



U.S. Department
of Transportation
**Federal Transit
Administration**

FARE REVENUE INTERACTIVE ELECTRONIC WORKBOOK Fare Review

Version 2.0

USER MANUAL

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**Ride the Information Highway on Public Transit
[<http://www.fta.dot.gov>]**

April 28, 2000

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Federal Transit Administration

Fare Review

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Foreword

The Fare Revenue Interactive Electronic Workbook (Fare RevIEW) programming structure allows for easily adding modules to the basic programs as transit system needs warrant. Future modules will be downloaded from the web page and integrated into the initial software package. Information on the program as well as downloading capability enables the system to have latest versions. Fare RevIEW was initiated by transit officials to the Office of Research Innovation. The objective of this program is to provide urban transit officials with a tool to internally evaluate the fare revenue control measures. Fare RevIEW is also intended to present general recommendations, suggestions and indicate where potential areas of exposure within the fiscal system. This program is not a means for the Federal Transit Administration (FTA) to audit the fiscal system within a transit agency. This program is not intended to be a replacement of an audit of a system's fare control practices by an outside firm.

The Fare RevIEW system was developed by the US Department of Transportation, (USDOT) FTA under contract number DTFT60-95-C-41004. The program was developed by Harvard Design and Mapping Co., Inc (HDM) of Washington DC with support from the following subcontractors: McCollom Management Consulting, Inc., of Darnestown, MD; Lobron Consultancy, LTD of Berwyn, PA and SG & Associates of Annandale, VA. HDM thanks all of the staff for their contributions to the program.

The Fare RevIEW software can be found on the FTA's Internet Website at www.fta.dot.gov.

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Acknowledgements

Harvard Design & Mapping, Co., Inc. (HDM) would like to thank the numerous transit officials who took time out of their extremely busy schedules to review the Fare RevIEW program in various stages of development. This input has been crucial to the development of a program that is usable as well as effective and efficient for transit systems to utilize.

A special note of appreciation goes to the transit systems who allowed us to test the program in their systems and provided information necessary to the development of the program: Sacramento Regional Transit District, Minneapolis Metro Transit, Capital Metro, Austin, Pee Dee SC, Lincoln NE, WMATA, DC. Based on the diversity of these systems, we were able to include elements to assist all types of transit services within the limits of this project.

HDM always wishes to express its appreciation to the FTA officials: Bert Arrillaga, Chief of Service Innovation Division, and Helen Tann, FTA Program Manager; and to APTA staff, Pam Boswell for their continued support and direction.

Getting the Most from Fare Review

The Fare Review system was designed to be a tool for transit system officials to review processes, evaluate and analyze the deviations to support thoughtful and logical decisions. This program is not designed to be a report card that indicates “bad or good” fiscal systems. The FTA and HDM team hopes that you will work with this program to learn the areas of possible exposure for loss of your revenues and to protect your employees and customers.

There are several ways in which you can maximize the benefit you receive from the Fare Review program. Some of these are summarized below.

- 1. Utilization for internal fiscal controls:** Most transit officials prefer to be proactive rather than reactive when handling financial procedures and potential exposure of the system, customer, and employee to the dangers of theft, embezzlement or fraud. The Fare Review program was designed with such an approach. When answering the survey questions on the existing system answer the questions as honestly as possible.
- 2. Use of “Not Applicable”.** It is easy to indicate “Not applicable” just because we do not use a procedure or process. Not applicable should be used only when the question is connected to a type of service delivery or fare media that the system does not offer. For example, when purchasing tickets over the Internet; or do you have zone fares.
- 3. Answering Questions.** Answer all other questions as “Yes” (we do), “No” (we don’t) or “Needs Information”. Carefully review all no answers. If you make a conscience decision to not implement a procedure type in the “User Comment Box” the reason you made that decision. For example, “Do you prosecute passengers who try to ride the system with outdated tickets?” Your reason may be: *Transit A has few incidents of this nature and would not prosecute a customer because of the potentially bad publicity.* The user comments are printed with the question in two of the reports. Any time a conscience decision has been made to not implement a procedure, state the rationale. A “Not Applicable” response in this version of Fare Review should be answered “**Needs Information**” in order for it not to be counted as an exposure or trigger additional “group questions” by answering “Yes”.
- 4. Answer Follow-up.** The appropriate team members should carefully analyze any question answered “No”. An analysis should be completed to determine if, in fact, the transit system should

implement a new process or specific procedure. As a rule of thumb, if the reason for not having a specific procedure is: "We've never done it that way." Or "We've just always done it this way." Or "That was decided by another General Manager or Board", re-examine the process, procedure or policy in context of the listed potential exposures, recommendations and suggestions. The bottom line is to always make a deliberate and conscious decision on the fiscal controls. Reaction to a problem such as an injured employee in a robbery or discovery of embezzlement tends to be considerably more expensive to correct, takes longer to implement corrective actions and usually results in negative press.

5. **Work Session Planning.** Answer as many functions as appropriate to the system. You do not have to complete the survey in one sitting. Save your questions before going to another area of the program or before you close for the day. When the program is re-opened, the survey will open to the last unanswered question.
6. **Increase Effectiveness.** By answering the survey honestly, the transit system financial department establishes a benchmark of the current status of the system and track effectiveness of changes.
7. **What-if Scenarios.** This program lends itself to "What if" scenarios. For example, if a transit system is considering the initiation of Internet purchasing of passes and/or tickets, the transit official(s) could go through the Internet sales, programming and encrypting functions to view what some of processes/procedures should be if implementation is completed. It can reduce the "Surprises".

General

Getting Help

You can receive personal assistance maneuvering through the Fare RevIEW program in a number of ways. Please note that email is probably the best method to insure that your question is interpreted properly. We will respond via email with a response within 3 working days. FTA will report on updates and additional modules on the main FTA web site at <http://www.fta.dot.gov/>.

- **User Guide:** Your hard copy user guide can be used as a reference to answer many of your questions.
- **On-line Help:** On-line help is a text and graphic form of help many users are familiar with.
- **Movie Help:** Animated help is available for some functions and walks the user through a process or concept using video and audio technology.
- **Email:** If you are connected to an electronic mail system, you may be able to email your question to an HDM Analyst at farereview@hdm.com or to jbyman@hdm.com
- **Fax:** Faxes can be sent directly to HDM at 202-554-8513.
- **Telephone:** You can contact the HDM Project Manager, Judith Byman, at 202-554-1700.

System Requirements

In order to install and run Fare RevIEW, you should confirm that your computer meets the following minimum specifications:

- An industry-standard personal computer with at least an 80486 or higher microprocessor
- Operating System should be Windows 95, Windows 98, or Windows NT 4.0 (with service pack 4.0 and under)
- A minimum of 32 MB Random Access Memory; 64 MB is recommended
- A minimum of 60 MB hard disk space, which will include adequate swap space and space for expansion
- A CD-ROM Drive
- A sound card and audio speakers to access the Movie Help
- Color screen resolution of 1024 x 768 (smaller size is possible, but the user will have to scroll horizontally and vertically to see some of the screens)

How Do I ...

How Do I Create a Case Study?

To create a case study for the first time, select File/Case Studies from the menu bar. The case study form will appear with none of the fields filled in. If cases were previously created, click on the small arrow to the right of the case name entry.

To create a new case, you will be enter information into four (4) tabs in the following window. You may save your work at any time, and can review your answers by clicking on any of the four tabs:

- Agency Info
- Modes
- Functions
- Media

Case Study ? X

Agency Info | Modes | Functions | Media

Case: Bus Transit

Description: The bus tranist line case

Agency: City Transit

Address: 100 Main St.
4th Floor

City: Boston

State: Massachusetts **Zip Code:** 02134

Phone: (617) 555 - 1234

Fax: (617) 555 - 5678

WWW: http://www.bostontransit.com

This is the default case study for this transit system.

Use as the starting point for all future case studies.

Step 1. Agency Info Tab

Click on the “Agency Info” tab and enter information describing the agency as shown in the example on the following page.

When creating or editing the default case, there are two options that are enabled:

- “This is the default case study for this transit system” - Checking this option will designate that this particular case is the default case for the system. This box is automatically checked by the Initialization Wizard when creating the default case for the first time.

