



## MEMORANDUM

**To:** Local Governments, Interested parties  
**From:** Joy Schaad, PE - Sr. Transportation Planning Engineer  
**Date:** June 15, 2012  
**Re:** Guidance on Preparing AADTs for Railroad Quiet Zones

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In the establishment of new Quiet Zones (QZ), you must verify that the information in the FRA's crossing inventory forms, including the average annual daily traffic (AADT), is correct. CMAP (through its predecessor agency, CATS), IDOT, ICC and FRA held discussions to adjust and clarify requirements and procedures regarding the updating railroad crossing inventory forms in northeast Illinois. Communities may proceed with their "Notice of Intent" and other related quiet zone activities before their AADT request is processed.

FRA's guidance on Swift Rail is at <http://www.fra.dot.gov/rpd/freight/1318.shtml> and includes a 15 page memo called "*Procedure for Updating the DOT Crossing Inventory File - For Public Authorities*". This document is broad, covering all aspects of the RR crossing inventory. Only IDOT, ICC, and the railroads can submit those updated forms and you will have to contact the affected railroad directly to have them update the train information for each crossing in your proposed quiet zone. This memo deals only with the roadway aspects of the inventory forms.

IDOT submits changes to the RR Crossing Inventory forms' road information. For AADTs, District One does the analysis of the raw traffic count data and IDOT's Central Office is the group that submits the updates to FRA. IDOT reviews "raw" count data supplied by local governments, applies seasonal adjustment factors and expansion factors, and checks for consistency with other data in the area. In an effort to minimize calls, IDOT has asked that any inquiries, questions, comments about the AADT process come through CMAP (attention Joy Schaad, PE at 312-386-8810 or [jschaad@CMAP.illinois.gov](mailto:jschaad@CMAP.illinois.gov).)

As you know FRA's published requirement is for the crossing inventory forms to be dated within 6 months of your QZ submittal to ensure that the data has been recently verified. This does not, however, mean that the AADT must be re-analyzed within the last 6 months. FRA has agreed to abide by IDOT's standards for frequency of AADT updates and IDOT will not process traffic counts that are too recent to reasonably expect significant changes. In general the standards are:

- For the AADT published for the current year & 2 years past – the AADT should not be updated unless a very major traffic generator has moved into the vicinity, or a similar reduction occurred that would render the old AADT invalid.

- For AADTs that are three years old – it is the local agency’s option.
- For AADTs that are four or more years old, the AADT must be updated for FRA to process the Quiet Zone request.

IDOT routinely counts traffic on State roads and has recently added railroad crossings on roads under local jurisdiction to their traffic counting preview. It will take a year or two to cover all six counties in District One. Communities wishing to pursue a quiet zone should check the IDOT website to see if a recent count is available for their crossings.

**Which locations to submit count data for:**

- 1.) Check FRA and IDOT on line sources for the most recent AADT on local, township, county, or unmarked State roads and only submit a count if it is three years old or older.
- 2.) Two exceptions to above:
  - If the official AADT ends in a “9”, then it was an estimate and should be counted.
  - In certain rare cases where there has been dramatic growth you can make the case to CMAP that you feel the crossing is worthy of an exception to the age standard. CMAP staff will work with IDOT to assess those cases.
- 3.) If the railroad crossing is on an Illinois marked route (i.e. has a posted Illinois Route number or US Route number), IDOT will not accept locally collected data. The traffic on marked routes is counted on odd numbered years as part of IDOT’s overall traffic monitoring program so are within FRA’s parameters.

For the latest official ADT data and date that it was submitted to FRA, go to the FRA website [www.fra.dot.gov](http://www.fra.dot.gov) and click on the link for Office of Safety. Once on the Office of Safety page, you can click on the crossing tab, and type in the crossing number. That will pull up the crossing inventory form with all the latest FRA data for that crossing. If you don’t have the crossing’s ID number you can get it from the FRA’s Quiet Zone Calculator or off the actual signal bungalow at that crossing.

For IDOT collected AADTs see the addendum to this memo.

