Background

Pedestrian traffic in urban and suburban areas continues to increase. When temporary pedestrian needs were suddenly identified on several projects either under construction or in final design, NCDOT decided that guidance and a procedure should be established for resolving these issues. A committee comprised of a cross section of NCDOT staff was formed and the committee produced the Guide for Temporary Pedestrian Accommodations. These guidelines help define the process for evaluating temporary pedestrian needs, sets up a Pedestrian Task Force for consultation when no feasible or practical alternative seems available, and defines areas in the Project Planning phase or Project Development phase where early identification of needs could be made.

However, it is also acknowledged that conditions within the project area can change rapidly and temporary pedestrian needs could be identified at any time during the life of the project. These procedures were developed to help NCDOT personnel work through the guidelines regardless of the phase of the project.

Purpose

The purpose of this procedure is to guide NCDOT Engineers, Consultants, and Division personnel in evaluating the need for Temporary Pedestrian Accommodations during construction. Identifying and assessing the impact of pedestrian traffic in work zones early in the project planning phases is the goal. However, issues can be identified at any time during the life of the project and should go through the appropriate process to resolve them.

Responsibility

The Project Development Team has the main planning responsibility for identifying the need for potential pedestrian accommodations during construction. The Work Zone Traffic Control Engineer has the main design responsibility of incorporating the pedestrian accommodations into the Transportation Management Plan (TMP) and of reviewing the implemented Pedestrian

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Management Plan. Coordination with the Divisions, NCDOT Design Units, and the Division of Bicycle and Pedestrian Transportation is required throughout this procedure.

**Scheduling and Time Constraints**

Assessing project sites for the potential need for pedestrian accommodations should begin at or around the time of Project Scoping. The Project Development Team should follow the Scoping Process in order to request input from the appropriate NCDOT personnel in a timely manner. The level of pedestrian accommodation will be based on these volumes and will be included in the planning document.

**Procedures**

The Project Development Team should identify and assess projects that may need pedestrian accommodations during construction and document any decisions or project commitments made with regards to these accommodations. While, ideally, the discussion should take place before or during the Scoping Meeting, these procedures can be followed at any time during the planning process once the need arises.

**Procedure 1: Collecting Data**

**Step 1.** Conduct a site visit. Fill out the [Community Impact Assessment Checklist](https://connect.ncdot.gov/resources/safety/Pages/Traffic-Data.aspx) during the visit. The form will prompt you to look at several aspects of the project. Reference [Planning a Project Engineer’s Field Trip](https://connect.ncdot.gov/resources/safety/Pages/Traffic-Data.aspx) for further directions on organizing the trip. Some indicators to look for are:

- Worn paths
- Existing sidewalks (check for existing ADA compliance, confirm/coordinate with the ADA Coordinators office)
- Schools
- Residences in close proximity to community services
- Parks, stadiums, community ballparks in close proximity to the project study area

**Step 2.** If any of the Step 1 indicators exist, obtain seven-day pedestrian volume counts by request through the NCDOT Traffic Safety Unit or by conducting counts in accordance with Traffic Safety’s data specifications. Request forms and count specifications are available through the following link: [https://connect.ncdot.gov/resources/safety/Pages/Traffic-Data.aspx](https://connect.ncdot.gov/resources/safety/Pages/Traffic-Data.aspx)

Pedestrian volumes are to be collected on all facilities with existing sidewalks or worn footpaths. Reference the [Scoping Process for R, U, and I Projects](https://connect.ncdot.gov/resources/safety/Pages/Traffic-Data.aspx) for additional information on requests. The following information is also needed to help identify pedestrian needs during construction:

- Community Characteristics Report from Community Studies
- Accident Report from Transportation Mobility and Safety Division

**Step 3.** Compile the information concerning pedestrians and include on the initial scoping information sheets. Continue to [Procedure 2](#).

