

Louisiana Transportation Research

Wet Weather Highway Accident Analysis and Skid Resistance Data Management System (Volume II: User's Manual)

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16. Abstract The objectives and scope of this research are to establish an effective methodology for wet weather accident analysis and to develop a database management system to facilitate information processing and storage for the accident analysis process, skid resistance testing, and other related tasks. The methodology employed consists of four phases: review and documentation of current LDOTD and LTRC procedures, engineering and statistical review of literature and procedures in the area of accident analysis, identification and recommendation of improvements which may facilitate data management and recovery, and design and development of a new computer information system based on recommendations defined in the third task. An effective wet weather accident analysis, testing, and database management system that allows only needed locations to be identified, tested, and reported is implemented. Volume II of this report consists of the data base management systems Users manual. Volume III of this report consists of data base management systems Reference manual.			
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**WET WEATHER HIGHWAY ACCIDENT ANALYSIS AND
SKID RESISTANCE DATA MANAGEMENT SYSTEM
(Volume II: User's Manual)**

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MAY 1992

WET WEATHER HIGHWAY ACCIDENT
ANALYSIS AND SKID RESISTANCE
DATABASE MANAGEMENT SYSTEM

USERS MANUAL

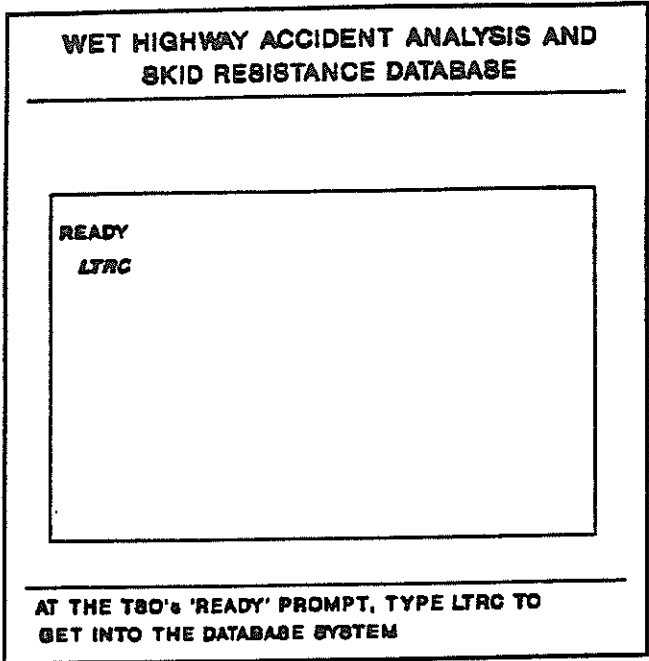
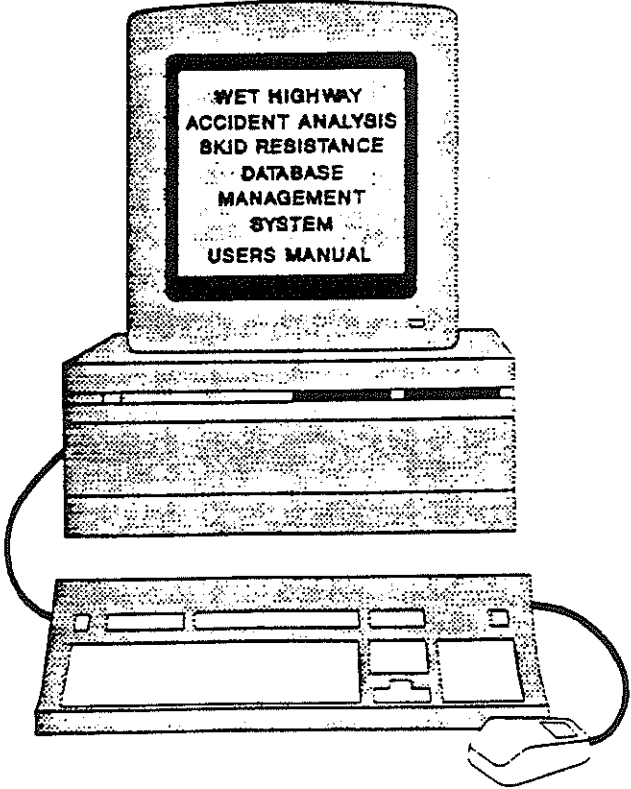


Figure 1

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



WET WEATHER ACCIDENT ANALYSIS DATABASE MANAGEMENT SYSTEM

This software has been implemented on LSU's IBM 370 MODEL 3090600E running MVS/XA with TSO operating system.

To get into this system, first the user will have to get into the TSO environment by entering 'T' at the '====>' prompt. Then enter the user logon-id 'IEKLEE'. The system will then ask the user for password. Current password is '_____'. This takes the user to the system's 'READY' prompt.

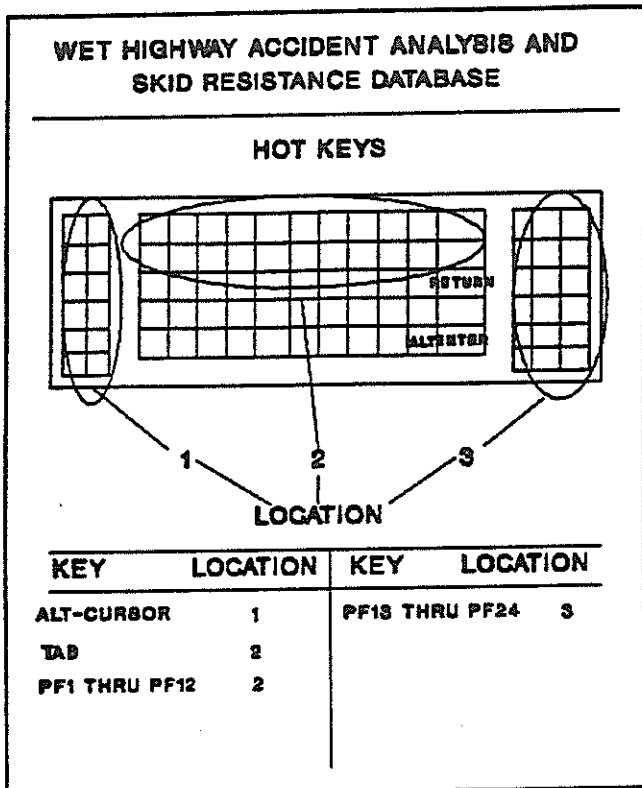
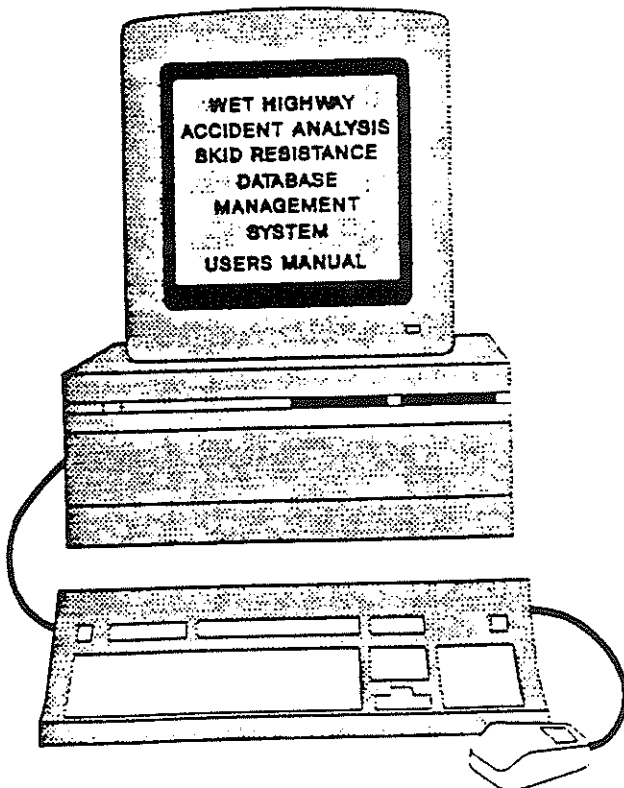


Figure 2

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



HOT KEYS

Before getting into the database system, the user should make a note of the keys shown in figure 2. These keys have been customized for some specific tasks for the purposes of this database system. Figure 2 will help the user to identify the exact locations of these 'HOT KEYS' on the keyboard.

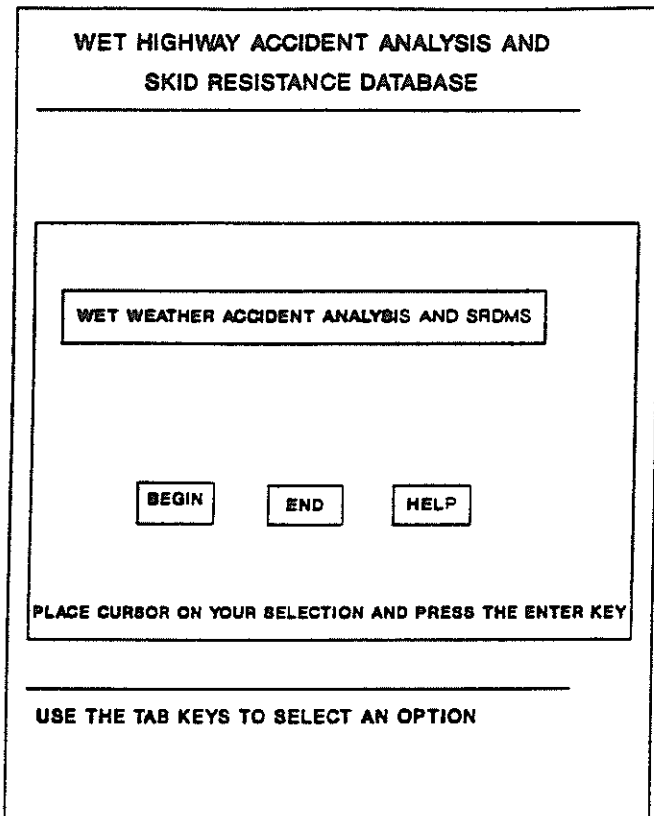
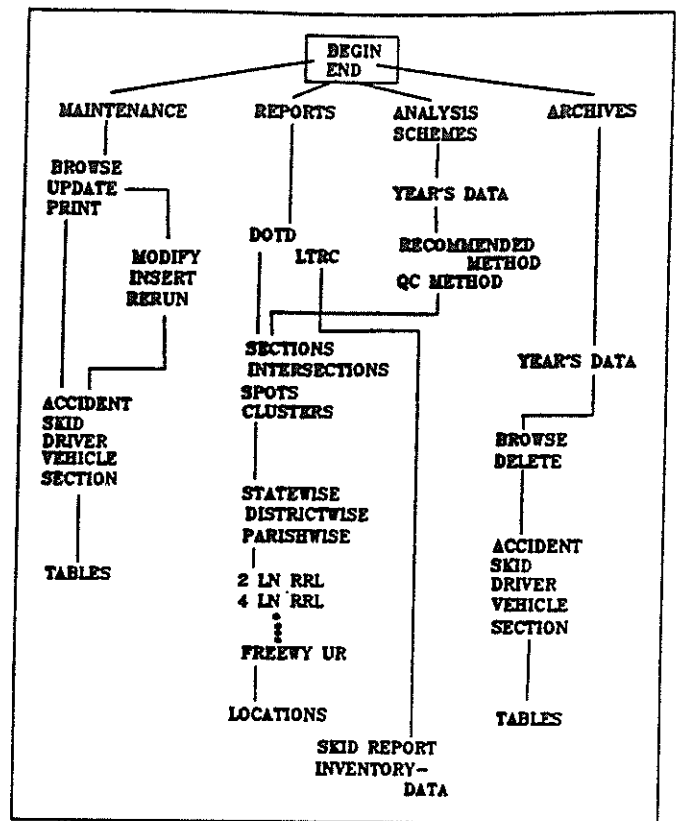
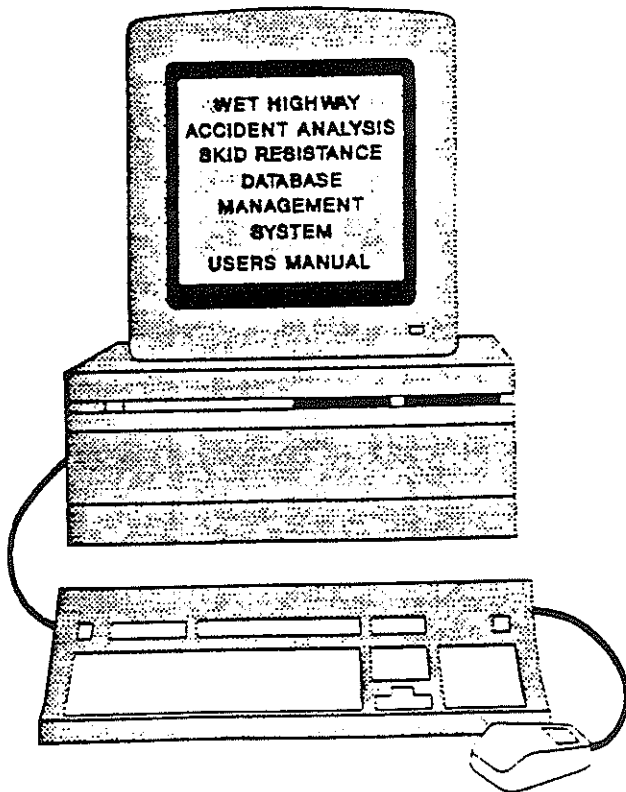


Figure 3



GETTING STARTED

Figure 3 shows the starting screen which the users see on entering the DMS. If the user feels that the cursor is not visible/clear then by using the ALT and CURSOR keys the users can change the size and make the cursor blink. To move the cursor from one selection to another, use the TAB keys (location 2). END selection takes the user back to the READY prompt of TSO.



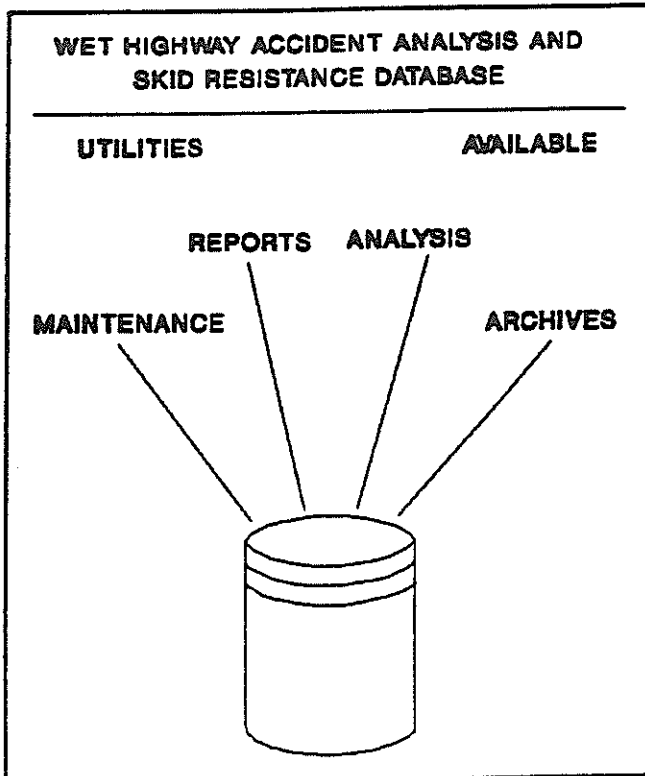
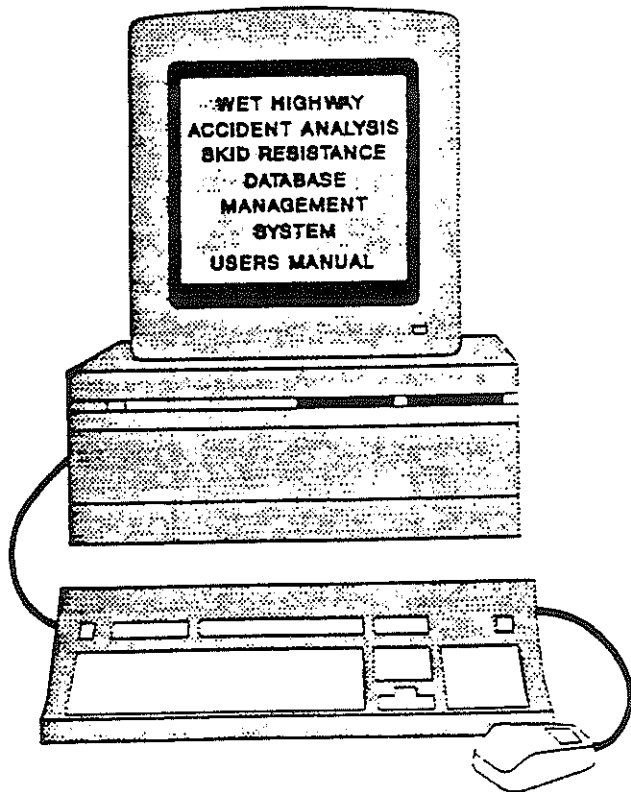


Figure 4

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



BASIC UTILITIES

This figure gives a comprehensive view of the four basic utilities available on this DMS. They are as follows:

1. MAINTENANCE of the database.
2. REPORTS generation.
3. ANALYSIS of schemes.
4. ARCHIVES

To go back to the previous screen, go to the END selection and press ENTER or press ALT-PF3 keys simultaneously.

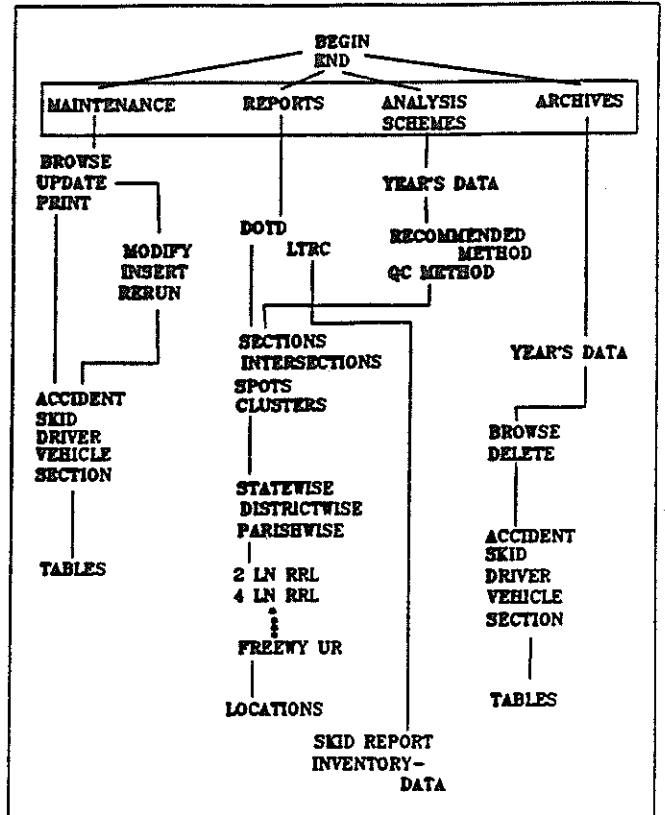
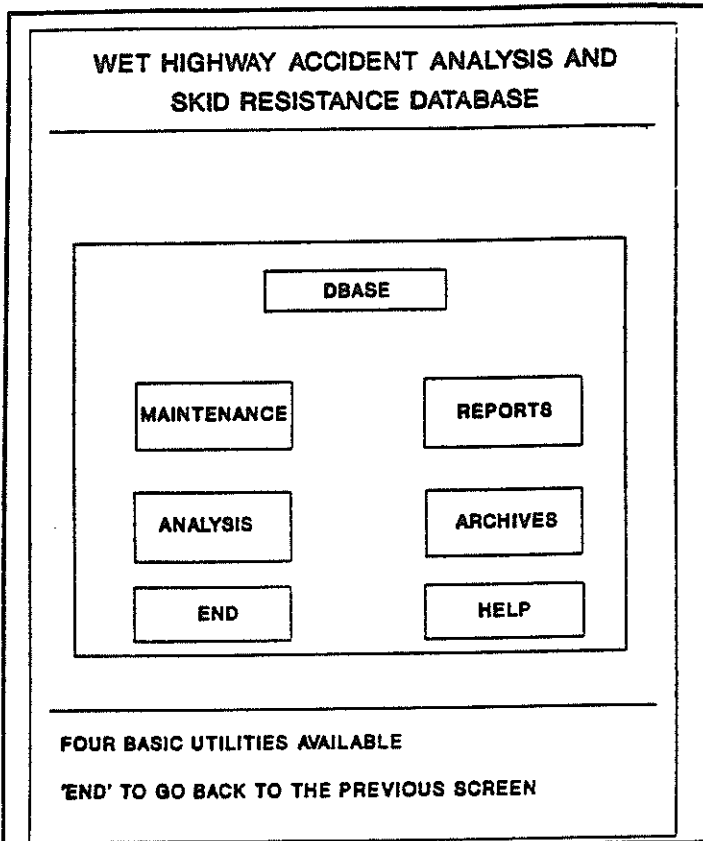
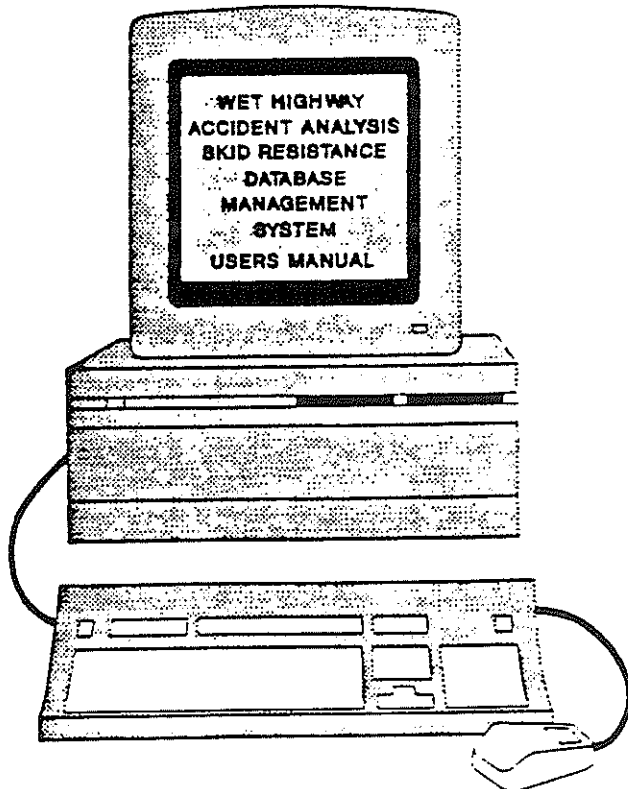


Figure 5



OPTIONS Screen

This is the OPTIONS screen which pops up on selecting BEGIN from the previous screen i.e. screen shown in figure 3.

To select any option, bring the cursor to that selection and press ENTER. Horizontal movement of the cursor is controlled by the TAB keys, Vertical downward movement the cursor is controlled by the RETURN key.

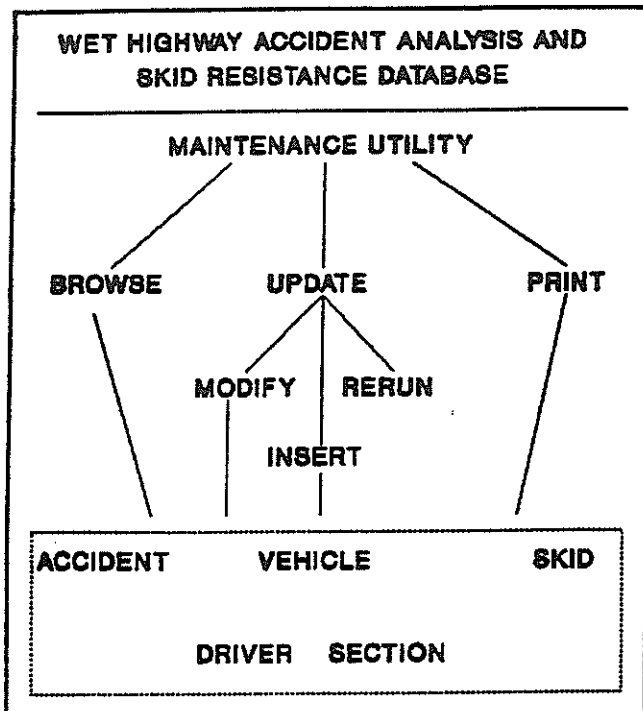
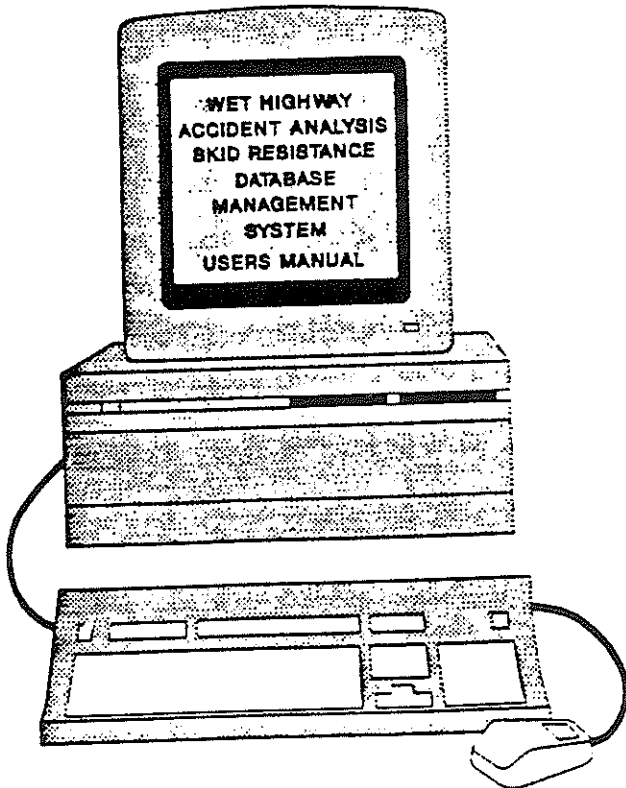


Figure 6

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



MAINTENANCE Options

This figure (figure 6) gives the user a panoramic view of the various options available within the MAINTENANCE utility.

As shown in the figure, user can

1. Browse the various files present in the database. From this screen, the user will have an access to the most recent year's data.
2. Update the database.
3. Take a hard copy of any of the files in the database.

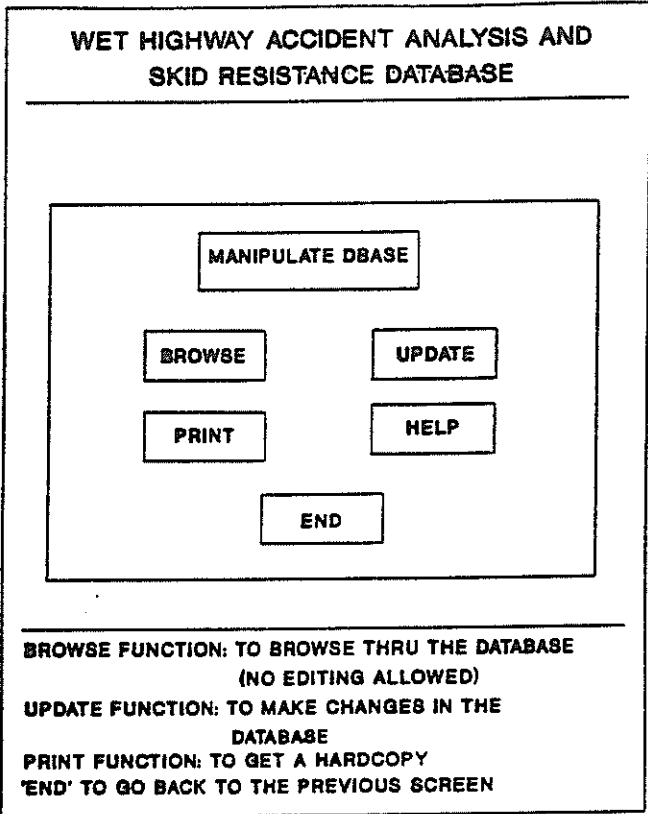
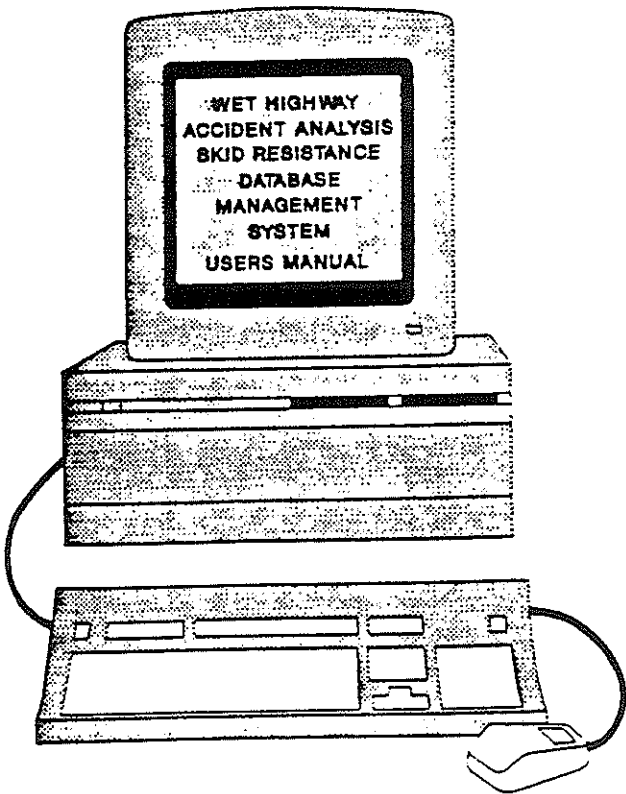
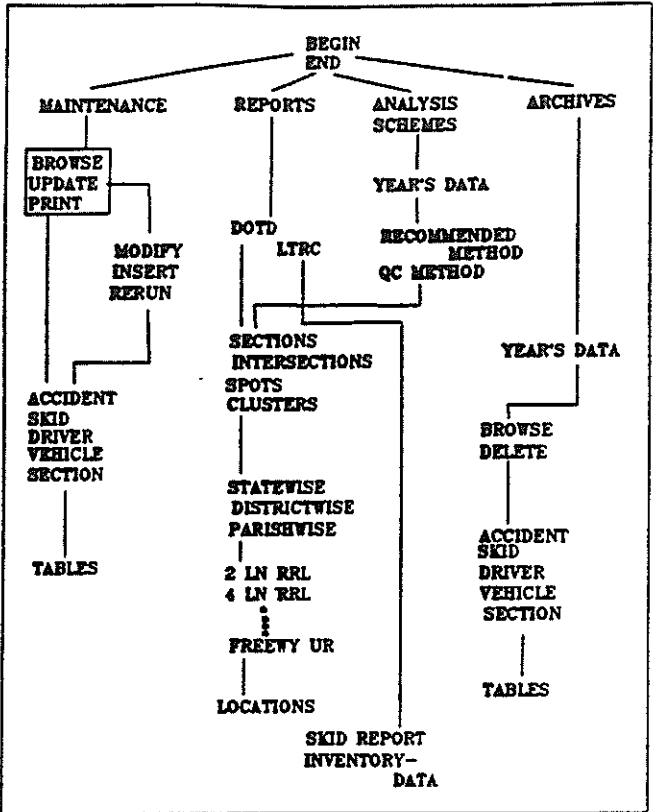


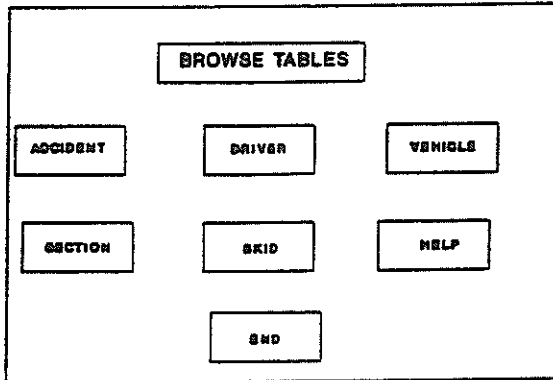
Figure 7



MAINTENANCE Options

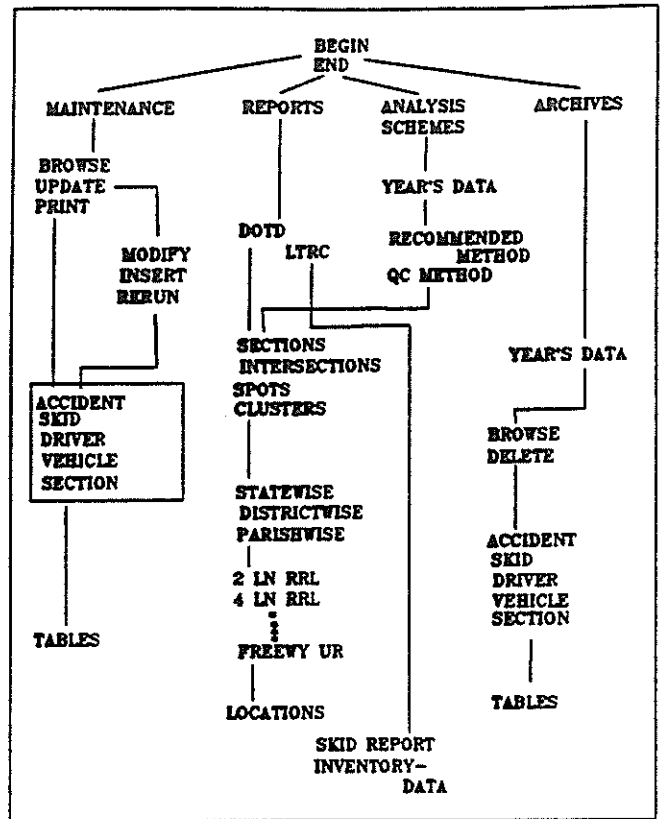
This figure (figure 7) shows exactly the screen associated with the Maintenance options. To get back to the previous screen, press ALT-PF3 keys simultaneously or go to END selection and press ENTER. This alternative command holds good for all the menus in this DMS.

WET HIGHWAY ACCIDENT ANALYSIS AND SKID RESISTANCE DATABASE



TO BROWSE THRU THE TABLES
CLICK (PRESS ENTER) ON ANY OF THE TABLES
AFTER BROWSING, PRESS ALT-PF3 TO GET BACK
TO THIS SCREEN
'END' TO GO BACK TO THE PREVIOUS SCREEN

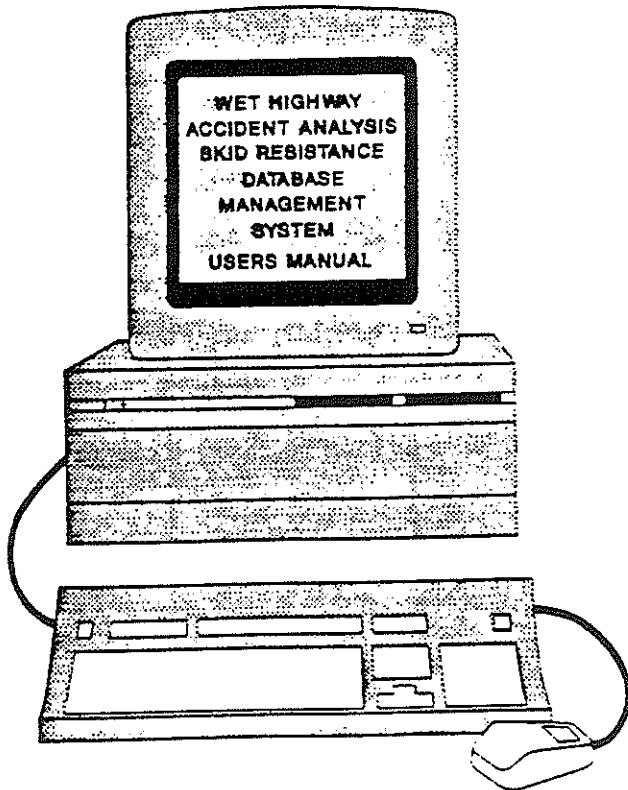
Figure 8



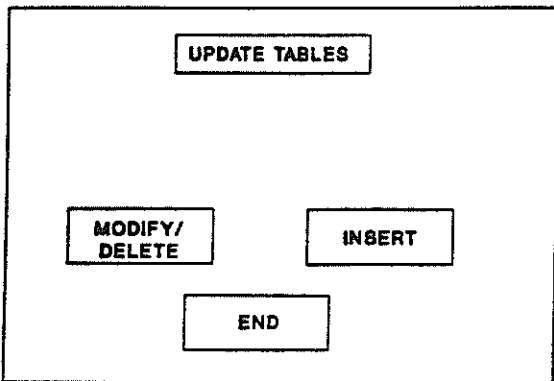
BROWSE TABLES

This screen shows the eight relational tables into which the entire accident data has been categorized and stored in this database system.

As mentioned earlier, the user will have an access to the latest year's data only. For browsing through the previous year's data, user will have to select the ARCHIVE option from the menu shown in figure 5.



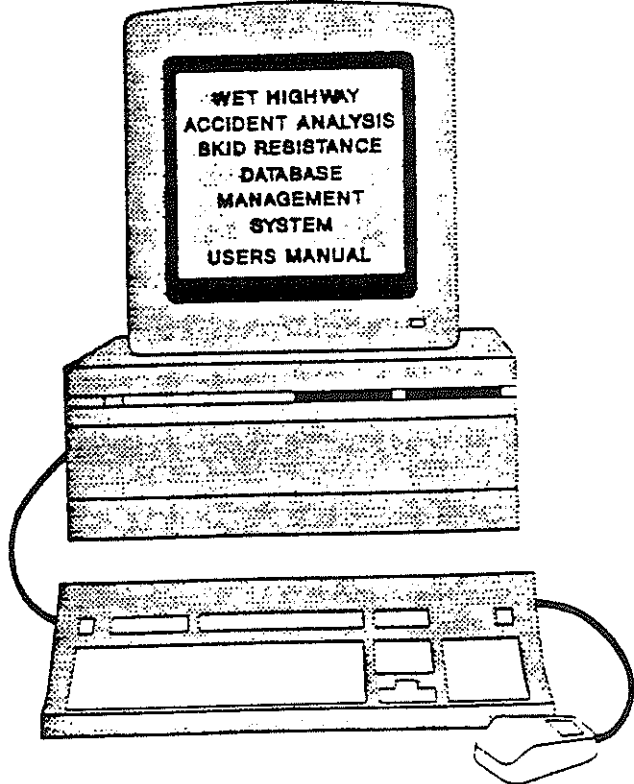
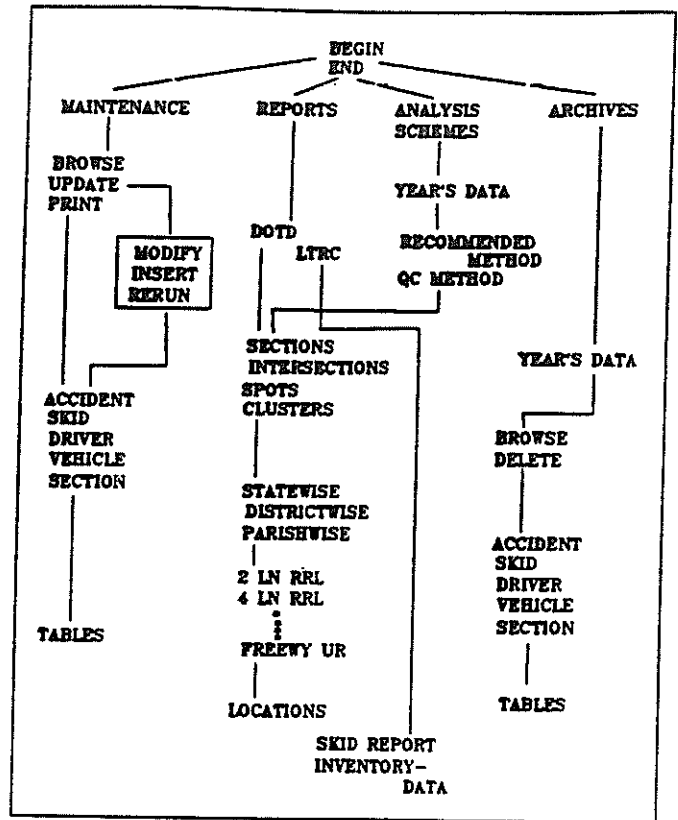
**WET HIGHWAY ACCIDENT ANALYSIS AND
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WHILE UPDATING, TO GET TO A SPECIFIC RECORD
ENTER ITS RECORD NUMBER AT THE COMMAND LINE
AFTER UPDATING, PRESS ALT-PF3 TO GET BACK
TO THIS SCREEN

'END' TO GO BACK TO THE PREVIOUS SCREEN

Figure 9



UPDATE TABLES

This screen gives the various options available to the user for updating the database.

Before making any changes, the Data base Administrator should be convinced about the need for these changes will be PERMANENT.

RERUN option is for rerunning the analysis programs on the edited data. Once the changes have been made, press ALT-PF3 to get back to this screen.

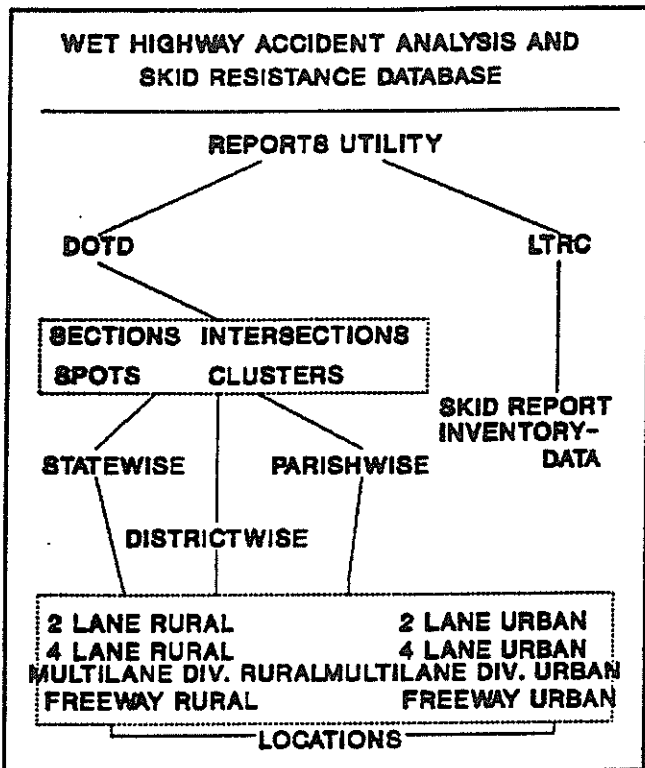
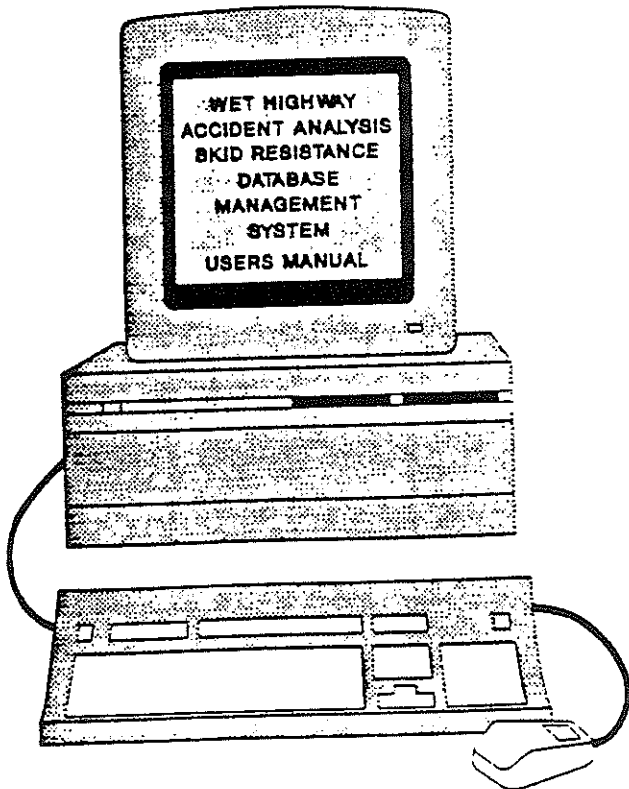


Figure 10

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



REPORTS UTILITY

This figure (figure 10) gives a comprehensive view of the various options available to the user in Reports Utility. There are two basic kinds of reports being generated, based on the type of organization the user belongs to.

The DOTD reports rank the hazardous locations based on the analysis scheme recommended by the consultants.

Hazardous locations can be obtained for any combination of location type, area, highway type.

