

# Special Traffic Signage at Unsignalized Crossing Guidelines

March 13, 2020

## **INTRODUCTION:**

The City of Hudson, Ohio is an incorporated community and is located approximately mid-way between the City of Akron and the City of Cleveland metropolitan areas in northeast Ohio. The Hudson community consists primarily of residential neighborhoods, along with a historical central business district and several industrial developments located in the outlying areas of the City.

The City has also established and begun to implement a plan to provide a safe and efficient, *sidewalk and trail* connectivity system throughout the City in order to provide pedestrian access to its downtown commercial areas, county trail system, schools, City parks and neighborhoods. Consequently, numerous intersections, both signalized and unsignalized, between the City's road system and connectivity system exist throughout the community.

With increased vehicle and pedestrian traffic, the City's Traffic Safety Committee (TSC) has received numerous requests to install Special Traffic Signage including LED-embedded signs, Rectangular Rapid Flashing Beacons (RRFBs) and other special traffic signage to increase driver and pedestrian safety at roadway intersections and pedestrian crossings on public roadways. The TSC has indicated that the use of these special signs should be reserved for unsignalized intersections and school crossings where significant vehicle and pedestrian safety concerns exist. The TSC has also observed that the over-use of special signage throughout the City may diminish their effectiveness.

With this in mind, the City of Hudson Traffic Safety Committee has established this Special Traffic Signage Installation Guideline to provide a set of criteria, procedures, and policies to guide the installation of special signage installation and respond to citizen's concerns and requests. Specifically, this document summarizes:

- (a) Criteria for Flashing LED-embedded sign installation at unsignalized intersections
- (b) Criteria for Rectangular Rapid Flashing Beacon (RRFBs) pedestrian crossing treatments at unsignalized intersections
- (c) Installation of other signage deemed "special" by the TSC including other types of LED-embedded signs, High-Intensity Activated crossWalk beacon (HAWK) signals, etc.

## **OBJECTIVES:**

The objectives of this policy are to provide a clear set of guidelines for the installation of (a) LED-embedded signs and (b) RRFBs at unsignalized intersections. The objectives include, but are not limited to:

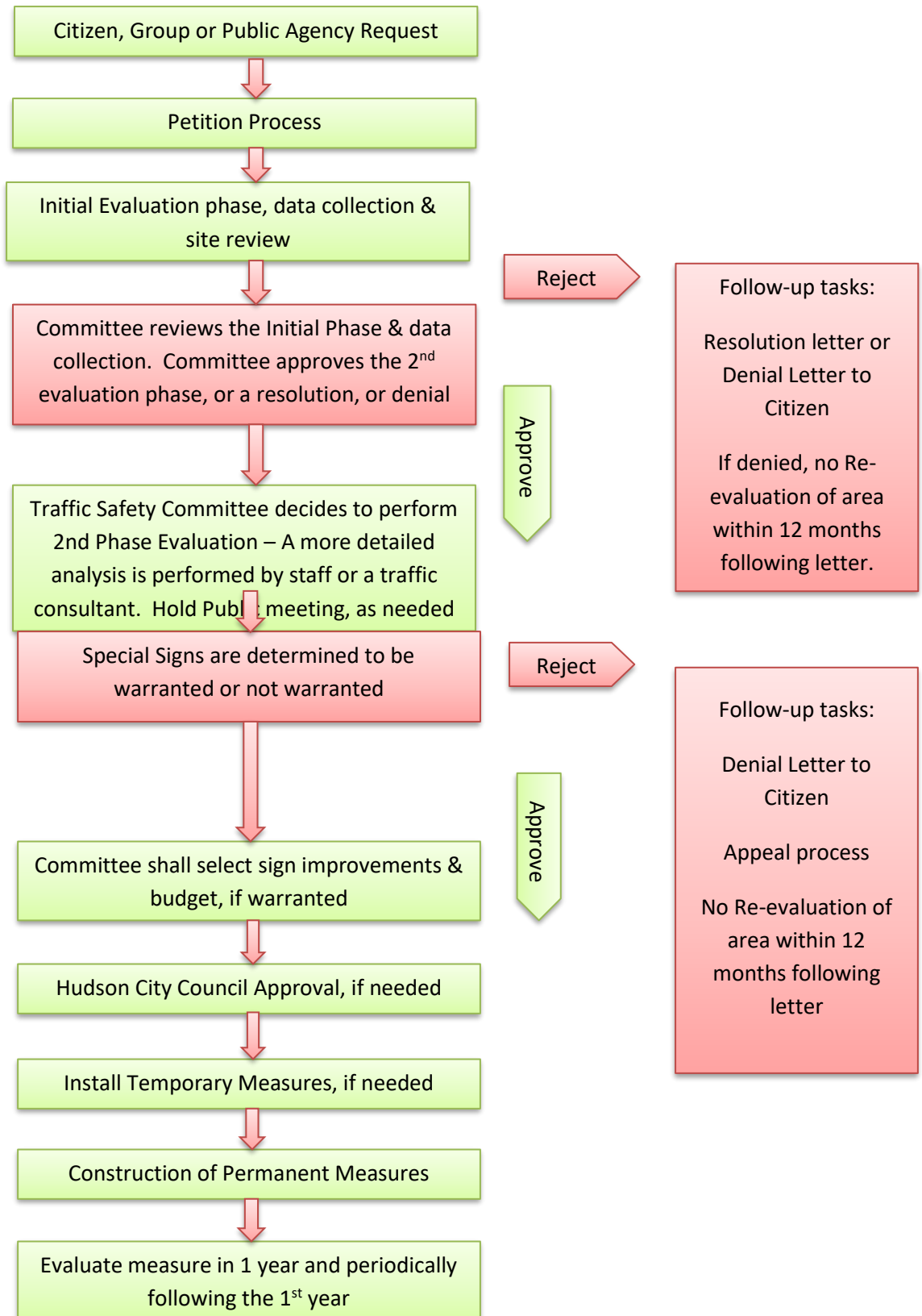
- Improving the safety for all modes of transportation on city streets (i.e. pedestrian, cyclist, and motor vehicles.).
- Reducing the number and severity of motor vehicle crashes;

