

# RAIL-HIGHWAY GRADE CROSSING CONSOLIDATION SELECTION PROCESS

---

---

## **I. Identify Crossings for Possible Closure**

A railroad-highway grade crossing having any of the following characteristics should be analyzed for closing:

- a) Redundant railroad crossings such as crossings in cities/towns where the track crosses a road every few hundred feet.
- b) Crossings on unpaved roads and those with minimal average daily traffic (ADT) where an alternative route is readily available.
- c) Any crossing without active warning devices being considered for the installation of active warning devices.
- d) Adjacent crossings that are located within one-half mile of any crossing being upgraded or grade separated.
- e) Crossings involved in a high speed corridor or passenger route.
- f) Crossings with four or more trains crossing per day.
- g) Crossings where the geometrics of the track and/or roadway make the location of the crossing a hazardous location such as a "humped" crossing where trucks could get stuck on the track or a diagonal crossing where there is no safe way for a truck or long machinery to cross safely due to limited sight distance. (One solution to closing a diagonal crossing is to build a parallel road with the tracks to the next crossing).

Keep in mind that the road crossing the track should not serve as a main route for fire, ambulances or any other emergency vehicles.

## **II. Select Crossing(s) for Possible Closure**

Target crossing(s) for possible closure. Survey the community or surrounding area for crossings that meet any or all of the above-mentioned criteria. Drive the roads several miles each way from the tracks to determine if the crossing could be closed or at least dead-ended. Crossings of specific rail corridors, or within an individual county or community, should be evaluated.

Prepare a field investigation. Prior to the field investigation, find out as much information as possible about the crossing including the information on page 1 of the attached form. This data can be obtained by reviewing the railroad inventory, Investigative Index, contacting the NCDOT's Traffic Engineering Branch or the appropriate railroad. It is also helpful to have an aerial photograph (which, if available, may be obtained from NCDOT's Photogrammetry Unit) and a location map of the crossing.

## **III. Investigate the Crossing in the Field**

Provide a map (from county or city road maps) and a detailed sketch of the crossing and surrounding roads (see pages 4-6). Also, include photographs of the site.

#### **IV. Answer the Questionnaire (shown on page 7)**

For question 1, state the initial reason(s) this crossing was proposed to be closed.

The answer to questions 2, 3, 5, 6, 9, 10 and 11 may be obtained by contacting the City Manager, City Traffic Engineer, Mayor, Division Engineer, Area Traffic Engineer, Transportation Planning Branch, or the Division Traffic Engineer.

Questions 4, 7 and 8 can be determined by the field investigation. For instance, if an unpaved road runs parallel to the track and connects two separate streets which cross the track, it may be possible to pave the unpaved connector road and close one of the crossings.

The answer to question 11 may be the biggest obstacle to prevent the closing of the crossing. For instance, if a business is located near the crossing, the owners may oppose closing the crossing because of the inconvenience to their customers and employees. Homeowners also may oppose the closing of a crossing. When a municipal system crossing is proposed to be closed, the local government will have to be involved with the closing of the crossing and a public hearing must be held in accordance with G.S. 160A-299. If a state-maintained road falls within municipal limits, NCDOT will contact the municipality to discuss the proposal, related safety projects, and solicit their input. Public opinion has a significant impact on any action to close a crossing and public opposition to closing an existing railroad grade crossing ensures that any closing will be difficult. However, safety will always be considered as a priority over convenience.

Per Section 8A-4 of the Manual on Uniform Traffic Control Devices, "Any highway grade crossing for which there is not a demonstrated need should be closed." Having obtained as much information as possible by completing the Railroad Crossing Closing Form, you are now ready to recommend whether or not the crossing should be closed.

## RAILROAD CROSSING CLOSING FORM

<u>CROSSING NO</u>	<u>DIVISION</u>	<u>COUNTY</u>	<u>CITY</u>	<u>ROUTE</u>	<u>ACCIDENTS /10 YEARS</u>

<u>MILEPOST</u>	<u>RR NAME</u>	<u>PROJECT IN THE TIP?</u>	<u>SCHEDULED IN FFY</u>	<u>PROGRAM I.D.</u>
		(CIRCLE ONE) YES                      NO		

Check type of rail traffic that applies:     *Federally Designated High Speed Corridor*  
      *Passenger*  
      *Freight*

Normal Daily Train Moves = \_\_\_\_\_; Day (6am-6pm)= \_\_\_\_\_; Night (6pm-6am)= \_\_\_\_\_

Maximum Daily Train Moves = \_\_\_\_\_ (Include an explanation if necessary.)