**How to conduct your traffic count**

IDOT needs 24 hour continuous counts taken between noon Monday and noon Friday. (typically 6:00 a.m. to 6:00 a.m., starting on a Tuesday, Wednesday or Thursday). IDOT will only take data from automated “tube counts”, “Hi-Star magnetic lane counters” or equivalent technology. IDOT will also take 12-hour continuous manual counts (6:00 a.m. to 6:00 p.m., only) on a limited basis, that being only if your location is one of the CMAP data collection program (summer intern collected) counts.

IDOT will work from raw data (vehicles, not axles) from any of these formats and convert to a seasonally adjusted AADT. No classifications (i.e. truck percentages, etc.) are needed.

**How to submit**

- 1.) Submit electronically to Vince Durante at IDOT District One ([vince.durante@illinois.gov](mailto:vince.durante@illinois.gov)). Submit only the data asked for and use the excel spreadsheet {attached} for the data items. You must also send a copy of your email to CMAP at [jschaad@cmapp.illinois.gov](mailto:jschaad@cmapp.illinois.gov).

**Information to Include:** (submit only the data asked for)

**Note:** Along with your cover letter or email providing the basic information below, use the supplied excel spreadsheet for the data items listed in the headers. This may require a slight duplication of your effort – but it will save significant time as IDOT inputs the data into their process. Other items required per the following list should be provided in your email message or an attached cover letter.

1. Local Agency - the municipality or county where the crossing is located. Provide the staff contact's name, address, phone, & email addresses (indicate whether you want this person to receive the correspondence on the IDOT ADTs or the below consultant, or both.)
2. Entity collecting counts for the local agency, if other than above. Provide the consultant contact's name, address, phone, & email addresses.
3. Indicate whether you have checked both FRA database and IDOT website for latest counts.
4. Date/time that each count collected (include start time, date, day of week, and duration.)
5. Type of equipment used (*skip for "CMAP data collection program" manual counts*).
6. Crossing ID number.
7. Endpoints: Provide the physical location of count(s) including "AT" and "BETWEEN". For example, "Counted at the UP RR west Line RR at First St. between Oak Ave and Maple Ter." IDOT needs the nearby significant street names (generally collector or arterial roads) to identify endpoints for the section of road with this AADT. Use whatever endpoints you judge to capture a segment of consistent traffic loading in the area, i.e. exclude sections with major traffic generators or significant cross streets. Endpoints can be local, collector or arterial streets; they can be 50 feet or several miles from the crossing.
8. Any road name changes for the crossing, if the FRA data base is incorrect.
9. Date submitted to IDOT and CMAP.
10. Your submittal should provide the 24 hour summary of the bi-directional raw count data – do not make any adjustments to it. Do not submit separately for each direction on the spreadsheet.
11. You must also provide the raw count data as back up. This can be bi-directional or both directions separately.
12. If this request is being submitted by a consultant, the agency contact should be copied in the transmittal.

Note that while District One is handling the traffic count analysis and data entry to the State's Roadway Information System (IRIS) for the Quiet Zone effort, it is requested that you address both technical and process questions to CMAP to reduce the volume of calls to the District staff.

**What happens after you submit?**

- 1.) CMAP staff reviews your submittal to assure that all the needed information is included and done correctly. Staff will contact you about any problems or let you know that it has been

verified for IDOT. (a copy of the CMAP check sheet for traffic count submittals is attached for reference).

2.) District One then reviews the traffic count information, applies any needed expansion factors or seasonal adjustments. They will look at other ADT data that they have on record for upstream, downstream, and adjacent roadways to determine if further adjustments are warranted.

3.) When District One arrives at a value for your crossings' AADTs they will email the ADTs to CMAP, whose staff will email it to the submitter and agency staff person. CMAP will also inform the ICC of the AADT changes.

4.) If IDOT rejects updating an AADT for any crossing, this information will be forwarded to you and the existing AADT will be re-submitted to FRA to meet the updated inventory form requirements of *FRA's Final Rule on the Use of Locomotive Horns* (published 4-27-2005).

5.) The District One staff will forward the new official AADT data to IDOT's Central Office data management team along with any other relevant info (road name changes and the reasons that certain count data was not accepted / processed.)

