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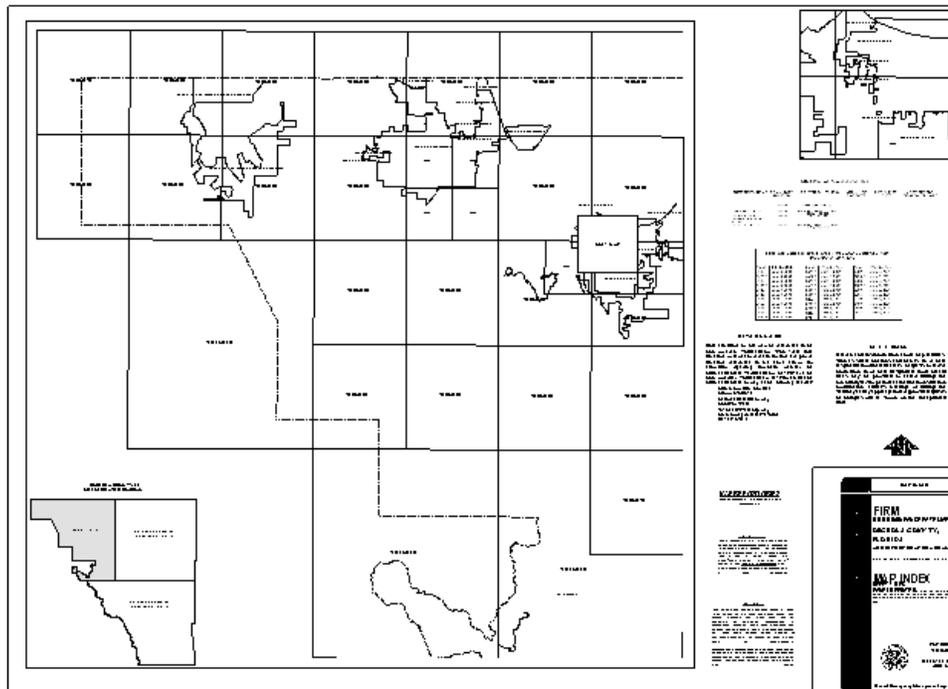
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What is DFIRM DFIT Pro?

DFIRM DFIT (Digital FIRM INDEX Tool) Pro (herein referred to as DFIT Pro) is a tool that automates the production of the FIRM panel INDEX map. There are several options that are available that allow you to customize the layout according to the characteristics of the INDEX, as well as create inset maps and/or multiple page INDEX sheets. The panel INDEX map elements meet FEMA's standards, which are described in FEMA's *Guidelines and Specifications for Flood Hazard Mapping Partners Appendix K: Format and Specifications for Flood Insurance Rate Maps* (hereby referred to as *Appendix K*).

The Title Block, Listing of Communities tables, Map Repository address list, FIRM Panel Dates table, Base Map note, Elevation Datum note, Panel Not Printed (PNP) description list, CBRS/OPA note, the standardized Note to Users, the Map Dates notes, the panel number and suffix, panel effective dates, and political areas are generated automatically based on user input and the information in the study's look-up tables and layers.

Moreover, **DFIRM DFIT Pro** will enable you to easily export the INDEX layout to the file format required for finalized data deliverable submissions to FEMA.



Quick Reference Guide

The following is a quick reference guide to all of the components of **DFIT Pro**. You can prepare the FIRM INDEX map via the *Generate INDEX Layout* dialog. Additionally, you can export INDEX map layouts to image formats.

Generate INDEX Layout Dialog

Select the page size for your INDEX map.

Select the page orientation.

Indicate whether the INDEX will be single page or multi-page, and identify the suffix and, if applicable, the page number

If you have a multi-page INDEX, select the maximum number of sheets for the INDEX Locator Diagram.

Choose the logo style.

Choose the date title.

If applicable, add inset map(s) to your INDEX map layout.

If applicable, select the necessary 'This Area Notes'.



DFIRM DFIT Pro Toolbar



[Generate INDEX Layout](#)

Creates the FIRM INDEX layout.



[Export to PDF](#)

Exports the INDEX layout to .pdf format.



[Export to Images](#)

Exports the INDEX layout to .eps and .tif format.



[Clear Layout](#)

Clears the graphics in the Layout View.



[Generate FIRM Panel Dates Table](#)

Generates the FIRM Panel Dates table without regenerating the INDEX layout.



[Generate Listing of Communities Table](#)

Generates the Listing of Communities table without regenerating the INDEX layout.



[Add Logo](#)

Adds supplementary logo(s) into the INDEX layout.



[Symbolize Multi-Page Panels](#)

Returns to the INDEX panel symbology created by the Generate INDEX Layout tool after running the Render Using VVT Symbology tool.



[Update Multi-Page Panels](#)

Updates the multi-page INDEX sheet after editing panels on the individual sheet.



[Auto Label](#)

Automatically labels the water line, water area, and transportation features.



[Save INDEX MXD](#)

Saves an INDEX map layout.



[Load INDEX MXD](#)

Opens a previously saved INDEX layout in ArcMap.

Tool Controls

Now that you are ready to produce your INDEX map, you will need to know how to create the layout with the tools on the **DFIRM DFIT Pro** toolbar and then how to export your layout to the required image file format.



Generate INDEX Layout

The **Generate INDEX Layout** tool enables you to customize your INDEX layout for your study, according to the options chosen in the **Generate INDEX Layout** dialog. The layout will be generated in the Layout View. The INDEX map elements adhere to *Appendix K* specifications.

This tool will automatically create the following INDEX map elements applicable to your study: Title Block, Listing of Communities table, Map Repository address list, FIRM Panel Dates table, Base Map note, Elevation Datum note, Note to User, Panel Not Printed (PNP) description list, and CBRS/OPA note. In addition, the panel number and suffix, panel effective dates, and political areas are automatically labeled in the map.

To create a DFIRM INDEX layout:

1. Click **Generate INDEX Layout**.

Note: You may only create a layout while in a parent JTX job step.

2. Select a page size.
3. Select a page orientation, if applicable.
4. Select if the layout is single page or multi-page.
5. Define the suffix and page number, if applicable.
6. Opt to include a locator diagram if creating a multi-page layout.
7. Select a Title Block logo.
8. Select a date title style.
9. Opt to include an inset map(s).
10. Opt to include "This Area" notes, if applicable.
11. Click *OK*.

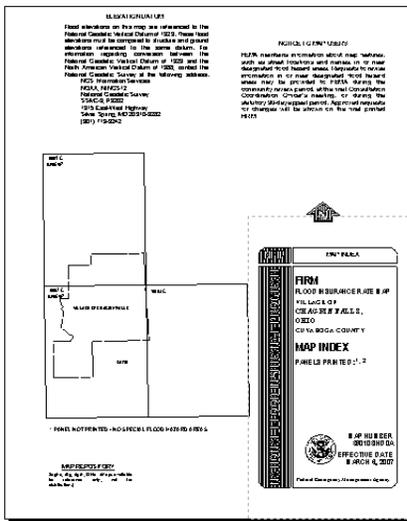
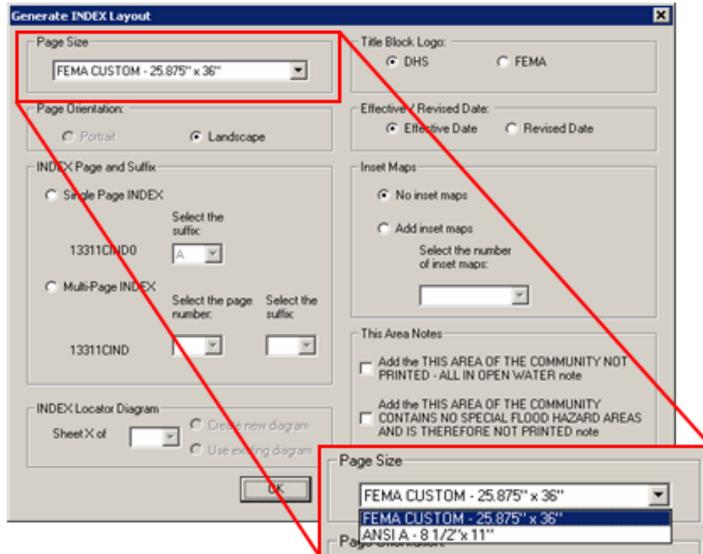
Note: Click the *Cancel* tool, if you prefer to exit the **Generate INDEX Layout** dialog without creating a layout.

12. The DFIRM INDEX layout is created. The layout includes the map body with panel number labels, community labels, water feature labels, and transportation feature labels. Additionally, the layout includes the Title Block, standard notes, and panel not printed listing. For a countywide study, the Listing of Community table, FIRM Panel Dates table, and Map Repository list are automatically created.

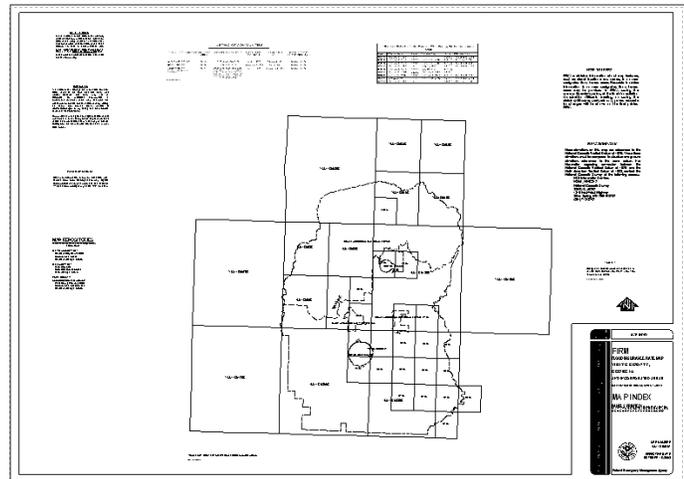
Note: Tables, lists, inset maps, and/or the INDEX Locator Diagram might be stacked on top of each other when the **Generate INDEX Layout** tool is run. Select one element (e.g., Listing of Communities table) at a time and space them around your layout to ensure that all of your necessary INDEX map elements have been created.

Page Size

Select the appropriate page size for your FIRM panel INDEX map. The two page sizes are ANSI A (8.5" x 11") and FEMA Custom (25.875" x 36").



An example of an ANSI A-sized layout.

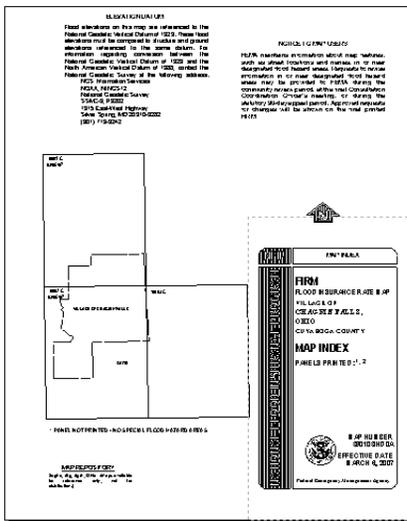
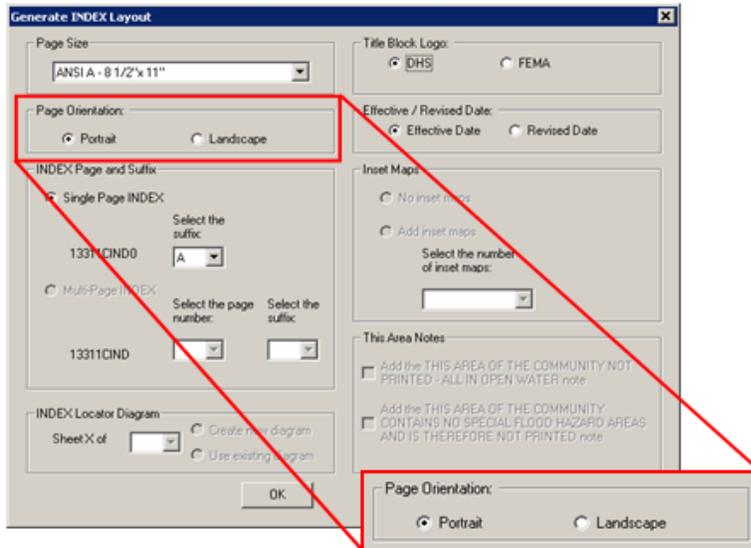


An example of a FEMA Custom-sized layout.