- Reducing the need for traffic enforcement monitoring; Improving driver behavior, concentration, and awareness

**CITY OF HUDSON, OHIO – SPECIAL TRAFFIC SIGN INSTALLATION FLOWCHART**

2020

**COLOR LEGEND**



## **PEDESTRIAN CROSSING TREATMENTS:**

### **GUIDANCE FOR LED-EMBEDDED SIGN INSTALLATION:**

1. Traffic Safety Committee shall review and approve the installation of LED embedded signs, unless otherwise identified by a professional engineering study or design.
2. Embedded Light Emitting Diodes (LED) in sign faces, or LED-embedded signs, are one way improve safety at intersections by enhancing driver awareness of traffic-control signs.
3. This treatment is applicable for regulatory and warning signs at unsignalized intersections with the intended purpose of improving the visual conspicuity of the signs. Typical locations where LED-embedded signs can be implemented include:
  - a. Locations with sight visibility limitations (horizontal curves, dusk/dawn glare, etc.);
  - b. Locations with documented problems of drivers failing to recognize an intersection; and
  - c. At STOP signs – this treatment may help to increase the rate of vehicles stopping and to avoid drivers failing to detect the STOP sign.
4. Any stop sign requests shall only be used to improve safety at intersections where traffic volumes or crashes warrant their installation and shall NOT be used for requests to reduce vehicle speeds per the Ohio Uniform Traffic Control Manual, current edition.
5. Flashing LED STOP and YIELD signs should only be considered for installation in situations necessitating enhanced visibility of the sign. When usage is limited to special circumstances, flashing LED STOP and YIELD signs may be effective safety countermeasures. The use of LED signs shall be approved by the Hudson Traffic Safety Committee.
6. LEDs may be set to flash 24 hours a day or be vehicle or pedestrian activated.
7. If used, the LEDs shall be the same color as the sign legend, border, or background. If flashed, all LED units on an installation shall flash simultaneously at a rate of more than 50 and less than 60 times per minute. The uniformity of the sign shall be maintained without any decrease in visibility, legibility, or driver comprehension during either daytime or nighttime conditions. MUTCD, Section 2A.08.
8. MUTCD, Section 2A.08 contains further information that should be consulted when installing a sign with embedded LEDs.
9. Studies suggests that the two following criteria should be met for the intersection to be considered for LED STOP sign installation:
  - a. Limited visibility, as determined by an engineering study, on approach to the intersection and
  - b. History of crashes documented to be caused by a failure to stop and deemed preventable by implementation of conspicuity improvements
10. Studies advise that alternative improvements should be considered at the intersection prior to selecting a LED STOP sign, such as:
  - a. installing a STOP AHEAD sign or pavement message
  - b. Increasing the size of the STOP sign or adding a second sign on the left side
  - c. Adding retroreflective strips to the STOP sign support
  - d. Install transverse rumble strips
  - e. Add a STOP bar
11. After the LED-embedded signs has been constructed, the City of Hudson may evaluate the effectiveness of the periodically following the 1-year review. The evaluation is performed to ensure that the new signs are still effective and serve the intended purpose. If measure has been