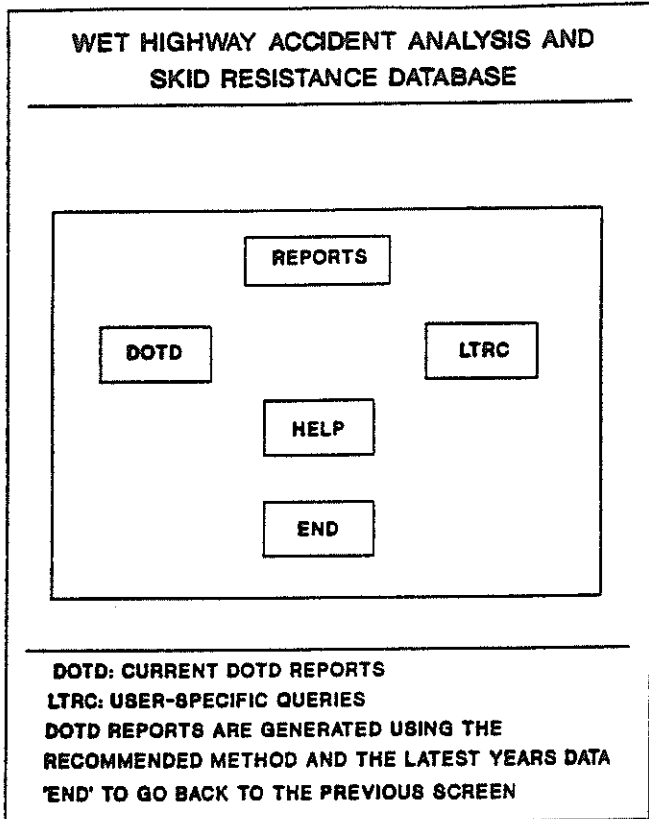
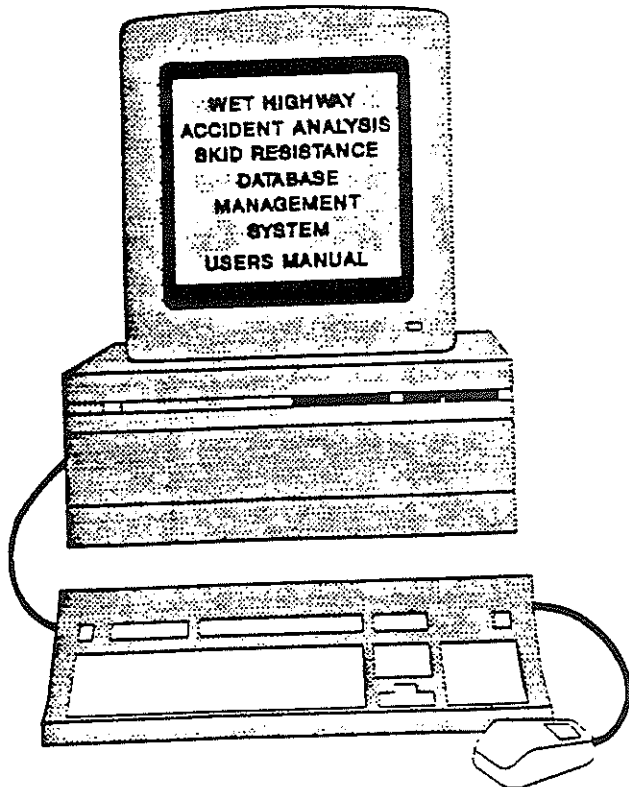
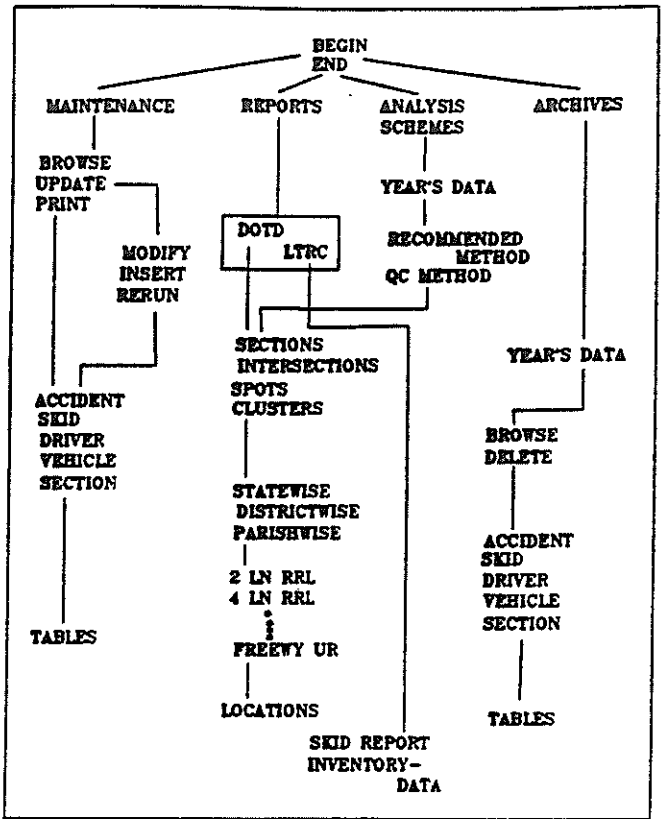


Figure 11



REPORTS UTILITY

This figure (figure 11) is an exact replica of the screen obtained on selecting this option. As mentioned earlier, LTRC contains some special user-requests for users at LTRC. Request 1 gives a SKID TEST report for each parish. Request 2 is for retrieving INVENTORY TYPE data.

On selecting the DOTD option the users can have an access to DOTD reports made on the current format being followed by them.

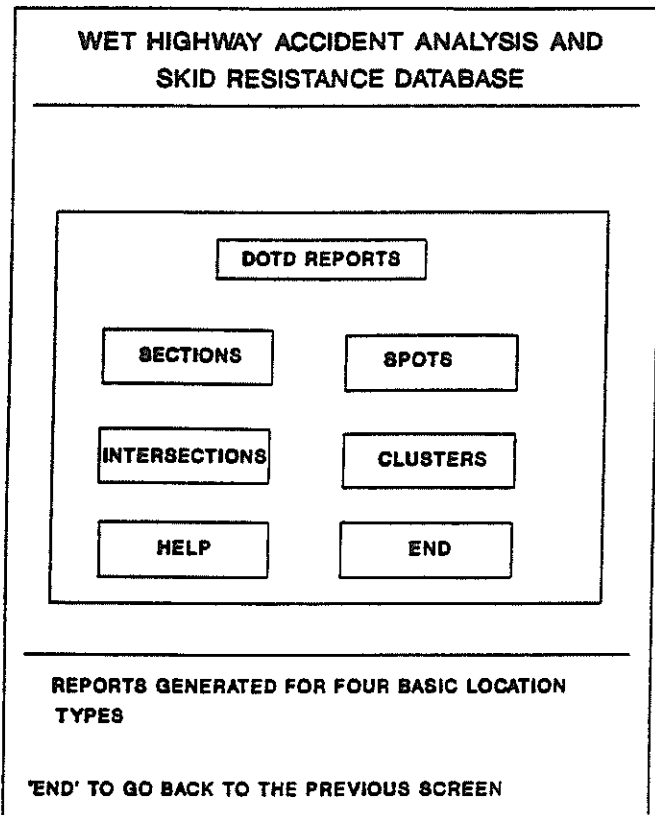
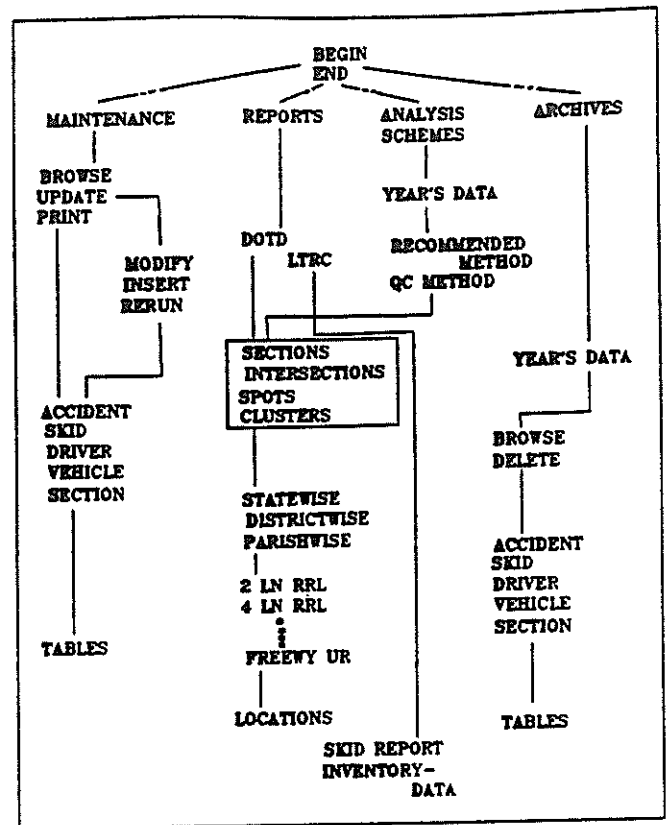
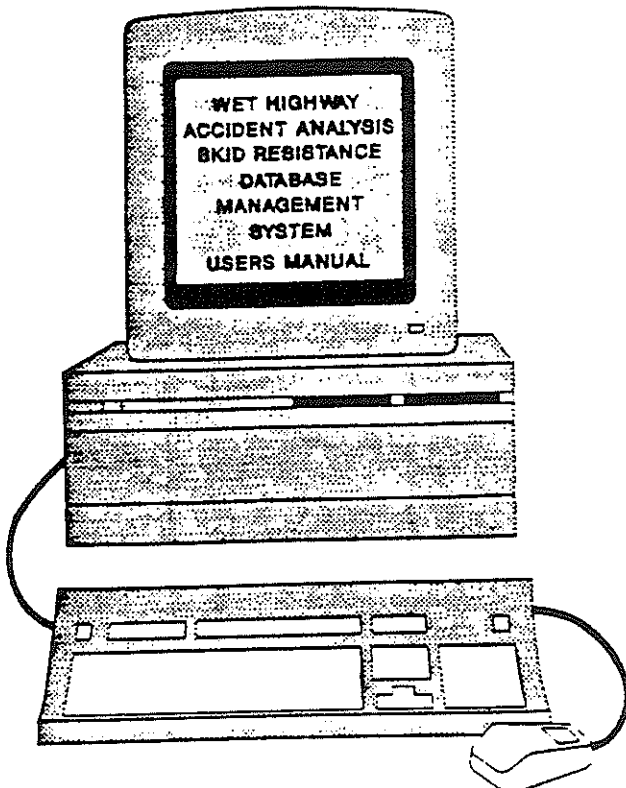


Figure 12



LOCATION TYPES

This screen (figure 12) shows the basic location types for which the analysis has been performed. In addition to the three location types identified by the DOTD presently (sections, intersections and spots), the consultants felt the need of including another location type i.e. 'clusters' for identification of hazardous locations.