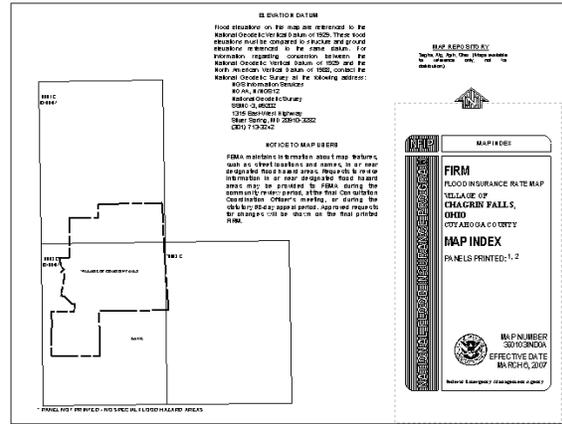
Note: Only community-based studies are allowed to create INDEX maps on an ANSI A (8.5" x 11") page size. Additionally, INDEX maps on an ANSI A page size must be a single page layout. The FEMA Custom (25.875" x 36") page size can be used for single page INDEX layouts or multi-page INDEX layouts.

Page Orientation

Select the portrait or landscape page orientation for your ANSI A-sized FIRM panel INDEX map. For the FEMA Custom page size, the page orientation is automatically defaulted to “Landscape”.



An example of an ANSI A portrait orientation layout.



An example of an ANSI A landscape orientation layout.

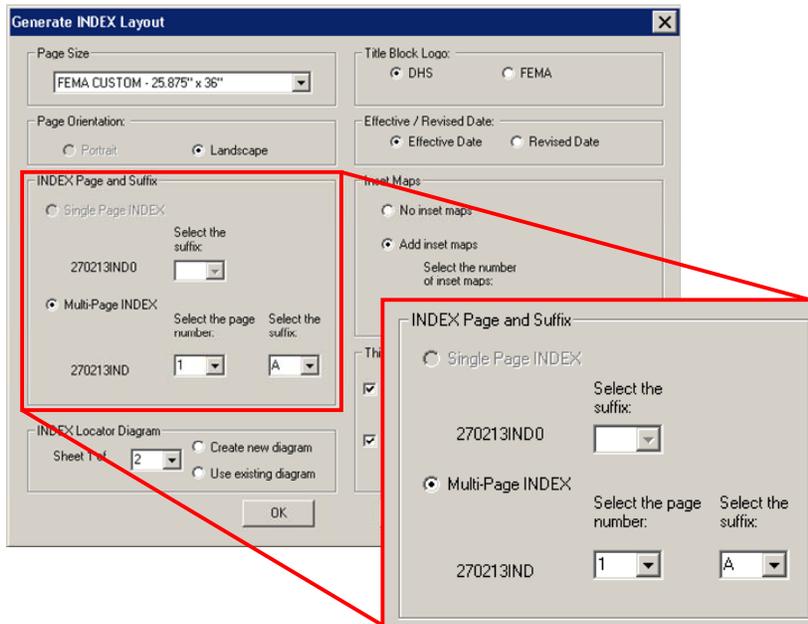
INDEX Page & Suffix

Choose to create a single page INDEX map or a multiple page INDEX map. If your study does not legibly fit on a single page, either because of it being a large area or an elongated area, a multiple page INDEX map is appropriate; otherwise, create a single page INDEX map layout.

If you choose to generate a single page INDEX map, all of the INDEX map features and all tables required by *Appendix K* will be displayed on one page. In the **Generate INDEX Layout** dialog you will have to select the INDEX map suffix letter. Since there is only one page comprising your INDEX map, the map page number will be automatically set to zero. In other words, a single page INDEX

map would follow the naming convention: <DFIRM ID>IND0<suffix> (e.g., 21131CIND0B, 306307IND0A).

If you choose to generate a multi-page INDEX map, your INDEX map features and all tables required by *Appendix K* may span up to four pages. In the **Generate INDEX Layout** dialog select the page number and suffix for the particular page of the INDEX map you are creating. Each page in a multi-page INDEX map must be generated separately. In other words, if you have a three-page INDEX map, you must enter the number "1" for the page number, complete all other necessary information in the **Generate INDEX Layout** dialog, and generate the INDEX map for the first page. You'll then repeat this process two more times, in order to fully create your three-page INDEX sheets. Based on the information you enter in the dialog, a multi-page INDEX map would follow the naming convention: <DFIRM ID>IND<page number><suffix> (e.g., 18167CIND2E, 400483IND4A).

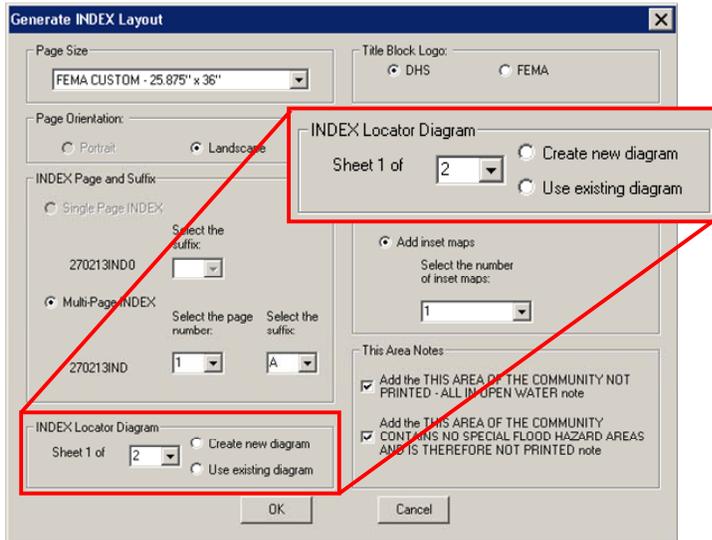


Note: Upon layout creation the Listing of Communities table (if the study is countywide), Map Repository table, Base Map Note, and the Panel Not Printed Notes will appear on the layout. If the information is not appropriate for that particular sheet of a multi-page INDEX map, you will have to manually delete the tables and reference notes that are not relevant. Additionally, reference notes will be created on every INDEX map page for the Listing of Communities table and the Map Repository table (e.g., See Sheet X of Y for MAP REPOSITORY LISTING). If the map page number in the reference note (i.e., X) is incorrect, you will have to manually edit the page number.

Note: The Panels Printed list in the Title Block will only include those panels which are shown on that particular INDEX map page.

INDEX Locator Diagram

Create or revise an **INDEX Locator Diagram** for multi-page INDEX map layouts. This diagram will be added to each page of the INDEX map, and it will indicate which portion of the study is represented on that page of the INDEX. There will be a separate data frame, named Index Locator Diagram, loaded into your Table of Contents, and it will contain the Index Locator Diagram (DFIT_INDLOCDIAGRAM) data layer.



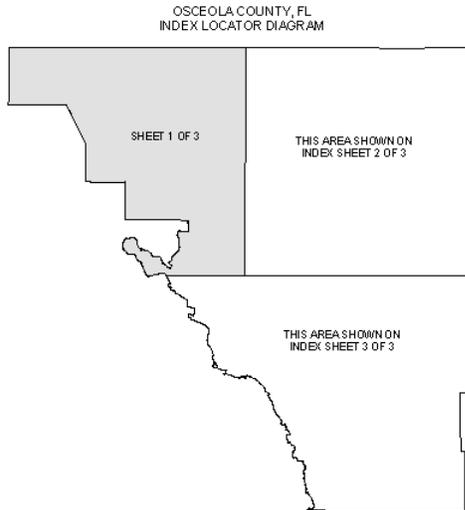
The INDEXSHEET field in the *FIRM Panel Index* (S_FIRM_Pan) data layer must be populated with the page number that the panel will appear on in the INDEX map. A multi-page INDEX map can be composed of up to four pages. Therefore, the valid values for the INDEXSHEET field are 1, 2, 3, and 4.

Note: The field INDEXSHEET should be populated for both single page and multi-page INDEX layouts. If you are creating a single page index, you should populate this field with “0” as the page number. You may use the tools on the **DFIRM GeoPop Pro** toolbar to populate the field.

If you have never created an Index Locator Diagram or if your INDEXSHEET field values have changed, select the Create New Diagram option in the dialog. If you previously created an Index Locator Diagram and your INDEXSHEET field values have not changed, select the Use Existing Diagram option to avoid needless data processing. If you erroneously select the Use Existing Diagram option when the diagram has never been created, you will receive a message prompting you to select the Create New Diagram option.

The portion of the political area included on the map page will be displayed in gray with the reference note “SHEET <X> of <Y>” in the INDEX Locator Diagram. Portions of the political area that fall on another INDEX map sheet(s) will be displayed in white with the reference note “THIS AREA SHOWN ON INDEX SHEET <X> OF <Y>”. In these notes the <X> value is the current page number and the <Y> value is the largest page number (which is defined in the dialog). The INDEX Locator Diagram will be given the title “<county or community name>, <state abbreviation> (first line) followed by the text “INDEX LOCATOR DIAGRAM” (second line). Specifically, the <county or community name> value is a concatenation of Study_Info’s *STUDY_PREFIX* (STUDY_PRE) and *STUDY_NAME* (STUDY_NM) field values. The <state abbreviation> value is an abbreviation of

Study_Info's *STATE NAME* (STATE_NM) field value. You should manually move the graphic title to the desired location.



Example of an INDEX Locator Diagram for a multi-page INDEX sheet

Each page in a multi-page INDEX map must be generated separately. In other words, if you have a three-page INDEX map, for "Sheet 1 of" you must enter the number "1" for the page, complete all other necessary information in the **Generate INDEX Layout** dialog, and generate the INDEX map for the first page. You'll then repeat this process two more times, in order to fully create your three-page INDEX map, with an INDEX Locator Diagram on each page.

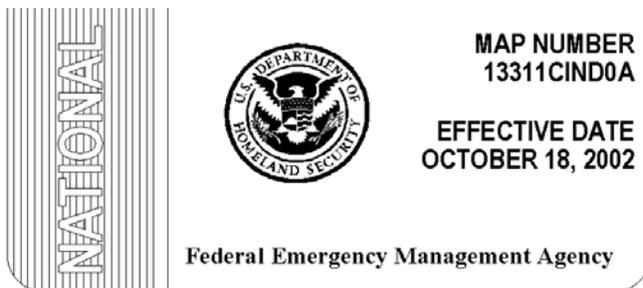
Note: The **INDEX Locator Diagram** option is not available for single page INDEX maps.

Title Block Logo

Choose which logo (i.e., DHS, FEMA) is appropriate to display in the title block. To determine which logo is correct for your project, use the following guidelines:

1. If this is a new DFIRM study, use the DHS logo.
2. If this entire DFIRM study is being republished, use the DHS logo.
3. If only part of the DFIRM study is being republished, use the logo on the effective FIRM.

The screenshot shows the 'Generate INDEX Layout' dialog box. The 'Title Block Logo' section is highlighted with a red box, showing 'DHS' selected. Other options include 'FEMA', 'Effective / Revised Date', 'Inset Maps', and 'Area Notes'. The 'Page Size' is set to 'FEMA CUSTOM - 25.875" x 36"', and the 'Page Orientation' is set to 'Landscape'. The 'INDEX Page and Suffix' section shows 'Single Page INDEX' selected and '270213IND0' in the suffix field. The 'Area Notes' section has two checkboxes: 'Add the THIS AREA OF THE COMMUNITY NOT PRINTED - ALL IN OPEN WATER note' (unchecked) and 'Add the THIS AREA OF THE COMMUNITY CONTAINS NO SPECIAL FLOOD HAZARD AREAS AND IS THEREFORE NOT PRINTED note' (checked). The 'INDEX Locator Diagram' section shows 'Sheet 1 of 2' and options to 'Create new diagram' or 'Use existing diagram'. The 'OK' and 'Cancel' buttons are at the bottom.



