# APPENDIX B: FEMA 452: Risk Assessment Database© V5.0

## User Guide

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Introduction

To support the facility assessment process, this easy to use Risk Assessment Database application is provided with FEMA 452, Risk Assessment: A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings and FEMA 455: Handbook for Rapid Visual Screening (RVS) of Buildings to Evaluate Terrorism Risks. The database is known as FEMA 452: Risk Assessment Database. It is a multi-purpose tool that supports assessments of 1) facilities, 2) COOP facilities, and 3) the Rapid Visual Screening process. The FEMA452db User Guide provides direction to complete each of the assessments capabilities within the database. The current version of the database was developed based on the methodologies, principles and tools found in FEMA 452, Risk Assessment: A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings and FEMA 455: Handbook for Rapid Visual Screening of Buildings to Evaluate Terrorism Risks.

Rapid Visual Screening Background

Implementation of FEMA 452, Risk Assessment Database demonstrated the need for a preliminary procedure for assessment of risk specific to terrorist attack that is quick and simple to use. It has also shown that such a procedure needs to be usable by owner(s)/operator(s) who are knowledgeable about building systems, but not necessarily experts in anti-terrorism design so that experts can be reserved for higher risk buildings requiring more detailed assessment when resources are limited. In this document, the concepts for rapid visual screening routinely employed for seismic hazards are combined with a risk-based procedure for manmade hazards defined in FEMA 426, Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings, FEMA 427, Primer for Design of Commercial Buildings to Mitigate Terrorist Attacks, and FEMA 452, Risk Assessment, A How-to Guide to Mitigate Potential Terrorist Attacks Against Buildings, from the FEMA Risk Management Series of reports.

Objectives and Scope

The Risk Assessment Database is a standalone application that is both a data collection tool and a data management tool. Assessors can use the tool to assist in the systematic collection, storage and reporting of assessment data. It has functions, folders and displays to import and display risk matrices, digital photos, cost data, site plans, floor plans, emergency plans, and certain GIS products as part of the record of assessment. Managers can use the application to store, search and analyze data collected from multiple assessments, and then print a variety of reports.
Database Administrator Information

Download and install the database program from the FEMA website: [http://www.fema.gov/plan/prevent/rms/rmsp452.shtml](http://www.fema.gov/plan/prevent/rms/rmsp452.shtml). Follow the download and self-installation instructions. It is recommended to install the database on two separate systems: one to use as the Master Database and one to use as a temporary Assessment Tool.

Install one copy of the program as the Master Database on a computer at your organization’s headquarters. This will act as the permanent database that stores assessments, produces reports, and is used to manage the assessment program. This is installed one time and is the permanent program. This database is normally run in the Master Database operating mode. For small organizations, the Master Database can also be used to perform the Assessment Tool functions and directly collect assessment data. Note: be sure to change the initial generic passwords.

Install a second copy of the program to use in the Assessment Tool operating mode on the computer(s) that your assessors will use to collect data, such as a laptop. This is intended to be a temporary database that can be used to collect data, pass the collected data on to the Master Database, and subsequently have its records deleted so it can be used for other assessments. This database is normally run in the Assessment Tool operating mode. Note: be sure to change the initial generic passwords.

When an organization wants to conduct an assessment of a facility or a series of facilities, it uses the database in the Assessment Tool operating mode. Pre-assessment tasks are performed and information is collected and loaded into the temporary Assessment Tool database. Into this Assessment Tool database are placed references, site plans, GIS portfolios, and other facility specific data that is known about the assessment facility or is developed during the pre-assessment phase. Loading this information can be done by a Project Manager before the assessment or by an assessor during the assessment.

The assessment team then conducts the assessment and records information using the Assessment Tool operating mode on one or more computers (usually laptop computers). At the end of the assessment, the assessment team leader uses the Import Checklist function in the Assessment Tool operating mode to combine the team’s checklist, vulnerability and recommendation entries. They also combine photos, and miscellaneous files into the lead assessor’s database folder. The Project Manager then uses the Import Assessor Database function in the Master Database operating mode to transfer the complete assessment data and files into the Master Database for analysis and printing.

Once the assessment record is imported into the Master Database, managers can use the application to store, search and analyze data collected from multiple assessments, and then print a variety of reports. The information can also be exported as a MS Word© or MS Excel© document for additional editing and formatting.
Creating and managing user accounts are also a function of the Master Database. After initially installing the application and changing the generic passwords, the administrator can restrict access and assign read / write permission to designated users. Assessment data then can only be viewed by authorized users of the database, and changes to the data can only be made by those granted permission.

The following are the hardware and software requirements for the Risk Assessment Database:

- Pentium® 4 or equivalent processor
- Windows XP®
- MS Access® 2002
- 256 MB of RAM recommended for all components

Note: the Database must be opened using the shortcut installed during the initial setup.

The initial passwords are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>Administrator</td>
</tr>
<tr>
<td>Assessor</td>
<td>Assessor</td>
</tr>
<tr>
<td>Editor</td>
<td>Editor</td>
</tr>
<tr>
<td>Reader</td>
<td>Reader</td>
</tr>
</tbody>
</table>

It is recommended that your database administrator assign new user names and change these passwords following the initial installation of the database. See the Database Administrator Information section and the Change Password section of the User Guide for more detailed information.
Installation Process

- Install one copy of the program as the Master Database on a computer at your organization’s headquarters. Download the database program from the FEMA website: http://www.fema.gov/plan/prevent/rms/rmsp452.shtm.

- After downloading the program, begin the installation process by first closing all other programs and then left click on the SETUP.EXE file. Note: If the program was previously downloaded to your computer, left click <Start>, <Run>, identify the location where the SETUP.EXE program can be found (CD, C:/Temp, or some other storage location on hard drive or media) and then left click on the SETUP.EXE file.

- The Install Wizard first identifies the name of the software being installed. Left click <Next> to continue after confirming that this is the software you want to install.

- A standard screen showing the End User License Agreement will appear. Read as you feel appropriate, then left click on the <Accept> circle, and left click on <Next> to continue with the installation.

- Add the User Name and Organization in the appropriate windows. Continue with the installation by left clicking <Next>.
• There is no advantage in using the Custom Installation. There are no component programs to select. The only feature that the Custom Installation allows is to change the file name and/or file location. In most cases you should follow the Typical Installation. To proceed, left click on <Typical>.

• A standard screen to ensure you are ready to install will appear. Proceed by left clicking <Install>.

• If the Access program is not located in the standard location, the Install Wizard will take a long time looking for it with a searching flashlight. It should eventually find it and get to this screen. The final standard screen indicates the Install Wizard has completed the installation. Left click <Finish> to end the installation.

• Following the same procedure, install a second copy of the program to use in the Assessment Tool operating mode on the computer(s) that your assessors will use to collect data, such as a laptop.
Use of the Database

The database is designed to be loaded on several different systems and to allow an organization to exchange information between two or more copies of the database: one (or more) loaded on the assessor team laptop(s) and operating in the Assessment Tool mode for conducting assessments in the field; and one database loaded on a computer at an organization’s headquarters and operating in the Master Database mode for collecting the results, printing reports, and analyzing the information from a number of assessments. The Master Database copy also provides the organization the ability to search for vulnerabilities common to many assessed facilities, search for specific vulnerabilities, etc. Essentially it can be used as a Risk Management tool to identify and track mitigation measures to reduce risk.

The Assessment Tool mode was designed for engineers and security specialists to be able to easily collect data from the facility being assessed. As you will see, the software is very user friendly. The Master Database mode was designed for the Program Manager.

This diagram shows how the copies of the database interact. When an organization collects pre-assessment information and prepares to conduct an assessment of a facility or a series of facilities, an assessment record is prepared in the lead assessor’s database using the Assessment Tool operating mode (usually on a laptop computer). Into this assessment record is placed references, site plans, GIS portfolios, and other facility specific data that is known about the assessment facility or is developed during the pre-assessment phase.
This assessment record is then exported (if required) to other assessment team members by an administrator using the Import Assessor Database function in the Master Database operating mode. The assessment team then conducts the assessment and records information using the Assessor Tool operating mode. At the end of the assessment, the assessment team leader uses the Import Checklist function in the Assessment Tool operating mode to combine the team’s checklist, vulnerability and recommendation entries into one record. They also combine photos, and miscellaneous files into the lead assessor’s database folder using the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” functions. At the end of the lead assessment, the assessor will use the export function to save the files to a temporary device such as a USB thumb drive, to be transferred to the computer with the Master Database. The Project Manager then uses the Import Assessor Database function in the Master Database operating mode to transfer the complete assessment data and files into the Master Database for analysis and printing.
**Opening the Database**

- To open the Master Assessment Database, you first left click on <Start>, then <Programs>, and look for the <FEMA Master Assessment Database> to left click. The FEMA Master Assessment Database should be at the end of the Startup Program Menu immediately after the installation. You can copy the shortcut icon for the FEMA Master Assessment Database to another location at any time.

Note: the database can only be opened by left clicking on the FEMA Master Assessment Database Icon.

The first action to enter the database is the Logon. You can enter the database Tool as an Assessor, Editor, Reader or Administrator. Recommend accessing the database the first time using the Administrator log on which provides access to all functions of the program. The initial Password for Administrator is “Administrator”. The Database Manager / Administrator will be able to establish new user accounts and passwords. If this has been completed use your assigned user name and password.
This leads to a Main Menu of the database. It may start in either in the Assessment Tool operating mode or in the Master Database operating mode. (It opens in the mode for which it was last used.)
Facility and Continuity of Operations Assessments in the Assessment Tool Mode

- The first action is to identify the facility assessment in the Assessment Tool by left clicking on <Create / Modify Assessment Record> and creating a new assessment. Any assessor can create an assessment in the Assessment Tool.

- If the Facility Information has already been loaded, you can go directly to an assessment screen by left clicking on <Facility Assessments> or <Continuity of Operations Assessments (COOP).

- Assessor laptops have limited storage capacity and can become bogged down by continuing to store many assessments. The <Empty Database> feature allows clearing of the database (with multiple requests for confirmation). Copy the database and all other collected information to a CD before emptying, as assessors may find it beneficial to refer to similar entries from previous assessments, especially recommended mitigation measures for similar vulnerabilities. Note: <Empty Database> cleans Facility Information, Team Members, Points of Contact, Observations, Recommendations, Vulnerabilities, Status, Costs, and the Executive Summary for ALL facilities in the Assessment Tool database. It also will prompt the user to identify if they want to empty the GIS Portfolio, Miscellaneous Files, and Photos in their separate subfolders.

- The <Switch Operating Modes> tab takes you to the Master Database mode. This enables the user to manage collected information. It also enables an assessor to
use the reports feature to check the final look of the information entered, to prevent duplicate entries, and to easily review the information rather than having to scroll through the database.
Create / Modify Assessment Record

The first task for using the database is to create an assessment record in the database. This establishes a record in the database and stores the basic information about the facility to be assessed including: Facility Name, Assessment Location, Assessment Date, and Assessment Type. For Continuity of Operations (COOP) assessments, this is also where unique COOP requirements such as essential functions and deployment planning data for the facility are listed.

Selecting the <Create / Modify Assessment Record> button from the Main Menu will bring you to the List of Facility Assessments screen. This displays a list of the current assessment records in the database. The first time you enter the database (with no prior assessments entered), this list will be blank. From this list you can either add a new assessment record or review / edit a record previously entered.