- “Use as the starting point for all future case studies” - Checking this option will cause all future case studies to be based on the default case. All new cases will have the same mode, functions, and media of the default case, but additions and subtractions can be made. This is very useful if you want to create cases similar to the default case with only small changes, to test different scenarios. When the Initialization Wizard comes to this step, the option is checked by default, but it can be unchecked. If you do not choose this option, all new case studies are created from scratch.

The screenshot shows a software window titled "Case Study" with a standard Windows-style title bar and toolbar. Below the toolbar are four tabs: "Agency Info", "Modes", "Functions", and "Media". The "Agency Info" tab is active, displaying a form with the following fields:

- Case:** Bus Transit (dropdown menu)
- Description:** The bus transit line case (text field)
- Agency:** City Transit (text field)
- Address:** 100 Main St (text field)
- City:** Boston (text field)
- State:** Massachusetts (dropdown menu)
- Zip Code:** 02134 (text field)
- Phone:** (617) 555 - 1234 (text field)
- Fax:** (617) 555 - 5678 (text field)
- WWW:** http://www.bostontransit.com (text field)

At the bottom of the form, there are two checkboxes:

- This is the default case study for this transit system.
- Use as the starting point for all future case studies.

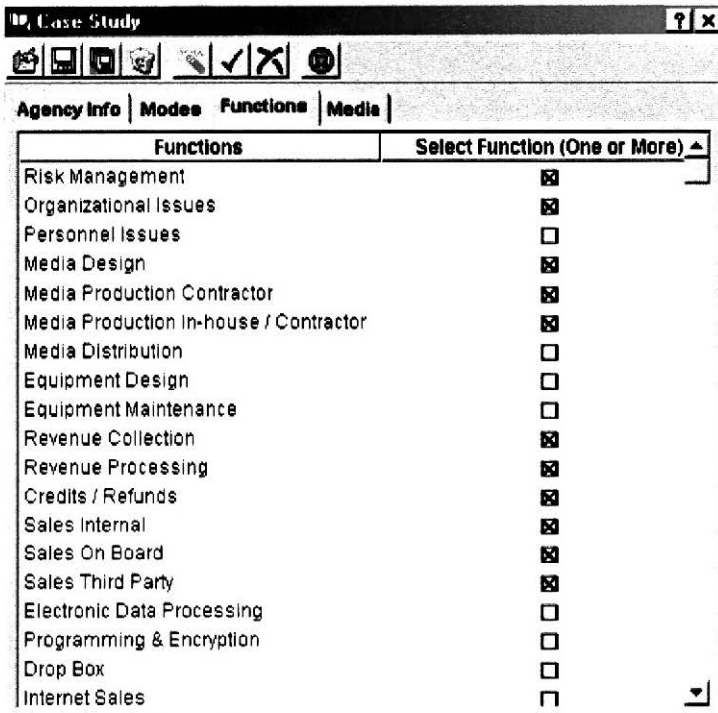
Step 2. Modes Tab

Click on the "Modes" tab and select one mode for this case. Create additional cases if you wish to consider additional modes.

Modes	Select Mode (One Only)
Bus / Fixed Route	<input checked="" type="radio"/>
Demand Response	<input type="radio"/>
Light Rail	<input type="radio"/>
Commuter Rail	<input type="radio"/>
Heavy Rail	<input type="radio"/>
Ferryboat	<input type="radio"/>

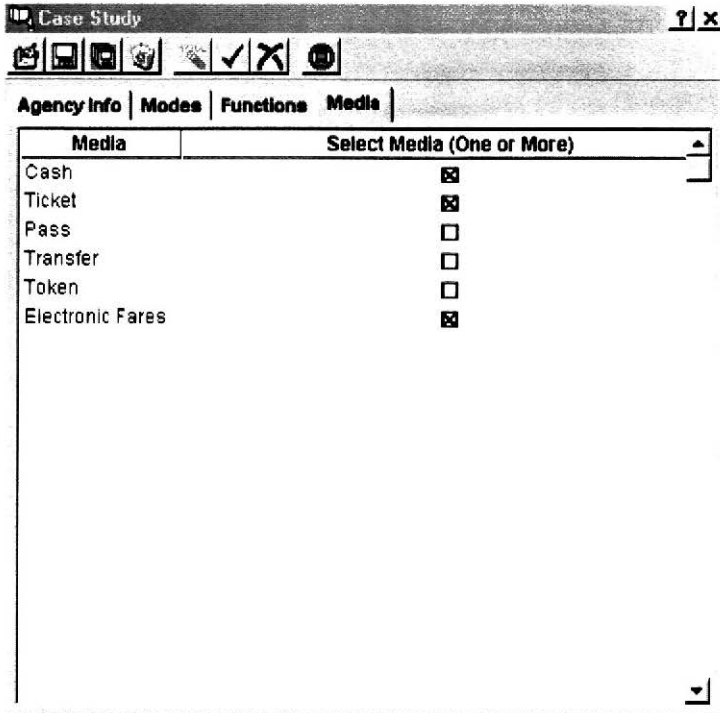
Step 3. Functions Tab

Click on the “Functions” tab and select all functions relevant to your system and the mode on the previous tab. If all the functions are not displayed at once, you may use the side bar to scroll down the list. At the current time, Fare Review does not delineate the questions by mode.



Step 4. Media Tab

Click on the “Media” tab and check all the media relevant for the mode selected in Step 2.



Step 5. Save the Case

Click on the “Save” button, or “Save” menu item that is found under “File”.

How Do I Answer a Survey of Questions?

After a Case Study has been created, you may now answer a survey of questions. Begin by clicking the question mark button on the toolbar.

For more information on how to create a case study:



The following main survey screen will be displayed which you will use throughout the entire question/answer session. Each section of the screen is described below.

Survey
Question 2 of 47

Case Information | Case Description | Survey Statistics

Select a Case Study Survey to take or edit:

New Red Bus Line

Case Name: New Red Bus Line
Date Created: April 10, 2000
Last Modified: April 10, 2000
Agency: Mass Transit Inc
 100 Main Street
 Boston, MA 01234

Select Function Groups to be Answered

Functions: Revenue Collection
 Revenue Processing

Media: Cash
 Ticket
 Transfer

Mode: Bus / Fixed Route

Is specific crime prevention training programs provided for employees responsible for revenue functions especially those with direct involvement with the public? (Reference Question ID: 315)

Media	Yes	No	Need Info
ALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ticket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

User Comments:

Question Notes:
 Employees should be advised that personal safety is paramount, with loss of revenue secondary to loss of life or injury. Crime prevention techniques may protect employees and/or customers from risk or injury due to robbery.

Reference:
 Not Available

Function: Revenue Collection | Number of Function Questions = 10 | Total Number of Questions Completely Answered = 24

14

Case Information is found on the left side of the screen, including the Agency Information and Functions. You may filter the questions by selecting only some of the functions, as shown by the checkmarks.

Case Information	Case Description	Survey Statistics
Select a Case Study Survey to take or edit:		
New Red Bus Line		
Case Name:	New Red Bus Line	
Date Created:	April 10, 2000	
Last Modified:	April 10, 2000	
Agency:	Mass Transit Inc. 100 Main Street Boston, MA 01234	
Select Function Groups to be Answered		
Functions:	Revenue Collection	<input checked="" type="checkbox"/>
	Revenue Processing	<input type="checkbox"/>
Media:	Cash Ticket Transfer	
Mode:	Bus / Fixed Route	

Two additional tabs on the left side contain the **Case Description** and **Survey Statistics**. The following is an example of the Survey Statistics tab.

Case Information	Case Description	Survey Statistics
Function	NFQ	NFQCA
Revenue Collection	10	6
Revenue Processing	37	18

Survey **Questions 2 to 47** are found in the top right of the screen. All answers are made by checking the appropriate box (Yes, No, or Need Information). Here, the user is about to answer Question #2 of 47 Revenue Collection questions. Remember that only the Revenue Questions are being shown because the user selected a filter in the Case Information dialog shown above.