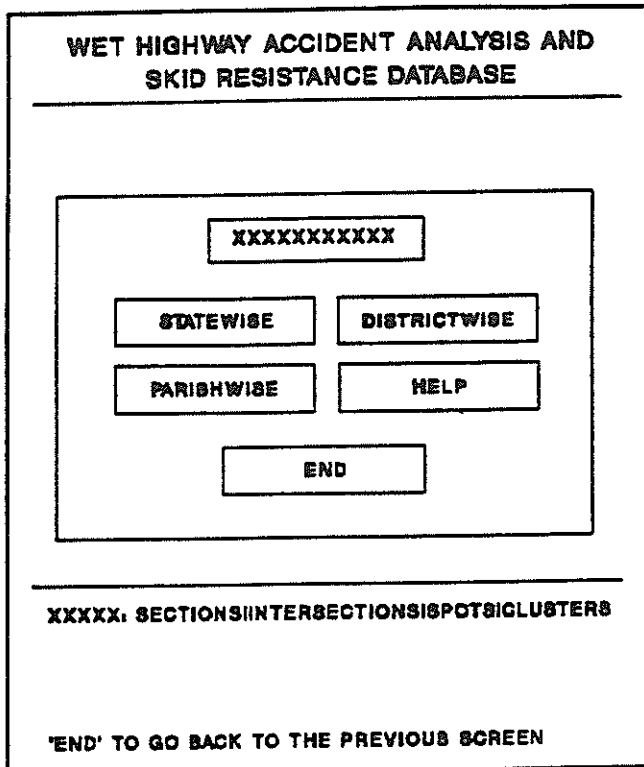
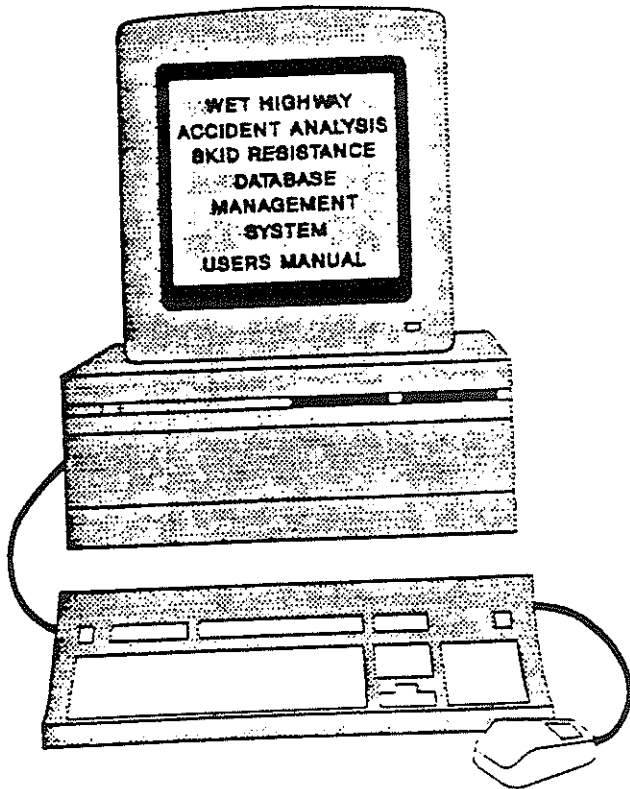
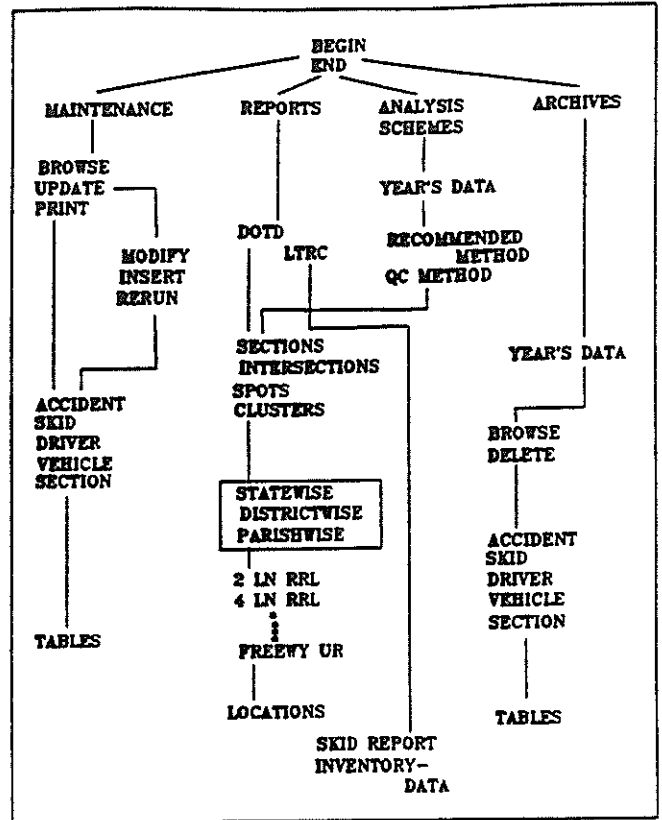


Figure 13



REGION CLASSIFICATION

This screen (figure 13) asks the user to input the region classification based on which the results are desired i.e. 'Statewise' selection gives a screen shown in figure 14. The other options give some intermediate screens before going down to that screen.

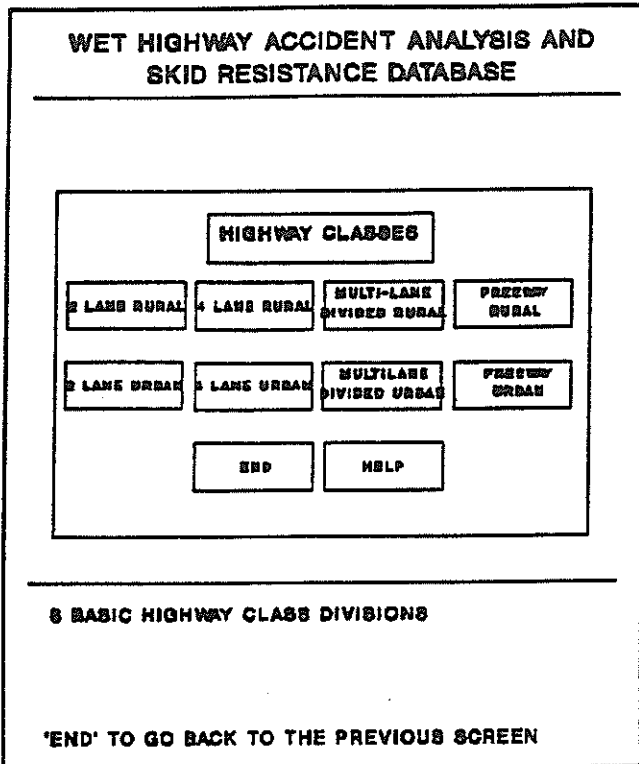
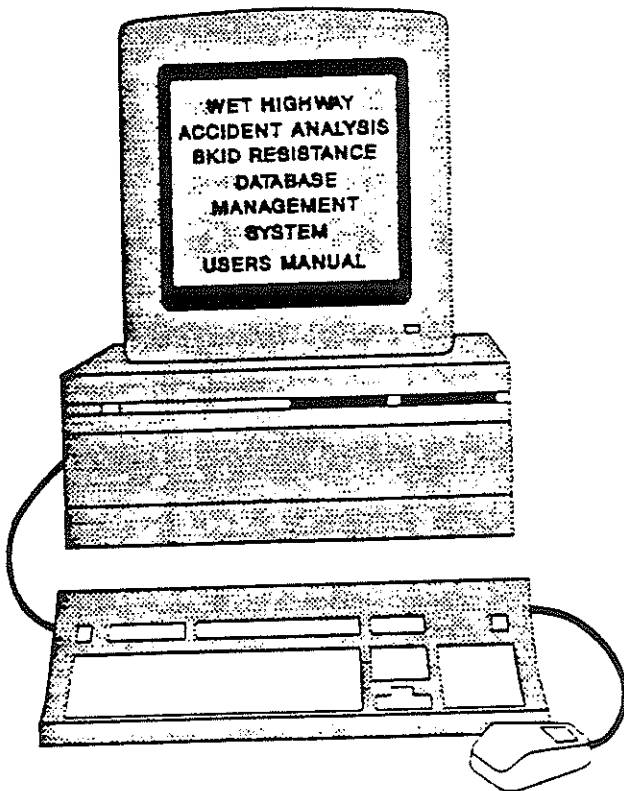
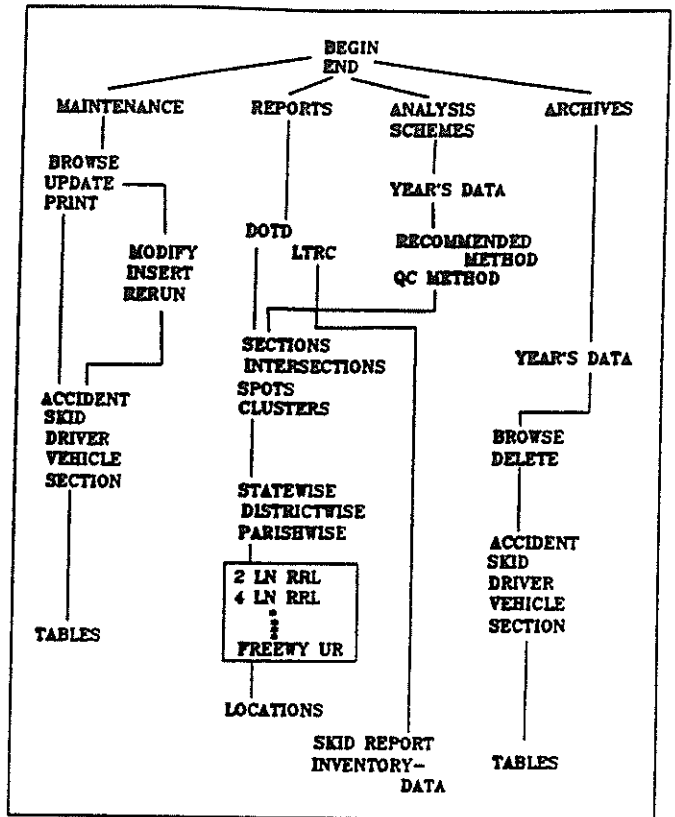


Figure 14



HIGH TYPE CLASSIFICATION

This screen (figure 14) shows the user the eight basic highway types for which the analysis has been performed. Any selection (except END) made here takes the user to the coordinates of the hazardous locations ranked in order of decreasing hazardity.