To edit an existing assessment record:

- First select one of the assessments by left clicking on the far left column of the List of Assessments. This will mark the assessment desired with a right pointing arrow head if one is not already there. This selects the assessment and links the buttons on the form to that assessment.

- Left click on the <View / Edit> button to review or edit information and the software will immediately go to the <Create Assessment Facility Record Screen> input screen. View or edit information as required.

To create a new assessment record:
• Left click on the <Add New Facility> button in the lower left corner. The software will immediately go to the <Create Assessment Facility Record> screen.

Note the asterisked (*) entries that are the minimum required to create an assessment: Facility Name, Assessment Location, Assessment Date, and Assessment Type. Facility Name, Assessment Location, and Assessment Date are self explanatory. However, Assessment Type needs some clarification.

For Facility Assessments, select from the Assessment Type drop down box “Facility Tier 1”, “Facility Tier 2”, or “Facility Tier 3”. Refer to FEMA 452, Page 3-2, for information on Assessment Type / Level of Assessment.

For COOP Assessments, select “COOP Assessment”. This will prompt the system to display Checklist #14 on the Assessment Tool main menu and also add the following three tabs to this form: Essential Functions, Deployment Planning and COOP Facility. Use these three tabs to record COOP related information on the facility.
When you create the facility, the software automatically creates subfolders named GIS Portfolio, Miscellaneous Files, and Photos, all under a main folder that uses the assessment location and assessment date as the main folder name. This is automatically displayed in the field “Assessment Folder Name”. The program will also remind you of the folder location when you create the assessment record. After taking notice of folder names, left click <OK> to finish creating the Assessment.

Microsoft Office Access

This Facility Assessment will be stored in folder:
C:\\Master V4 Final 12-12-07 HHC-Hazardville Information Company\Assessment_2007-12-25\Photos will need to be placed in the Photos subfolder
GIS Portfolio Images will need to be placed in the GIS_Portfolio subfolder
Miscellaneous files will need to be placed in the Miscellaneous subfolder

Note: If you changed the program location using Custom Installation, then you should make note of the file path that these subfolders are placed in, as you will need that information to properly load and link the contents of these subfolders to other databases.
Load Information in to the Newly Created Assessment Record

To load information collected during the pre-assessment period into the newly created assessment record, the user first opens the Assessment Tool and then uses the <Manage Photo/GIS/Misc> button and its related functions.

- From the Assessment Tool Main Menu, left click on <Facility Assessments> or <Continuity of Operations Assessment (COOP)> to enter the Main Menu for Assessors. The link to <Facility Assessments> provides access to Facility Tier 1 to Facility Tier 3 assessments and the standard 13 checklists. The <Continuity of Operations Assessment (COOP)> link provides access to COOP assessments, the standard 13 checklists and a 14th checklist titled “COOP Facility: Additional concerns”. Both forms function in the same manner.

- Next choose an assessment facility, since several may be loaded. This is done using the pull-down list in the “Facility:” window in the top left corner. The list will show the names of the facility records that have been created.

- Next, left click on the <Manage Photo/GIS/Misc> button. This will allow the user to add photos, and miscellaneous files into the current assessment record using the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” functions.

- A user can also use a drag-and-drop operation to transfer the files manually to the assessment subfolders. The database will automatically detect and link them to the
current assessment the database when the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” Tabs are opened.

• The database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “View Photo” and “View GIS Portfolio” folders.
Main Menu for Assessors

From the Assessment Tool Main Menu, left click on <Facility Assessments> or <Continuity of Operations Assessment (COOP)> to enter the Main Menu for Assessors. This will bring you to the Main Menu for Assessors. The link to <Facility Assessments> provides access to Facility Tier 1 to Facility Tier 3 assessments and the standard 13 checklists. The <Continuity of Operations Assessment (COOP)> link provides access to COOP assessments, the standard 13 checklists and a 14th checklist titled “COOP Facility: Additional concerns”. Both forms function in the same manner.

The first action on either screen is to choose an assessment facility, since several may be loaded. This is done using the pull-down list in the “Facility:” window in the top left corner.

The list will show the names of the facility records that have been created. Once an assessment facility has been chosen, the assessor can go into any of the data entry areas: General Facility Information, Assessment Team, Facility Points of Contact, Risk Matrices, Checklists, Executive Summary or Facility Vulnerabilities.
**General Facility Information**

The <General Facility Information> button takes the assessor to a report listing the basic information about the facility being assessed. This includes: Facility Name, Organizational Address, Description, Assessment date, Assessment Location, and Assessment Folder Location.

The report can be printed or converted to a Microsoft Word© document and which will allow additional information to be added, formatting changed, etc.
At this point left click <Close Report> to go back to the Main Menu for Assessors screen.
**Assessment Team**

The `<Assessment Team>` button enables an assessor to list information on members of the assessment team.

Left clicking the `<Assessment Team>` button opens a general entry form with a series of tabs across the top. As each tab is selected, the related information is displayed on the form. The tabs provide an alternate means to navigate through the database functions.
Left clicking on the <Assessment Team> tab displays a screen to track the assessment team members. The buttons across the bottom allow you to add or delete team members as needed.

Left clicking on the <Add New Team Member> button takes the assessor to a fill-in-the-blank list. Fill in this screen with as much information as is available or desired.
After adding a team member, you are taken back to the Team Members List and you can see the information that was entered. Use the slide scale or keyboard arrows to see the off-screen information. The other buttons allow you to select the Team Member from a List previously generated from other assessments or remove a Team Member from this assessment. Remember to first select one of the assessment team members by left clicking on the far left column of the Team Members. This will mark the person desired with a right pointing arrow head if one is not already there.

After loading information on additional team members, you can left click on <Close> to go back to the Main Menu for Assessors or left click on a different tab, such as <Points of Contact> to directly jump to that function.
**Points of Contact**

The Points of Contact tab takes the assessor to the Points of Contact screen for keeping track of the people identified to be contacted during the assessment or that are met during the assessment. The buttons across the bottom allow you to add or delete Points of Contact as needed. Add a POC by left clicking on <Add New POC>.

This input screen is different than the Team Members input screen, as you enter the information directly in each cell. You can enter the information and move to the next cell by using the <Tab> on the keyboard or by left clicking on the cell. Use the slide scale or keyboard arrows to move the screen to see the remaining information on the POC line.

You must press <Enter> or the <Tab> key after the cells are complete to add the information to the database.
There’s even a feature in the POC list to duplicate the address from previous entries, since it is likely that many POCs will have the same business address. Just left click the left column to get the black arrow to appear on the entry with the address to be copied. Then by left clicking on the tab <Add New POC and Duplicate> the light blue address blocks will be duplicated on the next entry line.
Risk Matrices Process

The Risk Matrices process analyzes the threat, asset value / consequences, and vulnerability to ascertain the level of risk for each critical asset against each applicable threat. There are two Risk Matrices: one for Critical Functions and the other for Critical Infrastructure. To get to these screens first choose an assessment facility and then left click either the <Critical Functions Matrix> or the <Critical Infrastructure Matrix> button from the Main Menu for Assessors.
Critical Function Matrix

Selecting the <Critical Function Matrix> button will display this screen. Listed are a range of established threats and functions. The matrix allows entry of a Threat Rating, Asset Value / Consequence, and Vulnerability Rating following the 1 to 10 scale as listed in FEMA 452. The Risk Rating is then automatically computed and color coded according to the established scale.

The matrix is populated with the existing system defaults established by the database manager / administrator (See Master Database, Administrative Functions). Unique Threat/Hazard, Critical Functions and Critical Infrastructures for the current assessment can be established by the lead assessor from the Threat/Hazard Matrix menus. (Critical Functions and Critical Infrastructures)

- There can be up to three pages of the Critical Functions Matrix. Each page displays up to seven Threat/Hazards. The matrix opens to Page 1. Selecting the <Page 2> or <Page 3> buttons will display additional Threat/Hazards.
- Selecting the <Modify Critical Function List> button enables authorized assessors to establish a unique Critical Infrastructure list for only this assessment.
- Selecting the <Modify Threat/Hazard> button enables authorized assessors to establish a unique Threat/Hazard list for only this assessment.
- Selecting the <Rollup> button displays a consolidated Functions matrix.

<table>
<thead>
<tr>
<th>Function</th>
<th>Low risk (1-60)</th>
<th>Medium risk (61-175)</th>
<th>High risk (&gt; 175)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats</td>
<td>1-10: Threat Rating</td>
<td>1-10: Asset Value / Consequence</td>
<td>1-10: Vulnerability Rating</td>
</tr>
</tbody>
</table>
**One Time Customization of the Critical Functions List**

Selecting the <Modify Critical Function List> button enables authorized assessors to establish a unique Critical Function list for only this assessment.

A screen is opened displaying the “System Defaults” Critical Function list on the left and the “User Customized For This Assessment” list on the right. From this form, the system allows users to add, delete and reorder the Critical Function labels. Note that the Critical Function labels should be changed before an assessor enters data into the matrix. Making changes to the labels will reset all matrix data to “0”.

- Select the arrow symbol < in the middle of the form to replace all the entries in the “User Customized List for this Assessment” with all the entries in the “System Defaults” list.
- To change an existing Critical Function entry, place the curser on any existing entry and type over the name.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name for the Critical Function.
- The order that the Function labels are displayed can be changed. Click on any order number and type in a new number. Use a “.5” decimal point to place the Function label between other existing numbers. For example, to make a Function label third on the list, change the order number to “2.5”. To make Function label first on the list, assign an order number of “0.5”.
- To have the form display the changed order of the Critical Function labels, left click on the <Reorder> button.
- To delete a Critical Function label, first select one of the Critical Function labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Critical Function label will be deleted. Note: A minimum of one Critical Function label must remain.
- To finalize all the changes made to the Critical Function list, select the <Update> button. This will first warn you that “This action will replace the Critical Function Matrix” for the listed assessment with a one time customization from the list on the right and that “Any existing Critical Functions data for this assessment will be deleted!”. Click <Yes> to complete the change or <No> to return to the form.
- Click <Cancel> to return to the Critical Function matrix without making any changes.
Replace all with system defaults
Type over any Critical Function
Type in a new Critical Function
Change the order
Delete a Critical Function
Finalize the change

<table>
<thead>
<tr>
<th>Order</th>
<th>Critical Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administration</td>
</tr>
<tr>
<td>2</td>
<td>Engineering</td>
</tr>
<tr>
<td>3</td>
<td>Warehousing</td>
</tr>
<tr>
<td>4</td>
<td>Data Center</td>
</tr>
<tr>
<td>5</td>
<td>Food Services</td>
</tr>
<tr>
<td>6</td>
<td>Security</td>
</tr>
<tr>
<td>7</td>
<td>Housekeeping</td>
</tr>
<tr>
<td>8</td>
<td>Other CF-1</td>
</tr>
<tr>
<td>9</td>
<td>Other CF-2</td>
</tr>
<tr>
<td>10</td>
<td>Other CF-3</td>
</tr>
<tr>
<td>11</td>
<td>Other CF-4</td>
</tr>
<tr>
<td>12</td>
<td>Other CF-5</td>
</tr>
<tr>
<td>13</td>
<td>Other CF-6</td>
</tr>
<tr>
<td>14</td>
<td>Other CF-7</td>
</tr>
<tr>
<td>15</td>
<td>Other CF-8</td>
</tr>
<tr>
<td>16</td>
<td>Other CF-9</td>
</tr>
<tr>
<td>17</td>
<td>Other CF-10</td>
</tr>
</tbody>
</table>

Record: |

Finalize the change
One Time Customization of the Threat / Hazard List From the Critical Functions Matrix

Selecting the <Modify Threats> button enables authorized assessors to establish a unique Threat / Hazard list for only this assessment.