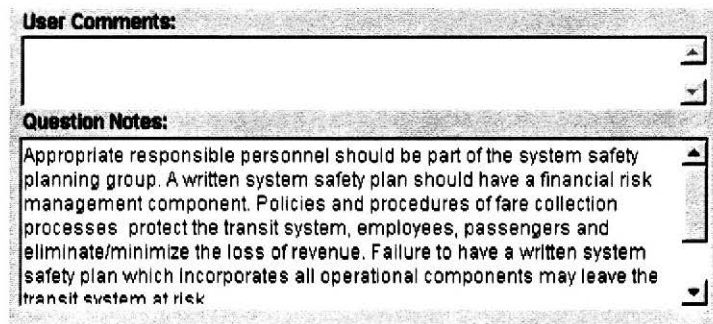
Question 2 of 47

Is specific crime prevention training programs provided for employees responsible for revenue functions especially those with direct involvement with the public? (Reference Question ID: 315)

Media	Yes	No	Need Info
ALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ticket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Below the question, the following window displays two things. The **User Comments** area is where the user can enter any comment or other supporting text that may be relevant to their answer. Please enter reasons for stating non-applicable as discussed in "Getting the most out of Fare Review."

Question Notes are provided to inform the user of potential exposures, recommendations and suggestions on how to minimize exposure of fare revenue to the system. References are listed when available. When references did not exist on a specific question, experience, general auditing rules were applied.



The screenshot shows a software interface with two sections. The top section is titled "User Comments:" and contains an empty text input area with a vertical scrollbar on the right side. The bottom section is titled "Question Notes:" and contains a text area with the following text: "Appropriate responsible personnel should be part of the system safety planning group. A written system safety plan should have a financial risk management component. Policies and procedures of fare collection processes protect the transit system, employees, passengers and eliminate/minimize the loss of revenue. Failure to have a written system safety plan which incorporates all operational components may leave the transit system at risk." This section also has a vertical scrollbar on the right side.

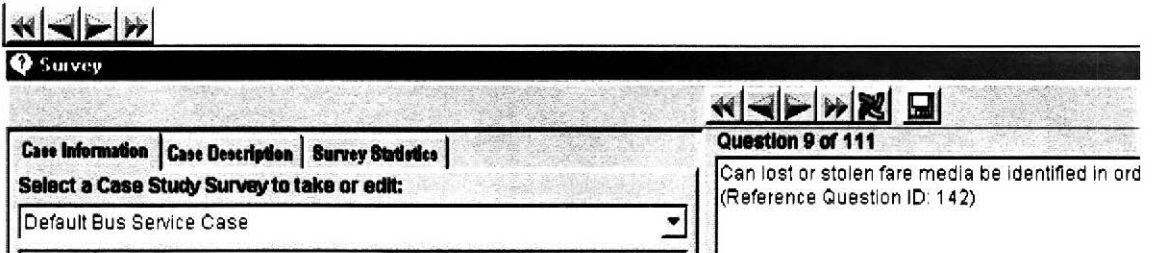
How Do I Navigate Through Questions?

There are three ways to navigate among the questions when answering a survey. Each method is described in the following sections:

- Arrow Buttons
- Right-click Question Window
- Go-to Question Feature

Arrow Buttons

To move through the questions one at a time, either forward or backward, you may click the arrow buttons located on the left of your screen. The first double arrow button moves you to the first question. The last double arrow button moves you to the last question. The two single arrow buttons in the center move you forward or backward one question at a time.



Right-click Question Window

If you would rather not click the buttons described above, you may RIGHT-CLICK in the gray area above the question. A popup menu appears that allows you to navigate in a way similar to the arrow buttons.

Question 10 of 106

Do you record third party fare media sales?

Next Question

Previous Question

First Question

Last Question


Goto Question...

Save Answers

Media	Yes	No	Need Info
ALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ticket	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Token	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Go-to Question Feature

If you wish to go to a specific question, either backward or forward, you click on the “Go To” button on the toolbar

which looks like this: 

Fare RevIEW will then calculate the status of all the questions this user is allowed to work with. You may go to any question by double-clicking it in the table that looks like the one below. The status of each question is color coded as shown in the legend below the table.

Go To Question		
----- Double Click on the Question To Go To. -----		
Question	Function	Question
1	Revenue Collection	(U) Are revenue handling procedures in place for specific situations?
1.02	Revenue Collection	(C) Is there a written policy regarding an employee handling money from passengers?
1.03	Revenue Collection	(C) Are employee cash transactions reconciled daily to ridership counts?
2	Revenue Collection	(U) Is specific crime prevention training programs provided for employees responsible for revenue functions especially those involving with the public?
3	Revenue Collection	(NI) Does your system have procedures to reconcile cash collected and media sold?
4	Revenue Collection	(C) Is there a written policy regarding steps to take when the farebox malfunctions?
4.02	Revenue Collection	(NI) Are payments received during a farebox outage reported and reconciled to ridership counts?
4.03	Revenue Collection	(NI) Are farebox outages reported immediately to supervision for direction or remedial action?
4.04	Revenue Collection	(NI) Are deviations from written policy on handling farebox outages reported to senior revenue management?
4.05	Revenue Collection	(C) Are the occurrences of farebox malfunctions recorded and analyzed for trends?
5	Revenue Collection	(C) Is there a policy regarding how the employee determines eligibility of passengers to purchase discount and free fares?

How Do I Create a Report?

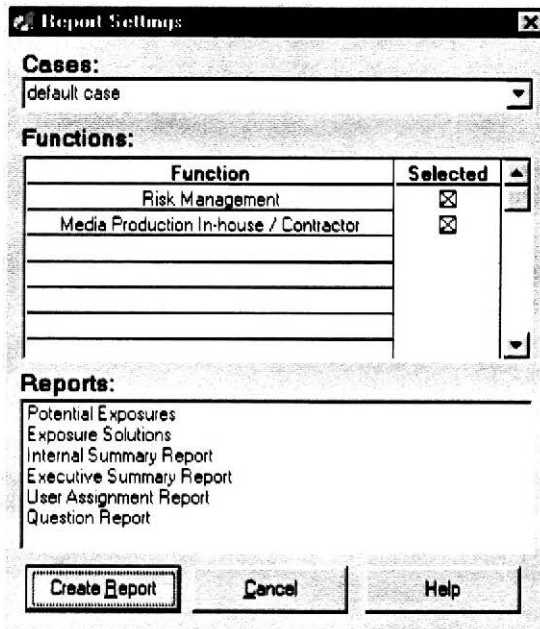
A number of reports have been included in the Fare RevIEW application. There are four easy steps to create reports from Fare RevIEW which are presented in the graphic below.

Step 1: Select a case from the Cases list.

Step 2: Select at least one function from the Function list. All are selected by default.








Step 3: Select a report from the Reports list

Step 4: Press the “Create Report” button.



The selected report will be displayed in a preview window. If no records are selected based on your report settings, the system will present a message explaining why the system was unable to create the report. For example, if there are no exposure resolutions based on your survey answers, the message dialog will say “No exposure resolutions have been provided for this case.”

After generating the report, the system will show a number of useful tools to help the user to navigate through the entire report:

- Remove the report from screen 
- Navigate between different pages  
- Print Report 
- Printer Setup 
- Set different zoom view of report 
- Search report contents by entering search contents 

How Do I Use the Printed Reports?

Six standard reports are provided to assist the user. The reports are listed below, and examples of each are provided.

- Potential Exposures
- Exposure Solutions
- Internal Summary Report
- Executive Summary Report
- User Assignment Report
- Question Report

Potential Exposures

This report will report any exposures that exist based on the answers to the questions. The report will summarize the question and answer that promoted the exposure, and provides a recommendation to limit exposure.

Potential Exposure Report

April 11, 2000

Case Name:	Red Line	Mode:	All
Function:	Revenue Collection		
Question:	Are there written procedures for handling revenue instruments?	Reference	56
	Media	Answer	Reference Question ID
	Ticket	No	123
	Transfer	No	123
Exposure:	Failure to have written procedures increases the chances of lost revenues through theft, fraud, and/or mishandling of fare instruments by employees.		
Recommendation:	Written and/or electronic procedures for handling revenue instruments should be established. There should be a chain of custody documents for shipments of fare media and money. All instrument processing activities should be defined clearly in writing. The rules should be presented and understood by all employees involved with the process prior to assignment. For good records, have the employee sign off on training and place document in personnel file.		

Exposure Solutions

This report will show any exposures that no longer exist due to changed answers. The report will summarize the question and answer that promoted the exposure.