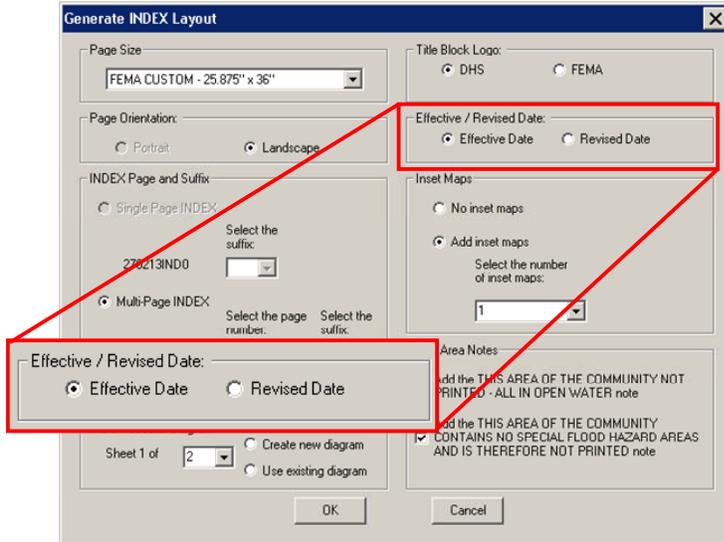
An example of the DHS logo in the Title Block.



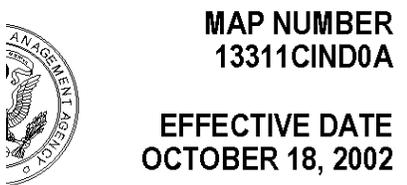
An example of the FEMA logo in the Title Block.

Effective / Revised Date

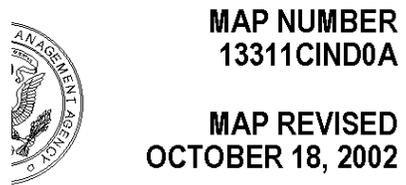
Select a date format for your layout (i.e., Effective Date, Revised Date). The date will be generated from the most recent value in the EFF_DATE field in the *FIRM Panel Index* (S_FIRM_Pan) data layer.



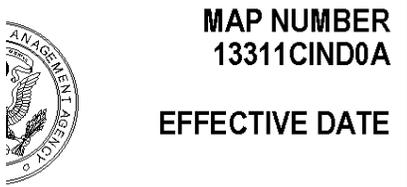
Note: If your effective date has not yet been established, then enter the value '9/9/9999' in the EFF_DATE field in the *FIRM Panel Index* (S_FIRM_Pan) layer. This value acts as a <Null> value and will not be displayed in the layout.



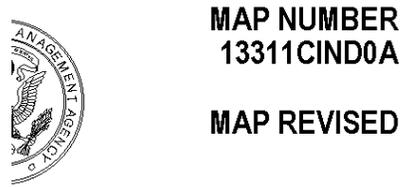
An example of the Effective Date date style.



An example of the Map Revised date style.



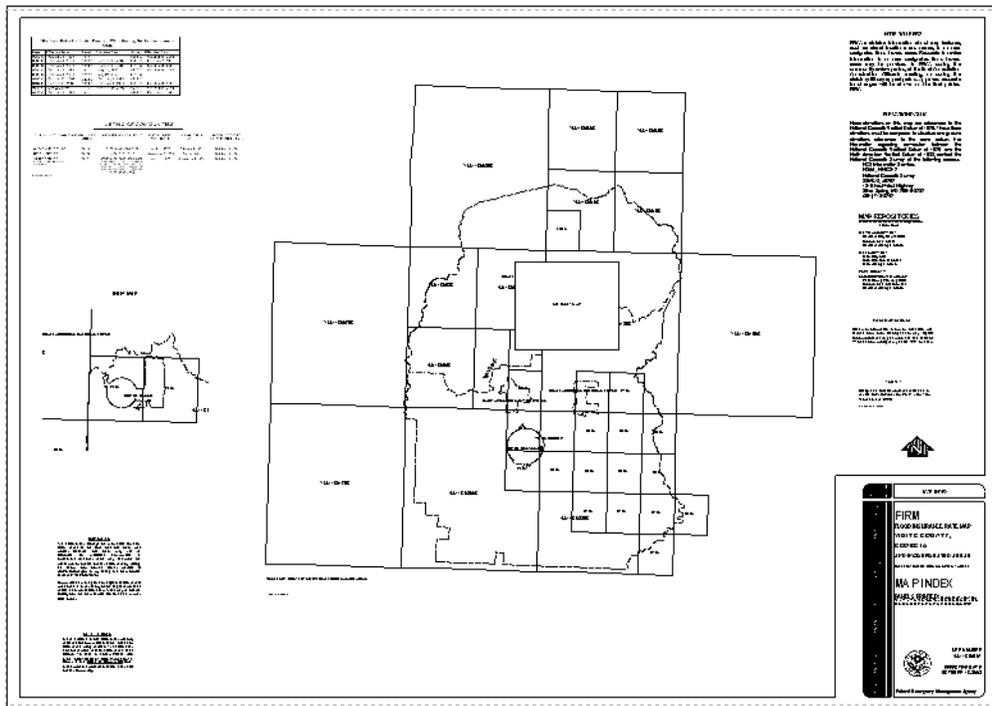
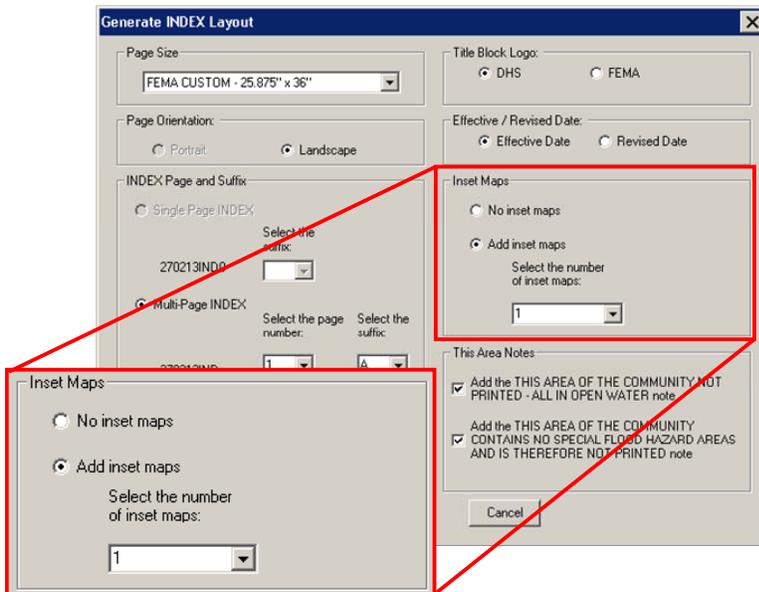
An example of the Effective Date date style when the EFF_DATE field value is 9/9/9999.



An example of the Map Revised date style when the EFF_DATE field value is 9/9/9999.

Inset Maps

You may create up to five inset map(s) in your layout for the congested areas on your INDEX map. A new data frame is added to the Table of Contents for each inset map that will be added to your INDEX layout. The data frame(s) are named "Insert Map <X>", where <X> indicates the number for that particular inset map (e.g., Inset Map 3). Each of the inset map data frames contain the exact duplication of the data layers that were in the Table of Contents at the time the INDEX layout was generated. Additionally, the inset map will be labeled just as the Layers data frame has been labeled.

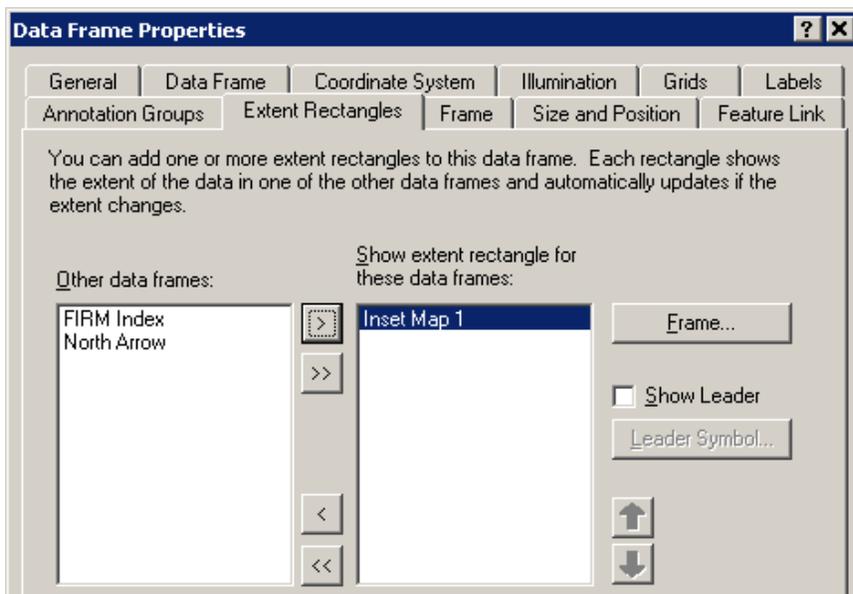


An example of a layout with an inset map.

The inset data frame(s) is automatically linked to the Layers data frame. As you zoom into the data in the inset map, a corresponding box (i.e., the extent rectangle) in the Layers data frame automatically adjusts to represent the visible area in the inset map data frame. The extent rectangle has a white fill and a black outline. When the layout is created, the inset map title (e.g., INSET MAP 2) and the see-inset-map note (See INSET MAP 2) are automatically created. Manually place the see-inset-map note overtop the extent rectangle in the Layers data frame in the layout. Manually place the inset map title above the inset map data frame in the layout.

Note: If only one inset map is created, the data frame will be titled "INSET MAP" and the inset reference note will be "See INSET MAP".

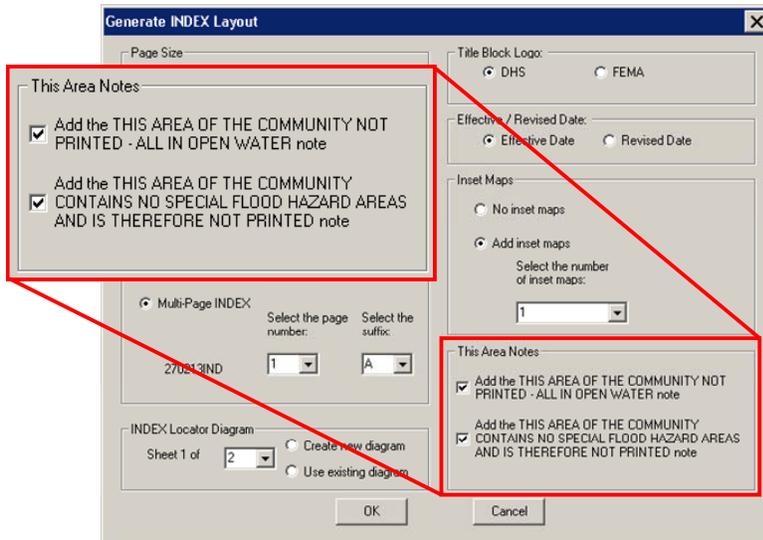
If necessary, you may view or alter the link between the Layers data frame and inset map(s) data frame via the *Extent Rectangles* tab in the **Data Frame Properties** dialog for the Layers data frame.



An example of the Inset Map 1 data frame linked to the Layers data frame.

This Area Notes

Add notes to the layout, where appropriate, to indicate why specific areas of panels are not printed (i.e., All in open water or No Special Flood Hazard Areas). The generated note(s) will adhere to *Appendix K* specifications.



