



NOISE ABATEMENT INVENTORY

JANUARY 1, 2020 to
DECEMBER 31, 2022

SUMMARY

Status

Roles

Review of Instructions



STATUS

WORK COMPLETED SO FAR



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Worked with the Resource Center to update and recreate the Noise Program pages on the Environment DSS' SharePoint site

Updated the instructions

- Requesting GIS information in a usable format

Initiated the collection

- Sent out announcement to Divisions

Announced webinar to Divisions and State DOTs

ROLES AND RESPONSIBILITIES

FHWA HQ, DIVISIONS, AND STATE DOTs



HEADQUARTERS

Prepare the spreadsheets:

- Standardize the input data
- Compile into national database and separate into state-specific sheets

Post them on SharePoint and announce availability

Track responses and send out reminders

Obtain completed spreadsheets and quality check them

Compile the spreadsheets back together

Run inflation cost calculations and assign Barrier IDs

Summarize findings into text and graphs

Post findings online and respond to questions

DIVISIONS

Download spreadsheet and instructions from SharePoint

Send these to your corresponding State DOT

Review instructions and respond to questions

Obtain the completed spreadsheet from the State DOT and quality check it

- Let HQ know if they need assistance with this before the due date

Send the final spreadsheet to HQ





STATE DOTS

Obtain their spreadsheet from their corresponding Division

Fill it in with information as required in 23 CFR 772

- Make use of the instructions
- If there is time available:
 - Review old entries for completeness and correctness
 - Note any Repairs or Demolitions (replacements, removals)
- Coordinate internally to obtain existing GIS data
 - If available, it may come from a GIS Unit, a Planning Office, or an Asset Management Team

Submit completed spreadsheet to Division

INSTRUCTIONS

FILLING OUT THE INVENTORY

INSTRUCTIONS

FHWAs Triennial Noise Abatement Inventory

2020-2022 Data Collection

County (State) Field
The county (counties) in which the Noise Barrier is located.
Do not shorthand names. Fill in the full name of the County, Parish, or Borough.
If the barrier crosses county lines, include both the county in which the Noise Barrier starts, and the county in which it ends. Separate the counties with a comma, i.e. County A, County B.
If the barrier is in an independent City, fill in the County column with 'NA'.

City (State) Field
The city (or cities) in which the Noise Barrier is located.
Record the name of the city in which the Noise Barrier is located; if the construction crosses city lines, report both the city in which the Noise Barrier starts, and the city in which it ends.
Separate the city names with a comma, i.e. City A, City B.
List only cities under "City" and neighborhoods, public development names, Counties, or numbers.
These types of identifiers, except Counties, can go under the "Noise Barrier Name" column.
Do not shorthand names. Fill in the full name of the City, i.e. Township, rather than Twp, so that they are locatable with an online search.

State Reference Name (State) Field
The name your Agency/State uses to identify the noise barrier/noise barrier system.
You can input any text or numbers into this field.
For example, you may choose to use the field to list associated or continuous noise barriers that work in conjunction to protect one or more neighborhoods or in association with a particular project. Sometimes a single community noise abatement is actually comprised of more than one noise barrier. Multiple noise barriers are reported separately, line row each in the inventory, but may be linked by grouping the same "Noise Barrier Name" to each distinct noise barrier. For example: "Parkway Neighborhood System" may be assigned to several noise barriers.

Example of correctly completed inventory (see all columns included due to space limitations)

State	County	City	State Reference Name	Material	Year	Area	Cost	Height	Loss	Reduction
AL	Jefferson	Montgomery	Jefferson Parkway	Concrete	2018	1000	1000000	10	10	10
AL	Jefferson	Montgomery	Jefferson Parkway	Concrete	2019	1000	1000000	10	10	10

ORGANIZATION

Background of why FHWA collects this data and how we use it

Flowchart with roles and responsibilities
Summary instructions and items of note

Instructions by Tab from Left to Right in the Workbook

Instructions for each column from Left to Right for each Tab

Why do States submit Noise Barrier Inventories to FHWA?

23 CFR 772.131(f) Abatement Measure Reporting: Each highway agency shall maintain an inventory of all constructed noise abatement measures. The inventory shall include the following parameters:

- type of abatement;
- cost (overall cost, unit cost per/ft, ft);
- average height;
- length;
- area;
- location (State, county, city, route);
- year of construction;
- average insertion loss/noise reduction as reported by the model in the noise analysis;
- NAC category(s) protected;
- material(s) used (precast concrete, beam, block, cast-in-place concrete, brick, metal, wood, fiberglass, combination, plastic (transparent, opaque, other);
- features (absorptive, reflective, surface texture);
- foundation (ground mounted, on structure);
- project type (Type I, Type II, and optional project types such as state funded, county funded, tollway/turmpike funded, other, unknown).

