

Adding a stop sign on a local road is a significant decision that affects safety, traffic flow, and driver expectations. According to the **Indiana MUTCD**, which mirrors the **federal MUTCD** with some local adaptations, stop signs **should not** be used for speed control or convenience. Instead, they are installed based on clear engineering judgment and/or a traffic engineering study. Here's a concise guide tailored for a **Public Works board**:

When to Consider Installing a Stop Sign (Indiana MUTCD Guidance)

1. To Assign Right-of-Way at Intersections

- The intersection has **limited sight distance**.
- The intersection is **not self-regulating** (i.e., drivers are unclear on who has priority).
- One road has **substantially higher volume** than the other (major/minor road configuration).

2. Warrants for a Multi-Way Stop (Per MUTCD Section 2B.07)

A multi-way stop *may be warranted* if **one or more of the following conditions** apply:

- **Crash history**: Five or more **correctable crashes** (e.g., right-angle, left-turn, or pedestrian collisions) within a 12-month period.
- **Minimum volume**:
 - Major street: ≥ 300 vehicles/hour (total of both directions) for any 8 hours of an average day.
 - Minor street: ≥ 200 vehicles/hour (approach direction) for the same 8 hours.
- **Significant delay** to traffic on the minor street.

3. Special Conditions

- **Near schools, parks, or high pedestrian activity areas** — but only if visibility and volumes support it.
- **Temporary conditions** like construction or detours — must be removed afterward.

When NOT to Use a Stop Sign

- To **control speed** — this leads to driver frustration and non-compliance.
- As a **traffic calming measure** — consider speed humps, narrowing, or other design options instead.
- Without **engineering evaluation** — community complaints alone are insufficient without supporting data.

Recommended Steps for a Public Works Board

1. **Initiate a Traffic Engineering Study**
 - Collect data: vehicle volumes, crash history, sight distance, speed studies.
 - Evaluate per MUTCD criteria.
 - Use INDOT or a licensed traffic engineer if your jurisdiction lacks staff.
2. **Public Communication**
 - Engage residents on the process and findings.
 - Explain the rationale for or against installation.
3. **Resolution and Documentation**
 - Approve or deny stop sign installation via formal board action.
 - Document the decision and supporting data for liability protection.

INDIANA MUTCD text

Section 2B.07 Multi-Way Stop Applications

Support:

- 01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
- 02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

- 03 *The decision to install multi-way stop control should be based on an engineering study.*
- 04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*
- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
 - B. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
 - C. *Minimum volumes:*
 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*

- D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Option:

05 Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Stop Sign Evaluation Checklist

Use this before deciding to install a stop sign on a local road.

Basic Information

- ☐ Intersection location: _____
 - ☐ Current traffic control: _____
 - ☐ Nearby land uses (school, park, etc.): _____
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Traffic Volumes (for Multi-Way Stop)

- ☐ Major street: ≥ 300 vehicles/hour (both directions) for 8 peak hours?
 - ☐ Minor street: ≥ 200 vehicles/hour (approach) for 8 peak hours?
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Crash Data

- ☐ ≥ 5 correctable crashes (angle, left-turn, pedestrian) in last 12 months?
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Sight Distance & Visibility

- ☐ Limited sight distance present at uncontrolled approaches?
 - ☐ Geometry or obstructions create unsafe conditions?
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Pedestrian Safety

- ☐ High foot traffic crossing uncontrolled approaches?
 - ☐ Nearby school or playground with poor crossing visibility?
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Engineering Study

- ☐ Data collected: speed, volume, crash reports, sight lines

- ☐ Study performed by: _____
 - ☐ MUTCD Section(s) referenced: _____
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Public Input

- ☐ Community feedback received?
 - ☐ Speeding concerns evaluated separately?
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Recommendation

- ☐ Stop sign warranted?
- ☐ Type: ☐ Two-way stop ☐ Four-way stop ☐ Other: _____
- ☐ Additional signs/markings needed? (e.g., advance warning)