THIS AREA OF THE COMMUNITY NOT
PRINTED - ALL IN OPEN WATER

This Area Note for 'All in Open Water'

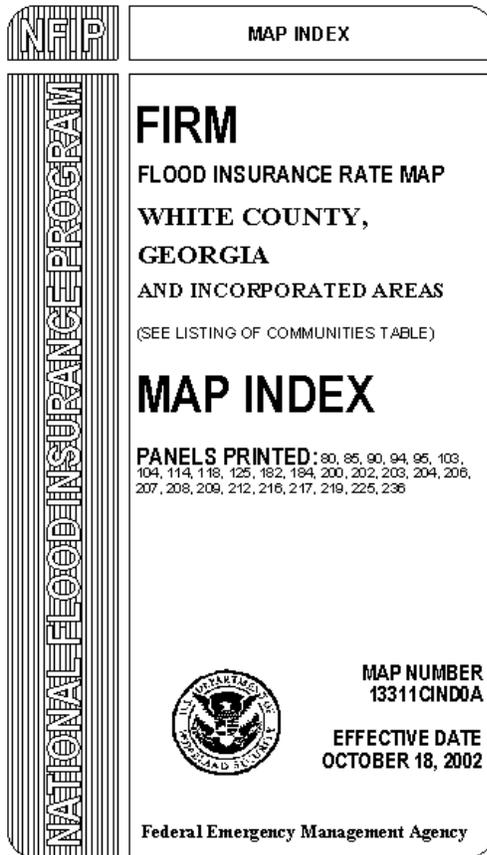
THIS AREA OF THE COMMUNITY CONTAINS
NO SPECIAL FLOOD HAZARD AREAS AND IS
THE REFORE NOT PRINTED

This Area Note for 'No Special Flood Hazard Areas'

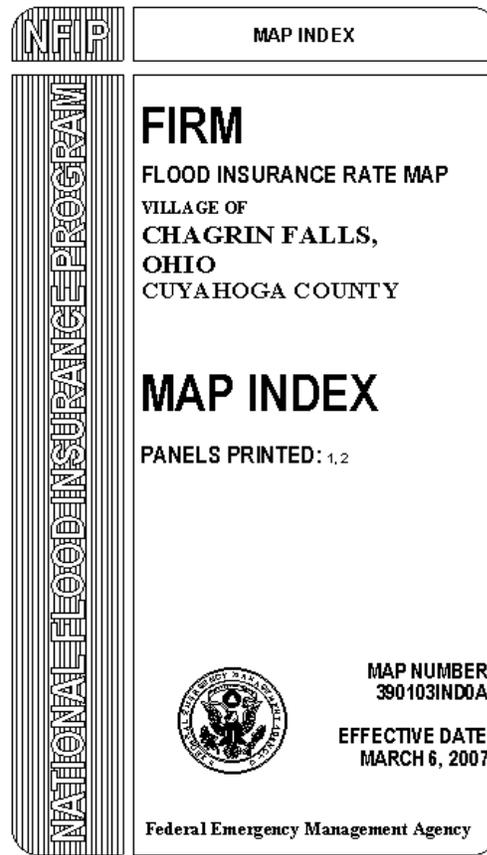
Note: Since these notes are not defined in *Appendix K* as being appropriate for ANSI A-sized layouts, this option is only enabled for DFIRM panel INDEX maps created on a FEMA Custom (25.875" x 36") page size.

Dynamic Title Block

The INDEX Title Block is generated from data in the *FIRM Panel Index* (S_FIRM_Pan) data layer, the Study_Info table, and input from the *Generate INDEX Layout* dialog.



An example of a countywide Title Block.

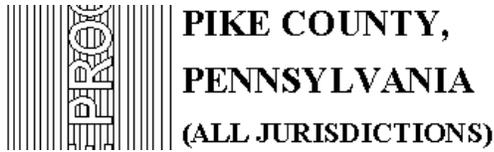


An example of a single-jurisdiction Title Block.

The community/county name and state information is shown in the Title Block. The format varies slightly from countywide to single-jurisdiction. For a countywide study, the study name is obtained from the *STUDY NAME* (STUDY_NM) field. The study name is followed by the state name which is gathered from the *STATE NAME* (STATE_NM) field. The state name is followed by the study's jurisdiction type. The jurisdiction type is obtained from the *JURISDICTION TYPE* (JURIS_TYP) field. All three of these values are found in the Study_Info table. If the *JURISDICTION TYPE* (JURIS_TYP) field value is "AND INCORPORATED AREAS", the text is not enclosed in parenthesis; if the text is "ALL JURISDICTIONS", the jurisdiction type value is enclosed in parenthesis.



An example of the study name in the Title Block for a countywide study where the jurisdiction type is "AND INCORPORATED AREAS".



An example of the study name in the Title Block for a countywide study where the jurisdiction type is "ALL JURISDICTIONS".

For a single-jurisdiction study, the study prefix is first listed in the Title Block. The study prefix value is obtained from the *STUDY PREFIX* (STUDY_PRE) field. If the *STUDY PREFIX* (STUDY_PRE) field value is <Null>, no study prefix is included in the Title Block. The study prefix is followed by the study name and the state name. These values are found in the *STUDY NAME* (STUDY_NM) and the *STATE NAME* (STATE_NM) fields respectively. The state name is followed by the county name which is pulled from the *COUNTY NAME* (CNTY_NM) field. All of these fields are found in the Study_Info table.



An example of the study name in the Title Block for a single-jurisdiction study.

If the single-jurisdiction study is a county equivalent, the study prefix and county name values are not included in the Title Block. The *JURISDICTION TYPE* (JURIS_TYP) field value succeeds the state name in this situation. A county equivalent is identified when the study is single-jurisdiction and the *STUDY NAME* (STUDY_NM) field contains the text "COUNTY", "PARISH", "BOROUGH", or "CENSUS AREA".



An example of the study name in the Title Block for a county equivalent single-jurisdiction study.

If the single-jurisdiction study is an independent city, the Title Block says as such. The **Generate INDEX Layout** tool looks for the value "INDEPENDENT CITY" in the *JURISDICTION TYPE* (JURIS_TYP) field in the Study_Info table. If this value is found, the text "INDEPENDENT CITY" is placed beneath the state name.

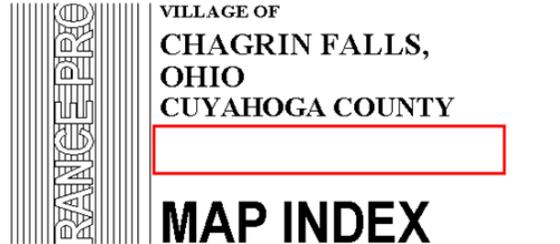


An example of the study name in the Title Block for an independent city single-jurisdiction study.

For a countywide study, the text "(SEE LISTING OF COMMUNITIES TABLE)" is placed below the study name. For a single-jurisdiction study, this area of the Title Block is left blank.

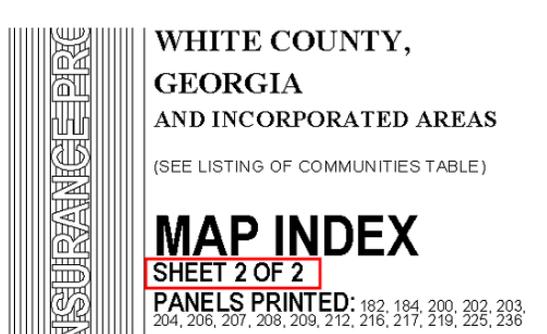


An example of the Listing of Communities table reference in the Title Block of a countywide study.

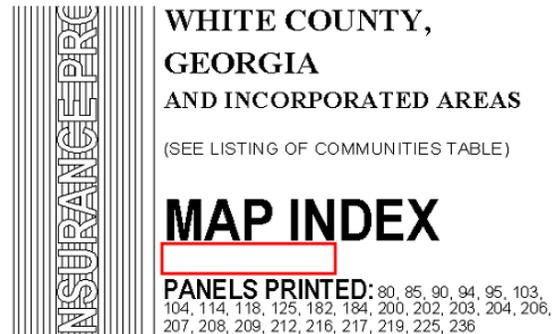


An example of the empty space in a single-jurisdiction study where the Listing of Communities table reference would reside in a countywide study.

For a multi-page INDEX sheet map, the text "SHEET <X> of <Y>", where X is the current sheet and Y is the total number of sheets (e.g., SHEET 2 of 2) follows the "MAP INDEX" text.



An example of the sheet reference in the Title Block.



An example of the empty space where the sheet reference would reside.

The next item in the Title Block is the list of printed panels. The panel number is the 4-digit panel number with the leading zeros removed (e.g., "25" is listed instead of "0025"). If the layout is a multi-page INDEX sheet, only those panels which fall on that map sheet are listed in the Title Block.

The map number, effective date, and agency logo follow the list of printed panels. These items were discussed in detail previously in this document.

Listing of Communities Table

The Listing of Communities table is generated from data in the *FIRM Panel Index* (S_FIRM_Pan) data layer, the *Political Area* (S_Pol_Ar) data layer, and the L_Comm_Info table. The Listing of Communities table is automatically created for all countywide studies. Single-jurisdiction studies do not require this table; therefore, it is not created in this scenario.

All communities in the *Political Area* (S_Pol_Ar) layer are shown in the table unless the community is not included (i.e., the AREA NOT INCLUDED [ANI_TF] field value is "T") or contains the text "FED", "ST", or "OTHR" in the *COMMUNITY NUMBER* (COMM_NO) field. The communities are listed in alphabetical order. The county (or county equivalent like a parish or Alaskan borough) name is succeeded by the text "(UNINCORPORATED AREAS)".

LISTING OF COMMUNITIES

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITIAL FIRM DATE	MOST RECENT FIRM PANEL DATE
CLEVELAND, CITY OF	130418	0182, 0184, 0203, 0225	April 11, 1975	February 1, 1991	October 18, 2002
HFI FN, CITY OF	130192	0103, 0104, 0125	September 6, 1974	April 3, 1984	October 18, 2002
WHITE COUNTY (UNINCORPORATED AREAS)	130191	0075, 0100, 0103, 0104, 0114, 0118, 0125, 0175, 0182, 0184, 0200, 0202, 0203, 0204, 0206, 0207, 0208, 0209, 0212, 0216, 0217, 0219, 0225, 0236	June 11, 1976	September 1, 1989	October 18, 2002

An example of a Listing of Communities table.

To ensure that FEMA's formal CIS community name is used, the **Generate INDEX Layout** tool accesses an internal CIS-based community table to obtain the community's name. For each unique *COMMUNITY INFO ID* (COM_NFO_ID) field value in the *Political Area* (S_Pol_Ar) layer, the tool locates the community in the internal CIS-based table and uses its community name in the generation of the Listing of Communities table. The internal CIS-based community table is routinely updated to match FEMA's CIS database. If the tool is not able to locate the community in the internal table, you will receive a message telling you that the community is not found. The Listing of Communities table is created, but the community name for the unfound record will be missing.



An example of the Community Not Found in Internal Look-Up Table message.

LISTING

COMMUNITY NAME	COMMUNITY NUMBER	LOCATED ON
	399999	0175
BELLAIRE, CITY OF	390025	0219, 0236, 01
BELMONT COUNTY*	390762	0015, 0020, 0040,

An example of the missing community name in the Listing of Communities table.

Any community that is not floodprone will be footnoted in the Listing of Communities table as "†Non-floodprone". This information is derived from the FLOODPRONE field in the L_Comm_Info table. This field must be populated with "T" or "F".

COMMUNITY NAME
†CLEVELAND, CITY OF HELEN, CITY OF WHITE COUNTY (UNINCORPORATED AREAS)
†Non-floodprone

An example of a non-floodprone community in the Listing of Communities table.

The Listing of Communities table includes the list of panels on which the community falls. The **Generate INDEX Layout** tool intersects each community with the *FIRM Panel Index* (S_FIRM_Pan) features. If the panel is not printed, the panel number in the table will be footnoted as "°Panel Not Printed". This information is taken from the *PANEL TYPE* (PANEL_TYP) field in the *FIRM Panel Index* (S_FIRM_Pan) data layer.

LOCATED ON PANEL(S)	COMMUNITY NAME
0103, 0104, 0125 0075°, 0100°, 0103°, 0104, 0114, 0118, 0125, 0175°, 0182, 0184, 0200, 0202, 0203, 0204, 0206, 0207, 0208, 0209, 0212, 0216, 0217, 0219, 0225, 0236	CLEVELAND, CITY OF HELEN, CITY OF WHITE COUNTY (UNINCORPORATED AREAS)
	°Panel Not Printed

An example of panels footnoted as being not printed in the Listing of Communities table.

The table also includes the date of the community's first NFIP map, the date of the community's first FIRM map, and the date of the community's most recent FIRM map. The first NFIP map date is obtained from the IN_NFIP_DT field in the L_Comm_Info table and is placed under the INITIAL NFIP MAP DATE column heading. If the IN_NFIP_DT field value is "8/8/8888", no date will be placed under the column heading. Generally the date of the first NFIP map and the date of when the community was identified as eligible for the NFIP program are identical. However, if they differ (i.e., IN_ID_DAT and IN_NFIP_DT field values in L_Comm_Info do not match), the initial NFIP map date is footnoted in the Listing of Communities table as "<1>Initial Identification Date is <date>" where the <1> increases as necessary to accommodate additional communities differences and where <date> is the IN_ID_DAT field value from L_Comm_Info for that community.