A screen is opened displaying the “System Defaults” Threat / Hazard list on the left and the “User Customized For This Assessment” list on the right. From this form, the system allows users to add, delete and reorder the Threat / Hazard labels. Note that changes to the Threat / Hazard list effects both the Critical Function and the Critical Infrastructure matrixes. The Threat / Hazard labels should be changed before an assessor enters data into either matrix. **Note: Making changes to the labels will reset all matrix data to “0”**.

- Select the arrow symbol < in the middle of the form to replace all the entries in the “User Customized List for this Assessment” with all the entries in the “System Defaults” list.
- To change an existing Critical Function entry, place the curser on any existing entry and type over the name.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name for the Threat/Hazard.
- The order that the Threat/Hazard labels are displayed can be changed. Click on any order number and type in a new number. Use a “.5” decimal point to place the Threat/Hazard label between other existing numbers. For example, to make a Threat/Hazard label third on the list, change the order number to “2.5”. To make Threat/Hazard label first on the list, assign an order number of “0.5”.
- To have the form display the changed order of the Threat/Hazard labels, left click on the <Reorder> button.
- To delete a Threat/Hazard label, first select one of the Threat/Hazard labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Threat/Hazard label will be deleted. Note: A minimum of one Threat/Hazard label must remain.
- To finalize all the changes made to the Threat/Hazard list, select the <Update> button. This will first warn you that “This action will replace the Threat/Hazard Matrix” for the listed assessment with a one time customization from the list on the right and that “Any existing Threat/Hazard data for this assessment will be deleted!” Click <Yes> to complete the change or <No> to return to the form.
- Click <Cancel> to return to the Threat/Hazard matrix without making any changes.
### One-Time Customization of Threat / Hazard

#### Replace all with system defaults

#### Type over any Critical Function

#### Type in a new Critical Function

#### Change the order

#### Delete a Critical Function

#### Finalize the change

---

<table>
<thead>
<tr>
<th>Order</th>
<th>Threat / Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explosive Device (Bomb)</td>
</tr>
<tr>
<td>2</td>
<td>Kinetic Agent</td>
</tr>
<tr>
<td>3</td>
<td>Chemical/Toxic Agent</td>
</tr>
<tr>
<td>4</td>
<td>Biological Agent</td>
</tr>
<tr>
<td>5</td>
<td>CBRN</td>
</tr>
<tr>
<td>6</td>
<td>Physical Agent</td>
</tr>
<tr>
<td>7</td>
<td>Biological Agent</td>
</tr>
<tr>
<td>8</td>
<td>Chemical/Toxic Agent</td>
</tr>
<tr>
<td>9</td>
<td>CBRN</td>
</tr>
<tr>
<td>10</td>
<td>Physical Agent</td>
</tr>
<tr>
<td>11</td>
<td>Unauthorized Entry</td>
</tr>
<tr>
<td>12</td>
<td>Surveillance</td>
</tr>
<tr>
<td>13</td>
<td>Wind</td>
</tr>
<tr>
<td>14</td>
<td>Flood</td>
</tr>
</tbody>
</table>

---

Record: [Previous] [Next] [Edit] [Delete] [Cancel] [Update]
Critical Infrastructure Matrix

Selecting the <Critical Infrastructure Matrix> button will display this screen. Listed are a range of established threats and functions. The matrix allows entry of Threat Rating, Asset Value / Consequence, and Vulnerability Rating following the 1 to 10 scale as listed in FEMA 452. The Risk Rating is then automatically computed and color coded according to the established scale.

The matrix is populated with the existing system defaults established by the database manager / administrator (See Master Database, Administrative Functions). Unique Threat/Hazard, Critical Functions and Critical Infrastructures for the current assessment can be established by the lead assessor from the Threat/Hazard Matrix menus. (Critical Functions and Critical Infrastructures)

- There can be up to three pages of the Critical Infrastructure Matrix. Each page displays up to seven Threat/Hazards. The matrix opens to Page 1. Selecting the <Page 2> or <Page 3> buttons will display additional Threat/Hazards.
- Selecting the <Modify Critical Infrastructure List> button enables authorized assessors to establish a unique Critical Infrastructure list for only this assessment.
- Selecting the <Modify Threat/Hazard> button enables authorized assessors to establish a unique Threat/Hazard list for only this assessment.
- Selecting the <Rollup> button displays a consolidated Infrastructure matrix.

Infrastructure

--

Threats

--

Asset Value
Threat Rating
Vulnerability Rating

1- 10  Low risk (1-60)
1- 10  Medium risk (61-175)
1- 10  High risk (> 175)
One Time Customization of the Critical Infrastructure List

Selecting the <Modify Critical Infrastructure List> button enables authorized assessors to establish a unique Critical Infrastructure list for only this assessment.

A screen is opened displaying the “System Defaults” Critical Infrastructure list on the left and the “User Customized for This Assessment” list on the right. The first ten items, listed in blue, are required and can not be changed.

The first ten Critical Infrastructures listed are established for use in all assessments and are supported by the FEMA 452 checklist. While adding additional Critical Infrastructure labels is possible, it is discouraged unless the assessor develops associated guidance and documentation.

This form enables users to add, delete and reorder the additional Critical Infrastructure label entries. Note that the additional Critical Infrastructure labels should be added before an assessor enters data into the matrix. Making changes to the labels will reset all matrix data to “0”.

- Select the arrow symbol < in the middle of the form to replace all the entries in the “User Customized List for this Assessment” with all the entries in the “System Defaults” list.
- To change an existing additional Critical Infrastructure entry, place the curser on any entry and type over the name. Note: the first ten cannot be changed.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name of the additional Critical Infrastructure.
- The order that the Infrastructure labels are displayed can be changed. Click on any order number and type in a new number. Use a “.5” decimal point to place the Infrastructure label between other existing numbers. For example, to make an Infrastructure label third on the list, change the order number to “2.5”. To make Infrastructure label eleventh on the list, assign an order number of “10.5”. Note: the first ten cannot be changed.
- To have the form display the changed order of the Critical Infrastructure labels, left click on the <Reorder> button.
- To delete a Critical Infrastructure label, first select one of the Critical Infrastructure labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Critical Infrastructure label will be deleted. Note: the first ten cannot be changed.
- To finalize all the changes made to the Critical Infrastructure list, select the <Update> button. This will first warn you that “This action will replace the Critical Infrastructure Matrix” for the listed assessment with a one time customization from the list on the right and that “Any existing Critical
Infrastructure data for this assessment will be deleted!” Click <Yes> to complete the change or <No> to return to the form.

- Click <Cancel> to return to the Critical Infrastructure matrix without making any changes.
One Time Customization of Threat / Hazard List From the Critical Infrastructures Matrix

Selecting the <Modify Threats> button enables authorized assessors to establish a unique Threat/Hazard list for only this assessment.

A screen is opened displaying the “System Defaults” Threat / Hazard list on the left and the “User Customized For This Assessment” list on the right. From this form, the system allows users to add, delete and reorder the Threat / Hazard labels. Note that changes to the Threat/Hazard list effects both the Critical Function and the Critical Infrastructure matrixes. The Threat / Hazard labels should be changed before an assessor enters data into either matrix. Making changes to the labels will reset all matrix data to “0”.

- Select the arrow symbol < in the middle of the form to replace all the entries in the “User Customized List for this Assessment” with all the entries in the “System Defaults” list.
- To change an existing Critical Function entry, place the cursor on any existing entry and type over the name.
- To add a new entry, place the cursor on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name for the Threat/Hazard.
- The order that the Threat/Hazard labels are displayed can be changed. Click on any order number and type in a new number. Use a “.5” decimal point to place the Threat / Hazard label between other existing numbers. For example, to make a Threat / Hazard label third on the list, change the order number to “2.5”. To make Threat / Hazard label first on the list, assign an order number of “0.5”.
- To have the form display the changed order of the Threat/Hazard labels, left click on the <Reorder> button.
- To delete a Threat / Hazard label, first select one of the Threat / Hazard labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Threat / Hazard label will be deleted. Note: A minimum of one Threat / Hazard label must remain.
- To finalize all the changes made to the Threat / Hazard list, select the <Update> button. This will first warn you that “This action will replace the Threat / Hazard Matrix” for the listed assessment with a one time customization from the list on the right and that “Any existing Threat / Hazard data for this assessment will be deleted!”. Click <Yes> to complete the change or <No> to return to the form.
- Click <Cancel> to return to the Threat / Hazard matrix without making any changes.
The database provides the assessor an automated FEMA 452 checklist process that can be tailored to the needs of the specific assessment. The database was first tailored during the “Create / Modify Assessment Record” process when an “Assessment Type” was previously selected. The database is further modified now, during the checklist process to support an Antiterrorism Analysis, a Natural Hazards Analysis or All-Hazard Analysis.

The checklist control buttons run down the middle of the Main Menu for Assessors screen. The top three buttons are color coded and enable the assessor to filter which questions are displayed. Select the top button < Antiterrorism Analysis> to only display questions for an antiterrorism analysis. Select the second button < Natural Hazards Analysis> to only display questions related to a wind, earthquake, and flood analysis. Select <All-Hazard Analysis> to display all questions. Note that this selection filters all 14 sections of the checklist. Also note that the filter process does not destroy entries and that an assessor can return to this page and change the filter setting without losing or destroying data.

The checklist is organized into 14 sections which are displayed on the middle of the page under the filter buttons. The first 13 sections apply to all assessments. The 14th checklist titled “COOP Facility: Additional concerns” is only displayed and used for COOP related assessments. A checklist section is accessed by left clicking on its control button. Each section of questions is numbered 1-14 to identify the checklist it is associated with. For instance, “Site” questions are section #1 and “Utility” is section #5. Each of the four sub-
categories, antiterrorism, wind, earthquake, or flood, can accommodate up to 99 questions per sub-category. The four sub-categories are included in each section if applicable. Antiterrorism questions are numbered 1-99; wind is 101-199; earthquake is 201-299; and flood is 301-399. A question labeled as “5-103” indicates the question is from the Utility Systems section, “5-”; and the “103” means it is from the sub-category of “wind” (100) and is the third question (03). Additionally, sections are color-coded to assist users with quicker recognition.

To start, first select an assessment facility, by left clicking on the drop down box under <Facility>. Then select a checklist filter, such as <All-Hazard Analysis>. Finally select a checklist section.

**Assessment Checklists**

The format of the Site Checklist, shown below, is like all the other checklists.