determined by the City to be ineffective, or if the traffic patterns have changed, the City of Hudson Traffic Safety Committee may decide to modify or remove the traffic calming measures. No funds will be returned if the improvement was assessed and if the measures are removed.

12. This Traffic Calming Policy may be subject to changes as needed by the Traffic Safety Committee in the future.
13. This Policy has been developed & accepted by the Hudson Traffic Safety Committee, with the assistance of TMS Engineers, Inc. (Adopted by Traffic Safety Committee: Date).

#### **GUIDANCE FOR RECTANGULAR RAPID FLAHSING BEACON (RRFB) SIGN INSTALLATION:**

1. Recognizing the limited availability of resources to implement crossing treatments within the City, special sign treatments shall not be installed at locations where the ADT is lower than 1,500 vehicles per day unless otherwise identified by a professional engineering study or design. Exceptions may be made at school crossing locations where the peak hour vehicle traffic exceeds 10% of the ADT.

The Minimum Pedestrian Volume criteria for installation of RRFBs in school zones is 20 pedestrians (school aged or other) per hour in any one hour of the day (per NCHRP Report 562)\* and with approval by the Hudson Traffic Safety Committee. Pedestrian counts will be held over a minimum of three days.

2. The installation of RRFBs , or types of pedestrian traffic signals can all have a significant impact on the automobile traffic operation in a corridor. The automobile and pedestrian crossing volumes, the spacing to the adjacent signalized intersections, the type of pedestrian population (high school students, elementary students, elderly, a mix) should all be considered when selecting the crossing treatment type and how it will be operated.
3. Where practical, pedestrian traffic signals should be coordinated with the signal progression in the corridor to minimize the impact of the new traffic signal on corridor traffic flow. Not coordinating the pedestrian crossing signals may result in unacceptable increases in vehicle congestion and delay.
4. RRFBs used at high volume pedestrian crossings in congested roadway corridors can also have a significant impact on automobile congestion and compromise effective signal progression.
5. Where the effects of a RRFB may negatively impact vehicle congestion and delays, a separate traffic safety study may be required.
6. The Traffic Safety Committee, in compliance with the FHWA, recommends the following
  - a. General Conditions:
    - i. An RRFB shall consist of two rapidly and alternately flashed rectangular yellow indications having LED-array based pulsing light sources, and shall be designed, located, and operated in accordance with the detailed requirements specified below.