Exposure Solution Report

April 11, 2000

Case Name:	Red Line	Mode:	All
Function:	Revenue Collection		
Question:	Is there a written policy regarding an employee handling money from passengers?	Reference:	56
Media	Original Answer	Reference Question ID	
Cash	No	126	

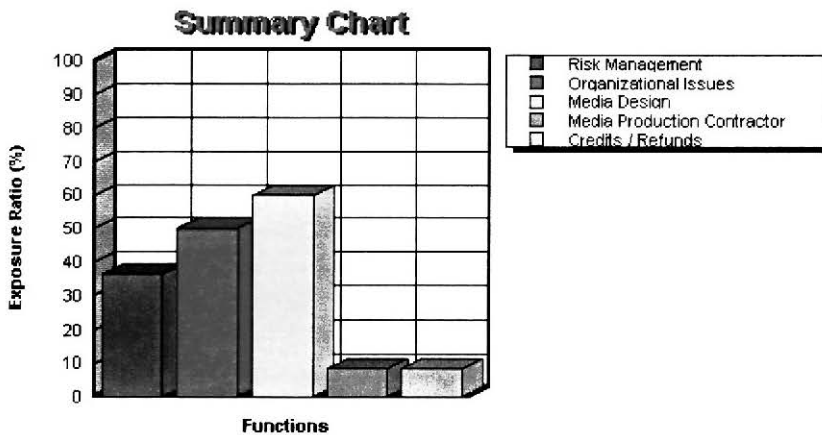
User Comments:

Internal Summary Report

This report summarizes the answers to each question, by functional area. The report is useful to analyze the status of the case surveys, and if any questions remain unanswered. A partial report is shown below.

Case Name: Bus Transit

Mode: All



The chart presents the ratio between the number of exposures and the number of questions for given functions.

Function: Risk Management

Total Number of Questions:	11
Number of Questions Answered As "Yes":	7
Number of Questions Answered As "No":	4
Number of Questions Answered As "Need Info":	0

Function: Organizational Issues

Total Number of Questions:	6
Number of Questions Answered As "Yes":	3
Number of Questions Answered As "No":	3
Number of Questions Answered As "Need Info":	0

Executive Summary Report

This report summarizes the number of potential exposures based on the answers provided by the users. The information is presented in chart and tabular form. A partial report is shown below.

Executive Summary Report

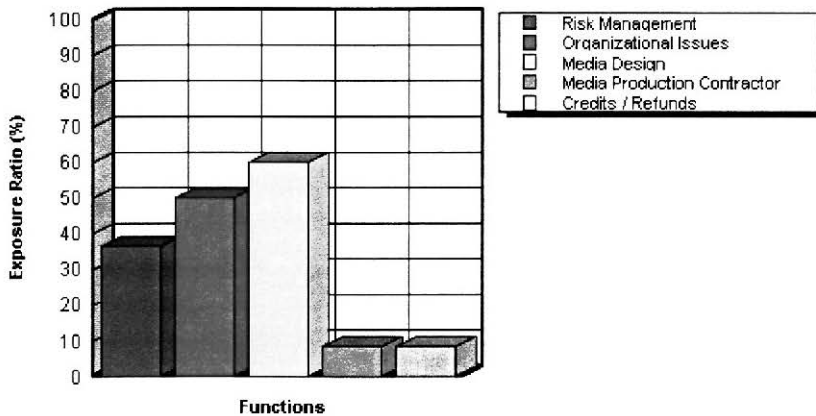
March 13, 2000

Total Questions in the Survey: 164
 Total Question Completely Answered in the Survey: 17

Case Name: Bus Transit

Mode: All

Summary Chart



The chart presents the ratio between the number of exposures and the number of questions for given functions.

Function	Number of Compliances	Number of Potential Exposures
Risk Management	7	4
Organizational Issues	3	3
Media Design	5	6
Media Production Contractor	2	1
Credits / Refunds	0	1

User Assignment Report

The User Assignment Report summarizes the permissions set up by the Fare Review Administrator. This report will only be available if the Administrator selected a security option during setup. A partial report is shown below.

User Assignment Report

March 13, 2000

Case Name: Bus Transit

Mode: Bus / Fixed Route

User Name: JOHN BROWN

Function	Media
Risk Management	Cash
Risk Management	Ticket
Risk Management	Electronic Fares
Organizational Issues	Cash
Organizational Issues	Ticket
Organizational Issues	Electronic Fares
Media Design	Cash
Media Design	Ticket
Media Design	Electronic Fares

Question Report

The Question Report lists all the questions that will be asked in the case survey. The questions presented are based on the case study characteristics, including the mode, functions, and media. A partial report is shown below.

Question Report

March 13, 2000

Function:	ID Question
Credits / Refunds	1 Do you have a written policy for refunding money for tickets, passes, transfers, and tokens?
Credits / Refunds	2 Are refund transactions recorded?
Credits / Refunds	3 Are refund transactions reviewed and approved by a supervisor prior to issuance?
Credits / Refunds	4 Are efforts made to ensure that the refund recipient purchased the submitted fare instrument?
Credits / Refunds	5 Are trends in refund recipient and refund issuer performed by independent parties?

How Do I Log On and Off?

Log On

When the application is started, a log on screen will appear requesting the username and password of an approved user. You must enter your username and password exactly to enter the system. If your Fare RevIEW was set up with No Security option, then this screen will not appear.

Log Off

You may log off Fare RevIEW at an time by selecting File / Exit in the menu bar. If there have been changes since the last time you exited, you will be asked if you want to save your changes. You may select **Yes** to save your changes, **No** to exit without saving your changes, and **Cancel** to return to your Fare RevIEW session.

System Administration

System Administrator's Role

The Fare RevIEW System Administrator is the person charged with overseeing the system's configuration. You will find that if no security is used, the System Administrator's role will be minimal since there will be no usernames or permissions.

Setting up Fare RevIEW includes the following general steps:

- Installing and configuring Fare RevIEW
- Selecting a security option
- Creating a default case study against which other cases may be compared
- Adding usernames and permission levels
- Resetting the security options if necessary
- Resetting the entire system if necessary

Install Fare RevIEW

Installing the Fare RevIEW application a second time is fairly straightforward. Follow these steps:

1. Uninstall old versions of Fare RevIEW by clicking on the Uninstall icon or selecting Start/Control Panel/Add or Remove Programs.
2. Insert the Fare RevIEW CD-ROM into the drive of your computer. The installation program will self-start. If it does not, click Start/Run and enter your CD drive name. Then browse to find the setup.exe file on your Fare RevIEW CD-ROM.
3. The installation function will walk you through the process. Be sure to follow all instructions given for software installation. Make sure to restart your computer before using Fare Review to ensure all the files are properly set up.
4. You may start Fare RevIEW in two ways:
 - Double-click desktop Fare RevIEW icon
 - Click Start/Programs/Fare RevIEW

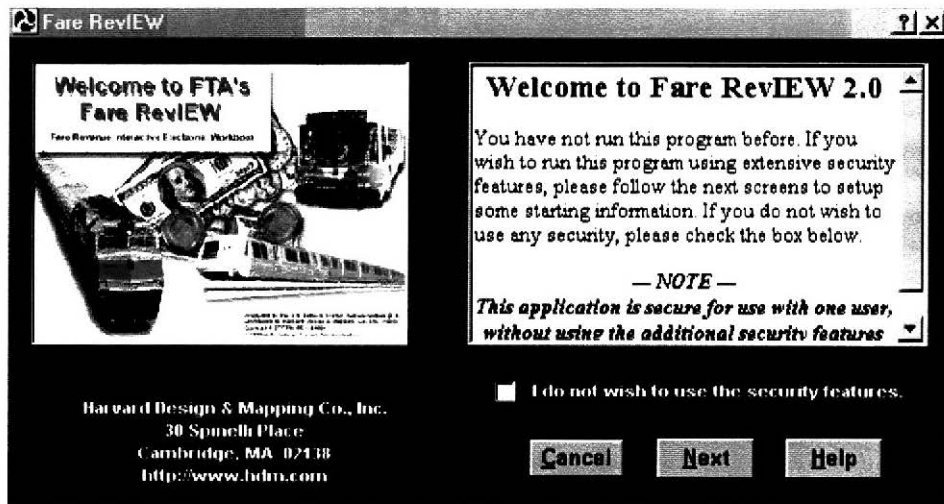
Configure the System

Before the application can be used, there are some vital pieces of information which must be setup before the application can be used for analysis. The level of security to run the program must be decided upon. If security is used, users must be created and permissions assigned to each of them. A default case study accurately reflecting your transit system must be created, and the survey of questions based upon the default case should be answered if comparative reports are to be generated. The first time the application is run, the "Initialization Wizard" guides you through setting these options.