- The first column contains an arrow to indicate which row is selected for data entry.
- The second column on the left is the checklist question number [Section Number – Question Number (5-103)]
- The third column is the Observation made during the assessment. This could describe a vulnerability identified by the assessor.
- The fourth column is the Recommendation / Remediation made by the assessor to mitigate concerns with this question and observation.
- The fifth column is reserved for identifying the questions which have an observation identified as a vulnerability.
- The sixth column is the question itself, taken right from the FEMA 426 Building Vulnerability Assessment Checklist. The questions are color coded to facilitate identification. Antiterrorism related question are colored green, Wind related questions are colored yellow, seismic related questions are colored tan, and flood related questions are colored blue.
- The seventh column is the guidance associated with that question, also found in the FEMA 426 Building Vulnerability Assessment Checklist.
- The eighth column is a cross reference to COOP related guidance.
- There are four color coded buttons across the top right of the form. These allow the user to jump to the first related question in the section. Note that if a user has previously filtered out a topic, the system will remain on its current question.
This form is used to record observations and recommendations/remediations from the assessment and can be printed out as a report. If an Observation was identified by the assessor as a vulnerability to consider, the user places a check mark in the “Vuln?” box by putting the pointer on the box and left clicking. This copies the Observation (now a Vulnerability) and the Recommendation/Remediation to the Facility Vulnerability list for further analysis. Note: The software indicates, using a pop-up, that more information—building number and priority—will be required when the Vulnerabilities screen is opened.
When all the information is input to the visible screen, you can scroll the screen using the right side vertical slide bar or use the Record selector arrows in the lower left corner to get to the question desired. Also, double clicking on the top blue bar will expand the window size to show a full screen of information.

On the bottom of the form are three additional functions:

- The first button produces a report of the questions in the section of the checklist.
- The second button produces a report of the observations and recommendations entered into this section of the checklist.
- The third button displays the facility information form. This allows the assessor a quick means to review facility information during the assessment.

The other 12 sections of the checklist function the same way to capture observations and recommendations or remediation. As before, when finished, left click on the <Close> button in the lower right corner to go back to the Main Menu for Assessors screen.
Facility Vulnerability Process

The Facility Vulnerabilities section of the Assessment Tool provides a means to further analyze the vulnerabilities found during the assessment. By displaying on one list the facility’s vulnerabilities, their location and the initial recommended remediation, assessors can determine common weaknesses and mediation strategies that will work for multiple vulnerabilities. This also aids in the analysis of prioritization for mediation. Left clicking on the <Facility Vulnerabilities> tab will take you to that screen.
Vulnerability and Recommendation Screen

This is the Vulnerability and Recommendation screen of the Assessment Tool. It is automatically populated with the previously entered Observations (now called Vulnerabilities) and Recommendation / Remediation when the “Vuln?” box is checked when completing a question on the checklists. Note that the rightmost column of the page shows the checklist section from where vulnerabilities were transferred. Assessors can also add to the list by typing in a new vulnerability onto the page (some may not be associated with a checklist question).

This form has three fields that are still blank if a vulnerability was transferred from a checklist by clicking the “Vuln?” box.

- Record a building name or number in the first column to focus where this vulnerability is located.
- Prioritize the vulnerability so as to better identify which vulnerabilities require mitigation based upon the limited resources available – get the best benefit / cost ratio for reducing overall risk.
- Add an estimated cost of the recommendation by left clicking on the <Vulnerability Status / Cost> button.

There are two other ways to get Vulnerabilities and Recommendations / Remediations into the fields:
• The assessors can type them directly into the fields. They will not show linkage to specific checklist questions unless that information is also added.

• Vulnerabilities and Recommendations / Remediations can be imported from the Assessment Tools of other assessors using the tool’s import utility. In doing this, the Lead Assessor has the option of importing all of a Team Member’s vulnerabilities and recommendations, or choosing specific ones to transfer.

When an assessor selects a vulnerability, the program requires the assessor to enter a building number and a priority number (1 to 5) in the Vulnerability List in addition to making recommendations about how to reduce the vulnerability / risk.

CAUTION: If you do not select a priority number before the inputs are accepted by the database, the number will be set to zero and this entry will come out on the top of the vulnerability report.

Prioritization is based on the severity of the vulnerability and the availability of resources for mitigation. For example: Priority 1 vulnerabilities are the most important to mitigate…i.e. fix it now. Priority 5 vulnerabilities may wait until additional funds are available.

The Master Database can be searched based on this field…all Priority 1 vulnerabilities, all Priority 1 and 2 vulnerabilities, etc.

To delete a vulnerability entry, first select one of the vulnerabilities by left clicking on the far left column. This will mark the vulnerability desired with a right pointing arrow head if one is not already there. Then left click the <Delete Vulnerability> button on the bottom of the form.

The Assessment Tool allows an assessment team to provide a cost estimate (dollar values) to the individual recommendations: New fence $100,000, Vehicle barriers $25,000, etc. Left click on <Vulnerability Status / Cost> from the Facility Vulnerabilities page to enter the Remediation module.
The Program Manager can then track the cost information throughout the process to implement the recommendation.

Left click <Close> to exit the Remediations screen and left click <Close> to exit the Facility Vulnerabilities screen.
**Facility Executive Summary Process**

The Facility Executive Summary section of the Assessment Tool allows an assessor, usually the Team Leader, a page to summarize general information about the facility and this assessment. Left clicking on the <Facility Executive Summary> tab will take you to that screen.
Facility Executive Summary Menu

The Facility Executive Summary section of the Assessment Tool provides three fields for the Lead Assessor (or Team Leader) to summarize general information about the facility and this assessment. When printed, these three fields appear as a single document with three main sections: Introduction, Observations, Recommendations / Remediations.

The Introduction field should contain some background information, facility location, mission, dates, etc. The Observations field should contain general information about what was found, but particularly, vulnerabilities…are they security related, critical infrastructure related, etc. Finally, the Recommendations / Remediations field is for general recommendations about current conditions, mitigation measures that are applicable to the major vulnerabilities and other pertinent information to consider.

Note that you can use the tabs above the three fields to go from this section to many others to review information as necessary while writing the Executive Summary.

One word of caution regarding the Executive Summary: The import/export utility will not transfer this section of the tool between assessors, so if an assessment team member other than the Lead Assessor fills in these fields, there are two ways to transfer the information between laptops: one method is for the drafter of the Executive Summary to switch to Master Database mode, go to Facility Reports / Executive Summary / Publish as a Word Document / Save the Word Document where it can then be transferred to the Lead Assessor as a Word Document file. An alternative is to cut and paste the three paragraphs into a document and transfer the temporary document between computers. Then the Lead Assessor can cut and paste the individual paragraphs back into the Executive Summary. Use <Close> to return to the Main Menu for Assessors Screen.
Importing Checklists, Vulnerabilities and Recommendations

After the assessment team has completed its data collection effort, the checklist questions, vulnerabilities, and remediations have to be combined into one Assessment Tool database before the data can be transferred to the Master Database. This is accomplished by using the import function to transfer collected data from the Team Members Assessment Tool Databases to the Lead Assessor’s Assessment Tool Database.

Let’s say there are five members of the assessment team: A Lead Assessor, a Security Specialist, a Mechanical/Electrical Assessor, a Structural Engineer, and a Cost Estimator. Before the start of the assessment, the Lead Assessor (or Team Leader) should assign Checklist sections to each member of the team. For example, the Structural Engineer would do Checklist Sections 2, 3 and 4. Checklist sections can be split among team members; this makes importing more complex, but still doable.

The file management utilities (<Import Checklist Vuln. / Obs.> and <Export to Transfer Folder>) of the Assessment Tool allows the Lead Assessor to collect checklist observations and comments, along with vulnerabilities and the associated recommendations from the team members. This consolidated database is the responsibility of the Lead Assessor to ensure technical editing, consistency, and a flowing report prior transferring it to the Master Database. The process is simple but it takes some practice.

- First make sure you have selected the correct facility in the upper left drop down box.
Second, each team member must copy his Assessment Tool database file to a transfer device. A USB drive works well as a file transfer device. The file will be a large (several dozen MB) Microsoft Access® MDE Database file. Left click on the <Export to Transfer Folder> button. This will bring up a window that copies and exports the assessment database and assessment folder (with the associated Photo, GIS files and Miscellaneous subfolders) from the current location to a new location selected by the user. Use the <Browse> button to identify where you want to copy the data to and then left click <Copy Files>.

The Lead Assessor then uses the transfer device (USB drive, CD, DVD, etc.) with the assessment files and copies the files to a temporary location on his computer. Then, from the Main Menus for Assessors, the Lead Assessor should select the facility being assessed from the pull down list, and click on the <Import Checklist Vuln. / Obs.> button. Note: First, ask your database administrator to make sure the Lead Assessor user name is assigned to the “Admins” group. If you are not in the “Admins” group, the Import Checklist button will be grayed out and not functional.

This brings up a request window to identify the file to select for import. Left click <Browse> to find the file called MasterDBV4.mde in your temporary folder.

After browsing to the database file either double left click on the file or left click once on the file and then left click the <Open> button to have the file name and location appear in the field.
• Finish the process by left clicking on the <Import> button.

• This will bring up a window listing all the assessment facilities available to import from. Click on the assessment facility you want to connect to, then click <Select Assessment> to establish a connection between databases.

• This will bring up a small window to indicate the connection between databases has been made, and # Checklist records and # Vulnerability records are available for viewing and copying to the Lead Assessor’s database.
Warning: It is important to realize that the wrong database can be imported as easily as the correct one. It is imperative for the Lead Assessor to keep accurate track of files copied from other assessors.

Hint: When the team member gave the lead assessor his assessment information on his transfer device, he also transferred the team member’s photos, GIS portfolios and miscellaneous files. Use the <Add Photos>, <Add GIS Portfolio Images> and <Miscellaneous Files> tabs to add these items to the lead assessor’s database and files.
Viewing and Importing From Linked Databases

After the databases are linked, the next step is for the Lead Assessor to select the checklist section that he wants to import data into. The new orange heading on the checklist form indicates the databases are linked. The “remote data” is from the linked assessment. Check the name and date of the assessment, highlighted with an orange background, to verify its identity.

Then left click <Open Remote Data> to open the orange import window.
Section 1, Site Checklist, is shown here in the screen capture. The Lead Assessor can read the entries from the remote data checklist and then select the specific observations and comments to be imported by putting a check mark in <Copy Record> or choose <Select All> to input all Observations and Recommendations / Remediations in this section. The Lead Assessor can also decide to add the new information to any he already has entered by indicating by check mark to <Copy and Append> or overwrite anything previously entered using <Copy and Overwrite>. The default is Copy and Append.

Warning: Make sure you track what you are importing. This is where it is possible to accidentally overwrite good data with a blank field.

The process is the same for importing vulnerabilities and recommendations. This is a very handy tool, allowing the Lead Assessor to assemble all of the collected data on one database and in one computer before leaving the facility at the end of the assessment.

Note the Photos, GIS Portfolio Images, and Miscellaneous Files are not linked. However, when the team member gave the lead assessor his assessment information on his transfer device, he also transferred the team member's photos, GIS portfolios and miscellaneous files. Use the <Add Photos>, <Add GIS Portfolio Images> and <Miscellaneous Files> tabs to add these items to the lead assessor’s database and files.
Manage Photos, GIS Portfolios, and Miscellaneous Files

To load photos, GIS Portfolios, or miscellaneous files collected during the assessment into the assessment record, the user first opens the Assessment Tool and then uses the <Manage Photo/GIS/Misc> button and its related functions.

- From the Assessment Tool Main Menu, left click on <Facility Assessments> or <Continuity of Operations Assessment (COOP)> to enter the Main Menu for Assessors.

