# TOWN OF LEWISVILLE PEDESTRIAN CROSSING TREATMENTS August 13, 2020

## MISSION STATEMENT

The Town of Lewisville wishes to have a procedure whereby its residents can petition the Town to incorporate un-signalized or mid-block pedestrian crossing treatments on municipal or state maintained streets.

The purpose of this document is to present ways in which residents can suggest solutions to traffic and safety problems as approved by the Lewisville Town Council. Consideration is given to a variety of traffic concerns and to the characteristics of these concerns on a case-by-case basis.

The following outlines these guidelines and procedures, which can be used to develop the optimum solution or solutions to each particular situation. There are many factors taken into consideration when reviewing residential traffic concerns in order to determine whether an un-signalized or mid-block crossing is warranted. These factors include: the surrounding roadway network, resident access, speeds and/or volume of traffic, accident history, neighborhood response, budget considerations and existing or future land use conditions. This policy is only for the consideration of un-signalized or mid-block crossings maintained by the North Carolina Department of Transportation or the Town of Lewisville. (To determine who is responsible for your street's maintenance, please go to <a href="https://www.lewisvillenc.net">www.lewisvillenc.net</a> and click on *Our Town and then Town Boundary Map*.)

Note: Public health and safety concerns are always the overriding consideration when installing or removing traffic control devices.

#### **Definitions:**

85th Percentile Speed: The 85th percentile speed is the speed exceeded by the fastest 15% of vehicles.

AADT: Average Annual Daily Traffic

<u>Local Residential Street:</u> A local residential street is one that connects individual driveways to the roadway network. Often these streets contain subdivision type characteristics, contain cul-de-sacs, and are unstriped with curb and gutter.

<u>Local Residential Collector</u>: A residential collector street is one that connects individual driveways and local residential streets to connector roadways. Often these streets are striped, contain sidewalks, have a good alignment, and are of higher speed than local residential streets.

<u>MUTCD:</u> Manual on Uniform Traffic Control Devices. This is a nationally published standard, published by the Federal Highway Administration under 23 Code of Federal Regulations (CFR), Part 655, Subpart F, that governs the use of all public street signs and pavement markings.

NCDOT Maintained Street: A street that is maintained by the North Carolina Department of Transportation.

<u>Posted Speed Limit:</u> The speed limit that is ordinanced and posted on a street based on design criteria such as vertical and horizontal sight distances.

<u>Town Maintained Street:</u> A street that is currently on the Town's list of streets which it maintains. Pedestrian Crossing Treatments: An Un-signalized Crossing or Midblock Crossing.

## Criteria

In order to be considered for un-signalized or midblock pedestrian crossings, the following criteria should be met:

- The Street must be a public street, owned and maintained by the Town or a public street maintained by the North Carolina Department of Transportation.
- The Street shall be classified as a local residential, a local residential collector street or an arterial road, Collectors, arterials, or thoroughfares.
- Private roads will not be considered as eligible.
- The posted speed limit in the vicinity of the mid-block crossing treatment shall be 45 mph or less.
- The street must not be more than two travel lanes wide (two lanes with a common left turn would not qualify).
- The street must be at least one thousand (1,000) feet in length.
- The street must have no more than 15,000 AADT.
- The speed of at least 15% of traffic must be no more than the posted speed to qualify for the installation of an un-signalized pedestrian crossing treatment.
- The street shall have adequate horizontal and vertical sight distances as determined by the Public Works Director or his/her designee.
- There is not another un-signalized crossing within 300 feet.
- There is not a signalized intersection within 400 feet.
- Streets with speeds of 35 mph or less: On streets with a posted speed or 85th percentile operating speed of 35 mph or less, a pedestrian volume threshold of 20 pedestrians per pedestrian peak hour applies.
- Streets with Speed Greater than 35 mph: On streets with a posted speed or 85th percentile operating speed greater than 35 mph, a pedestrian volume threshold of no more than 14 pedestrians per pedestrian peak hour applies.
- · Lower volume thresholds may be considered for crossings with a significant presence of a special population, such as children or the elderly. Where the estimated pedestrian volume is considered low, no action is required.