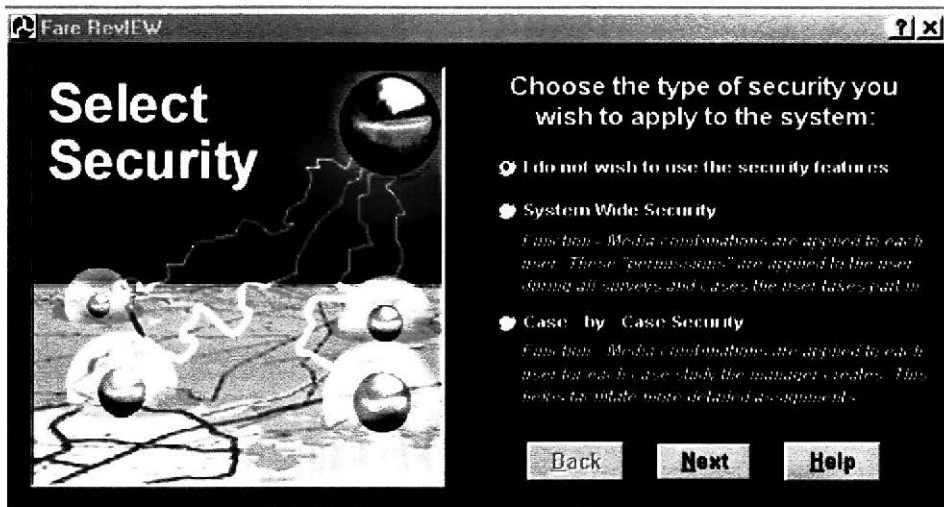
You can exit the wizard before it is finished. The application will remember where you left off, and pick up from there the next time the application is run.

Setup Sections

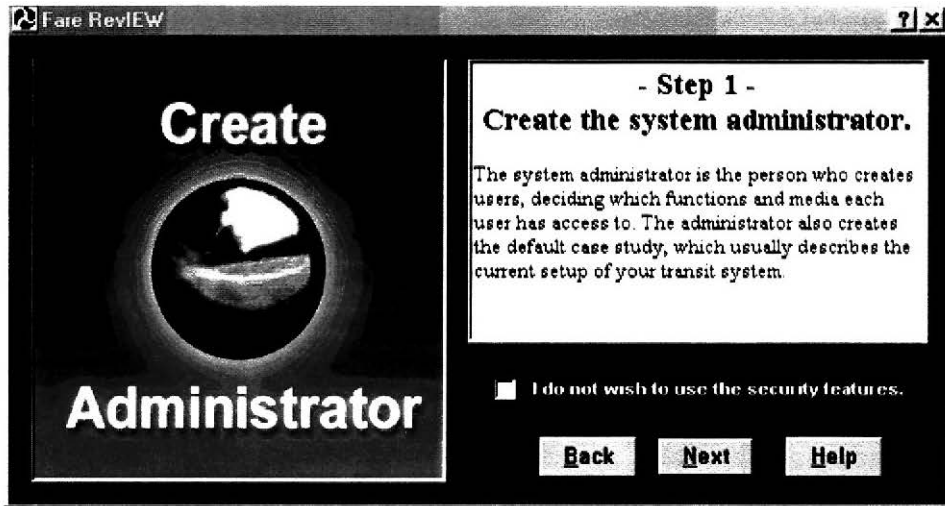
1. **The Introduction:** This screen tells you whether this is the first time the application has been run, or if the wizard has been partially run before. If it has been run before, it will pick up at the next Step to be completed. Click on "Next" to proceed. "Cancel" exits the Setup Wizard. You may check "I do not wish to use the security features" to disable security and skip ahead to Section #4.



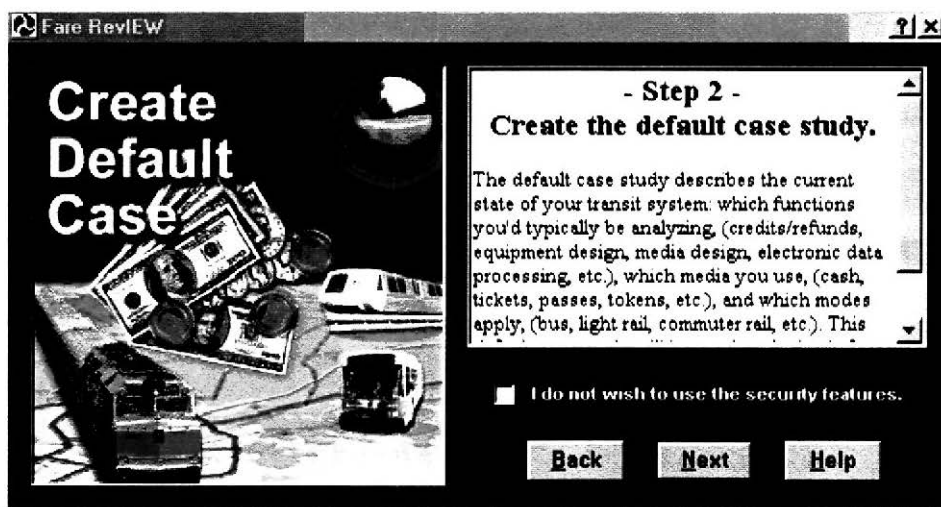
2. **Select the type of security** you wish to use in this program, if any. The default is not to use security. Click “Back” to go back to the Introduction. Click “Next” to continue to the next Step. If “I do not wish to use the security features” was chosen, go to Section #4. If either “System-Wide” or “Case-by-Case” security modes are being used, continue with Section #3. For more information on what the different security modes are, see “What Are the Different Security Modes?”



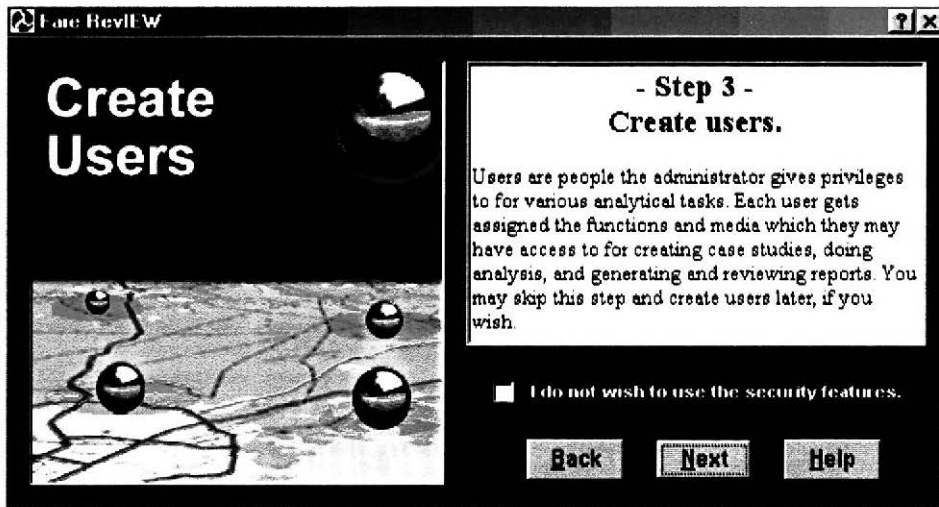
- 3. Create the administrator.** The text on this screen describes the administrator’s role and responsibilities. Click “Next” to start creating the administrative user. Click “Back” to go back to the Security screen and choose a different mode of security. For details on how to create the administrative user, see “How Do I Create a User?”