- Next choose an assessment facility, since several may be loaded. This is done using the pull-down list in the “Facility:” window in the top left corner. The list will show the names of the facility records that have been created.

- Next, left click on the <Manage Photo/GIS/Misc> button. This will take the user to the Assessment Main Page form. On this form, there are the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” function Tabs across the top that the user can select to add files into the current assessment record.

- A user can also use a drag-and-drop operation to transfer the files manually to the assessment subfolders. The database will automatically detect and link them to the current assessment the database when the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” Tabs are opened.
• The database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “Photo” and GIS Portfolio” folders.
**Adding Photos**

The <Add Photos>, <Add GIS Portfolio Images> and <Miscellaneous Files> work similarly to add these items to the database and files. A user can browse to a single file and copy it to the database and current assessment folder or browse to a file and then copy all files in that folder to the database and current assessment folder. A user can also delete files from the database and assessment folder.

- First select <Add Photos> from the assessment Main Page form.

- Next, select either <Copy only the selected image> to attach a single photo, or select <Copy All from the folder> to attach all files in the selected folder.

- Left click the <Browse for a file> button to browse and select a photo to attach. A standard browse function screen will open. Search for the file you want, then double click the file or single click the file and single click the <Open> button to select the file.
• The software confirms that the files were added and attached. Left click <Yes> to continue with each pop up. Left click <No> or <Cancel> to cancel the attachment. Left click the “View Photos” tab to ensure the selected photos were added.

• Note that the database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “Photo” and GIS_Portfolio” folders.

• A user can also manually add or delete files from the assessment subfolders. The database will automatically detect changes and update the current assessment’s folder when the “Add Photo”, “View Photos”, “Add GIS Portfolio Images”, “View GIS Portfolio” or “Miscellaneous Files” Tabs are opened.
After adding photos, the user has an option to select one of the photos as the “Default Image” that will appear on various screens in the top right corner. The image is generally one that represents the location of the assessment. For instance, it could be a photo of the building or a sign depicting the name of the facility. Left click on the drop-down menu to the right of the Default Image field and select the desired default image. The image will be present each time the assessment is accessed.

To delete a photo, first select the photo from the list by left clicking on the photo’s name. This will place a black triangle next to the name of the photo selected.
Next left click on the <Delete Photo> button. The software confirms the user wants to delete a file. Left click <Yes> to continue with the deletion. Left click <No> or <Cancel> to cancel the deletion.
Next you have to left click on the <View Photos> tab in the center of the screen to display the photos. You can left click on a photo and enter Photo Zoom which gives a limited capability for viewing the photo in different sizes, using Zoom, Clip, and Internet Explorer. Clip is essentially what you currently see.

If there are more than five items attached to the database, left click the arrow buttons in the lower left corner, to display the additional items. When done, left click <Close> to exit.
**Adding GIS Images**

The <Add GIS Portfolio Images>, <Add Photos> and <Miscellaneous Files> functions work similarly to add or delete these items from the database and files. A user can browse to a single file and copy it to the database and current assessment folder or browse to a file and then copy all files in that folder to the database and current assessment folder. A user can also delete files from the database and assessment folder.

- First select <Add GIS Portfolio Images> from the assessment Main Page form.

- Next, select either <Copy only the selected image> to attach a single GIS portfolio image, or select <Copy All from the folder> to attach all files in the selected folder.

- Left click the <Browse for a file> button to browse and select a GIS portfolio image to attach. A standard browse function screen will open. Search for the file you want, then double click the file or single click the file and single click the <Open> button to select the file.
The software confirms that the files were added and attached. Left click <Yes> to continue with each pop up. Left click <No> or <Cancel> to cancel the attachment. Left click the “View GIS Portfolio” tab to ensure the selected photos were added.

Note that the database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “Photo” and GIS Portfolio” folders.

A user can also manually add or delete files from the assessment subfolders. The database will automatically detect changes and update the current assessment’s folder when the “Add Photo”, “View Photos”, “Add GIS Portfolio Images”, “View GIS Portfolio” or “Miscellaneous Files” Tabs are opened.
• To delete a GIS portfolio image, first select the GIS portfolio image from the list by left clicking on the image’s name. This will place a black triangle next to the name of the image selected.

• Next left click on the <Delete GIS Portfolio Images> button. The software confirms the user wants to delete a file. Left click <Yes> to continue with the deletion. Left click <No> or <Cancel> to cancel the deletion.
• Next you have to left click on the <View GIS Portfolio> tab in the center of the screen to display the GIS portfolio images. You can left click on an image and enter Photo Zoom which gives a limited capability for viewing the image in different sizes, using Zoom, Clip, and Internet Explorer. Clip is essentially what you currently see.

• If there are more than five items attached to the database, left click the arrow buttons in the lower left corner, to display the additional items. When done, left click <Close> to exit.
**Adding Miscellaneous Files**

The <Miscellaneous Files>, <Add Photos> and <Add GIS Portfolio Images> functions work similarly to add or delete these items from the database and files. A user can browse to a single file and copy it to the database and current assessment folder or browse to a file and then copy all files in that folder to the database and current assessment folder. A user can also delete files from the database and assessment folder.

- First select <Miscellaneous Files> from the assessment Main Page form.

- Next, select either <Copy only the selected image> to attach a single file, or select <Copy All from the folder> to attach all files in the selected folder.

Left click the <Browse for a file> button to browse and select a file to attach. A standard browse function screen will open. Search for the file you want, then double click the file or single click the file and single click the <Open> button to select the file.
The software confirms that the files were added and attached. Left click <Yes> to continue with each pop up. Left click <No> or <Cancel> to cancel the attachment.

Files can then be viewed by left clicking on the File Name.

Note that the database will recognize any type of file in the "Miscellaneous" folder. However, the database only recognize files with a "jpg", "gif" or "bmp" file extension in the "View Photo" and "View GIS Portfolio" folders.

A user can also manually add or delete files from the assessment subfolders. The database will automatically detect changes and update the current assessment’s folder when the “Add Photo”, “View Photos”, “Add GIS Portfolio Images”, “View GIS Portfolio” or “Miscellaneous Files” Tabs are opened.
• To delete a file, first select the file from the list by left clicking on the image’s name. This will place a black triangle next to the name of the image selected.

• Next left click on the <Delete file> button. The software confirms the user wants to delete a file. Left click <Yes> to continue with the deletion. Left click <No> or <Cancel> to cancel the deletion.
**Erasing All Assessments in the Database**

Administrators have the capability to erase all records in a database, **permanently**. This is only done after transferring your data to a Master Database in a separate location and when starting a new assessment. This enables an administrator to remove all database entries and start with an empty database. It also serves to control assessment information. Note: this is permanent. **Confirm you have transferred the current information to the Master Database in a separate location before you erase the database.**

Left click on <Empty the Database>. The next window confirms that you want to **permanently** erase all assessment data (not just one assessment, but erase all records). Left click on <Yes> to continue or cancel.

The next screen that appears during the “Empty the Database” process provides the administrator an option to keep their customized system defaults or reset the Critical Function, Critical Infrastructure, and Threat/Hazard labels to their original listings.

Left click on each listed option to reset the Critical Function, Critical Infrastructure, and Threat/Hazard labels to their original listings or to keep the administrators customized system defaults. Finalize the process by left clicking on <Continue with these choices”.

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Warning, confirm you have transferred the information to the Master Database **in a separate location** before you erase the data!
Switching Between Operating Modes

The <Switch Operating Modes> tab takes you between the two operating modes: Assessment Tool mode and Master Database mode.

An organization will generally use two different copies of the database: one loaded on a laptop and operating in the Assessment Tool mode for conducting assessments in the field, and the other loaded on a computer at your organization’s headquarters and operating in the Master Database mode for collecting the results from the assessors, printing reports, and archiving the results from a number of assessments. The Master Database copy also provides the organization the ability to search for vulnerabilities common to many assessed facilities, search for specific vulnerabilities, etc. Essentially it can be used as a Risk Management tool to identify and track mitigation measures to reduce risk.

The Assessment Tool mode was designed for engineers and security specialists to be able to easily collect data from the facility being assessed. As you will see, the software is very user friendly. The Master Database mode was designed for the Program Manager.

Switching between the main page of the Assessment Tool to the Master Database mode is as simple as left clicking on the <Switch to Master Database Operating Mode> button. Similarly, switching between the main page of the Master Database mode to the Assessment Tool mode is as simple as left clicking on the <Switch to Assessment Tool Operating Mode> button.

The next window confirms that you want to switch modes. Left click on <Yes> to continue or the other buttons if you do not want to change modes. Then another confirmation window pops up. Left click on <OK>. Left click on <Exit> to close the Database.
Rapid Visual Screening Assessment Tool Operating Mode

The Rapid Visual Screening (RVS) Tool mode was designed for use by both technical and stakeholder audiences to be able to automate the RVS listed in FEMA 455: Handbook for Rapid Visual Screening of Buildings to Evaluate Terrorism Risks. The data collection screens resemble the paper forms in the publication.

Example of a RVS data collection form:

- The first action is to enter the RVS data collection form from the main menu by left clicking on <Create / Modify Rapid Visual Screening Record>
Create / Modify RVS Assessment Record

The first task is to create a RVS record in the database. This establishes a record in the database and stores the basic information about the facility to be assessed including: Facility Name, Assessment Location, Assessment Date, and Assessment Type (RVS).

Selecting the <Create / Modify Rapid Visual Screening Record> button from the Main Menu will bring you to the List of Facility Assessments screen. The first time you enter the database (with no prior assessments entered) this list will be blank. From this list you can either <View / Edit> a record previously entered or <Add New RVS>.

Note the RVS assessments can be sorted by their CIKR using the building Use and Building Sub Use columns.

To create a new RVS record:

Left click on the <Add New RVS> button in the lower left corner. The software will immediately go to the <Create Assessment Facility Record> screen.

Note: The asterisked (*) fields are the minimum required to create a new record: Facility Name, Assessment Location, Assessment Date, and Assessment Type. The Assessment Type field defaults to the RVS when you tab to that field or click on the field with your mouse, however the drop-down menu provides access to the same information. To complete the action you must place your mouse in one of the remaining fields (recommend Facility Descriptive Text) and left click.
At this point a MS Office Access screen (seen below) will pop up indicating where the file will be stored on your system. When you create the new facility record, the software automatically creates subfolders named GIS Portfolio, Miscellaneous Files, and Photos, all under a main folder that uses the assessment location and assessment date as the main folder name. Acknowledge the message by left clicking <OK> to finish creating the record. The message will disappear and return the user to the Create Assessment Facility Record screen where additional facility information can be added to the building specifications and available documents tabs.

Note: If you changed the program location using Custom Installation, then you should make note of the file path that these subfolders are placed in, as you will need that information to properly load and link the contents of these subfolders to other databases.
**Building Specifications and Available Documents**

From the Create Assessment Facility Record screen you can enter additional information about the building you are screening and the types of documents made available to review. The information is self-explanatory. More than one entry can be made when adding available documents. If information is not known, leave the field blank until the information is obtained.

Once you have finished adding building specification and available document information left click on the <Close> button to return to the List of Facility Assessments screen. The assessor will be able to access the record just created or any other stored record from this screen.

