to establish the broad use of No Turn on Red (NTOR) restriction at signalized intersections within the City of Seattle.

Background

Until 1959 the City of Seattle prohibited right turns on red. In 1975, the federal Energy Policy and Conservation Act (EPCA) required all states to permit right turns on red to reduce fuel consumption and estimated a travel time savings of 1–5 seconds for vehicles turning at signals. Studies^{1,2} following the 1975 EPCA showed that right turn on red crashes with people walking increased by 60 to 70 percent. Additionally, a recent study³ published by the [Institute of Transportation Engineers](#) lists that NTOR signage can reduce pedestrian-vehicle conflicts by 92% and vehicle-vehicle conflicts by 97% during the red interval at signalized intersections. In Seattle, right turn on red crashes account for 9% of all collisions with people walking at signalized intersections (2016-2020).

NTOR signage is also listed under action 2.4 in the Seattle Pedestrian Master Plan (PMP) a method to reduce conflicts at intersections, and it is one tool among many to systemically enhance safety and advance our Vision Zero efforts.



R10-11a

Purpose

To advance our mission and vision, SDOT continues to develop and implement policies that enhance safety for all travelers, especially people walking, rolling, and biking who are the most vulnerable. NTOR is a tool to reduce conflicts at signalized intersections between turning drivers and other travelers. The most frequent application is focused on right turns, but it can also include left turns onto one-way streets as described in [SMC 11.50.140](#) and [11.50.150](#). This restriction reduces risks and conflicts for people driving as they scan in opposite directions for both oncoming vehicle traffic and for people crossing at signalized intersections.

Footnotes

1. The Effect of Right-Turn-On-Red on Pedestrian and Bicyclist Accidents: https://rosap.ntl.bts.gov/view/dot/1322/dot_1322_DS1.pdf
2. Right-Turn-On-Red Laws and Motor Vehicle Crashes: [Right-turn-on-red laws and motor vehicle crashes: A review of the literature - ScienceDirect](#)
3. Institute of Transportation Engineers – Analysis of Expanded No Turn on Red Applications: [May 2022 \(ygsclibook.com\)](#)



EVALUATION AND REVIEW

This document sets the general policy of restricting turns on red at signalized intersections. Prior to design, the operations team will review potential locations to determine if an exception from this general policy is recommended. Vehicular delay will not generally be considered unless necessary for coordination with partner agencies. All approaches to the intersection should be evaluated; however, approaches where the impacted turn does not have a conflicting pedestrian movement will typically be exempted.

IMPLEMENTATION

This policy aims to change operations at signalized intersections to restrict turning on red. Consistent with existing state and local laws, projects will place [R10-series](#) signing or equivalent to control approaches where turns are prohibited. SDOT will work within funding and staffing constraints to implement this policy. SDOT will evaluate and implement these changes when:

- New signalized intersections are installed,
- Signalized intersection operations are modified*, or
- SDOT programs otherwise prioritize this work.

**Application of this includes most public or private projects but excludes routine preventative maintenance, installation of Accessible Pedestrian Signals, and/or signal timing adjustments.*

ASSOCIATED WORK

In certain situations, additional work may be appropriate to mitigate the impact of NTOR. As such, any mitigation identified while evaluating and implementing a NTOR should be pursued in coordination with the NTOR restriction.

DEVIATIONS

Any deviation or exceptions from this policy shall be documented and approved by the City Traffic Engineer.

Venu Nemani,
City Traffic Engineer

03/02/2023

Date

Dusty Rasmussen (Mar 2, 2023 10:17 PST)

Dusty Rasmussen,
Interim Transportation Operations Division Director

03/02/2023

Date