- ii. When activated, the two yellow indications in each RRFB shall flash in a rapidly alternating "wig-wag" flashing sequence (left light on, then right light on).
  - iii. As a specific exception to 2003 MUTCD Section 4K.01 requirements for the flash rate of beacons, RRFBs shall use a much faster flash rate. Each of the two yellow indications of an RRFB shall have 70 to 80 periods of flashing per minute and shall have alternating but approximately equal periods of rapid pulsing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, one of the yellow indications shall emit two rapid pulses of light and the other yellow indication shall emit three rapid pulses of light.
  - iv. The flash rate of each individual yellow indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second, to avoid frequencies that might cause seizures.
  - v. The light intensity of the yellow indications shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.
- b. Beacon Operation:
- i. The RRFB shall be normally dark, shall initiate operation only upon pedestrian actuation, and shall cease operation at a predetermined time after the pedestrian actuation or, with passive detection, after the pedestrian clears the crosswalk.
- c. Allowable Uses:
- i. An RRFB shall only be installed to function as a Warning Beacon (see 2003 MUTCD Section 4K.03).
  - ii. An RRFB shall only be used to supplement a W11-2 (Pedestrian) or S1-1 (School) crossing warning sign with a diagonal downward arrow (W16-7p) plaque, located at or immediately adjacent to a marked crosswalk.
  - iii. For this Policy, an RRFB should only be considered for use within School Zones and for crossings without crossing guards.
  - iv. An RRFB shall not be used for crosswalks across approaches controlled by YIELD signs, STOP signs, or traffic control signals that already provide driver warnings. This prohibition is not applicable to a crosswalk across the approach to and/or egress from a roundabout.
  - v. In the event sight distance approaching the crosswalk at which RRFBs are used is less than deemed necessary by the engineer, an additional RRFB may be installed on that approach in advance of the crosswalk, as a Warning Beacon to supplement a W11-2 (Pedestrian) or S1-1 (School) crossing warning sign with an AHEAD: (W16-9p) plaque. This additional RRFB shall be supplemental to and not a replacement for RRFBs at the crosswalk itself.
- d. Sign/Beacon Assembly Locations:
- i. For any approach on which RRFBs are used, two W11-2 or S1-1 crossing warning signs (each with RRFB and W16-7p plaque) shall be installed at the crosswalk, one on the right-hand side of the roadway and one on the left-hand side of the roadway. On a divided highway, the left-hand side assembly should be installed on the median, if practical, rather than on the far left side of the highway.

- ii. An RRFB shall not be installed independent of the crossing signs for the approach the RRFB faces. The RRFB shall be installed on the same support as the associated W11-2 (Pedestrian) or S1-1 (School) crossing warning sign and plaque.
    - e. Beacon Dimensions and Placement in Sign Assembly:
      - i. Each RRFB shall consist of two rectangular-shaped yellow indications, each with an LED-array based light source. Each RRFB indication shall be a minimum of approximately 5 inches wide by approximately 2 inches high.
      - ii. The two RRFB indications shall be aligned horizontally, with the longer dimension horizontal and with a minimum space between the two indications of approximately seven inches (7 in), measured from inside edge of one indication to inside edge of the other indication.
      - iii. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the W11-2 or S1-1 sign.
      - iv. As a specific exception to 2003 MUTCD Section 4K.01 guidance, the RRFB shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque (or, in the case of a supplemental advance sign, the AHEAD plaque), rather than 12 inches above or below the sign assembly. (See attached example photo.)
    - f. All RRFBs associated with a given crosswalk (including those with an advance crossing sign, if used) shall, when activated, simultaneously commence operation of their alternating rapid flashing indications and shall cease operation simultaneously.
    - g. If pedestrian pushbuttons (rather than passive detection) are used to actuate the RRFBs, a pedestrian instruction sign with the legend PUSH BUTTON TO TURN ON WARNING LIGHTS should be mounted adjacent to or integral with each pedestrian pushbutton.
    - h. The duration of a predetermined period of operation of the RRFBs following each actuation should be based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals.
      - i. A small light directed at and visible to pedestrians in the crosswalk may be installed integral to the RRFB or push button to give confirmation that the RRFB is in operation.
    - i. Other:
      - i. Except as otherwise provided above, all other provisions of the MUTCD applicable to Warning Beacons shall apply to RRFBs.
7. The FHWA recommends that overuse of crosswalk markings should be avoided to maximize their effectiveness. Crosswalks and sign treatments (such as the “State Law – Yield to Pedestrians” and rectangular rapid flash beacon signs) should be used discriminately within the City of Hudson so that the effectiveness of these treatments is not deteriorated by overuse. Although these treatments may be effective at individual locations, overuse of these treatments city-wide may lead to a decrease in their value as drivers become desensitized to them. Minimum pedestrian and vehicular volume criteria have been established in this document with this in mind.