To edit an existing assessment record:

- First select one of the assessments by left clicking on the far left column of the List of Assessments. This will mark the assessment desired with a right pointing arrow head if one is not already there. This selects the assessment and links the buttons on the form to that assessment.

- Left click on the <View / Edit> button to review or edit information and the software will immediately go to Bldg Info / page 1 of the RVS Data Collection. View or edit information as required.
Rapid Visual Screening Data Collection Screens

The RVS Data Collection process includes eight Tabs, each one representing the RVD paper forms. The first screen, Building Information or page 1, displays all the information entered while creating the new record and additional fields to enter supporting information described earlier.

The next six tabs (page) contain the specific RVS questions with drop down menu responses. When the selection is made, the numeric value assigned to that response is automatically entered into the box on the corresponding row on the right side of the screen for the given threat scenario. The sum of each column is entered into the bottom row labeled “Totals”. The same process recurs on each of the six pages. The final page, Risk Scoring Worksheet, displays the overall totals from the previous six pages as they apply to each category and presents the Total Risk Rating for Building.

The six RVS question tabs functions the same. There are several capabilities on each page to assist the assessor in selecting the correct response, highlighting a potential vulnerability, adding a comment or indicating the answer to a question is not known at this time. Several pages have a unique function that is described following the common capabilities.

Many of the pages have a questions mark between the question and the response field. The question is generally more complex and may require assessor clarification or explanation. Left click in the question mark and a screen will pop-up
providing additional information as well as the FEMA directive and page number. Left click the <Close> button to exit the help screen.

To the right of the response field on each page is a button with an “X”. By left clicking on this button, the previously entered choice for that single row will be cleared allowing the assessor to select a new response. Note that this action does not remove the marking in the red flag or unknown box, nor a comment. This must be accomplished separately.

The box associated with the Red Flag should be marked when the assessor determines the circumstances surrounding the response to a question may be a vulnerability requiring immediate attention. Left click in the box to mark the question with a red flag. A red flag generates a mandatory comment field to support the assessor’s decision. To remove a red flag, left click on the red flag.

The box associated with the Unknown box is marked if the assessor does not know the answer at the time of the assessment. This can be changed at a later time when the proper response is learned. To remove a check mark in the Unknown box, left click on the check mark.

A Comment can be added at any time to support or explain a unique or extraordinary circumstance. A comment is mandatory when the Red Flag box is marked. To remove a comment, left click on the Comment box. Delete the comment and left click the <Save> button. The box will no longer be marked. Edit the comment in the same manner but the box will remain marked.

The Asset / Threat page 2 includes a capability specific to questions 1.9.1 – 1.9.3. for Target Density Zones. Responses can be entered from the drop-down menu of each question or the assessor can click on one of the table buttons between the question and answer field and a table will pop-up. The assessor can enter the exact number of facilities / operations for each category and zone into the table and left click the <Use> button. This automatically populates the response fields and related numeric value.
**Risk Scoring Worksheet:**

The final tab is the Risk Scoring Worksheet which presents the totals of pages 2-7 and gives the Total Risk Rating for the building being assessed. The accuracy and usefulness of the Total Risk Rating is dependent on accuracy of the answers to the questions on each of the pages.

At the bottom of each of the eight pages are two rows of buttons. The top row is explained previously in this guide. The bottom row has a <Close> button to return the user to the previous menu. There are also two print options and two radio buttons. Each print option can be accomplished as a Standard Report or Red Flags and Comments only.

- The Standard Report generates a report that displays the mark for the Comments field but it does NOT display the text of the comment. If the Red Flags and Comments radio button is marked, the report includes only those questions marked with a red flag and the full text comment the assessor added.
- The <Print All> button generates a report containing the information from all eight pages in either the Standard Report format or the Red Flag and Comments format.
- The <Print This Page> button generates a report only for the page visible on the screen in either the Standard Report format or the Red Flag and Comments format.
Load Pre-Assessment Information into the Screening Record

Information collected during the pre-assessment period can be loaded into the newly created screening record from either the Master Database operating mode or the Assessment Tool operating mode. The information is added and accessed through the buttons labeled <Executive Summary>, <Points of Contact>, <Assessment Team>, <Photos>, <GIS Portfolio> and <Miscellaneous Files> located at the bottom of the RVS Data Collection screen.

Pre-assessment research and analysis is normally conducted by the assessor(s) tasked to perform the on-site screening. Through pre-coordination efforts, assessors often develop their points of contact and receive building drawing, schematics, blueprints, operating procedures, emergency plans, photos of the facility, etc, to assist with pre-assessment analysis. This information can / should be added to the database as it provides a baseline for the screening and supports the decisions the assessor makes while on-site. Standard opening and closing verbiage can be pre-loaded into the Executive Summary and edited / added to at a later time as necessary. The Assessment Team is normally identified ahead of time and can be pre-loaded as well. Changes to any of the areas can be made at any time.

This information is added to the database by opening database to the Assessment Tool Main Menu. Left click on <Create / Modify Rapid Visual Screening Record> and select the desired record by left clicking on the arrow to the left of the row where the screening record is located. Continue by left clicking on the <View / Edit> button which will open the RVS Data Collection screen with the Building Information / Page 1 tab visible.

Near the bottom of the screen is a row of six buttons labeled <Executive Summary>, <Points of Contact>, <Assessment Team>, <Photos>, <GIS Portfolio> and <Miscellaneous Files> where the various types of data is placed. Each of these capabilities is accessible through any of the eight tabs on the RVS Data Collection screen.

The database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “Photo” and GIS Portfolio” folders. Refer to the applicable section of this guide for specific directions on uploading the information.

A user can also use a drag-and-drop operation to transfer the files manually to the assessment subfolders. The database will automatically detect and link them to the current assessment the database when the “Add Photo”, “Add GIS Portfolio Images” and “Miscellaneous Files” Tabs are opened.
Master Database Mode

An organization will generally use two different copies of the database: one loaded on a laptop and operating in the Assessment Tool mode for conducting assessments in the field, and the other loaded on a computer at your organization’s headquarters and operating in the Master Database mode for collecting the results from the assessors, printing reports, and archiving the results from a number of assessments. The Master Database copy also provides the organization the ability to search for vulnerabilities common to many assessed facilities, search for specific vulnerabilities, etc. Essentially it can be used as a Risk Management tool to identify and track mitigation measures to reduce risk.

The Assessment Tool mode was designed for engineers and security specialists to be able to easily collect data from the facility being assessed. The Master Database mode was designed for the Program Manager.
**Master Database Main Menu**

The initial screen of the Master Database mode leads to five functions:

- Manage Assessments by clicking on the <Assessment Records> button.
- View the Vulnerability Assessment Checklist by clicking on the <Vulnerability Assessment Checklist> button.
- Switch to the Assessment Tool operating mode by clicking on the <Switch to the Assessment Tool Operating Mode> button.
- Change the Password of the user that is logged on by clicking on the <Change Password> button.
- Perform Administrative Functions by clicking on the <Administrative Functions> button.

To use the Master Database, the first step is to import an assessment from the Lead Assessor’s Assessment Tool. This is an Administrative Function and will be covered first, followed by the other functions. Note: administrative functions are not available to all users. Only those logged on with administrator permission can use the administrative functions. For example, only administrators may import assessment information from assessment team leaders to the Master Database.
Administrative Functions

One of the most important features needed to understand in the Master Database mode is how to import the lead assessor’s Assessment Tool database into the Master Database. To begin this process left click on <Administrative Functions> from the Main Menu.

![Administrative Functions Menu]

This brings up the below Assessment Functions Menu.
Importing Assessment Tool Databases

Before importing an assessment into the Master Database, the Lead Assessor must follow the same procedure as the team members and copy his database and files into one location or transfer device (USB drive, CD, DVD, etc.) and copy them into the same computer that runs Master Database. The Lead Assessor uses the file management utilities (<Import Checklist> and <Export to Transfer Folder>) of the Assessment Tool mode to transfer the files.

The process is simple but it takes some practice.

- First the Lead Assessor opens his copy of the database in the Assessor Tool Mode and makes sure he has selected the correct facility in the upper left drop down box.

- Second, the Lead Assessor must copy his Assessment Tool database file to a transfer device. A USB drive works well as a file transfer device. The file will be a large (several dozen MB) Microsoft Access® MDE Database file. Left click on the <Export to Transfer Folder> button. This will bring up a window that copies and exports the assessment database and assessment folder (with the associated Photo, GIS files and Miscellaneous subfolders) from the current location to a new location selected by the user. Use the <Browse> button to identify where you want to copy the data and then left click <Copy Files>.
The Lead Assessor then gives his files on a transfer device to the Master Database operator (usually the Program Manager). The Program Manager uses the transfer device (USB drive, CD, DVD, etc.) to copy the assessment files to a temporary location on his computer.

The Program Manager then opens the Master Database, left clicks on <Administrative Functions> from the Main Menu, and then left clicks on the <Import Assessor Database> button in the middle of the Administrative Functions Menu.

Note: If the <Import Assessor Database> button is grayed out, it means that you do not have Administrative permissions. To Import, always enter the Master Database as a user with Administrator permissions.

The next step is to find the Assessment database to import. The below screen opens with the last file identified to which the Master Database was linked.
Left click on the <Find a different Database> button to find the Assessment database that you just transferred to your computer and that you want to import.

With this screen you identify the Assessment database that you want to import into the Master Database. Single left click on the file to import, which will put that file into the File Name window and then left click on the <Open> button OR double left click on the file to link to this file.

Returning to the Imports Assessments screen the Link and Import window now correctly identifies the database to be imported. Left click the <Import> button to initiate the import.

A confirmation screen then pops up to ensure this is the desired action for the indicated file. Left click on <Yes> to continue.
The import function confirms the linking to the desired database has been accomplished. Left click on <OK> to continue.

![Microsoft Office Access dialog box showing the import process.](image)

A screen opens with a list of facilities that can be imported. Place the arrow on the facility to be imported and left click on <Select Assessment>.

![Select Assessment to Import dialog box](image)

Instead of manually moving the files in these subfolders between locations as in the Assessment Tool, the import function of the Master Database allows a one-button operation to do the same thing. Left click on <Yes> to make these transfers. Note: the files must be in the same folder as the database being imported. Also, if there are no files in a given folder, the computer will state there are no files to transfer.

![Microsoft Office Access dialog box for file movement](image)

The final confirmation pop-up you will see will ask if you want to write the files now. Left click <Yes> to complete the import process.

As in every process, it is always necessary to confirm that what you wanted to have done was actually done. After completing the Import function, left click on <Show Detailed Results> to check that all transfers were successful.
The Import Detailed Diagnostics screen shows what was in the Master Database before the import, the number of records attempted by the import, and the records after the import. The quick check is to scan the right hand Successful column to ensure all boxes are checked.

Another check is to scan Row 4, Assessments. The number of assessments in the Lead Assessor’s database being imported should match the number of assessments attempted. This is also one of the few times you left click on the X box in the upper right corner to close the window and return to the previous screen. This completes the import function.
Erasing All Assessments in the Database

Note the top two buttons of the Administrative Functions menu function similarly to the buttons with the same names in the Assessment Tool mode. The top button allows Administrators to erase all records in the database, permanently. This is usually only done when starting a new program on a new computer. Selecting the <Empty the Database> button opens a confirmation window, to ensure you want to permanently erase all assessment data (all data, not just data from one assessment). Left click on <Yes> to continue or cancel.

