

Traffic and Parking	
SECTION: Engineering	POLICY NO.: 2023-##
SUBJECT: Multi-way Stop Control Policy	EFFECTIVE: PAGE: 4
APPLIES TO: NDOT	<input checked="" type="checkbox"/> NEW ISSUE <input type="checkbox"/> PARTIAL REVISION <input type="checkbox"/> COMPLETE REVISION
<p>PURPOSE: The purpose of a STOP sign is to assign right-of-way and regulate traffic. A “multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist” and is often most effective when “used where the volume of traffic on the intersecting roads is approximately equal.”¹ When used appropriately, STOP signs can increase safety and standardize expectations of all road users at the intersection. When used incorrectly, such as solely to address speeding, these signs can breed disrespect for the sign and generate compliance issues, generally decreasing safety.</p> <p>APPLICABILITY:</p> <p>Applies to all multi-way stop control warrant analyses conducted and/or approved by NDOT.</p> <p>POLICY: 0</p> <p>This policy incorporates FHWA’s 2009 Manual on Uniform Traffic Control Devices (MUTCD) requirements:</p> <p>Introduction:</p> <p>Accordingly, installations should only be made at locations where it is safe and appropriate to do so. Engineering studies, such as a Multi-way Stop Warrant (Warrant), are used to evaluate criteria to determine whether one or more STOP signs are warranted for installation. This warrant will consider, among other things:</p> <ol style="list-style-type: none"> 1. An interim installation pending the installation of a traffic signal that has met a qualified traffic signal warrant; and 2. Five or more crashes in 12-months subject to correction by a multi-way stop; and 3. Volume of all traffic (cars, bicycles, pedestrians) within an eight-hour peak period (not necessarily consecutive hours); and 4. The speed of approaching traffic; and 5. Additional, site specific criteria as permitted.² <p>Upon the written request for the installation of multi-way stop control at the intersection of two City streets, NDOT may direct staff to complete a Warrant to verify whether such an</p>	

installation is appropriate. This process shall involve the collection and analysis of data with consideration made for the items identified previously. Intersections must meet one or more of the minimum qualifying areas to be considered. A recommendation will be provided to NDOT's Chief Engineer or designee who will use professional engineering judgment to determine whether to direct the installation of STOP signs in compliance with this Traffic and Parking Commission approved policy.

Any and all appeals related to the installation or rejection of multi-way stop control must be submitted to the Traffic and Parking Commission.

¹2009 Manual on Uniform Traffic Control Devices, Section 2B.04.05

²2009 Manual on Uniform Traffic Control Devices, Section 2B.07

MULTI-WAY STOP WARRANT WORKSHEET

Date: _____

Major Approach: _____ Minor Approach: _____

A. Interim Traffic Control Measure

Would a multi-way stop serve as an interim traffic control measure for an intersection that has met a traffic signal warrant and scheduled for a traffic signal installation at a later time?

Criteria met? Yes: _____ No: _____

2. All traffic volume on the minor approaches must average ≥ 200 (140) units per hour, for the same period, currently measured at _____ (vehicles), _____ (bikes) and _____ (pedestrians) for a total of ____ (traffic units).

Criteria met? Yes: _____ No: _____

B. Accidents

Has there been five or more reported collisions within a 12-month period that would be susceptible to correction by a multi-way stop?

Criteria met? Yes: _____ No: _____

If yes, list dates: _____

D. Multiple Criteria at Lesser Levels

When no single criterion has been satisfied, but where Criteria B, C.1 and C.2 are satisfied to 80% of the original (non-reduced) values.

Criteria met? Yes: _____ No: _____

C. Volume

Entering volume of all traffic (vehicles, pedestrians, and bicycles) shall be analyzed during the peak eight hours of an average day. These hours do not have to be consecutive.

Date/Hours: _____

85th percentile speed of major approach: _____

If ≥ 40 MPH, then the minimum volume thresholds used shall be 70% of their current value, shown as values in parenthesis.

Certain minimum volume thresholds must be met for consideration:

1. Vehicle volume on major approaches must average ≥ 300 (210) vehicles per hour, currently measured at _____; and

E. Other Conditions

Circle one or more other conditions/concerns:

1. There is a need to control left-turn conflicts by a road user; or
2. There is a need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes; or
3. Locations where a road user, when stopped, cannot see conflicting traffic and is not able to negotiate the intersection unless cross traffic is also required to stop; or
4. Location where two residential, collector (through) streets of similar design and characteristics intersect and where a multi-way stop would improve traffic operational characteristics of the intersection.

Criteria met? Yes: _____ No: _____

Recommendation

- YES**, the findings above do support a recommendation for the installation of a multi-way stop; or
 - NO**, the findings above do not support a recommendation for the installation of a multi-way stop.
- Reviewed by: _____ Date: _____
- This location has met the necessary criteria and installation of a multi-way stop is **approved**; or
 - This location has not met the necessary criteria and installation of a multi-way stop is **not approved**.

Approved by: _____ Date: _____

Comments:

REVISION NO.:

ISSUED BY: Jason Oldham

REVISION DATE:

TRAFFIC AND PARKING COMMISSION
APPROVAL REQUIRED

APPROVAL: