NCDOT Speed Limit Review Documentation Forms

The Roadway Speed Limit Review Packet includes three documents:

1. Data Collection OFFICE Worksheet (1 page)
2. Data Collection FIELD Worksheet (2 pages)
3. Speed Limit Assessment Worksheet (2 pages)

The speed limit study should be conducted using the following steps. The completion of each item is at the discretion of the engineer.

1. Determine the segmentation of the study road

   An initial review of aerial imagery, the crash report, and the roadway cross section should be conducted to determine if the roadway should be split into two or more segments. Reasons for segmenting the roadway may include:

   - Considerable change in driveway density
   - Considerable change in crash pattern
   - Considerable change in roadway cross-section outside of an intersection influence area
   - Considerable change in land use

2. Using an aerial image tool (i.e. online mapping tool), complete the Data Collection OFFICE Worksheet. For a definition of terms, see the **User Guide for Roadway Speed Limit Review Forms** PDF. In addition to a glossary of terms, the document bookmarks important pages of select reference documents.

3. Complete the Data Collection FIELD Worksheet. For a definition of terms, see the **User Guide for Roadway Speed Limit Review Forms** PDF. In addition to a glossary of terms, the document provides bookmarks for important pages of select reference documents.

4. Complete the Speed Limit Assessment Worksheet

   The purpose of the assessment worksheet is to document the considerations made by the engineer when determining the speed limit. For each element, place an X in the appropriate column to reflect if the data collected for that element supports reducing, increasing, or maintaining the current speed limit. The **Quick Guide on Factors to Consider for Speed Studies** PDF provides a summary of research-based evidence regarding the relationship between each element and speed. If the no data were collected for the element, place an X in the “not evaluated" column.

   In the final column, an X should be placed in any row for which the engineer judges an element to be critical in the determination of the speed limit. This column assists in recording the relative differences in importance of the elements given the context of the area in which the study segment is located. The final recommended speed limit and ordinance number (if necessary) should be noted at the bottom.

5. Store the completed documentation in an organized manner, either electronic or hard copy, for easy retrieval in case of request or reference for future updates to the study.

ITRE

Reset All Pages

NCDOT Speed Limit Review - Data Collection OFFICE Worksheet

Date: _____ **Reference #:** _____ **Completed By:** _____

County: _____ **Municipality:** _____ **NCDOT Route ID:** _____

Study Road: _____ **Length:** _____ miles **Study Motivation:** _____

Study Segment Begins _____ _____ _____ of _____
(distance) *(units)* *(direction)* *(reference road)*

Study Segment Ends _____ _____ _____ of _____
(distance) *(units)* *(direction)* *(reference road)*

Current Speed Limit: _____ mph ☐ Statutory ☐ Ordinance # _____ **Terrain:** Select One

Speed Limit Upstream of Starting Point: _____ mph ☐ Statutory ☐ Ordinance # _____

Speed Limit Downstream of Ending Point: _____ mph ☐ Statutory ☐ Ordinance # _____

Past Speed Studies

Date: _____ Result: _____

Date: _____ Result: _____

Road Classification & Area Type

Functional Class: Select One **NCDOT Complete Street Area Type:** Select One

AADT: _____ vehicles per day

Driveway/Intersection/Offset

Number of Driveways by Type: _____ Business _____ Residential _____ Other: _____

Driveway Density:
☐ Consistent throughout segment
☐ Considerable variation throughout segment

Number of Intersections by Type: _____ Signalized _____ Unsignalized

Typical Building Offset to Roadway:
☐ Consistent _____ feet (approximate)
☐ Varies from _____ to _____ feet (approximate)

Multimodal Facilities

	Y	N	
Are schools present along the segment?	☐	☐	Note: _____
Are parks or recreation areas present along the segment?	☐	☐	Note: _____
Are pedestrian facilities present along the segment?	☐	☐	Note: _____
Are transit facilities designated along the segment?	☐	☐	Note: _____
Are bicycle facilities designated along the segment?	☐	☐	Note: _____
Is on-street parking designated?	☐	☐	Note: _____

Crashes

Date: M M / D D / Y Y to M M / D D / Y Y TEAAS Mile Post: _____ to _____

Fatal: _____ A: _____ B: _____ C: _____ PDO: _____

Total Rate: _____ per 100 million VMT State-wide rate for road type: _____ per 100 million VMT