Maximum Train Speed = \_\_\_\_\_ mph. Is train speed variable? (Circle)    *Yes*                      *No*

Normal Passenger Train Speed = \_\_\_\_\_; Normal Freight Train Speed = \_\_\_\_\_

Number of Tracks = \_\_\_\_\_ Thru; \_\_\_\_\_ Switching/Auxiliary

Existing Invest. Index = \_\_\_\_\_ Existing Preemption? (Circle)    *Yes*                      *No*

Existing Average Daily Traffic (ADT) = \_\_\_\_\_

Projected ADT Increase Per Year = \_\_\_\_\_%    School Bus Factor = \_\_\_\_\_

Existing Warning Devices are (Circle): (a) *Crossbucks*                      (b) *Flashers*                      (c) *Cantilevers*  
 (d) *Flashers & Gates*                      (e) *Cantilevers & Gates*                      (f) *STOP Signs*  
 (g) *Diamond-Grade Material*                      (h) *Buckeye Crossbucks*                      (h) *Other* \_\_\_\_\_

Is this railway track a candidate for future abandonment or is any significant increase or decrease anticipated in train traffic at this location?  
 Circle One:                      *Yes*                      *No*                      *Unknown*

Comments:

**MAP OF AREA** (*From Mapquest, County Road or City Street Map*)

**FIELD INVESTIGATION FOR CROSSING NO. \_\_\_\_\_**

DRAW SKETCH ON NEXT PAGE TO INCLUDE THE FOLLOWING:

- (a) Indicate road name/state road number and intersecting alternative road.
- (b) Indicate paved or unpaved roadways.
- (c) Indicate railroad name and track configuration.
- (d) Indicate type of road, (i.e., connector, dead end, etc.).
- (e) Indicate location and type of warning devices at adjacent crossings.
- (f) Indicate distance to adjacent crossings and alternative road routes.
- (g) Indicate type of warning devices at adjacent crossings.
- (h) Show existing and proposed traffic patterns including length of road in miles (kilometers).
- (i) Indicate quadrants with sight distance problems and type of problems (i.e., trees obscuring view, high embankments, horizontal & vertical curves).
- (j) Indicate approximate location and names of local businesses, location of adjacent homes and any other pertinent information.
- (k) Indicate potential roadway residue remaining as result of potential crossing closure.

If aerial photograph available, attach to closing form package.

Mission No. \_\_\_\_\_ Photo No. \_\_\_\_\_ Date of aerial photograph \_\_\_\_/\_\_\_\_/\_\_\_\_

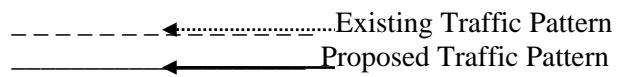
**FIELD INVESTIGATION FOR CROSSING NO. \_\_\_\_\_**

Name: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

No. of Field Photos Attached \_\_\_\_\_

SKETCH



**QUESTIONNAIRE**

- 1) What is/are the reason(s) this crossing is proposed to be closed?
- 2) Provide the estimated ADT on alternative road routes after traffic shift (list affected roads and respective ADT):
- 3) Is the roadway paved? If not, when is it scheduled to be paved?
- 4) If any, how much additional mileage is required because of the re-routing of roadway traffic due to the closing of the crossing? How much inconvenience in terms of alternative route time will the closing cause?
- 5) Are there any nearby safety operations such as fire, police or rescue departments which could be adversely affected by the closing of the crossing?
- 6) Is the crossing located on a School Bus route?
- 7) Do any of the other roads in the vicinity of the crossing need to be upgraded to facilitate traffic movement if the crossing is closed?
- 8) If the crossing is closed, will any roadway residues remain that may be abandoned?
- 9) How many homes could be affected by the closing? Are any businesses affected? If so, provide company name and approximate number of employees.

- 10) Is road part of a future thoroughfare or any other long term development project?
  
- 11) Do you anticipate any local opposition? If so, who and why? (For example, city officials, local citizens, local industries, etc.)
  
- 12) Would you recommend closing this crossing (include any pertinent comments)?

*10/6/95 (revised 9/12/2005)*