LISTING OF COMMUNITIES			COMMUNITY NAME	COMMUN NUMBE
LOCATED ON PANEL(S)	INITIAL NFIP MAP DATE	INITI C	CLEVELAND, CITY OF	130411
0182, 0184, 0203, 0225	April 11, 1975 ¹	Febru	HELEN, CITY OF	13019:
0103, 0104, 0125	September 6, 1974	Apr	WHITE COUNTY (UNINCORPORATED AREAS)	13019:
			⁰ Panel Not Printed	
			¹ Initial Identification Date is January 3, 1972	
			² Initial Identification Date is May 24, 1984	

An example of a community footnoted as having differing community identification and initial NFIP map dates in the Listing of Communities table.

The date of the first FIRM map is obtained from the IN_FRM_DAT field in L_Comm_Info and placed under the INITIAL FIRM DATE column heading. If the field value is "8/8/8888", the date will not be included on the layout. The date of the most recent FIRM map is gathered from the RECENT_DAT field in L_Comm_Info and is placed under the MOST RECENT FIRM PANEL DATE column heading. If the field value is "9/9/9999", **Generate INDEX Layout** will not place a date in the column.

Communities that will only receive an updated INDEX (i.e., do not receive updated panel maps because no revisions occur within the panels) will be footnoted in the Listing of Communities table as "**Includes Most Recent Map Index". When the community does not have any panel revisions, there will not be a date in the "MOST RECENT FIRM PANEL DATE" column in the table; instead the column value will be a "**". This information is taken from the REVISIONS field in the L_Comm_Info table. This field must be populated with "T" or "F".

MOST RECENT FIRM PANEL DATE	COMMUNITY NAME
October 18, 2002	†CLEVELAND, CITY OF
*	HELEN, CITY OF
October 18, 2002	WHITE COUNTY (UNINCORPORATED AREAS)
	†Non-floodprone
	⁰ Panel Not Printed
	[*] Includes Most Recent Map Index

An example of the most recent map date footnoted as only being a recent index for a community in the Listing of Communities table.

The Listing of Communities table is created via Crystal Reports and is, therefore, an image. You cannot edit the text in the image. Additionally, Crystal Reports creates a whole page for the image; if your table is smaller than a page, the image will contain both the table and white space representing the length of the page (i.e., the image is not clipped to the table extents). On the layout, you should use the tools on the **Draw** toolbar (e.g., the *Order* tools) to arrange your elements effectively.

Note: If the data in the Listing of Communities table needs to be altered, you can recreate the graphic table without affecting the existing layout via the [Generate Listing of Communities Table](#) tool. If you wish to recreate the layout in its entirety, including the Listing of Communities table, you should do so with the **Generate INDEX Layout** tool.

In addition to the Listing of Communities table graphic, its related Note to User graphic note will automatically be generated for all countywide studies. The dynamic date in the note is the latest EFF_DATE field value in the *FIRM Panel Index* (S_FIRM_Pan) layer. If all of the EFF_DATE field values are <Null> or "9/9/9999", the text "[date]" is used as the date placeholder in the note.

NOTE TO USER

Future revisions to this FIRM Index will only be issued to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated October 18, 2002 or earlier. Please refer to the "MOST RECENT FIRM PANEL DATE" column in the [Listing of Communities](#) table to determine the most recent FIRM Index date for each community.

An example of the Future Revisions Note to User note that accompanies the Listing of Communities table.

NOTE TO USER

Future revisions to this FIRM Index will only be issued to communities that are located on FIRM panels being revised. This FIRM Index therefore remains valid for FIRM panels dated [date] or earlier. Please refer to the "MOST RECENT FIRM PANEL DATE" column in the [Listing of Communities](#) table to determine the most recent FIRM Index date for each community.

An example of the Future Revisions Note to User note where the EFF_DATE field values are "9/9/9999".

Map Repository Address list

The Map Repository Address list is created from the information that is populated in the L_Comm_Info table. You must have one record in the table for every applicable community included in your study. An applicable community is any community which is included in the study (i.e., is not an Area Not Included) and has a valid CID value (i.e., a value other than "FED", "ST", or "OTHR"). Any community in the L_Comm_Info table which is identified as not being floodprone (e.g., the FLOODPRONE field value is not "T") will not be listed in the Map Repository Address list. If the community is not floodprone, they will not be receiving any flood maps.

The **Generate INDEX Layout** tool uses the values from the *REPOSITORY ADDRESS 1* (REPOS_ADR1), *REPOSITORY ADDRESS 2* (REPOS_ADR2), *REPOSITORY ADDRESS 3* (REPOS_ADR3), *REPOSITORY CITY* (REPOS_CITY), *REPOSITORY STATE* (REPOS_ST), and *REPOSITORY ZIPCODE* (REPOS_ZIP) fields in the L_Comm_Info table to build the map repository address. The *REPOSITORY ADDRESS 1* (REPOS_ADR1), *REPOSITORY CITY* (REPOS_CITY), *REPOSITORY STATE* (REPOS_ST), and *REPOSITORY ZIPCODE* (REPOS_ZIP) field values must be populated. The *REPOSITORY ADDRESS 2* (REPOS_ADR2) and *REPOSITORY ADDRESS 3* (REPOS_ADR3) field values should be populated only if applicable to the study.

The tool first summarizes the *COMMUNITY INFO ID* (COM_NFO_ID) field values in the *Political Area* (S_Pol_Ar) layer for the features whose *AREA NOT INCLUDED* (ANI_TF) field value is "F". The tool then takes the unique set of values and attempts to match them to values in the corresponding *COMMUNITY INFO ID* (COM_NFO_ID) field in the L_Comm_Info table. If there is a mismatch, the tool generates a message; that community address will not be included in the address list.

For a single-jurisdiction study, the tool is expecting to find one unique *COMMUNITY INFO ID* (COM_NFO_ID) field value. If more than one value is found and a match in L_Comm_Info is also

found, the tool will list each address. Since a single-jurisdiction study is meant to have only one map repository address, you should correct your data and regenerate your layout.

For a countywide study, the community map repository address is preceded by the community's name. To ensure that FEMA's formal CIS community name is used, the **Generate INDEX Layout** tool accesses an internal CIS-based community table to obtain the community's name. For each record in the L_Comm_Info table, the tool takes the *COMMUNITY INFO ID* (COM_NFO_ID) field value and locates the community in the internal CIS-based table. When a match is found, the formal community name is included on the layout. If a match is not found, a message is generated and the community name is not placed on the layout (although the address is included). The communities are listed in alphabetical order. The county (or county equivalent like a parish or Alaskan borough) name is succeeded by the text "(UNINCORPORATED AREAS):".

MAP REPOSITORIES

(Maps available for reference only, not for distribution.)

CLEVELAND, CITY OF:
Cleveland City Clerk's Office
85 South Main Street
Cleveland, Georgia 30528

HELEN, CITY OF:
Helen City Hall
25 Chattahoochee Street
Helen, Georgia 30545

WHITE COUNTY
(UNINCORPORATED AREAS):
White County Planning Office
58 South Main Street, Suite 7
Cleveland, Georgia 30528

[Example of a countywide Map Repository Address list](#)

MAP REPOSITORY

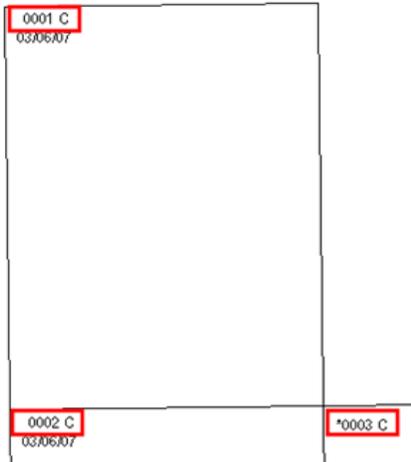
(Maps available for reference only, not for distribution.)

Herkimer Village Hall
120 Green Street
Herkimer, New York 13350

[Example of a single-jurisdiction Map Repository Address list](#)

FIRM Panel Number

The panel's number, in some form, is included on the panel feature in the layout. On an ANSI A INDEX layout, the 4-digit panel number followed by the panel suffix is placed in the upper left hand corner of panel spatial feature in the layout. These values are obtained from the *PANEL NUMBER* (PANEL) and SUFFIX fields in the *FIRM Panel Index* (S_FIRM_Pan) layer, respectively.



An example of the panel numbers on an ANSI A-sized layout.

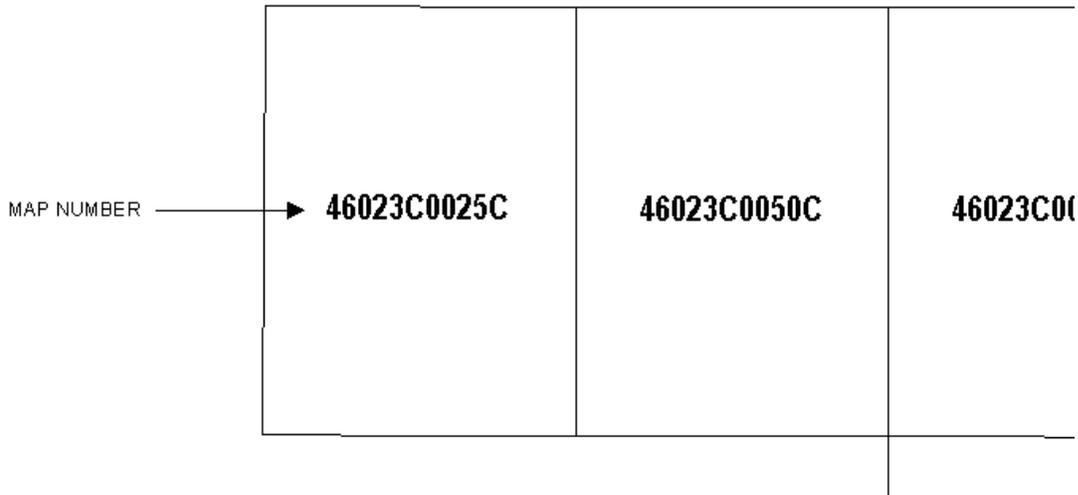
On a FEMA Custom-sized layout, the 11-digit full panel number (e.g., 12345C0025A) is shown on the panel spatial feature in the layout when the panel scale is “24,000” or “12,000”. The panel number is obtained from the *FIRM PANEL NUMBER* (FIRM_PAN) field in the *FIRM Panel Index* (S_FIRM_Pan) layer. For a 6,000-scale panel, to ensure that the panel number label will fit within the panel’s boundaries, only the 4-digit panel number and suffix values are shown. The label is created by concatenating the *FIRM Panel Index* (S_FIRM_Pan) layer’s *PANEL NUMBER* (PANEL) and *SUFFIX* field values. The **Generate INDEX Layout** tool attempts to place the label horizontally in the middle of the panel. However, if the tool finds that the panel number label exceeds the width of the panel, the label will be placed diagonally across the panel. If the label overlaps other panels or other labels (e.g., community name labels), you will need to manually adjust its location.



An example of the panel numbers on a FEMA Custom-sized layout.

Map Number note

The label "MAP NUMBER" will be created when the INDEX is generated. You will need to position the label "MAP NUMBER" to the left or right of top row of panels and draw an arrow via the *New Line* tool on the Draw toolbar from the label to the nearest panel number. Right-click the line, and select the *Properties* option, and select the appropriate arrowhead from the symbol list.

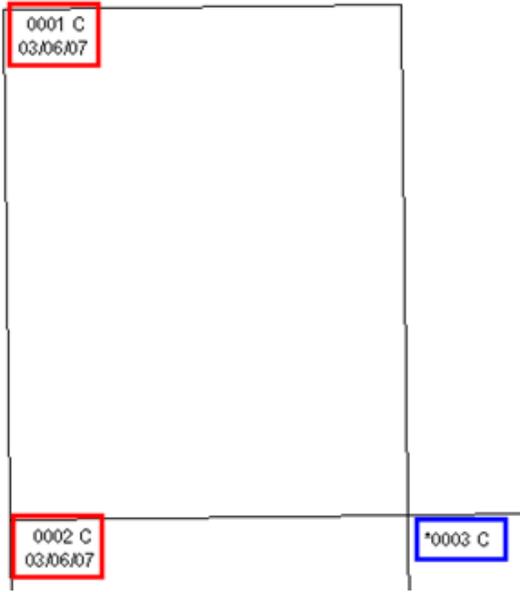


An example of the placement of the Map Number note.

Note: The label "MAP NUMBER" will be generated regardless of the study type or page size. You should include the label on all map sheets.