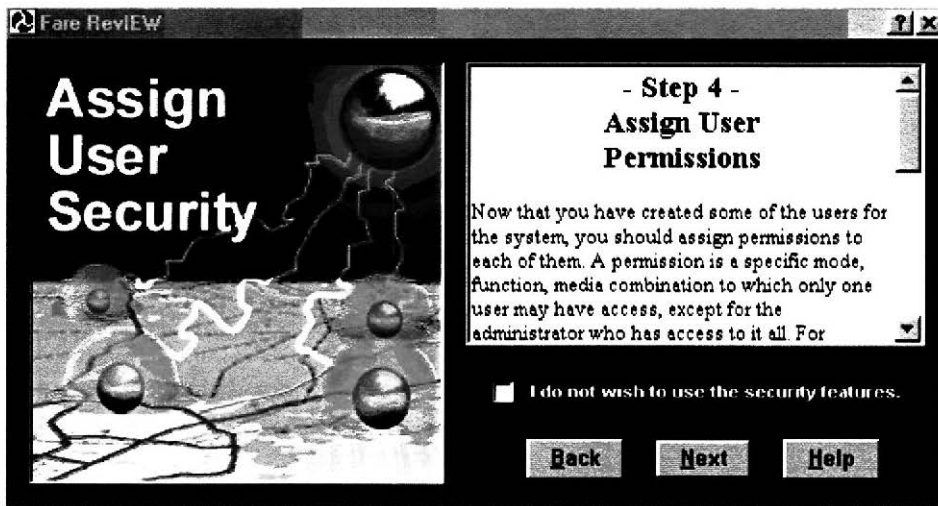
4. **Create the default case.** Click "Next" to start creating the default case. If either the System-Wide or Case-by-Case security modes are being used, clicking "Back" will take you back to Section #3, otherwise "Back" will take you back to Section #2. Once this Step has completed, if either "System-Wide" or "Case-by-Case" security modes are being used, continue with Section #7. For details on how to create the default case, see "How Do I Create a Case Study?"



5. **Create users.** This screen describes what a user is. Click “Next” to start adding users to the system. Click “Back” to go back to Section #4. For details on how to create a user, see “How Do I Create a User?”

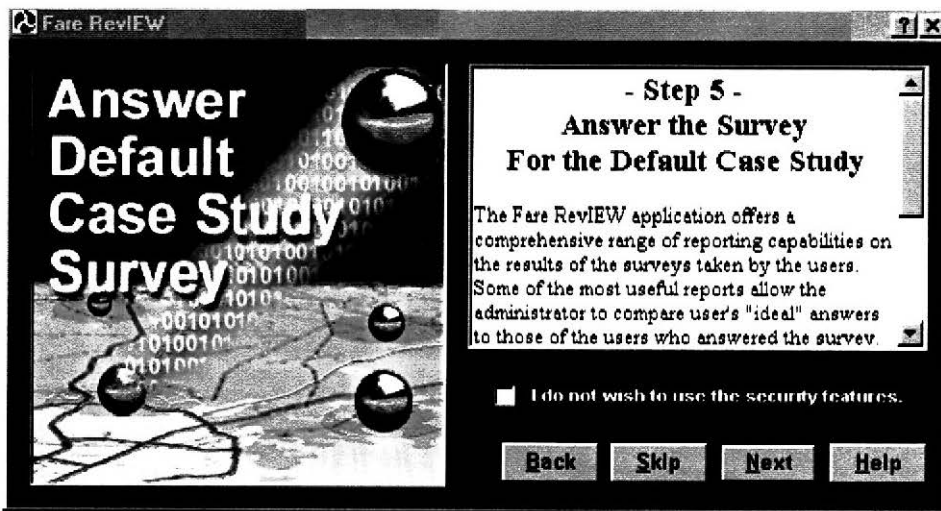


6. **Assign user permissions** for the default case study. This screen describes what permissions are for. Click “Next” to start assigning permissions to the various users who were just created. If the System-Wide security mode is being used, permissions, assigned during Step 4, will apply to all current and future case studies in the system. If the Case-by-Case security mode is being used, the permissions assigned during Step 4 will only apply to the default case study. For more information on assigning permissions for the System-Wide security mode, see “Assigning Permissions in System-Wide Security Mode”. For more information on assigning permissions for the Case-by-Case security mode, see “Assigning Permissions in Case-By-Case Security Mode”. For more information on the differences of permissions in the two different security modes, see “What are the Different Security Modes?”

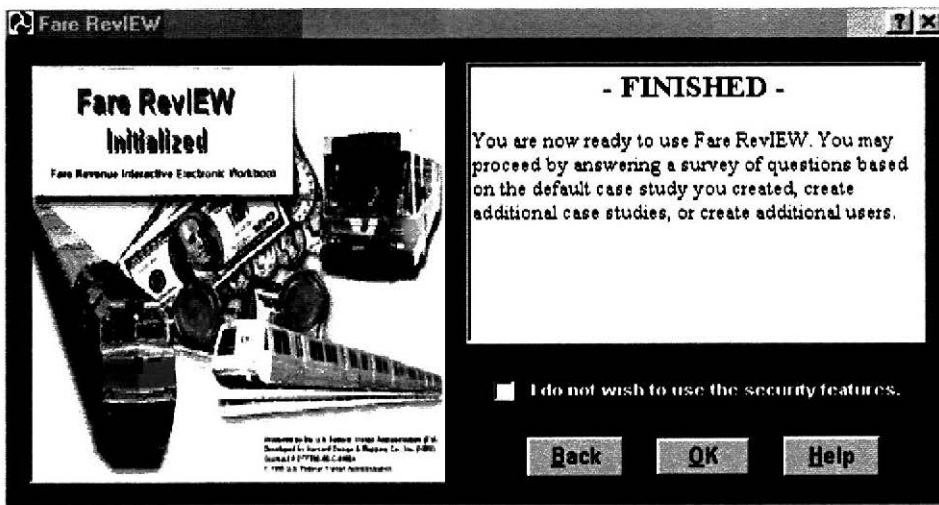


7. **Answer the survey of questions** based on the default case. Click “**Next**” to start answering questions. If either the System-Wide or Case-by-Case security modes are being used, clicking “**Back**” will take you back to Section #6, otherwise “**Back**” will take you back to Section #4. For details on how to create the default case, see “How Do I Answer a Survey of Questions?”

Note: The Fare RevIEW application offers a comprehensive range of reporting capabilities on the results of the surveys taken by the users. Some of the most useful reports allow the administrator to compare “ideal” answers to those of the users. To do this, the administrator must answer the survey of questions based on the selected case study. If the administrator does not, these comparison reports will not be available for that particular case.



8. **You are now finished.** All the necessary information needed to operate the application has now been supplied. If you want to go back and make any changes, click “Back”, and you will go back to Section #7. Keep clicking “Back” until you get to the step that you want to change. Clicking “Next” will take you to the main screen of the application. From there, the default case can be edited, new cases created, user accounts managed, permissions changed and assigned, surveys answered, and reports generated.

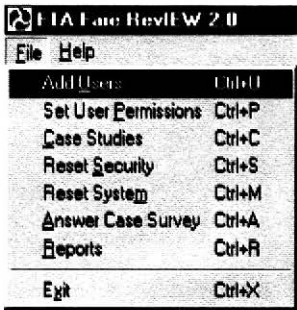


Add or Update a User Name

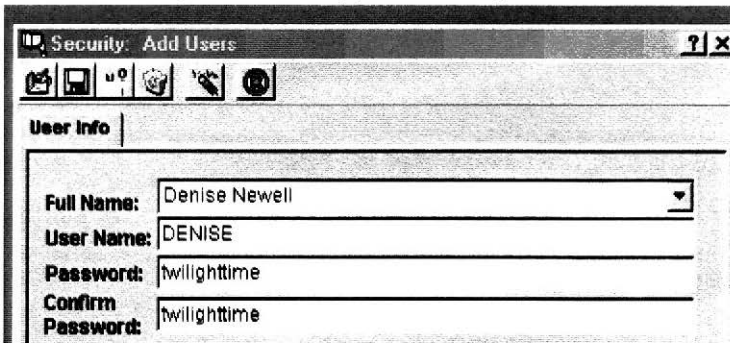
Prior to using the Fare RevIEW software, all users must be authorized by the administrator. This is done either at setup time, or later if necessary. Please note that the System Administrator must be setup during installation.

Below are steps to follow to add additional users after the initial installation.