## **PROCEDURE:**

The process to determine if a Special Traffic Sign should be installed is as follows:

- 1) A traffic safety concern or request is made by a citizen, a citizen group, or a governmental agency to the City Staff. The City shall require a formal petition from the individual or group that requested the initial investigation at this point in the process.
- 2) The **Initial Evaluation Phase** of the special sign request will be a preliminary evaluation by the City Staff (i.e. Police, Engineering and/or Public Works), and the City will decide if a traffic problem is significant enough to warrant a further detailed analysis or study. The staff may choose to utilize some or all of the following in this phase:
  - a. Staff will perform a thorough site review of the existing signage; intersection alignment; intersection conditions; and crossing type
  - b. Staff may review crash history;
  - c. Staff may collect data or utilize the city electronic data collection devices (i.e. JAMAR Unit);
  - d. Staff may use passive traffic calming measures - such as police speed enforcement or the city speed display vehicle;
  - e. Staff may install temporary emergency signage or other traffic control devices at this phase.

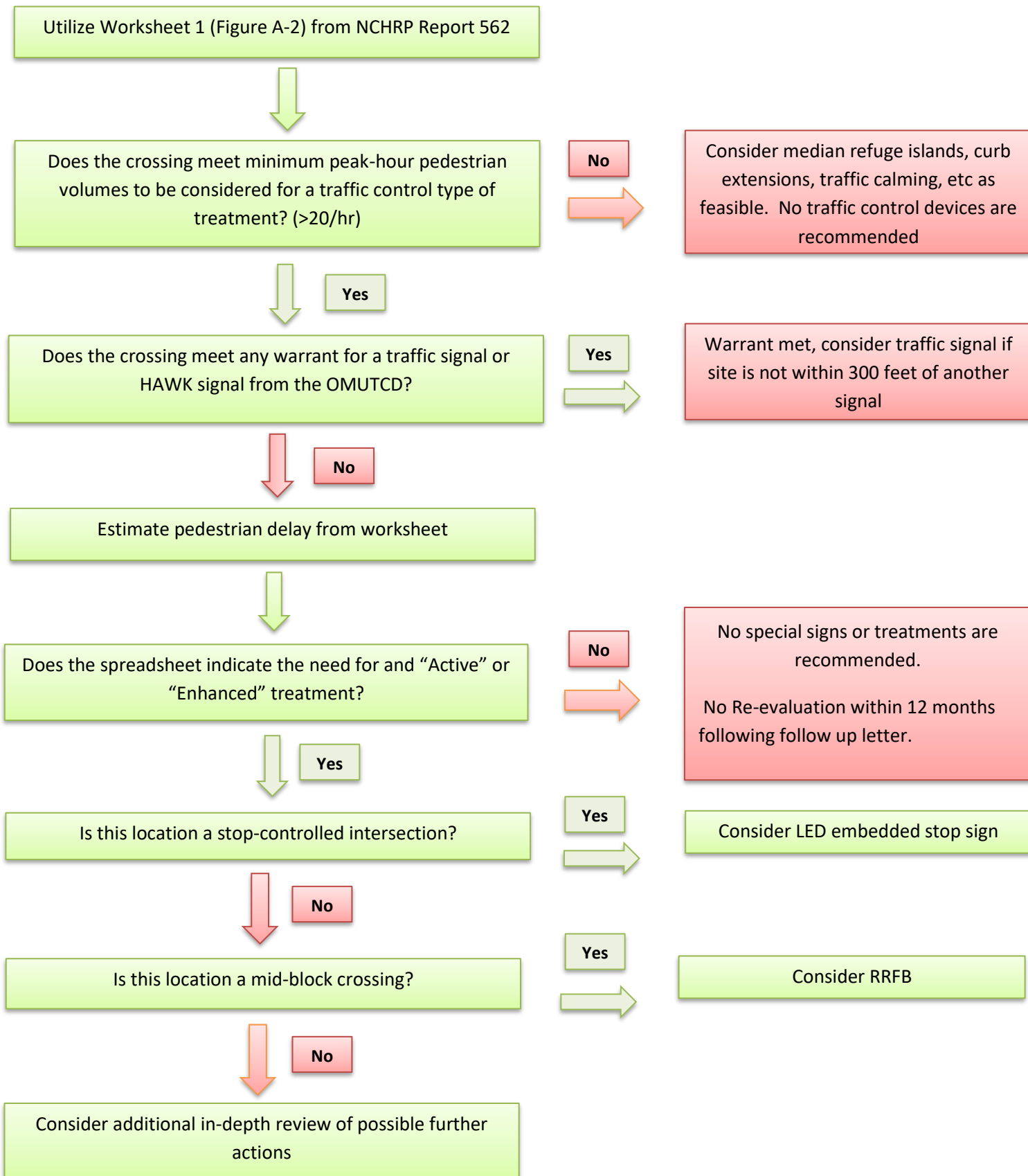
If there is no issue observed from this initial staff review, or if the issue is resolved by one or more of the above measures, the City will present the results to the individual or group that requested the evaluation by letter. This may represent justification for not proceeding further with the process and the request will be closed at that time in writing to the citizen or group. The Staff shall report on the next traffic safety committee meeting the recommendations and/or conclusions of this initial evaluation. Note: Following the initial evaluation, the issue will not be reviewed again for a minimum of 12 months from the date the request is initially closed in writing, unless otherwise approved by the Committee.