FIRM Panel Effective Date

For a single-jurisdiction study whose INDEX page size is ANSI A, the panel's effective date for printed panels is listed beneath the panel number. If the panel is not printed, the effective date is not included. The effective date value is obtained from the EFF_DATE field in the *FIRM Panel Index* (S_FIRM_Pan) layer.



An example of the effective date listed beneath the printed panel number (red box). For non-printed panels, the date is not included (blue box).

For countywide and single-jurisdiction studies whose INDEX page size is FEMA Custom, the FIRM Panel Dates table stores the panel's effective date. This table is created based on the information in the *PANEL NUMBER* (PANEL), *SUFFIX*, *PANEL TYPE* (PANEL_TYP), and *EFF_DATE* fields in the *FIRM Panel Index* (S_FIRM_Pan) layer. Only printed panels are included in the table. If the *PANEL TYPE* (PANEL_TYP) field value includes the text "NOT PRINTED", the panel number will not be included in the table. Panels that have <Null> values or are populated with "9/9/9999" for the effective date will be identified as <Null> in the table. For multi-page INDEX maps, the FIRM Panel Date table will only list those panels that are displayed on that particular sheet.

The FIRM Panel Dates table is created via Crystal Reports and is, therefore, an image. You cannot edit the text in the image. Crystal Reports creates a whole page for the image; if your table is smaller than a page, the image will contain both the table and white space representing the length of the page (i.e., the image is not clipped to the table extents). On the layout, you should use the **Draw** toolbar (e.g., the *Order* tools) to arrange your elements effectively.

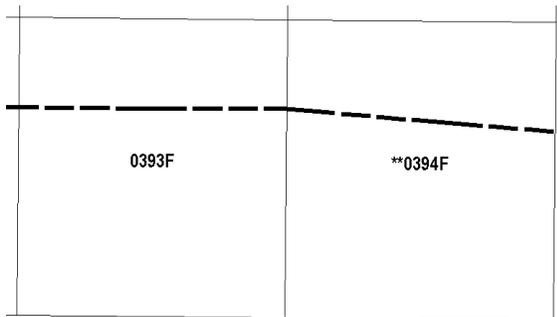
FIRM Panel Dates For Printed Panels of White County, GA (And Incorporated Areas)					
Panel	Effective Date	Panel	Effective Date	Panel	Effective Date
0100 C	February 1, 1991	0200 C	May 24, 1996	0212 C	October 18, 2002
0103 C	October 18, 2002	0202 C	May 24, 1996	0216 C	October 18, 2002
0104 C	October 18, 2002	0203 C	February 1, 1991	0217 C	
0114 C	May 24, 1996	0204 C	February 1, 1991	0219 C	
0118 C	February 1, 1991	0206 C	October 18, 2002	0225 C	October 18, 2002
0125 C		0207 C		0236 C	October 18, 2002
0182 C	October 18, 2002	0208 C	October 18, 2002		
0184 C	October 18, 2002	0209 C	February 1, 1991		

An example of the FIRM Panel Dates table.

Note: If the data in the FIRM Panel Dates table needs to be altered, you can recreate the graphic table without affecting the existing layout via the *Generate FIRM Panel Dates Table* tool. If you wish to recreate the layout in its entirety, including the FIRM Panel Dates table, you should do so with the **Generate INDEX Layout** tool.

Panel Not Printed Notations

In both the ANSI A- and FEMA Custom-sized layout, a non-printed panel is noted by a symbol preceding the panel number label on the spatial feature. In addition a list of the panel not printed (PNP) reasons is automatically created. The PNP description list is derived from the L_PNP_Reason table and the *FIRM Panel Index* (S_FIRM_Pan) data layer. The L_PNP_Reason table is populated early in the workflow to assist you with populating the *PANEL NOT PRINTED REASON* (PNP_REASON) field for each appropriate panel via the tools on the **DFIRM GeoPop Pro** toolbar. Do not populate a <Null> record (e.g., NSPNULL, an empty space such as " ") in the L_PNP_Reason look-up table, as the *PANEL NOT PRINTED REASON* (PNP_REASON) field is only applicable when the *PANEL TYPE* (PANEL_TYP) field for a particular panel indicates that the panel is not printed.



* PANEL NOT PRINTED - AREA IN ZONE D
 ** PANEL NOT PRINTED - ALL OPEN WATER

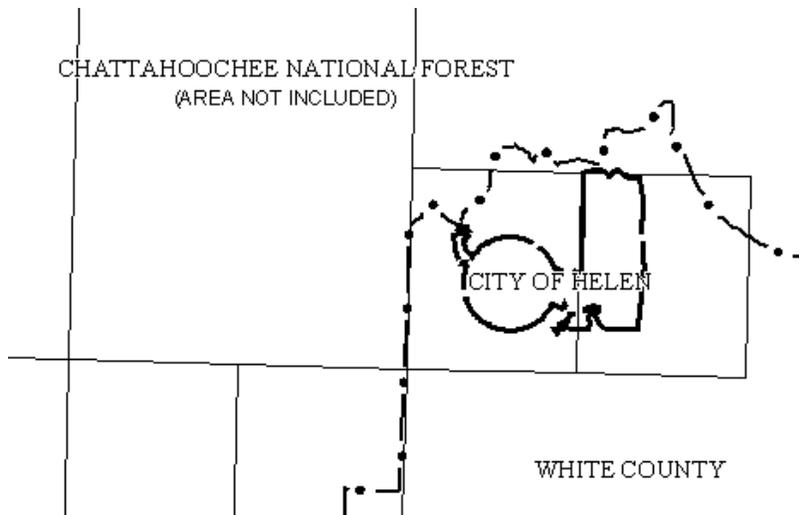
An example of footnoted panel number label in the layout.

An example of Panel Not Printed (PNP) description list in the layout.

For those *FIRM Panel Index* (S_FIRM_Pan) features whose *PANEL TYPE* (PANEL_TYP) field value contains "NOT PRINTED", if the **Generate INDEX Layout** tool cannot find a match between the *PANEL NOT PRINTED REASON* (PNP_REASON) field in the *FIRM Panel Index* (S_FIRM_Pan) layer and the *PANEL NOT PRINTED LOOKUP* (PNP_LID) field in the L_PNP_Reason table, the tool will generate a message and will not include the not printed note or symbol.

Community Labels

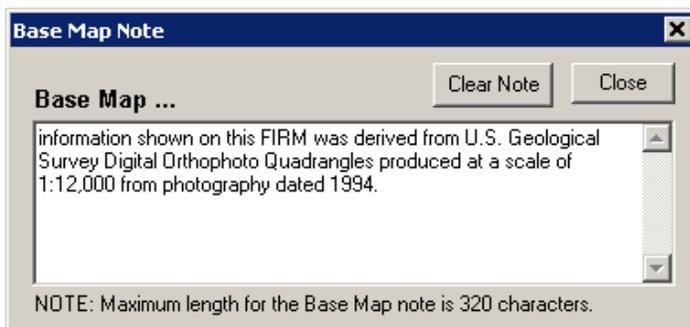
Generate INDEX Layout automatically labels each feature in the *Political Area* (S_Pol_Ar) layer in the layout. Each political area polygon is labeled with the value from the *POLITICAL NAME 1* (POL_NM1) field. For instance, if there are 3 polygons whose *POLITICAL NAME 1* (POL_NM1) field value is "City of Springfield", the label will appear 3 times on the layout, once for each polygon. For *Political Area* (S_Pol_Ar) layer features where the *AREA NOT INCLUDED* (ANI_TF) field value is "T", the community will be labeled in the layout with the *POLITICAL NAME 1* (POL_NM1) field value followed by the text "(AREA NOT INCLUDED)". The label is placed in the center of the polygon. You should manually move the label to the desired location, if necessary.



An example of the communities labeled in the layout.

Base Map Note

The Base Map note is usually created via the Base Map Note option in **DFIRM Map Production Pro's *Design Map Layout*** dialog. If a base map note was not entered in the *Design Map Layout* dialog, you will be prompted to enter the note via the **Base Map Note** dialog as the INDEX layout is being created. The text is saved to an internal table (the same table in which *Design Map Layout* uses) associated with your JTX job so that you will not need to recreate the text each time you generate the layout. You can opt not to include the text by clicking the *Cancel* button.



An example of the Base Map Note dialog populated with the base note text.

BASE MAP SOURCE

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994.

An example of the base map note that appears on the INDEX layout.

Elevation Datum

The Elevation Datum note must be placed on every layout regardless of study type or page size. The dynamic information in the Elevation Datum note is taken from the *VERTICAL DATUM* (V_DATUM) field in the Study_Info table.

ELEVATION DATUM

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282
(301) 713-3242

[An example of the Elevation Datum note.](#)

Note: If the *VERTICAL DATUM* (V_DATUM) field in the Study_Info table is not populated, the Elevation Datum note will not be created. In addition, other notes including the base map note will not be created. It is important that all of the required fields in the Study_Info table be populated before you generate your INDEX layout.

Note to Users

The Note to Users is standardized text, and it does not require any input from the spatial layers, look-up tables, or the *Generate INDEX Layout* dialog. The note is generated each time a layout is created with the **Generate INDEX Layout** tool. However, the Note to Users in the INDEX map should only be included on preliminary INDEX maps or on INDEX maps where only one panel is being printed. You will have to manually delete the Note to Users text when it is not applicable.

NOTE TO USERS

FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.

[The FEMA Maintains Note to Users note on the INDEX layout.](#)

CBRS/OPA note

The Coastal Barrier Resource System (CBRS)/Otherwise Protected Area (OPA) note will be generated if features exist in the *CBRS* (S_CBRS) data layer. All panels in which a *CBRS* (S_CBRS) feature(s) exists will be identified in the note; any panel in the note that is not printed will be footnoted as "Panel Not Printed".

- NOTE -

Designated CBRS Areas are located on panels 25*, 75*, 100, 103, 125, and 200.

*Panel Not Printed

An example of the CBRS note.

Layer Symbology and Ordering

Only a few spatial layers are displayed on the INDEX layout. During its processing, the **Generate INDEX Layout** tool automatically removes the unneeded spatial layers (including the topology layers) from the Layers data frame. The tool retains several layers in the Table of Contents and automatically arranges them in the following order:

- *FIRM Panel Index* (S_FIRM_Pan)
- *Water Line* (S_Wtr_Ln)
- *Transportation* (S_Trnsport_Ln)
- *Water Area* (S_Wtr_Ar)
- *Political Line* (S_Pol_Ln)
- *Political Area* (S_Pol_Ar)

If these layers are not currently loaded into the Table of Contents, the **Generate INDEX Layout** tool will add them to the Layers data frame. Reference layers that are loaded into the Table of Contents are all automatically removed from the Table of Contents.

For a single page layout (for both the ANSI A and FEMA Custom page sizes), the **Generate INDEX Layout** tool does not affect the layer symbology. You are responsible for symbolizing the data via the DFIRMINDEX style option in the **Render Using VVT Symbology** tool on the **PLTS Symbology and QA** toolbar. You may render the layers before or after the layout is created.

For a multi-page layout, the **Generate INDEX Layout** tool alters the symbology of the *FIRM Panel Index* (S_FIRM_Pan) layer. In this scenario, all panels whose INDEXSHEET field value matches the layout sheet are symbolized as hollow fill with a black outline. All other *FIRM Panel Index* (S_FIRM_Pan) features are symbolized as white fill with no outline. For instance, in your *FIRM Panel Index* (S_FIRM_Pan) layer, some features have an INDEXSHEET field value of "1" while others have a value of "2" or "3". When you generate the layout for sheet 2, all of the *FIRM Panel Index* (S_FIRM_Pan) features whose INDEXSHEET field is "2" are automatically symbolized as hollow fill with a black outline. The *FIRM Panel Index* (S_FIRM_Pan) features whose INDEXSHEET field is "1" or "3" are automatically symbolized as white fill with no outline. The symbology for the other layers is not affected by the tool.

To prevent unnecessary re-symbolization, when creating a multi-page INDEX layout, you should render your data via the "DFIRMINDEX" style option in the **Render Using VVT Symbology** tool

before generating the layout. If you do symbolize the multi-page INDEX layout with the *Render Using VVT Symbology* tool after generating the layout, you will overwrite the multi-page-based *FIRM Panel Index* (S_FIRM_Pan) layer symbology. To return the *FIRM Panel Index* (S_FIRM_Pan) layer to the symbology based on the INDEXSHEET field, use the *Symbolize Multi-Page Panels* tool.