6.) IDOT's Central Office will send the updated AADT to FRA by early March of the following year, but applicants may use the new AADT for all Quiet Zone processing as soon as it is received from CMAP.

7.) FRA will update their inventory over the following year.

#### Attachments

Addendum on finding AADTs on the IDOT Website & use of the  
Traffic count submittal template  
Traffic count Check sheet

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## Addendum

### Illinois Railroad Crossing Information Sources (IDOT & ICC)

Below explains how to find railroad crossing AADTs that have been done by IDOT recently and are not yet in the FRA database.

1. All Average Daily Traffic (ADT) counts including trucks are available on the Illinois Department of Transportation (IDOT) Internet Website. This application displays the most current and complete ADT information available. From our home page [www.dot.il.gov](http://www.dot.il.gov), click on the "Getting Around Illinois" section at the very top of the page (above the main string of tabs near the top).

Then, under the Description Box, click on "Quick Launch to Annual Average Daily Traffic." In the grey tabs on the upper left side, click on "Zoom to Area," Then in the boxes that appear below, pick a County (or City/Town) for the location for which you are seeking ADT information; then click "Submit Location." Clicking that link will bring up the map of ADTs in that area where you can then use the directional, pan, zoom and other tools to focus in on the specific location of interest.

Put a check mark in the box on the left hand side for "Average Annual Daily Traffic" if it is not already checked. Also available is a box to check for Truck Traffic (Truck Count). Once zoomed into your location, the map will display ADT information on the routes within the map view.

You can use the "Identify" tool at the top of the map to determine the ADT and the year during which the traffic was counted. Click on any ADT number on the map with the Identify Tool and this information should "Pop Up" in a box to the left of the map. To enable the identify tool to work, hold down the shift key while clicking on the location with the tool. It is the pop-up blocker that prevents the information from coming up.

2. This other database also gives hourly count information. It doesn't include all the IDOT counts; it only includes the places where they've got the detailed counts.  
<http://gis.midwesternconsulting.com/tcds/tsearch.asp?loc=Idot>
3. Consultants can also download the IRIS GIS file if they have GIS capabilities.  
<http://www.dot.il.gov/gist2/select.html>

**The ICC's searchable crossing database is a valuable resource.** The link below will allow you to conduct a countywide search for all open public crossings: <http://www.icc.illinois.gov/railroad/search.aspx>

The search will provide a list of all open crossings in a particular **county**, in either a "Map View" or a "Table View":

1. In **Map View**, all crossings in a selected county will be presented. By clicking on a particular balloon, the basic crossing location information will be displayed, including a thumbnail photo. In addition, a "View Details" link will be displayed. When clicking on the "View Details" link, all the Crossing Information and all the Crossing Photos from the ICC database will be displayed.
2. In **Table View**, all crossings in a selected county will be displayed in a table. By clicking on the Crossing Number (DOT; left-hand column), all the Crossing Information and all the Crossing Photos from the ICC database will be displayed



## Quiet Zone AADT Request - Check Sheet

Location & Date: \_\_\_\_\_ Checked by \_\_\_\_\_

	Yes/No	Follow up	Status	Notes
<b>Inclusions:</b>				
Submitted electronically?				
Basic info (cover letter or email is fine)				
Submittal Template -(Excel sheet)				
Back up count data provided				
If a consultant, evidence that the municipality was "copied"				

<b>Specifics (for each crossing, if applicable):</b>				
Meets timing requirements (older than 2 yrs, unless ends in a 9)				
Evidence of checked FRA database and IDOT website for latest count				
Local Agency - contact info				
Entity performing the count- contact info				
Type of equipment used				
Date, day of week & time for each count				
Meets equipment type & 24 hr requirements (noon Mon to noon Fri)				
Crossing ID numbers				
Provides logical segment end points for each crossing				
Any Road name changes to update (optional)				

<b>Template attached</b>				
Count (raw data =- 2 way 24 hour totals)				

<b>Processing:</b>				
When Informed IDOT (Data Bank Mngr) OK to process				
Received AADT from IDOT				
Informed submitter and ICC of new count				