Warning: this will erase all records in the database, permanently!
Erasing a Single Assessment in the Master Database

Administrators have the ability to erase a single assessment in the database, **permanently**. This is usually only done when an assessment was loaded in error. Selecting the <Delete an Assessment> button opens a list of assessments. Select the assessment to erase, then left click <Delete This Assessment>. This will open a confirmation window, to ensure you want to permanently erase the selected assessment. Left click on <Yes> to continue or cancel.

![Image of the administrative functions menu]

For Help, Press the F1 Key

![Image of the list of assessments]

Warning: this will erase the assessment from the database, **permanently**!
Manage User Accounts

The <Mange User Accounts> button enables an administrator to add a new user, delete a user and assign permission levels to users. The database is preloaded with the following four users:

- **Name**: Administrator  
  **Password**: Administrator
- **Name**: Assessor  
  **Password**: Assessor
- **Name**: Editor  
  **Password**: Editor
- **Name**: Reader  
  **Password**: Reader

These passwords are examples only and should be changed after installing the program. Note that the password and for the four original users can change, but these four user names can not be deleted. This is a safety feature to prevent a user from erasing all Administrators from the program.

Select <Mange User Accounts> to start the process.
Add New User, Delete User, and Change Groups

After selecting <Mange User Accounts>, the form labeled “List of Users and the Group to which they belong” is displayed. From this form, an Administrator can add a new user, delete a user and assign or change their permission level, called Group.

User Groups:

Three user groups have been created for the database in the Workgroup File: Admins, Full Data Users, and Read Only Users.

*Admins* has full access to the database. The Administrative Functions button will only be visible for users in the Administrator group. Two users have been created in this group, Administrator and Assessor. They have the initial passwords of “Administrator” and “Assessor”. It is highly recommended to assign them a different password in the Master Database after initial installation.

*Full Data Users* can view and update data. The created user “Editor” has the initial password of “Editor”.

*Reader* can only view data. The created user “Reader” has an initial password of “Reader”.

These are examples only and should be changed after installing the program. Note that the password and permission level for the four original users can be changed, but these four original user accounts cannot be deleted.
Add a New User:

From the form labeled “List of Users and the Group to which they belong”, select <Add New User> button to add a new user name to the database. A screen opens called “Add a new USER Account”. On this screen, type in the new user name and select from the drop down box users group (permission level). After making entries, left click on the <Add User> button to finalize the account.

![Add a New User Account](image)

Delete a User:

The first step is to select one of the existing Users by left clicking on the far left column of the form labeled “List of Users and the Group to which they belong”. This will mark the User desired with a right pointing arrow head if one is not already there. This selects the User and links the buttons across the bottom to that User.

Next left click on the <Delete User> button to delete a user name from the database. A warning screen opens asking you to confirm the deletion. Left click <Yes> to continue, or <No> or Cancel> cancel the action.

![Microsoft Office Access](image)
Change a User’s Group:

The first step is to select one of the existing Users by left clicking on the far left column of the form labeled “List of Users and the Group to which they belong”. This will mark the User desired with a right pointing arrow head if one is not already there. This selects the User and links the buttons across the bottom to that User.

Next left click on the <Change Group for:…> button to change the group of a user from the database. Notice that name of the User selected on the top of the form is displayed in the button <Change Group for:…>. This is designed to help the Administrator keep track of the account they are working on. A screen opens asking you to select a Group from a drop down Menu. Left click <Change Group> to continue or Cancel> cancel the action.
Customize Matrix Defaults

The program allows the database administrator to establish system defaults for the Threat/Hazard matrices of future assessments. This allows the organization to tailor the database to the needs of its assessment program. This was established following the below concepts:

- Critical Functions: display standard FEMA 452 critical functions. Allow the user to fully modify the list and use all or none of the critical functions.

- Critical Infrastructures: display standard FEMA 452 critical infrastructures. The user must display the standard list, but can add additional infrastructures to this list.

- Threats: display standard FEMA 452 threats. Allow user to fully modify the list and use all or none of the standard threats.

Selecting <Customize Matrix Defaults> from the Administrative Functions menu opens form entitled “Customize System Defaults Menu”. To begin the process, left click on <Customize Critical Function>, <Customize Critical Infrastructure> or <Customize Threat/Hazards>. 
Customize Critical Function Defaults

Selecting the <Customize Critical Functions> button enables the database administrator to establish system defaults for the Critical Functions matrix for future assessments. It does not effect established assessments.

A screen is opened displaying the “Master List (shipped with product)” Critical Function list on the left and the “System Defaults” list on the right. From this form, the system allows users to add, delete and reorder the System Default labels.

- Select the arrow symbol < in the middle of the form to replace all the entries under “System Defaults” with all the entries under “Master List (shipped with product)” list.
- To change an existing Critical Function entry, place the curser on any existing entry and type over the name.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name for the Critical Function.
- The order that the Critical Function labels are displayed can be changed. Click on any existing order number and type in a new number. Use a “.5” decimal point to place the Critical Function label between other existing numbers. For example, to make a Critical Function label third on the list, change the order number to “2.5”. To make Function label first on the list, assign an order number of “0.5”.
- To have the form reset and display the new revised order of the Critical Function labels, left click on the <Reorder> button.
- To delete a Critical Function label, first select one of the Critical Function labels by left clicking on the label. This will mark the desired label with a right pointing
arrow head if one is not already there. Then left click the <Delete Row> button and the selected Critical Function label will be deleted. Note: A minimum of one Critical Function label must remain.

- To finalize all the changes made to the Critical Function list, select the <Update> button.
- Click <Cancel> to return to the “Customize System Defaults Menu” without making any changes.
**Customize Critical Infrastructure Defaults**

Selecting the <Customize Critical Infrastructure> button enables the database administrator to establish system defaults for the Critical Infrastructure matrix for future assessments. It does not effect established assessments.

A screen is opened displaying the “Master List (shipped with product)” Critical Infrastructure list on the left and the “System Defaults” list on the right. From this form, the system allows users to add, delete and reorder the System Default labels. Note: The first ten items, listed in blue, are required and can not be changed.

The first ten Critical Infrastructures listed are established for use in all assessments and are supported by the FEMA 452 checklist. While adding additional Critical Infrastructure labels is possible, it is discouraged unless the assessor develops associated guidance and documentation.

- Select the arrow symbol < in the middle of the form to replace all the entries under “System Defaults” with all the entries under “Master List (shipped with product)” list.
- To change an existing additional Critical Infrastructure entry, place the curser on any existing entry and type over the name. Note: the first ten cannot be changed.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the new name for the additional Critical Infrastructure.
- The order that the Critical Infrastructure labels are displayed can be changed. Click on any existing order number and type in a new number. Use a “.5” decimal point to place the Critical Function label between other existing numbers. For
example, to make a Critical Infrastructure label third on the list, change the order number to “2.5”. To make Infrastructure label eleventh on the list, assign an order number of “10.5”. Note: the first ten cannot be changed.

- To have the form reset and display the new revised order of the Critical Infrastructure labels, left click on the <Reorder> button.
- To delete a Critical Infrastructure label, first select one of the Critical Infrastructure labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Critical Infrastructure label will be deleted. Note: the first ten cannot be changed.
- To finalize all the changes made to the Critical Infrastructure list, select the <Update> button.
- Click <Cancel> to return to the “Customize System Defaults Menu” without making any changes.
Customize Threat/Hazard Defaults

Selecting the <Customize Threat/Hazards> button enables the database administrator to establish Threat/Hazards system defaults for both the Critical Function and Critical Infrastructure matrixes for future assessments. It does not effect established assessments.

A screen is opened displaying the “Master List (shipped with product)” Threat/Hazard list on the left and the “System Defaults” list on the right. From this form, the system allows users to add, delete and reorder the System Default labels.

- Select the arrow symbol < in the middle of the form to replace all the entries under “System Defaults” with all the entries under “Master List (shipped with product)” list.
- To change an existing Threat/Hazard entry, place the curser on any existing entry and type over its name.
- To add a new entry, place the curser on the bottom blank row. The asterisk “*” on the left will change to a black triangle. First type in an order number, then type in the name for the new Threat/Hazard.
- The order that the Threat/Hazard labels are displayed can be changed. Click on any existing order number and type in a new number. Use a “.5” decimal point to place the Threat/Hazard label between other existing numbers. For example, to make a Threat/Hazard label third on the list, change the order number to “2.5”. To make Threat/Hazard label first on the list, assign an order number of “0.5”.

For Help, Press the F1 Key
To have the form reset and display the new revised order of the Threat/Hazard labels, left click on the <Reorder> button.

To delete a Threat/Hazard label, first select one of the Threat/Hazard labels by left clicking on the label. This will mark the desired label with a right pointing arrow head if one is not already there. Then left click the <Delete Row> button and the selected Threat/Hazard label will be deleted. Note: A minimum of one Threat/Hazard label must remain.

To finalize all the changes made to the Threat/Hazard list, select the <Update> button.

Click <Cancel> to return to the “Customize System Defaults Menu” without making any changes.
Customize Report Handling Markings

Selecting the <Customize Report Handling Markings> button enables the database administrator to establish a customized report handling markings that will be automatically printed on the top and bottom of all reports.

A screen is opened displaying the “Report Page Markings - TOP” entry area on the left and the “Report Page Markings - BOTTOM” list on the right. From this form, the system allows administrators to create numerous sets of markings.

The default marking can be edited by right clicking in the text box. Additional sets of top and bottom markings can be established by selecting the <New Report Marking> button.

Selecting the <Active Marking> checkbox on the far right designates which marking will be used during printing of reports.
**Master Database Assessment Records Function**

The Assessment Records Function gives the Project Manager or an assessor the ability to review assessment data, photos and files, search for specific observations, vulnerabilities, etc., and print reports from individual facilities or from the results of the searches. To begin this process left click on the < Assessment Records > button from the Main Menu.

This form provides the Project Manager the ability to review assessment data, photos and files, search for specific observations, vulnerabilities, etc., and print reports from individual facilities or from the results of the searches.
The fields in the dark green box allow the user to search for and display only the assessments of interest.

- The first step is to select one of the assessments by left clicking on the far left column of the List of Assessments. This will mark the assessment desired with a right pointing arrow head if one is not already there. This selects the assessment and links the buttons across the bottom to that assessment.

- Most Master Database screens mirror those in the Assessment Tool operating mode. The Assessment Checklist, Facility Reports, and Other Reports functions are unique to the Master Database operating mode. These new sections will be covered next.
Assessment Checklists

As can be seen, the initial screen is a summary type slide showing the Site Checklist questions.

- The three check boxes on the top enable the assessor to filter which questions are displayed. Select the top button <Antiterrorism Questions> to only display questions for an antiterrorism analysis. Select the second button <Natural Hazards Questions> to only display questions related to a wind, seismic, and flood analysis. Select <All-Hazard Questions> to display all questions. Note that this selection filters all 14 sections of the checklist. Also note that the filter process does not destroy entries and that an assessor can change the filter setting without losing or destroying data.

- The first line of each Observation and Recommendation / Remediation along with the “Vulnerability?” checkbox are visible for quick identification. Scroll to the right or double click a box to see the full entry.