Export to PDF

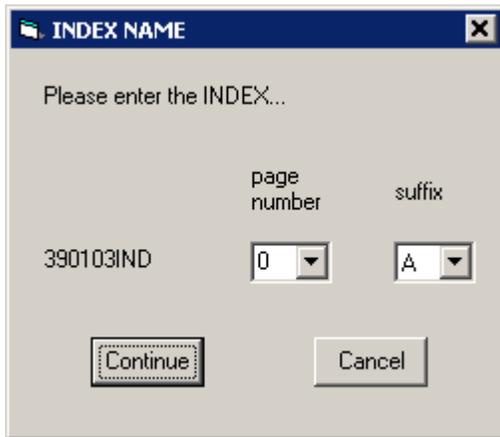
The **Export to PDF** tool creates a Portable Document Format (.pdf) image file for the current layout. The .pdf image has a resolution of 400 dpi. The layout will be saved according to the following naming convention:

<DFIRM ID>_IND<map page number><suffix>.pdf
(e.g., 06063C_IND2B.pdf, 218193_IND0A.pdf)

1. Click **Export to PDF**.

Note: You may only export a layout while in a parent JTX job step.

2. Select the page number and suffix for your INDEX map layout and click *Continue*, if prompted.



The INDEX NAME dialog.

When a layout is created with the *Generate INDEX Layout* tool, the INDEX map sheet name is temporarily stored in memory. When ArcMap is closed, the memory is cleared. After re-launching ArcMap, if you wish to export your layout, since the INDEX map sheet is no longer stored in memory, you will be prompted to select the page number and suffix that represents the layout. The selected page number and suffix is used in the file name creation process. If you are creating a single page INDEX, the page number should be "0".

Note: Click the *Cancel* button if you wish to stop the export process.

3. The .pdf image is created.

The exported .pdf is stored in the following folder structure on the **MIP**:

J:\FEMA\

Note: Use the *Download PDF* tool on the **Local Transfer** toolbar to download the .pdf image file(s) from the MIP directory structure to your local drive for printing and/or archiving.



Export to Images

The **Export to Images** tool exports INDEX layout to .eps and .tif image formats. The images have a resolution of 400 dpi. The layout will be saved according to the following naming convention:

<DFIRM ID>IND<map page number><suffix>.eps

(e.g., 06063CIND2B.eps, 218193IND0A.eps)

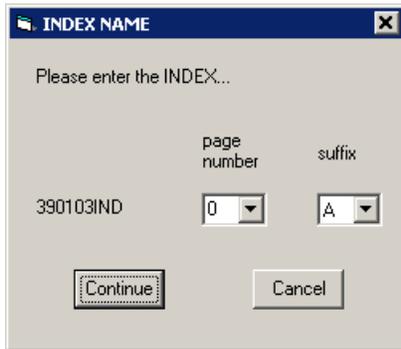
<DFIRM ID>_IND<map page number><suffix>.tif

(e.g., 06063CIND2B.tif, 218193IND0A.tif)

1. Click **Export to Images**.

Note: You may only export a layout while in a parent JTX job step.

2. Select the page number and suffix for your INDEX map layout and click *Continue*, if prompted.



The INDEX NAME dialog.

When a layout is created with the *Generate INDEX Layout* tool, the INDEX map sheet name is temporarily stored in memory. When ArcMap is closed, the memory is cleared. After re-launching ArcMap, if you wish to export your layout, since the INDEX map sheet is no longer stored in memory, you will be prompted to select the page number and suffix that represents the layout. The selected page number and suffix is used in the file name creation process. If you are creating a single page INDEX, the page number should be "0".

Note: Click the *Cancel* button if you wish to stop the export process.

3. The .eps and .tif images are created.

The .eps and .tif image files are stored in the following folder structure on the **MIP**:
J:\FEMA\

Note: The following is a universal approach for printing .eps files directly to a printer/plotter from your local machine.

1. Open the DOS Prompt (cmd.exe) via **Start Menu > Run >** Type "cmd" into the **Open:** dialog.
2. Enter the following command "copy <local directory path with .eps file name and extension> <printer location including the server path>" (e.g., copy D:\DFIRM\BradleyCity_IL\1703380120D.eps \\Server08\1055A)



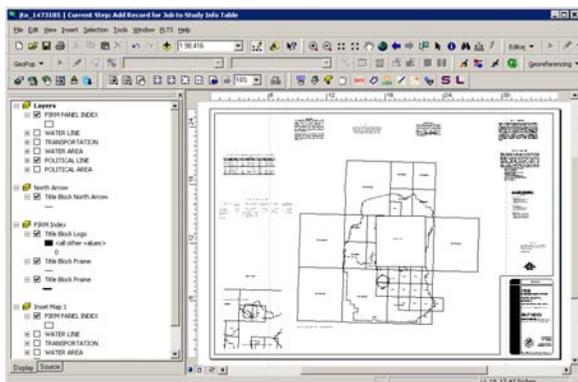
Clear Layout

The **Clear Layout** tool removes all graphics from the layout. In addition, the tool deletes the data frames that were created by the **Generate INDEX Layout** tool from the Table of Contents. The labels on the layers *FIRM Panel Index* (S_FIRM_Pan), *Political Area* (S_Pol_Ar), *Water Line* (S_Wtr_Ln), *Water Area* (S_Wtr_Ar), and *Transportation* (S_Trnsport_Ln) will also be removed. Additionally, the active view is switched from the Layout View to the Data View.

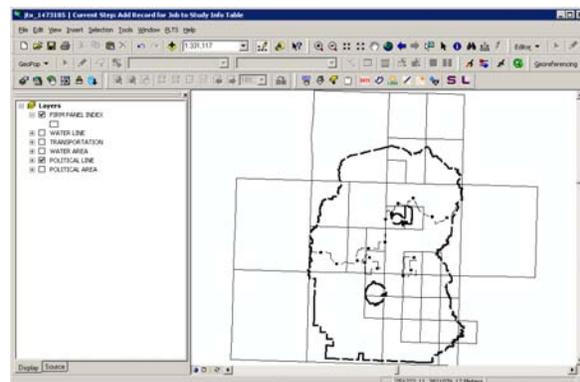
1. Click **Clear Layout**.

Note: You may only clear the layout while in a parent JTX job step.

2. The graphics and INDEX layout-related data frames are removed.



An example of an INDEX layout in the ArcMap document before clicking Clear Layout.



An example of the ArcMap document after clicking Clear Layout.



Generate FIRM Panel Dates Table

The **Generate FIRM Panel Dates Table** tool regenerates the FIRM Panel Dates table without having to recreate the INDEX map layout via the **Generate INDEX Layout** tool. For single page INDEX maps the FIRM Panel Dates table will include all panels for your study. Whereas, for multi-page INDEX maps the FIRM Panel Dates table will include only dates for those panels that are displayed on that particular map page.

The FIRM Panel Dates table is created via Crystal Reports and is, therefore, an image. You may not edit the text in the image. Crystal Reports creates a whole page for the image; if your table is smaller than a page, the image will contain both the table and white space representing the length

of the page (i.e., the image is not clipped to the table extents). On the layout, you should use the **Draw** toolbar (e.g., the Order tools) to arrange your elements effectively.

Note: You may only create the table while in a parent JTX job step.

Note: The **Generate FIRM Panel Dates Table** tool does not replace the current FIRM Panel Date table; rather it creates a new table image, and you will have to manually delete the old table image. Therefore, if you click the **Generate FIRM Panel Dates Table** button 4 times, you will have 5 instances of the table – one created via the *Generate INDEX Layout* tool and 4 created via the **Generate FIRM Panel Dates Table** tool.



Generate Listing of Communities Table

The **Generate Listing of Communities Table** tool regenerates the Listing of Communities table, for countywide studies, without having to recreate the INDEX map layout via the *Generate INDEX Layout* tool.

The Listing of Communities table is created via Crystal Reports and is, therefore, an image. You may not edit the text in the image. Crystal Reports creates a whole page for the image; if your table is smaller than a page, the image will contain both the table and white space representing the length of the page (i.e., the image is not clipped to the table extents). On the layout, you should use the **Draw** toolbar (e.g., the Order tools) to arrange your elements effectively.

Note: You may only create the table while in a parent JTX job step.

Note: The Listings of Communities table is not created for community-based studies.

Note: The **Generate Listing of Communities Table** tool does not replace the current Listing of Communities table; rather it creates a new table image, and you will have to manually delete the old table image. Therefore, if you click the **Generate Listing of Communities Table** button 4 times, you will have 5 instances of the table – one created via the *Generate INDEX Layout* tool and 4 created via the **Generate Listing of Communities Table** tool.



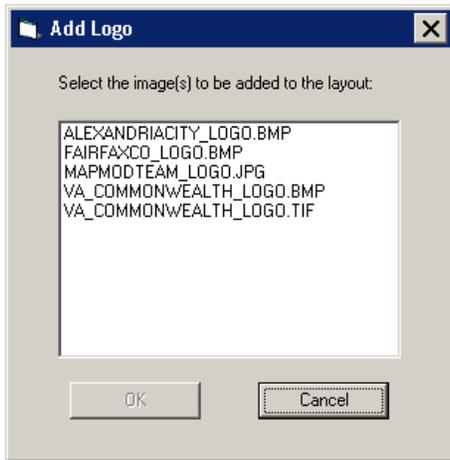
Add Logo

The **Add Logo** tool allows the user to add any additional logo(s) to the INDEX map layout. The logo(s) must be located in the J:\FEMA\

1. Click **Add Logo**.

Note: You may only add a logo while in a parent JTX job step.

2. Select the appropriate logo(s) in the **Add Logo** dialog and click *OK*.



An example of images listed in the Add Logo dialog.

Note: Only the files that met the file extension criteria will be listed in the dialog.

3. The selected image(s) is added to the layout. You will need to manually move and/or resize the added logo(s) as necessary.

Note: The **Add Logos** tool does not currently support compressed .tif images.

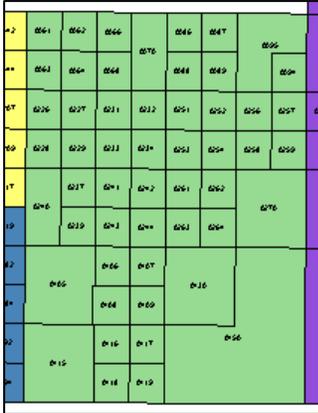


Symbolize Multi-Page Panels

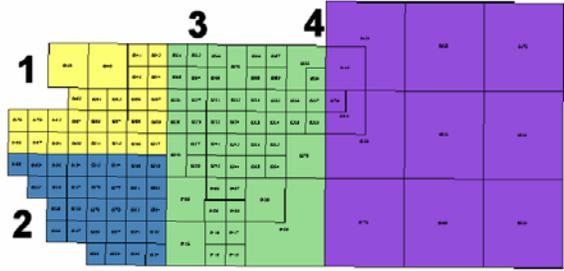
The **Symbolize Multi-Page Panels** tool allows you to symbolize the *FIRM Panel Index* (S_FIRM_Pan) data layer in a multi-page INDEX layout, so that only the panels on that map page are visible (i.e., displayed with a black outline and hollow fill).

Running the **Render using VVT Symbology** tool on the **PLTS Symbology and QA** toolbar after generating the INDEX map layout will cause all panels to be visible, despite whether or not the panels are included on that particular map page. Running the **Symbolize Multi-Page Panels** tool will symbolize just the *FIRM Panel Index* (S_FIRM_Pan) features; all other data layers will remain symbolized as they currently are.

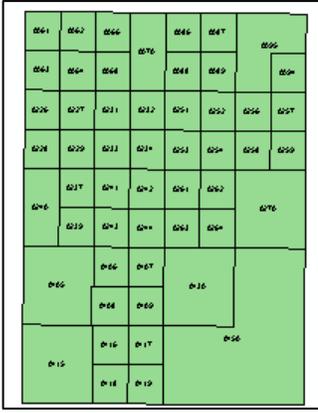
Note: Run the **Render using VVT Symbology** tool with the DFIRMINDEX option prior to generating the INDEX map layout. The **Generate INDEX Layout** tool will automatically symbolize your panels properly, according to which panels are displayed on that particular map page.



Graphical depiction of running the *Render using VVT Symbology* tool after running the *Generate INDEX Layout* tool for sheet 3. Notice that the neighboring panels for the other INDEX sheets are displayed.



Graphical depiction of the FIRM Panel Index features. Each color represents a different INDEX sheet in a multi-page sheet INDEX.