1. Click on "File", then on "Add Users", or as a short cut, hold down the "CTRL" key and press "U".



2. The following screen will appear where you enter information describing the new user.



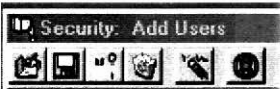
There are a few rules to follow when completing this form:






- Full Names can have any characters
- User names are used to log in and cannot have spaces
- Passwords are case-sensitive and must have at least 5 letters

Click on the diskette in the toolbar to save the information, and this user will be authorized the next time Fare RevIEW is started. For information on additional toolbar buttons, read the following section.


Toolbar Buttons

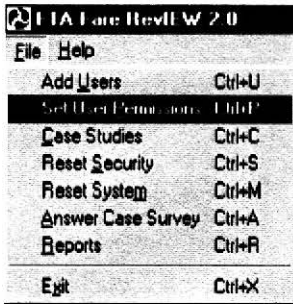
Several toolbar buttons are available to assist the administrator in adding and editing user names. These are found on the following toolbar:



-  Add a new user name: Clears entries without saving and starts again.
-  Save all changes: Saves entries currently in the dialog box.
-  Set user permissions: If security was selected, you may manage user information here.
-  Clear entries: Clears entries on the current screen.
-  Cancel user administration and lose changes: Quits user administration without saving your changes.

Assign User Permissions

1. Assigning user permissions will enable you to control the questions and answers that your users may view. There are three different ways to access the user permissions feature from the administrator account. You may:
 - Click the Set User Permissions button in the toolbar: 
 - Enter “CTL-P”
 - Click on “File”, then “Set User Permissions”



Assigning Permissions in System-Wide Security Mode

The following screen will display the current user and permission options. You may change them by clicking on the buttons for the appropriate case study, person, function and media combination. Note that only one user can have access to each combination of these five components. The System Administrator is the only person who can view the unassigned permission combinations.

The screenshot shows a window titled "User Permissions" with a toolbar and two dropdown menus. The first dropdown is labeled "Select a Mode to set permissions for:" and is set to "Bus / Fixed Route". The second dropdown is labeled "Select a Function to set permissions for:" and is set to "Sales On Board". Below these is a table with columns for users and permission media types. The table has three rows of data and several empty rows below.

	ALL	Cash	Ticket	Pass	Transfer	Token	Electronic Fares
Mary Smith	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Diane Weaver	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joe Turner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

1. Click on the drop-down list box for modes, and select the mode to assign permissions for. These permissions apply system wide, so all available modes are listed as options.
2. Click on the drop-down list box for functions, and select the function to assign permissions for. All available functions may be listed.
3. On the appropriate user's row, click on the option button corresponding to the payment media that this user should answer questions for in this particular mode and function. Repeat for all users' media until all the media have been assigned for this mode and function combination.

4. Repeat steps 2 and 3 until permissions have been assigned for all desired function and media combinations for this mode.
5. Repeat steps 1 through 4 for each mode.
6. Frequently click the “Save” button to save your work.

Note: Not all of the combinations need to be assigned. Questions based on tasks that have not been assigned will not be presented or seen by any users, except the administrator.

Assigning Permissions in Case-By-Case Security Mode

1. Click on the drop-down list box for names of case studies, and select the case study to assign tasks for. These permissions apply to this case only. *(See figure in this section)*
2. Click on the drop-down list box for functions, and select the function to assign permissions for. Only those functions defined for the selected case study will be listed if “Case-By-Case” security is being used.
3. On the appropriate user’s row, click on the option button corresponding to the payment media that this user should answer questions for in this particular mode and function. Repeat for all users’ media until all the media have been assigned for this mode and function combination. Only media that have been defined for the selected case are available.
4. Repeat steps 2 and 3 until permissions have been assigned for the entire case study.
5. Repeat steps 1 through 4 for each mode.
6. Frequently click the “Save” button to save your work.

Note: Not all of the permissions, a.k.a. tasks, need to be assigned. Questions based on tasks that have not been assigned will not be answered or seen by any users, except the administrator.

Toolbar



1. "Save" button, (looks like a floppy disk) - saves the permissions.
2. "Check for Unassigned Permissions", (looks like a red checkmark on a green background) - checks for permissions which haven't been assigned yet. If any unassigned permissions are found, a report is generated and displayed. This report, or selected sections of the report, can be printed. If "System Wide" security mode is being used, all the possible permissions are checked. If "Case-By-Case" security mode is being used, only the selected case's permissions are checked.
3. "Erase Permissions", (looks like a pencil eraser) - erases the permissions which have been assigned. All permissions for the system, or selected case, depending on the current security mode, will be erased. Do this with caution.
4. "Cancel", (looks like a bulls-eye) - cancels this screen and you will lose all changes made since your last save.

Choose a Security Option

The application can be run in any of three different security options: “No Security”, “System-Wide Security”, and “Case-by-Case Security”.

No Security

If no security is used, all users have access to everything in the program. Anyone can edit and create cases, and answer surveys of questions. This is by far the quickest and simplest method of running the program. If you want to have control over which person can answer, edit and view questions based on different function/media/mode combinations, then choose one of the other security options.

System-Wide Security

In this mode, there is an administrator and users. The administrator creates the default case, any other desired cases, and authorized users. Once users and cases are created, the administrator assigns specific function/media/mode combinations, called permissions, to each user. These permissions apply to that user for all cases in the system. The questions a user can answer are restricted by these permissions. The user will not be able to answer, view or report on questions that fall under the auspices of other permissions. The user can create their own case studies, but limited to specific combinations and/or subsets of the assigned permissions.

For example...

The administrator created a user named Valerie Janson. Valerie is the manager in-charge of the media design of tickets, tokens, passes, and transfers for the subway, commuter rail, and buses in the metro-Boston area. The administrator didn't want her to answer questions on revenue collection, personnel issues, or equipment maintenance, or any of the other functions. So, the administrator chose to run this program in "System-Wide" mode, and assigned the following permissions to Valerie:

Mode	Function	Cash	Tickets	Tokens	Passes	Transfers	Electronic Fares
Light Rail	Media Design		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Commuter Rail	Media Design		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Bus	Media Design		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Demand Response	Media Design		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Now, Valerie can only see questions that have to do with her area of specialty. No one else can see her questions, other than the system administrator.

NOTE: Only one person may be assigned a particular permission (task).

Case-by-Case

This mode also uses an administrator and users. This is very similar to System-Wide Security. The administrator creates the users and default case study and any other case studies to be evaluated. Then the administrator chooses one of these cases and assigns the specific permissions of that case to various users. These permission assignments are specific to that case only. The administrator does this for each of the other cases.

For example...

1. The administrator created a default case describing the transit system.
 - **Name:** Current MBTA Transit System
 - **Mode:** Demand Response
 - **Functions:** Media Design, Media Distribution, Sales On Board, Revenue Collection, and Media Production Contractor
 - **Media:** Cash, Tickets, Passes, Transfers, Tokens, and Electronic Fares

2. The administrator then assigned the following permissions, or tasks, to various users for the “Current MBTA Transit System” case.

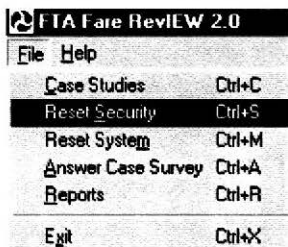
User	Mode	Function	Cash	Tickets	Tokens	Passes	Transfers	Electronic Fares
Valerie Janson	Demand Response	Media Design		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Kim Lee	Demand Response	Media Design						<input checked="" type="checkbox"/>
James Kerr	Demand Response	Media Distribution		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sharon Leves	Demand Response	Sales On Board		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
	Demand Response	Revenue Collection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ben Waverly	Demand Response	Media Production Contractor		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Jill Gates	Demand Response	Media Production Contractor						<input checked="" type="checkbox"/>

All the tasks in the default case have been assigned to various users to complete. Note that not all of the possible permissions have been assigned. Some of them don't make sense to assign. The U.S. Mint is in charge of Media Design and Media Distribution of Cash, and certainly Cash would never be Sold On Board. These permissions only apply to the default case. If users are to answer a survey of questions based on a different case, perhaps a hypothetical case in which a new media type should be introduced, permissions would have to be reassigned to users for that case. This is because there would be a different array of tasks to assign due to the new case characteristics. If no security was selected during setup, there would be no permissions to assign.