**Procedure 2: Determining the Level of Pedestrian Accommodation**

The Project Manager and Community Planner will follow these steps before or after the Scoping Meeting has been held, dependent upon when pedestrian counts are available.
Step 1. Determine the level of pedestrian accommodation based on pedestrian volumes:

<table>
<thead>
<tr>
<th>7-day Average Pedestrian Volume, ped/day</th>
<th>Pedestrian Accommodation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10</td>
<td>Absence of Need</td>
</tr>
<tr>
<td>10-99</td>
<td>Basic</td>
</tr>
<tr>
<td>100-499</td>
<td>Moderate</td>
</tr>
<tr>
<td>500 or more</td>
<td>Full</td>
</tr>
</tbody>
</table>

Step 2. Document the level of pedestrian accommodation to include in the planning document and any required project commitments. During the final design phase, pedestrian maintenance will be incorporated into the TMPs.

Procedure 3: Designing the Transportation and Pedestrian Management Plans

These series of procedures should be used when a need for pedestrian accommodations during construction is identified after the planning document has been completed, but before the project is let to construction. The unit that identifies the need is responsible for initiating the process.

Step 1. The pedestrian level of accommodation has been defined at this point. The Work Zone Traffic Control Engineer should evaluate the following:

- Can pedestrian traffic be maintained safely on-site during construction without significant increases in the cost and duration of the project or increases in environmental impacts? If yes, consider the following pedestrian traffic strategies:
  - Travel lane shifts
  - Signal modification
  - Stage construction
  - Reduce onsite vehicular parking for pedestrian access

Step 2. If pedestrian traffic cannot be safely maintained on-site, items to consider for off-site detours are:

- ADA Compliance (should be similar in condition as the existing path and may not be upgraded during construction unless full pedestrian accommodation is specified)
- Detour length (no greater than ½ mile additional travel distance)
- Public Safety and Security
- Terrain (should be similar to that of the existing path)

Evaluate other potential alternates for maintain pedestrians off-site during construction such as:

- Public Transportation/Transportation Services (Coordinate with NCDOT Public Transportation Division and/or municipality).
- Contractor supplied, operated, and maintained vehicle(s) for both able-bodied and disabled pedestrian transport
Identity other existing area transport services for both able-bodied and disabled persons

**Step 3.** Involve the Project Manager and Division personnel, as necessary, to discuss the impacts of potential alternatives on cost, duration of the project construction, and environmental impacts.

**Procedure 4. Implementing the Pedestrian Accommodation during Construction**

The Construction team and Contractor will implement the Pedestrian Plan as prepared by the Design Team. The Work Zone Traffic Control team will routinely review the project with a field inspection checklist to ensure compliance to the selected level of pedestrian accommodations and to review the details/devices installed to support maintenance of pedestrian traffic. This review will also address any constructability issues.

However, when a need for pedestrian accommodations arises after the project has been let to construction either the Work Zone Traffic Control Project Engineer or Division personnel will be responsible for initiating the process to finding a solution. At this time revisit any of the previous Procedures to collect data and revise the Pedestrian Plan.

**Policy, Regulatory, and Legal Requirements**

- Guide for Temporary Pedestrian Accommodations
- 23 CFR 630, Subpart J (Work Zone Safety and Mobility)

**Warnings and Precautions**

Failure to identify and provide temporary accommodations for pedestrians during construction where a need has been identified could result in project delays and increased construction costs for NCDOT, including the possibility of litigation.

**Resources and Tools**

- Guide for Temporary Pedestrian Accommodations
- Manual of Uniform Traffic Control Devices (MUTCD)
- Work Zone Impacts Assessment: An Approach to Assess and Manage Work Zone Safety and Mobility impacts of Road Projects.

**Contacts**

For suggestions to change this procedure or questions about performing this procedure contact the Pedestrian Task Force. **The Pedestrian Task Force can be contacted and consulted with at any time during planning, design, and construction. If a need is identified during construction, schedule a meeting immediately.**

- Work Zone Traffic Control
- ADA Coordinator
- Bicycle and Pedestrian Division
- PICSViz (Community Studies)

**User Access**

- Restricted NCDOT, FHWA, MPO, RPO, Consultants, etc.