- Double clicking on any cell of a row retrieves screens that look much the same as in the Assessment Tool. Selecting cells in the first or fifth column displays the entire question and any guidance. Selecting a cell in the second or third column displays a specific question and the data entered.
• Alternately, left clicking on the <View All [Site] Observations> button will expand the Checklist questions and show what has been entered in Observations and Recommendations. This also looks much like the Assessment Tool data entry screen.

• Similarly, left clicking on the <View All [Site] Vulnerability Assessment Questions> will make the Questions and Guidance more accessible and easier to read.

• Left click on the <Print Section> button to produce a report of the questions, observations, and recommendations in this section of the checklist.

• This module can be used by the Administrator / Manager to edit inputs from the field. Anything typed into the purple fields becomes part of the record for the facility.

• Left click on <Close> to return to the List of Assessments.
Assessment Reports Menu

First choose an assessment facility indicated by the arrow in the first column of the List of Assessments page.

This menu is displayed when selecting the <Assessment Reports> button from the List of Assessments screen. From this location the user can print any of the automated reports for the assessment facility specified at the top of the menu (the selected record on List of Assessments for when the <Assessment Reports> button was depressed). Each report can be printed or converted into Microsoft Word© for editing, distribution, etc. Pressing the <Close Report> button returns to the Reports Menu.

- The <Summary Sheet> button produces the Facility Summary Sheet report.
- The <Executive Summary> button produces the Executive Summary report.
- The <Facility Assessment Team> button produces the report listing the information for the individual assessors responsible for that particular assessment.
- The <Facility Information> button produces the report listing the information for the individual assessment facilities.
- The <Vulnerabilities> button produces the Vulnerabilities and Recommendations/Remediation report.
• The <Risk Matrix> button will perform an automated process which opens a Microsoft Excel® document and then populates it with the information for both the Critical Function Matrix and the Critical Infrastructure Matrix.

• The <Facility Points of Contact> button produces the Facility Points of Contact report.

• The <Observations and Comments> button creates the Assessment Observations and Comments report.

• The <Rapid Visual Screening> produces the full Rapid Visual Screening Report. Note this button is not available unless the assessment selected is a RVS assessment.

Click on the <Close> button at the bottom of the Assessment Reports Menu to return to the List of Assessments page.
Other Reports Menu

This menu appears after the user selects the <Other Reports> button at the bottom of the List of Assessments form. This area of the Master Database allows the Administrator / Manager to search for data from all assessments on file in the database. This is a very powerful analytical tool.

- The <Search Observations and Recommendations / Remediations> button opens the Observations and Recommendations / Remediations for Assessment Checklist form.

- The <Search Vulnerabilities and Recommendations / Remediations> button opens the Vulnerabilities and Recommendations/Remediations form.

**NOTE: THESE REPORTS SEARCH THE ENTIRE DATABASE AND ARE NOT LIMITED TO THE ASSESSMENT THE USER IS CURRENTLY VIEWING.**
Search Observations and Recommendations / Remediations From Assessment Checklists

This form is used to search all the Observations and Recommendations / Remediations for key words. All assessment facilities in the database are searched using this function.

- The black triangle indicates the record that is selected.

- The fields in the dark green box allow the user to search for and display only the observations and recommendations / remediations of interest.

- The <Search> button performs search based on criteria entered into the fields described above. Key words may be typed into the Facility Name, Observation or Recommendation / remediation fields in the green row. Clicking <Search> will query the entire database for line entries with the key word in the chosen field. Subsequent searches will only be of the previous results unless the <Clear> button is first clicked.

- The <Clear> button will allow all facilities to be seen and searched again.

- The <Print Observations, Sorted by Facility> button will create a report of the search results sorted by facility name. The report can be printed or converted to Microsoft Word© and allow additional information to be added, formatting changed, etc.
• The <Print Observations, Sorted by Checklist #> button will create a report of the search results sorted by the question number. The report can be printed or converted to Microsoft Word© and allow additional information to be added, formatted etc.

Click <Close> to return to the previous screen.
Search Vulnerabilities and Recommendations / Remediations

This form is used to search all the Vulnerabilities and Recommendations / Remediations for key words. All the assessment facilities in the database are searched using this function.

- The fields in the green query box allow the user to search for and display only the vulnerabilities and recommendations / remediations of interest.

- The <Search> button performs search based on criteria entered into the fields described above. Key words may be typed into the Facility Name, Observation or Recommendation / remediation fields in the green row. Clicking <Search> will query the entire database for line entries with the key word in the chosen field. Subsequent searches will only be of the previous results unless the <Clear> button is first clicked.

- The <Clear> button will allow all facilities to be seen and searched again.

- The <Print View Vulnerabilities / Initial Costs> button will create a report of the search results sorted by facility name and showing only the initial costs. The <Print View Vulnerabilities / All Costs> button will create a report of the search results sorted by facility name and show all four cost categories. The report can be printed or converted to Microsoft Word© and allow additional information to be added, formatting changed, etc. Click <Close> to return to the previous screen.
Vulnerability Assessment Checklist Function

The Vulnerability Assessment Checklist Function gives the Project Manager or an assessor the ability to view all answers for individual checklist questions. To begin this process left click on the <Vulnerability Assessment Checklist> button from the Main Menu.
This form shows all of the assessment checklist questions in the database.

- The black triangle indicates the Checklist Question that is selected.

- The green query bar allows the user quick access to the assessment questions by using a drop down menu to select the Checklist section. Keyword searching is also possible, similar to the search routines.

- The three check boxes on the top enable the assessor to filter which questions are displayed. Select the top button <Antiterrorism Questions> to only display questions for an antiterrorism analysis. Select the second button <Natural Hazards Questions> to only display questions related to a wind, seismic, and flood analysis. Select <All-Hazard Questions> to display all questions. Note that the filter process does not destroy entries and that an assessor can change the filter setting without losing or destroying data.

- The <Search> button performs search based on criteria entered into the fields described above. Subsequent searches will only be of the previous results unless the <Clear> button is first clicked.

- The <Clear> button will allow all questions to be seen again.

- The <View Questions/Observations> button opens the All Observations and Recommendations / Remediations for this Question screen based on the selected question.

- The <Print Checklist> button produces a report of the checklist.
Observations and Recommendations / Remediations for One Question

<table>
<thead>
<tr>
<th>Vulnerability Assessment Checklist to</th>
<th>Section Header</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question: What major structures surround the facility (site or building)?</td>
<td>Section Header</td>
</tr>
<tr>
<td>Guidance: The black triangle indicates the record that is selected.</td>
<td>Section Header</td>
</tr>
<tr>
<td>The &lt;View Observations&gt; button creates a report of all entries in the database for the designated question. The report can be printed or converted to Microsoft Word® for additional editing, formatting, etc.</td>
<td>Section Header</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Side Name</th>
<th>Assessment Date</th>
<th>Type</th>
<th>Observation</th>
<th>Recommendation / Remediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento Information Company</td>
<td>1/5/5607</td>
<td>Facility</td>
<td>This is generally a short title for the observation followed by discussion and the impact to the operations or</td>
<td>The length of the recommendation depends on the complexity of the recommendation / mitigation options. It is</td>
</tr>
</tbody>
</table>

For Help, Press the F1 Key
Switching Between Operating Modes

The <Switch Operating Modes> tab takes you between the two operating modes: Assessment Tool mode and Master Database mode.

An organization will generally use two different copies of the database: one loaded on a laptop and operating in the Assessment Tool mode for conducting assessments in the field, and the other loaded on a computer at your organization’s headquarters and operating in the Master Database mode for collecting the results from the assessors, printing reports, and archiving the results from a number of assessments. The Master Database copy also provides the organization the ability to search for vulnerabilities common to many assessed facilities, search for specific vulnerabilities, etc. Essentially it can be used as a Risk Management tool to identify and track mitigation measures to reduce risk.

The Assessment Tool mode was designed for engineers and security specialists to be able to easily collect data from the facility being assessed. As you will see, the software is very user friendly. The Master Database mode was designed for the Program Manager.

Switching between the main page of the Assessment Tool to the Master Database mode is as simple as left clicking on the <Switch Operating Modes> button.

The next window confirms that you want to switch modes. Left click on <Yes> to continue, then another confirmation window pops up. Left click on <OK> to complete the switch. Click the <NO> or <Cancel> buttons if you do not want to change modes.

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Changing Passwords

Each user has the ability to change their password from the Master Database operating mode main menu. When a user is initially created by an administrator, their password is blank. To enter the database, simply enter your user name, leave the password field blank, and left click <OK>.

The program will then force a new user to create a password.

It is highly recommended to change all pre-existing passwords at the Program Managers initial entry into the database. (Pre-established Users: Administrator, Assessor, Editor, Reader) To do this, log in with each user name, go to the Main Menu and select <Change Password>.

Selecting the <Change Password > button opens the Change Password Form. Your User name is pre-populated in the top box. Enter your existing password in the “Old Password:” box. Enter a new password in the “New Password:” box. Verify your entry by re-typing the new password in the “Verify:” box.
Note that password must be eight characters long and they must include at least three of the four characters from the following categories:

1. Lower case letters (a to z)
2. Upper case letters (A to Z)
3. Numbers (0 to 9)
4. Special characters ( `!@#, etc. )

Left click <Set Password> to complete the password change. Left click on <Cancel> to cancel.
Database Administrator Information

Version 4.0 of the FEMA 452 database has continued to simplify the required Database Administrative functions. The Installation Process section of the User Guide describes a step by step process for Users to install and run the database. It simplifies managing user accounts and changing passwords. It also describes how Users can import database files, Photos, GIS files, and Miscellaneous files.

A Database Administrator may be required to manage the security functions of the database. It is highly recommended that the database administrator is an intermediate to advanced Microsoft Access user. For up to date information about Microsoft Access®, the current software webpage is: http://office.microsoft.com/en-us/FX010857911033.aspx.

Database Specifics:

The database application is composed of various files, including a Microsoft Access© database (MasterDBV4.mde for the Master Database), a workgroup file (FEMA452wg.mdw), a shortcut to the database (FEMA Master Assessment Database V4) and a User Guide in Adobe Acrobat © (FEMA452dB_UserGuide_30-Jun.doc).

The following are the hardware and software requirements for the risk Assessment Database:

- Pentium® 4 or equivalent processor
- Windows XP
- MS Access© 2002
- 256 MB of RAM recommended for all components

Note that the database will recognize any type of file in the “Miscellaneous” folder. However, the database only recognize files with a “.jpg”, “.gif” or “.bmp” file extension in the “Photo” and “GIS_Portfolio” folders.

Notes for installation on systems running MS Access© 2002:

(If you are running the program on MS Access© 2003, you will not have this problem.)

The first time the program is started in MS Access© 2002, the below “Missing Shortcut” dialogue box will display.
Simply allow the system to search your system for several minutes until it prompts you with the below “Problem with Shortcut” dialogue box. Then click <Fix it>. This will reset the shortcut to match your system and open the FEMA Master Database program.

Alternately, when you get the first dialogue box, you can browse to your version of MS Access©.
Summary

In this User Guide you have been shown how to install and open the Database. You have also been shown how to link collected data to the databases, how to move around the software and between the Assessment Tool and Master Database, how to handle vulnerabilities, including setting of priorities, and the production of standard reports. Good luck with using the FEMA 452 and FEMA 455 processes and this database in performing a Risk Management Program.