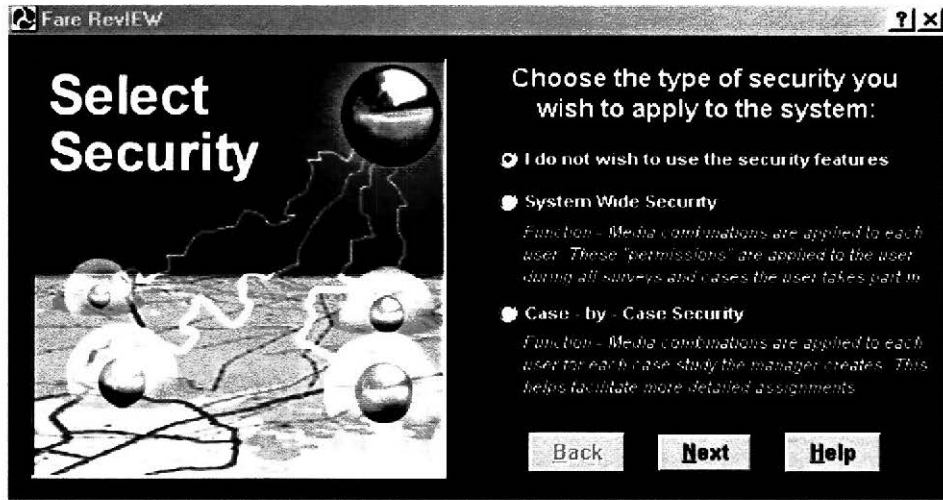
Reset Security Options

The system administrator may reset the security features of the system. This option will re-run the initial configuration routines that first came up when the system was installed. You can either opt out of security and permissions all together, or go through the steps of assigning user permissions.

To reset the security, select “File” and then “Reset Security” from the main menu. You may also select the short cut of “CTL-S”.



The first of several screens is displayed that step the administrator through the process of selecting the security for this installation. If you select "I do not wish to use the security features", you will go on to create a default case. If you select either "System Wide Security" or "Case-by-Case Security" you will go on set up the administrator account.

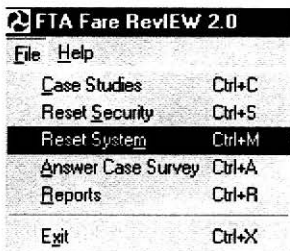


Reset the System

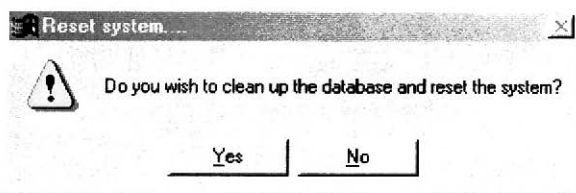
Resetting the system allows the system administrator to clear all the databases and refresh the entire system. This will include all user names, case studies, and all survey questions.

This process is not reversible.

First, select “File” and “Reset System” or “CTL-M”. You must be logged in as the system administrator.



The following dialog will appear. If you click “Yes”, you clear your databases. There is no recovery option, so be sure this is what you want to do.



Uninstall Fare Review

Fare Review can be removed from your computer at any time. This should be done if you do not plan to use the system in the future and want to delete all program components, or if you are wish to reinstall the application.

You may uninstall Fare Review in one of two ways:

- Click Start/Programs/Fare Review/Uninstall Fare Review
- Click Start/Settings/Control Panel/Add/Remove Programs. When the dialog listing your applications is presented, locate Fare Review and click "Remove".

Glossary

APTA

The American Public Transportation Association. APTA members serve the public interest by promoting safe, efficient and economical transit services and by improving those services to meet national energy, environmental, and financial concerns.

case study

A theoretical representation of a transportation system defined by the administrator for a particular mode of service delivery, various fare revenue collection functions, and various fare media. It is used to evaluate current, or hypothetical situations within the fare revenue processes.

case study characteristics

The characteristics of a case study include descriptive information of the transit system, using a single mode of service delivery, along with all relevant fiscal functions and fare media utilized within the transit system.

cash

Coins or bills used by a customer on board a transit vehicle to secure a ride.

credits/refunds

The amount of money returned or credited to the customer presenting a valid fare instrument for the amount of money remaining.

date created

The date that the case study was created by the administrator. See “last modified.”

default case study

The default case study is entered during the setup process. This special case is used for comparison with all future cases studies, and can also optionally be used as a base to build new subsequent cases.

drop box

A fare box which does not record or collect data.

electronic data processing

Computers/probes etc. which collect, process or data through automation rather than manually.

electronic fares

Instrument used by a customer to purchase a ride which is calculated, validated, and/or deducted from a magnetic ticket by a computerized machine or is purchased over the internet.

equipment design

Specification of fare collection devises used to validate, collect, record money and/or passenger data for a trip.

equipment maintenance

Breakdown and preventive work completed on machines/devices used throughout the fare revenue collection process.

FTA

Federal Transit Administration, a division of the US Department of Transportation.

function

A component in the revenue fiscal management process. (In this program, there are over 30 functions in the Fare RevIEW system from which to chose when establishing a case study. You can select as many as you wish.)

HDM

Harvard Design and Mapping Co., Inc. is the firm that designed and developed the Fare RevIEW Software program.

internet sales

The purchase of tickets or passes by a customer over the over a web site.

last modified

The date that the case study was last “altered.”

media

Media are the types of fare instruments sold by a transit system to a customer in exchange for a ride.

media design

Specification or blueprint for fare instruments which makes the instrument visibly recognizable as one of the transit system’s fare media.

media distribution

The process by which fare instruments are dispersed to points of sale.

media production contractor

The firm awarded the contract to produce one or more of the fare instruments; e.g. tickets, tokens.

media production in-house/contractor

Production of fare instruments by transit employees or contractors in facilities of the transit system.

mode

The method of service delivery used by the transit system. (This program does not sort questions by mode. Delineation by mode may be included in future modules.) Modes include, but not limited to Bus Fixed Route, Bus-Demand Response, Light Rail, Commuter Rail, Heavy Rail, and Ferryboat.

organizational issues

Topics that arise from the organizational structure of the transit system which affect the fare revenue control process.

pass

A fare media which allows a customer unlimited rides on the transit system over a specified period of time for a specified a month; e.g. monthly pass.

password

A code word used by the administrator when establishing the "user permissions." (If you have forgotten your password, see the administrator who set-up the case studies.)

permission

The administrator of the Fare RevIEV program assigns permissions to specified people based on their responsibilities in the fiscal system. The person assigned a case study based on mode, function and fare media is the only person who will see the questions pertaining to that case other than the administrator.

personnel issues

A component of the fare revenue control process which deals with issues pertaining to employees; e.g. training.

programming and encryption

Encryption is a coding process that protects the customer and transit system from unauthorized receipt of financial data. Programming is the utilization of computer codes to produce data analysis, databases, and other uses of data collected throughout the fare revenue process.

report

A summary of information developed by users in a case study. There are five reports reflecting divergent purposes can be generated from this program.

revenue collection

The process where cash or fare instrument data is gathered within the fiscal control system.

revenue processing

The method(s) a transit system utilizes in recording, depositing, funds used by customers to obtain rides on the transit system.

risk management

A component of the fare revenue control process where potential exposure and/or liability is often assessed.

Media internal

Media sold by transit system employees at specified locations or on-board transit vehicles.

Media on board

Cash or the purchase fare media can be done when the customer is on the transit vehicle.

Media third party

A person, business or organization not affiliated with the transit system that sells fare media to customers for rides on the transit system. This can be a formal contract/bid award.

Media security

Media security is the system in the Fare REVIEW program that can be activated by the administrator to restrict access to the questions, potential exposures and other information within the program.

Media security is optional, and can be bypassed during installation if desired by the administrator.

Media ticket

A fare instrument usually a stiff form of paper used for one or more rides on the transit system.

Media token

A substitute for cash usable in fare boxes, usually round and of some specified metal content.

Media transfer

Usually a thin, tissue type paper which is either given out for free or sold for a minimal amount that allows a customer to use one or more routes to reach his/her destination.

Media username

The name of the person assigned by the administrator the responsibility of completing specified questions in one or more case studies.

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