#### **Initial Steps**

The pedestrian crossing treatment evaluation process may be initiated through a variety of mechanisms. Most commonly, it is expected that the Town will initiate an evaluation of a crossing location at the request of a citizen or organization. As local agencies develop pedestrian or greenway plans, it may be beneficial to review crossing

locations identified and prioritized through the planning process to better evaluate infrastructure needs and develop useful cost estimates.

While it is more likely that this evaluation process will be performed in response to a particular request or prioritized location, it could also be utilized as a proactive means to systematically review existing crossing locations as part of a basic needs assessment and inventory.

## **General Information**

- 1. **Defining the Concern:** Upon receiving a request about traffic concerns on a street, the Public Safety Committee will require staff to perform an investigation. Based on findings from the initial investigation, additional traffic studies may be scheduled. The purpose of these additional studies is to determine if whether the traffic concern is related to speeding or volume and to quantify the severity of the traffic concern. These studies will indicate whether the concern qualifies for pedestrian crossing treatments.
- 2. Who Pays for Control Measures? The cost of the installation of the pedestrian crossing treatments shall be the responsibility of the petitioner.
- 3. Standard Procedures for Implementation of pedestrian crossing treatments.
  - a. STEP I: Initiation: Pedestrian Crossing Treatments requests may be made to the Town Manager and copied to the Town Clerk by any of the following methods:
    - i. A written request from the Board of the Neighborhood Homeowners Association acting for the neighborhood; a minimum of five signatures from the owners of five separate properties in the vicinity of the proposed crossing; or a public or private organization will be required before studies will be initiated.

The request should describe the reasons for the request emphasizing special or existing circumstances that exist that justify the request.

If the request is being made for consideration of pedestrian crossing treatments on roads under the care and maintenance of the NCDOT, the petitioners should show evidence that they have made a request for pedestrian crossing treatments with the NCDOT, provide documentation related to any studies that were conducted and the resolution of the request.

- ii. Staff Field Reviews.
- iii. Request by the Public Safety Committee.
- b. STEP II: Committee Review/Town Staff Review/Traffic Engineering Analysis Classification:
  - i. The Public Safety Committee or a Subcommittee of the Public Safety Committee and staff will review the concern(s) with the organization, neighborhood group, homeowner association, or individuals initiating the request at the next scheduled Public Safety Advisory Committee meeting to assure that the scope and details of the concern are

clearly identified. A traffic study may include any or all of the following, depending on the scope of the concern:

- (1) Distance to Adjacent Crossing
- (2) Vehicle Traffic Volume
- (3) Speed Limit and/or Operating Speed
- (4) Pedestrian Volume
- (5) Number of Lanes and/or Crossing Distance
- (6) Total Pedestrian Delay
- ii. Traffic Studies may be necessary to obtain the following information:
  - (1) Average Annual Daily Traffic (AADT)
  - (2) Average speed of the top 15% of traffic
  - (3) Vehicle speed check
  - (4) Vehicle turning movement counts
  - (5) Origination/Destination study
  - (6) Pedestrian counts
  - (7) Accident report summary
  - (8) Collision diagram studies
  - (9) Location of any existing pedestrian crossing treatments.
- iii. The cost of Contracted Traffic Studies will be borne by the petitioner.
- iv. Additional considerations:
  - (1) Lighting considerations,
  - (2) Observed crossing behaviors and travel paths,
  - (3) Presence of special pedestrian populations (e.g. children and/or the elderly),
  - (4) Future traffic and or pedestrian volumes (5 to 10 years out), and
  - (5) Future nearby land use changes, growth, or development patterns (5 to 10 years

out)

- (6) Existing sidewalk or other existing pedestrian facilities.
- c. STEP III: Public Safety Committee Recommendation:

The Town Staff analyzes traffic data, field information and other available information pertaining to the particular area of concern in determining if pedestrian crossing treatments are warranted. These studies and data are provided to the Public Safety Advisory Committee at its next scheduled meeting, following receipt of information, for review and its recommendation(s).

- 5. If, after analyzing the data and other supporting information, the Committee determines that the request for the Pedestrian Crossing Treatment is valid, the recommendation will be forwarded to the Town Manager for costs and for implementation by Public Works.
- 6. If it is determined that the location for the pedestrian treatment is denied, the location shall not be reconsidered for a period of three years from the decision date unless conditions change significantly such as an increase special populations and land planning.