- 3) If the issue warrants further investigation or possibly a more detailed study, a **2<sup>nd</sup> Evaluation Phase** is conducted after the work in the initial phase is completed. The City may choose to collect additional information and data within the requested area within a period of time that is reasonable to the existing staff schedules and duties. A written letter notifying the citizen or group, or a public meeting notice of the effective area may be held at this time by the City to inform all parties of the issue and collect more information that will be dependent on the scale of the issue.
- 4) All appeals to the Traffic Safety Committee's decision shall be reviewed by the Hudson City Manger or his/her designee as assigned. The City Manager's decision shall be final.
- 5) The data collection by the City may include one or more of the following:
  - a. Vehicle Volume count to determine peak-hour traffic
  - b. Vehicle Volume count to determine 24-hour traffic

- c. Pedestrian Volume count to determine peak-hour traffic
- d. Pedestrian Volume count to determine 24-hour traffic
- e. Speed study to determine existing speed data
- f. If not collected above, the crash data for the most recent three (3) years within the roadway section or the immediate area of the traffic issue shall be reviewed and utilized.
- g. A topographical and/or boundary survey of the area.
- h. Other informational data that may be applicable.



6) The 2<sup>nd</sup> Evaluation phase will then continue through the following process:



<b>WORKSHEET 1: PEAK-HOUR, 30 MPH (44 KM/H) OR LESS</b>		
Analyst and Site Information		
Analyst: Analysis Date: Data Collection Date:	Major Street: Minor Street or Location: Peak Hour:	
Step 1: Select worksheet (speed reflects posted or statutory speed limit or 85 <sup>th</sup> percentile speed on the major street): a) Worksheet 1 – 35 mph (55 km/h) or less b) Worksheet 2 – exceeds 35 mph (55 km/h), communities with less than 10,000, or where major transit stop exists		
Step 2: Does the crossing meet minimum pedestrian volumes to be considered for a TCD type of treatment?		
Peak-hour pedestrian volume (ped/h), $V_p$	2a	
If $2a \geq 20$ ped/h, then go to Step 3.		
If $2a < 20$ ped/h, then consider median refuge islands, curb extensions, traffic calming, etc. as feasible.		
Step 3: Does the crossing meet the pedestrian volume warrant for a traffic signal?		
Major road volume, total of both approaches during peak hour (veh/h), $V_{maj-s}$	3a	
Minimum signal warrant volume for peak hour (use 3a for $V_{maj-s}$ ), SC SC = $(0.00021 V_{maj-s}^2 - 0.74072 V_{maj-s} + 734.125)/0.75$ OR $[(0.00021 3a^2 - 0.74072 3a + 734.125)/0.75]$	3b	
If $3b < 133$ , then enter 133. If $3b \geq 133$ , then enter 3b.	3c	
If 15 <sup>th</sup> percentile crossing speed of pedestrians is less than 3.5 ft/s (1.1 m/s), then reduce 3c by up to 50 percent; otherwise enter 3c.	3d	
If $2a \geq 3d$ , then the warrant has been met and a traffic signal should be considered if not within 300 ft (91 m) of another traffic signal. Otherwise, the warrant has not been met. Go to Step 4.		
Step 4: Estimate pedestrian delay.		
Pedestrian crossing distance, curb to curb (ft), L	4a	
Pedestrian walking speed (ft/s), $S_p$	4b	
Pedestrian start-up time and end clearance time (s), $t_s$	4c	
Critical gap required for crossing pedestrian (s), $t_c = (L/S_p) + t_s$ OR $[(4a/4b) + 4c]$	4d	
Major road volume, total both approaches or approach being crossed if median refuge island is present during peak hour (veh/h), $V_{maj-d}$	4e	
Major road flow rate (veh/s), $v = V_{maj-d}/3600$ OR $[4e/3600]$	4f	
Average pedestrian delay (s/person), $d_p = (e^{v t_c} - v t_c - 1) / v$ OR $[(e^{4f \times 4d} - 4f \times 4d - 1) / 4f]$	4g	
Total pedestrian delay (h), $D_p = (d_p \times V_p)/3,600$ OR $[(4g \times 2a)/3600]$ (this is estimated delay for all pedestrians crossing the major roadway without a crossing treatment – assumes 0% compliance). This calculated value can be replaced with the actual total pedestrian delay measured at the site.	4h	
Step 5: Select treatment based upon total pedestrian delay and expected motorist compliance.		
Expected motorist compliance at pedestrian crossings in region, Comp = high or low	5a	
<b>Total Pedestrian Delay, <math>D_p</math> (from 4h) and Motorist Compliance, Comp (from 5a)</b>	<b>Treatment Category</b> (see Descriptions of Sample Treatments for examples)	
$D_p \geq 21.3$ h (Comp = high or low) OR $5.3 \text{ h} \leq D_p < 21.3$ h and Comp = low	RED	
$1.3 \text{ h} \leq D_p < 5.3$ h (Comp = high or low) OR $5.3 \text{ h} \leq D_p < 21.3$ h and Comp = high	ACTIVE OR ENHANCED	
$D_p < 1.3$ h (Comp = high or low)	CROSSWALK	