The FHWA will collect this information, in accordance with OMB's Information Collection requirements." Therefore, the fields that correspond to the regulation are required to be filled out and submitted by the highway agency to FHWA. This requirement is met when states update and submit their Noise Barrier Inventory spreadsheet to the FHWA.

What Data Are Needed to Complete the Inventory?

The fields in light orange boxes on the following pages correspond to the parameters listed in the 23 CFR 772.131(f). Fields not in red are optional.

States should focus their efforts on barriers constructed during 2017, 2018, and 2019. However, they are encouraged to fill in as many missing fields as possible for barriers constructed before 2016.

After you submit your inventory you can still make changes at any point. Save changes to your most recently submitted workbook and email it to your Division. FHWA Headquarters will update your inventory.

Workbook Update and Review Process:

```
graph TD
    A[1] HQ Provide State-specific workbooks to Divisions --> B[2] DIVISION Provide specific workbook to their State
    B --> C[3] STATE Update workbook and return by email to your Division
    C --> D[4] DIVISION Review the updated inventory workbook for completeness and correctness and email it to HQ
    D --> E[5] HQ Export data from updated State-specific workbooks to the Master Noise Barrier Inventory
    E --> F[6] HQ Post the updated inventory online
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Listed in 23 CFR 772.131(f) → LEGEND ← Optional or System Calculated

General Instructions:

You will see that the workbook is populated with data you have previously reported to FHWA. Every three years, FHWA asks states to update their inventories.

An "update" includes making any of the following changes to a current inventory:

- 1) Add new rows to the spreadsheet to report (new) Noise Barriers constructed in 2017, 2018, or 2019 since your last report to FHWA. Use one row for each new Noise Barrier.
- 2) Adding unreported barriers. An unreported barrier is an existing barrier, one that was constructed before 2014, that should be counted in your state's inventory, but is not in your current inventory.
- 3) Correcting data about barriers already in your inventory. Some examples of corrections include correcting the length, the material type, or the original construction cost of a barrier.
- 3) Add new rows to the REPAIRS tab in the spreadsheet to describe any repairs made in the last 3 years to existing, previously-reported Noise Barriers.

Note: On the spreadsheet, values in cells in shaded columns are calculated at HQ.

Instructions for All Columns:

- 1) Do not enter information in all CAPS.
- 2) Make sure you do not combine data from different columns.
- 3) Please fill in any blanks in your State's previously reported information.
- 4) If a field does not apply, input N/A.
- 5) If information is not available, leave the cell blank.
- 6) On the use of commas (,) and slashes (/):
 - a. Commas should be used to separate items that are not the same
 - For example a barrier crosses two cities → City A, City B, or protects various Activity Categories → B, C, D or denotes a barrier on an interchange of two roadways by using a comma between the roadway names
 - b. Slashes should be used for items that are the same but have multiple identifiers
 - For example: A route with multiple names along the same stretch of road.

State	County	City
Alabama	Jefferson	Montgomery
Alabama	Jefferson	Montgomery

WORKBOOK ORGANIZATION

▶	2020-2022 Update	Alabama	Repairs	Demolitions



[STATE NAME] TAB

Do not:

- fill in Barrier ID columns
- fill in 2022 dollar cost columns unless the barriers were built in 2022 itself
- erase demolished, rebuilt, or relocated barriers
- combine data from multiple columns into a single one
- enter data in ALL CAPS

Try to input actual quantities for the Area column

Make use of the State Reference Name column

Add notes for unique situations in their row at the end of the labeled columns

REPAIRS TAB

Use this tab to fill in data about repairs:

- Patches
- Panel replacements
- Painting
- Absorptive material replacement

Add a repair date to the Main Tab information for that given barrier





DEMOLITIONS TAB

Use this Tab to fill in the information for barriers that have been

- Demolished,
- Replaced-in-kind, or
- Reconstructed in a new location

In the Main Tab, use the ~~cross-out-text~~ function to strike a line through the old barrier

- Make a note in column 'Z' about what type of change it was,
- What year it occurred, and
- What new barrier replaced it

In the Demolitions Tab, copy in the information for the old barrier

- Copy and paste the old barrier data from the main tab of the inventory into this tab

LINKS

INTERNAL AND PUBLIC



FINDING AND USING THE INVENTORY

Internal Division and HQ SharePoint:

- For Divisions to download and send to State to fill out
- [Noise Barrier Inventories Library \(sharepoint.com\)](#)

Public Webpages:

- To find the summary, graphs, and data tool for the last completed inventory
- https://www.fhwa.dot.gov/environment/noise/noise_barriers/inventory/

Q&A

OPEN DISCUSSION

THANK YOU



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[https://www.fhwa.dot.gov/
environment/noise/](https://www.fhwa.dot.gov/environment/noise/)