NCDOT Speed Limit Review - Data Collection FIELD Worksheet

Date: _____ **Reference #:** _____ **Completed By:** _____

County: _____ **Current Speed Limit:** _____ mph

Study Road: _____ from _____ to _____

Surface Treatment

Typical Pavement Width: _____ feet

Pavement Type: ☐ Asphalt ☐ Concrete ☐ Dirt/Gravel ☐ Other: _____
Pavement Condition: ☐ Good/Fair ☐ Poor ☐ None
Marking Condition: ☐ Good/Fair ☐ Poor ☐ None
Median Type: ☐ None ☐ Traversable ☐ Non-Traversable Width: _____ feet

Total # of Thru Lanes: _____ Typical Lane Width: _____ feet

TWLTL Present? ☐ Yes ☐ No

Shoulders

Typical Shoulder Width: _____ feet paved ☐ Varies from _____ to _____ feet
_____ feet unpaved ☐ Varies from _____ to _____ feet

Shoulder Condition: ☐ Good/Fair ☐ Poor
Recoverable Shoulder: ☐ Yes ☐ No Comment: _____
Curb: ☐ Vertical ☐ Sloped ☐ None
Typical Distance to Roadside Hazards: _____ feet ☐ Varies from _____ to _____ feet
Roadsize Hazard Rating: _____

Driving Investigation

Conduct a driving investigation of the segment and note any areas with potentially inadequate sight distance, vertical alignment, or horizontal alignment. Include comments on locations where travel speed is constrained. Attach ball-bank study sheet if needed.

Notes: _____

Check as appropriate

Pedestrian Activity Observed/Expected:	☐ **None**	☐ **Low**	☐ **Medium**	☐ **High**
Bicycle Activity Observed/Expected:	☐ **None**	☐ **Low**	☐ **Medium**	☐ **High**
Truck Activity Observed/Expected:	☐ **None**	☐ **Low**	☐ **Medium**	☐ **High**

Operating Speed Study

Result of current operating speed study (this may include the results from US Limits 2): _____

Purpose of Road

Explain the main purpose of the road. See user guide for examples. _____

NCDOT Speed Limit Review - Data Collection FIELD Worksheet (cont.)

Notes

Use this sheet to record any additional notes about the study segment or the data collection effort. Note any warning or regulatory signs missing or in visible need of replacement or repair. An image or drawing of the site may be provided at the bottom.

Plan-view Sketch of Road Segment *Include major intersecting roads and label each intersection control type*

Photographs

Description of any photographs attached (complete as necessary)

Notes: _____

Attachments *Check as appropriate and list additional attachments*

- ☐ Strip Analysis/Crash Data
- ☐ Features Report
- ☐ Neighborhood Petition
- ☐ Photographs
- ☐ Speed Data
- ☐ Ball Bank Study Form
- ☐ _____
- ☐ _____
- ☐ _____

NCDOT Speed Limit Review - Speed Limit Assessment Worksheet

Date: _____ **Reference #:** _____ **Completed By:** _____

County: _____ **Current Speed Limit:** _____ mph

Study Road: _____ from _____ to _____

This worksheet helps to record the elements considered by the engineer when determining a speed limit. For each element, place an X in the appropriate column depending on whether the element supports increasing the speed limit, decreasing the speed limit, or maintaining the current speed limit.

In the far column, check the box if the element is critical in determining the speed limit for this road.

Element	Not Evaluated/ Not Applicable	Supports Reducing Speed Limit	Supports No Change in Speed Limit	Supports Increasing Speed Limit	Check If Element is Critical
Road Classification & Area Type					☐
Driveways / Intersections / Offset					☐
Multimodal Facilities					☐
Crashes					☐
Surface Treatment					☐
Shoulders					☐
Driving Investigation					☐
Operating Speed Study					☐
Purpose of Road					☐
Neighborhood Petition					☐
Statutory Speed Limit					☐
Other:					☐
Other:					☐
Other:					☐

Recommended Speed Limit: _____ **mph**

☐ Ordinance # _____

☐ Ordinance # _____

☐ Ordinance # _____

NCDOT Speed Limit Review - Speed Limit Determination Worksheet (cont.)

Comments and Discussion

Include any additional factors which influenced the recommended speed limit. This could include observed traffic conflicts, conditions not readily apparent to the driver (e.g. hidden driveways, schools, shopping centers, seasonal generators, or generators which create unique traffic conditions), or known tourist facility. It may also include consistency with other nearby similar roads.