Figure A-2. Worksheet 1.

- 7) If the City determines through this **2<sup>nd</sup> Evaluation Phase** that a LED-embedded stop sign is not warranted or shall not be implemented, then the citizen or group shall be notified of the recommendation via US mail of the denial. If the citizen does not agree with the determination of the Committee, they may request a meeting to appeal the decision to the City Administration. The City of Hudson Administration shall be the final authority of any appeals regarding the issue. Following the detailed evaluation and denial, the issue will not be reviewed again for a minimum of 12 months from the date the request is initially closed in writing, unless otherwise approved by the Committee.
- 8) If the City determines through the above information that a LED-embedded sign is warranted or shall be implemented, then the recommendation shall be placed on the next scheduled Committee meeting and the type of measure shall be voted on by the Committee in order to implement the project into the City schedule or a future City budget, as needed. If the measures that are recommended by the Committee can be implemented within existing budgets, the process will be resolved as soon as the City staff can implement the measures. If the solution is a substantial cost (i.e. Above \$25,000), the City may need to obtain the services of a professional consultant and/or contractor to implement the necessary improvements. The City Council will need to approve any design or improvement costs above the current administrative thresholds. The City will communicate and involve the citizen(s) or group(s) on the appropriate sequence of design and construction, and any solution(s) throughout the design process. The design and construction will be completed as soon as possible following the City approval and when the necessary funds are available.
- 9) The City may choose to install temporary or trial installations that may be used to evaluate the use of LED-embedded sign's impact to the area prior to a final design and improvements. These options will be left to the discretion of the City of Hudson Traffic Safety Committee.
- 10) The City will implement the final permanent measures following the above steps are completed as needed.
- 11) After one year following the final completion of the improvements, the committee will re-evaluate the project and report at the next scheduled committee meeting. This may include additional data collection, comments by the local neighborhood, effectiveness of the improvements, and any additional items.