Graphical depiction of running the *Symbolize Multi-Page Panels* tool after running the *Render using VVT Symbology* tool on generated sheet 3. Notice that the neighboring panels for the other INDEX sheets are not displayed.



Update Multi-Page Panels

The **Update Multi-Page Panels** tool allows you to update the map layout in a multi-page INDEX when changes are made to the INDEXSHEET field in the *FIRM Panel Index* (S_FIRM_Pan) data layer. For instance, you initially populated your INDEXSHEET field with the values "1" and "2". After creating INDEX sheet 2 with the *Generate INDEX Layout* tool, you realize that your study would best be shown on three sheets. So, you modify the values in the INDEXSHEET field in the *FIRM Panel Index* (S_FIRM_Pan) to be "1", "2", and "3". You can then click the **Update Multi-Page Panels** tool to update the appropriate pieces of existing sheet 2. This tool prevents you from having to recreate the entire INDEX sheet with the *Generate INDEX Layout* tool when the panels on that sheet have changed.

The **Update Multi-Page Panels** tool will regenerate the Title Block, recreate the FIRM Panel Dates table, regenerate the INDEX Locator Diagram, and automatically symbolize the *FIRM Panel Index* (S_FIRM_Pan) layer, based on the panels which are displayed on that map page. The changes that you made to the arrangement of the layout elements (e.g., moving and aligning the Map Repository Address list) will be preserved.

Note: The **Update Multi-Page Panels** tool does not replace the current FIRM Panel Date table; rather it creates a new table image, and you will have to manually delete the old table image. Therefore, if you click the **Update Multi-Page Panels** button 4 times, you will have 5 instances of the table – one created via the *Generate INDEX Layout* tool and 4 created via the **Update Multi-Page Panels** tool.

The *Generate INDEX Layout* tool stores your INDEX sheet name in memory. If the **Update Multi-Page Panels** tool is unable to locate the sheet name because you, for instance, have closed ArcMap since generating the sheet or have loaded a previously created sheet, the tool will prompt

you to supply the page number and suffix of your current INDEX map layout. Once you select the values and click *OK*, your INDEX sheet name will be stored in memory for that ArcMap session.

Note: If you enter an erroneous page number or suffix when prompted, you will not be able to correct your mistake since now the name is stored in memory, and you will not be prompted again to supply it. To correct this, you will need to close ArcMap and re-launch it to clear the INDEX sheet name from memory.



Auto Label

The **Auto Label** tool automatically labels the features in the *Water Line* (S_Wtr_Ln), *Water Area* (S_Wtr_Ar), and *Transportation* (S_Trnsport_Ln) data layers, when the *Shown on INDEX* (SHOWN_INDX) field value is "T" in each of these data layers. The **Auto Label** tool will label features in the Layers data frame as well as any existing inset map data frames.

Note: You may only auto label water and transportation features while in a parent JTX job step.

Water features will be labeled with the value in the *WATER NAME* (WTR_NM) field. If "NP" or "UNKNOWN" is the value in the *WATER NAME* (WTR_NM) field in either the *Water Line* (S_Wtr_Ln) or *Water Area* (S_Wtr_Ar) data layer, the water feature will not be labeled.

Transportation features, excluding railroads, will be labeled with the concatenation of the following fields: PREFIX, *FEATURE NAME 1* (FEAT_NM1), SUFFIX, and *NAME TYPE* (NM_TYP). If any of these fields are populated with a null or "NP" value, the field value will be omitted from the concatenation. Road shields will be created for any features where the *NAME TYPE* (NM_TYP) value is "COUNTY HIGHWAY", "STATE HIGHWAY", or "INTERSTATE HIGHWAY". Also, if the name type equals "HIGHWAY" and the field *FEATURE NAME 1* (FEAT_NM1) contains "ST", "CO", or "I", a road shield will be created for the feature; otherwise the feature will be labeled according to the field concatenation.

Note: When *NAME TYPE* (NM_TYP) equals "HIGHWAY" and *FEATURE NAME 1* (FEAT_NM1) contains "I", "ST", or "CO" and a letter (e.g., "CO K" for county highway K), the feature will be labeled as "CO K HIGHWAY". To properly label lettered highways with a shield, the *FEATURE NAME 1* (FEAT_NM1) value should be only the lettered portion (e.g., "K") of the highway name and the *NAME TYPE* (NM_TYP) value should be specific to the highway type (e.g., "COUNTY HIGHWAY").

If the *TRANSPORTATION FEATURE TYPE* (TRANS_TYP) value equals "railroad", then the feature will be labeled as "RAILROAD". Unlike the road transportation features, every railroad transportation feature will be labeled.

Note: Each label name (e.g., Potomac River), excluding railroads, will be generated only once per INDEX map page.

The labels are always placed parallel to the bottom of the page. To manipulate the orientation of the label, you may double-click the label and change the angle in the *Properties* dialog. Or, you may select the label(s) and use the *Rotate* tool on the **Editor** toolbar to change the angle appropriately.

Note: The **Auto Label** tool does not replace the current transportation and water labels; rather it creates new labels, and you will have to manually delete the old labels. Therefore, if you click the **Auto Label** button three times, you will have three instances of the labels.



Save INDEX MXD

The **Save INDEX MXD** tool saves the current MXD to the SDE database. The MXD is associated with the parent job, so it will be preserved throughout the JTX workflow lifecycle.

The MXD will be named according to the INDEX map name (e.g., 06037CIND2B.mxd, 170238IND0A.mxd). Therefore, only one MXD can exist at a time for a particular INDEX map sheet. You will be prompted with the option to overwrite the current MXD, if an ArcMap session already exists for that particular INDEX map.

Note: When the **Save INDEX MXD** tool is applied, the INDEX MXD is saved with a reference to the parent job version. This is essential so that when you return to the INDEX for post-preliminary processing, you may access your data. Whereas, if the **Save INDEX MXD** tool saved the MXD with a reference to a child job version, when you returned to the INDEX MXD in the future, there would be unrecoverable broken data links in the MXD since the child job version no longer exists. Therefore, **Save INDEX MXD** is designed to be used within a parent job step; you may not use this tool or any of the other **DFIT Pro** tools within a child job.

Note: When you exit ArcMap you may be prompted to save your INDEX MXD before you close the application.



Load INDEX MXD

The **Load INDEX MXD** tool opens a saved INDEX map MXD. Only INDEX maps previously saved via the **Save INDEX MXD** tool, for your specific parent JTX job, can be opened.

1. Click **Load INDEX MXD**.

Note: You may only load an INDEX MXD while in a parent JTX job step.

2. Select the INDEX MXD you want to open from the **INDEX MXD Names** dialog and click *OK*.



An example of the available INDEX MXDs in the INDEX MXD Names dialog.

3. A message box indicates when the selected INDEX MXD is opened.



An example of the notification message stating that the selected INDEX MXD is opened.

You may be prompted to save the current ArcMap MXD (e.g., jtx_115873.mxd), before working in the opened INDEX MXD. Click *Yes* to save your ArcMap session for the next time that ArcMap is launched from JTX; click *No* to discard all of your changes in the ArcMap session (e.g., DFIRMINDEX symbology)

Note: To return to the ArcMap session/MXD that is associated with the current JTX workflow step, you must close ArcMap and relaunch ArcMap from **JTX**.

Note: When you exit ArcMap you may be prompted to save your opened INDEX MXD before you close the application.

Troubleshooting

Problem: What are the four date fields in the L_Comm_Info table, and how do I populate them?

Solution: The IN_ID_DAT value is the date that the community was first identified as a flood-prone area and is a candidate for the NFIP.

The IN_NFIP_DAT value is obtainable from the FIRM or FHBM and is shown on the FIRM; the date is related to the Flood Hazard Boundary Map Revisions and Flood Insurance Rate Map Effective listing on the FIRM Legend. This is essentially the date of the first FEMA map. If the FHBM is the first FEMA map, for instance, then its effective date is placed here. If a currently effective FIRM is the first FEMA map then that date should go here. If this FIRM in-progress is the first FEMA map, then its effective date (when it's known) should be listed here. If there is no FHBM or effective FIRM date and the soon-to-be-effective FIRM date is not yet known, the value should be 8/8/8888.

The IN_FRM_DAT value is also on the FIRM. This value is the date that is listed under the Flood Insurance Rate Map Effective heading. So if there is no FHBM date, then IN_NFIP_DAT and IN_FRM_DAT will hold the same value. If this is a first time FIRM, this value would be 8/8/8888 during the preliminary period and would be replaced with the valid effective date when the map is finalized.

The RECENT_DAT is the effective date of the FIRM in-progress. During the preliminary stage, this value would be 9/9/9999. Once the preliminary period is over and the effective date has been established, 9/9/9999 would be replaced with the valid effective date.

Problem: After I ran the *Generate INDEX Layout* tool, I added more data layers via the *DFIRM Layer Data Loader* tool. All of my data in the Layers data frame disappears in my map layout.

Solution: If you need to add additional data to your INDEX map after creating a layout via the *Generate INDEX Layout* tool, make sure you are in the Data View when you use the *DFIRM Layer Data Loader* tool. Otherwise, if you add data in the Layout View after using the *Generate INDEX Layout* tool, you will have to click the *Go Back to Previous Extent* tool on the **Tools** toolbar to refresh the map layout.

Problem: I added a base map note as prompted when the INDEX layout was being created. I need to change the note. How can I do that?

Solution: For a short term fix, you can manually alter the graphic base map note that is placed on the INDEX layout. So that your note is correct in the long term, you should alter the note via the *Design Map Layout* tool on the **DFIRM Map Production Pro** toolbar. Click the *Design Map Layout* tool, alter the note in the Base Map Note

section of the *Design Map Layout* dialog, and create a panel layout. This series of actions will update your base map note text in the internal table.

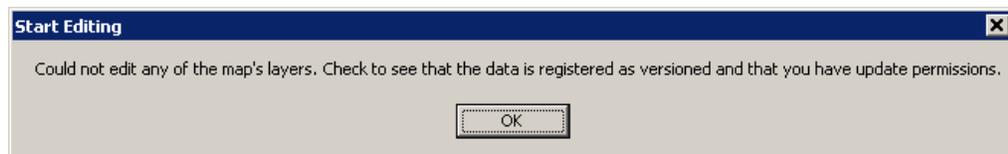
Problem: I cannot select the labels or features for editing within my INDEX layout.

Solution: To be able to select the labels within your Layers data frame while in the Layout View, you need to select the data frame by right-clicking Layers in the Table of Contents and selecting *Activate* from the dropdown list. When the Layers data frame is selected (i.e., cyan dotted line), right-click within the data frame, click the *Order* option menu, and select *Bring to Front*. Then, double-click the Layers data frame to focus the active frame; the frame will be outlined with a thick gray hashing when it is focused. Now you will be able to select the labels or features and edit them as necessary.

Problem: When my layout is created, the map repository heading is created but there is no address(es) listed.

Solution: Only floodprone communities are included in the map repository list. Verify that the FLOODPRONE field value(s) in the L_Comm_Info table is "T".

Problem: When I attempt to start an editing session, this error message appears.



Error message – Cannot edit map layers.

Solution: This message appears when you are attempting to edit a data frame other than the Layers data frame. To start editing the Layers data frame, right-click the Layers data frame name in the Table of Contents and select *Activate*. Once the Layers data frame is active (i.e., the data frame name in the Table of Contents is bold), you will be able to start an editing session.

Problem: I was using the *Export to PDF* tool to export my layout, and this error message appeared.



Error message – Cannot access directory folder when exporting a .pdf image.

Solution: The *Export to PDF* tool failed to access the output folder. Most likely the folder pathway is incorrect or contains the wrong set of permissions. Please contact MIPHelp@mapmodteam.com for additional assistance.

Problem: I was using the *Export to Images* tool to export my layout, and this error message appeared.



Error message – Cannot access directory folder when exporting images.

Solution: The *Export to Images* tool failed to access the output folder. Most likely the folder pathway is incorrect or contains the wrong set of permissions. Please contact MIPHelp@mapmodteam.com for additional assistance.

Problem: I was using the *Add Logo* tool to customize my layout, and this error message appeared.



Error message – Cannot access directory structure

Solution: The *Add Logo* tool failed to access the input folder. Most likely the folder pathway is incorrect or contains the wrong set of permissions. Please contact MIPHelp@mapmodteam.com for additional assistance.