- End of Policy -

## Appendix A - Definitions:

- 12) This “Policy” applies to the Special Traffic Sign review process within the City of Hudson, Ohio.
  - 13) The term “RRFB” refers to Rectangular Rapid Flashing Beacon or pedestrian-actuated enhancement sign used in combination with a pedestrian, school, or trail crossing warning signs to improve safety at uncontrolled, marked crosswalks.
  - 14) The term “HAWK” refers to a High-Intensity Activated crossWalk beacon is a pedestrian hybrid beacon (PHB) traffic control device used to increase motorists' awareness of pedestrian crossings at uncontrolled marked crosswalk locations. A HAWK beacon or PHB is distinct from pre-timed traffic signals and constant flash warning beacons because it is only activated by pedestrians when needed.
  - 15) The term “City” refers to the City of Hudson, Ohio including all departments and personnel.
  - 16) The term “Committee” refers to the City of Hudson Traffic Safety Committee.
  - 17) The term “Citizen” refers to the general public, neighborhood association, or motorist.
  - 18) The term “petition” refers to the safety petition and process as identified in the City Codified Ordinance.
  - 19) The policy and procedures for the installation of Special Traffic Sign installation shall apply on EXISTING residential local and collector streets only, with a maximum legal posted speed of 25 miles per hour, since these streets are multi-purpose type facilities shared by pedestrians, cyclist, automobiles, and other vehicles. Note that the installation of Special Traffic Signs at all other locations will be as determined by a professional engineering traffic study or design.
  - 20) The term “Local residential collector streets” – refers to traffic from local residential roads and funnels them to the arterial network.
  - 21) The term “Local residential streets” - generally classified by default once all arterial and collector roadways are identified, the remaining roadways are classified as the local roads.
  - 22) This policy shall be in conformance with the Ohio Manual of Traffic Control Devices, and the Institute of Transportation Engineers (ITE) Traffic Calming Manual, National Cooperative Highway Research Program (NCHRP) Report 562, current editions.
  - 23) The term “arterial” – typically emphasizes a high level of traffic mobility and a low level of property access. Arterials accommodate relatively high levels of traffic at higher speeds than other functional classes and serve longer distance trips. Arterials also serve significant intra-area travel, such as between central business districts and outlying residential areas.
  - 24) The term “collector” – Collector streets provide land access and traffic circulation within residential neighborhoods, commercial and industrial areas. Collector streets also collect traffic from local streets in residential neighborhoods and channel it into the arterial system.
- 1.0 DEFINITIONS
- 25) The term “Average Daily Traffic (ADT)” - The amount of vehicular traffic that crosses an imaginary line across a roadway in a 24-hour period. ADT information typically includes both directions of vehicle travel (if on a two-way street).
  - 26) The term “Controlled Pedestrian Crossing” - A pedestrian crossing where motorists are required to stop by either a stop sign or traffic signal
  - 27) The term “Traffic Signal” - A conventional traffic signal with circular red, yellow, and green displays for motorists and Walk/Don't Walk signals for pedestrians that is applied at a pedestrian crossing.
  - 28) The term “Rectangular Rapid Flash Beacons (RRFBs)” - RRFBs are small rectangular yellow flashing lights that are deployed with pedestrian crossing warning signs. They are typically

actuated by a pedestrian push button and flash for a predetermined amount of time, to allow a pedestrian to cross the roadway, before going dark. RRFBs are warning devices and do not themselves create a legal requirement for a vehicle to stop when they are flashing.

- 29) The term "School Crossing" is defined as a legally marked and signed crossing location where student pedestrians are crossing. This policy refers to "School Crossings" that do not have a crossing guard.
- 30) The term "Special Traffic Sign" refers to those signs not in bulk quantities within the City of Hudson sign inventory including, but not limited to LED-embedded signs, RRFBs, etc.
- 31) The term "Uncontrolled Pedestrian Crossing" - An established pedestrian crossing that does not include a traffic signal, or a stop sign that requires motor vehicles to stop before entering the crosswalk.

## **Appendix B – General Information**

This policy is created to accompany, not replace, the 2016 City of Hudson traffic calming policy and procedures. Both documents are intended to provide a process to respond to citizen's concerns regarding traffic safety and calming issues in a structured and fair approach. Traffic conditions, volume, excessive speeds, and other site conditions may affect the safety of our main and neighborhood streets and pedestrian connectivity system and the objective of this policy is to aid in reducing these issues.

This policy and procedure is for sensible use of special traffic signage through implementation of a standard request format; evaluation process; recommendations; and the possible implementation of traffic calming measures, which the City shall use as a guideline. Requests in which a special traffic sign is requested shall follow the attached flowchart and outline in this policy in order to be the safest, most effective, and the most prudent use of City funds to correct the traffic issue.

The citizen's participation is a very important component in the implementation improving safety at intersections and the city staff will communicate with the various neighborhood groups or citizen(s) that request a traffic calming measure throughout the process.