USEFUL TIPS FOR THOSE SCREENS

- To scroll up, press ALT-PF7
- To scroll down, press ALT-PF8
- To move right, press ALT-PF10
- To move left, press ALT-PF11
- To exit, press ALT-PF3

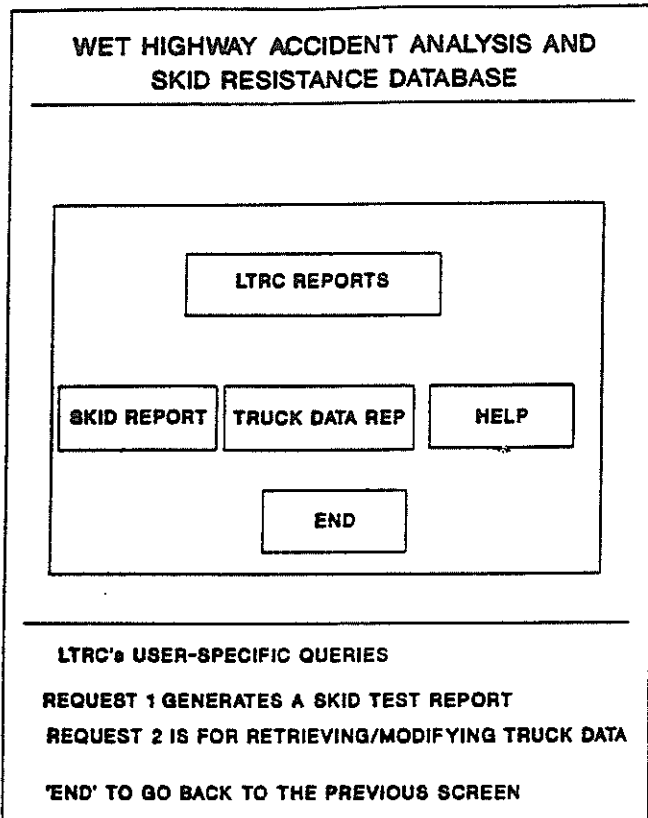
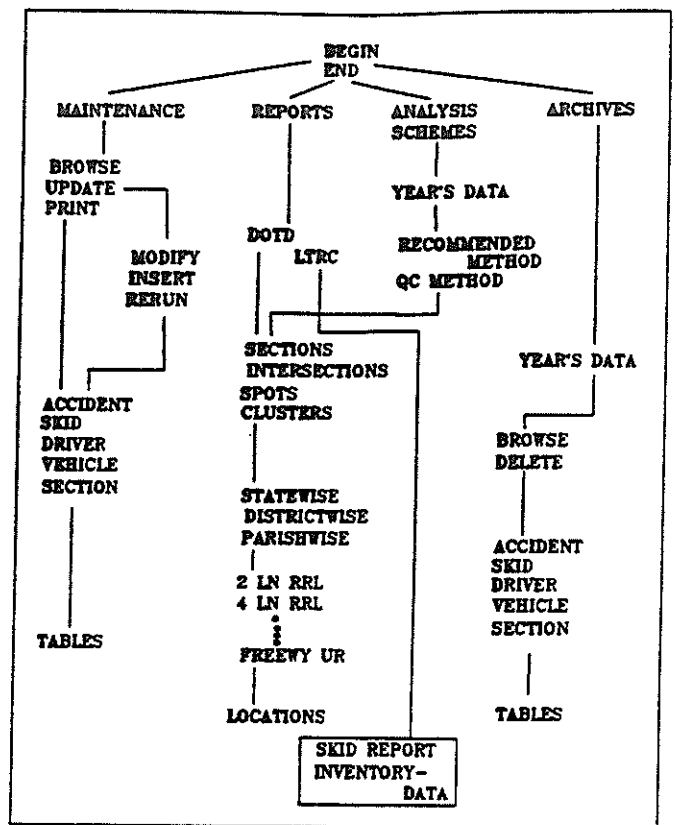
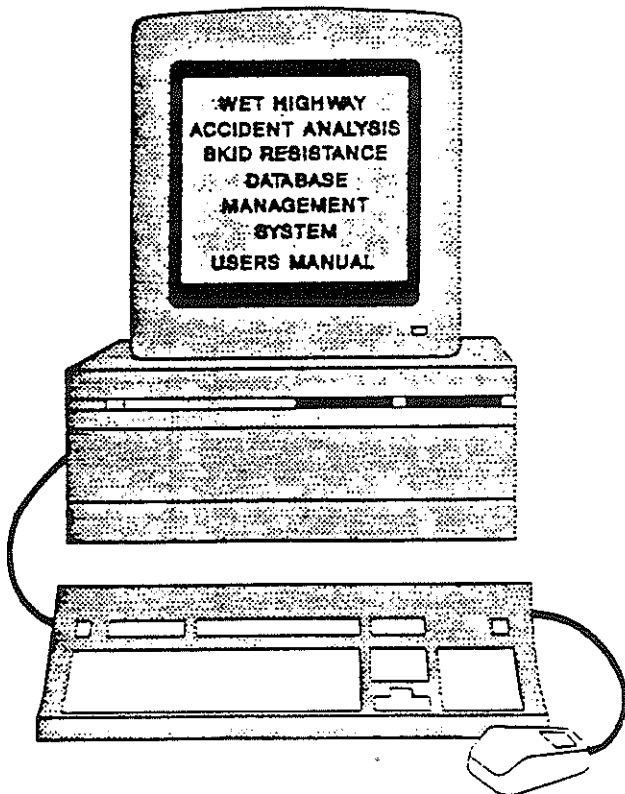


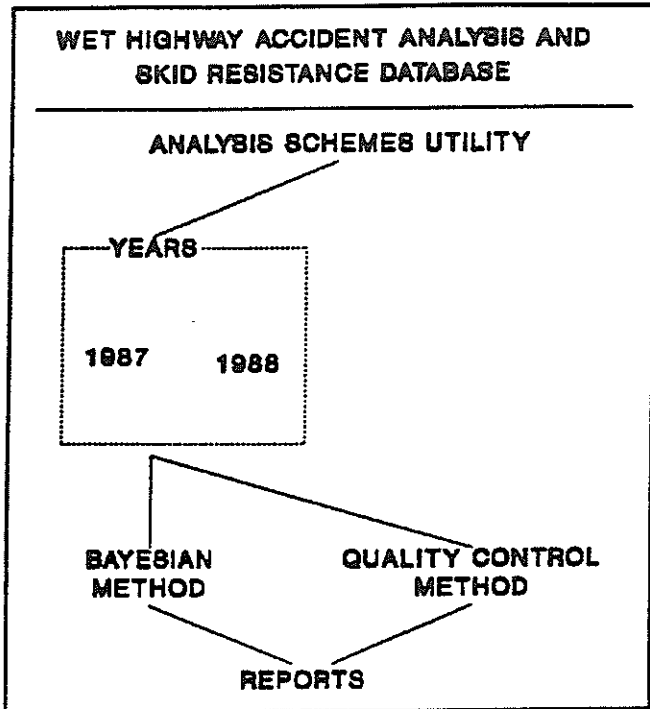
Figure 15



LTRC REQUESTS

This screen (figure 15) shows the two LTRC requests. To make a selection, go to that option using the TAB keys and press ENTER. To get back to the previous screen, either press ENTER on END or press ALT-PF3.

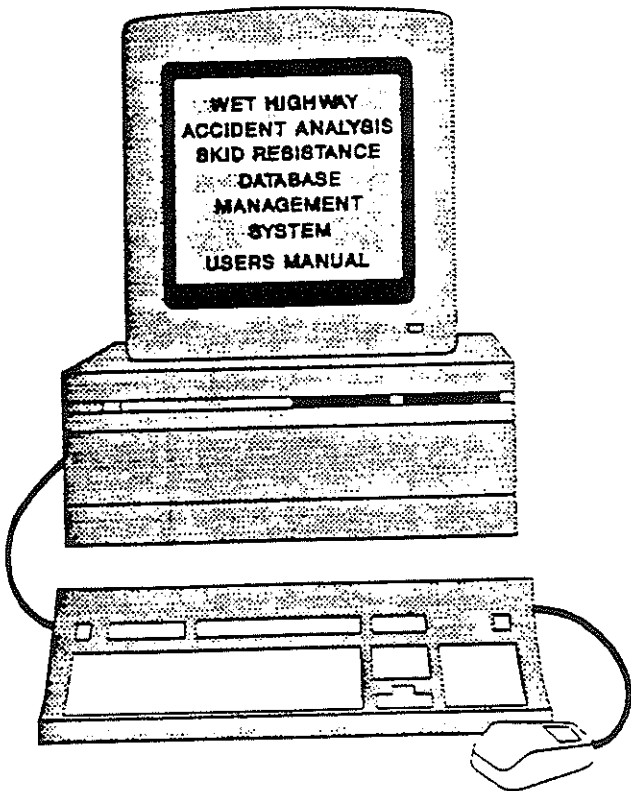




FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT

Figure 16



ANALYSIS SCHEMES Options

This figure gives the user a broad view of various choices available within the ANALYSIS SCHEMES utility.

As shown in the figure, the user can select a particular year of his interest in order to generate different reports based on any of the available analysis methods.

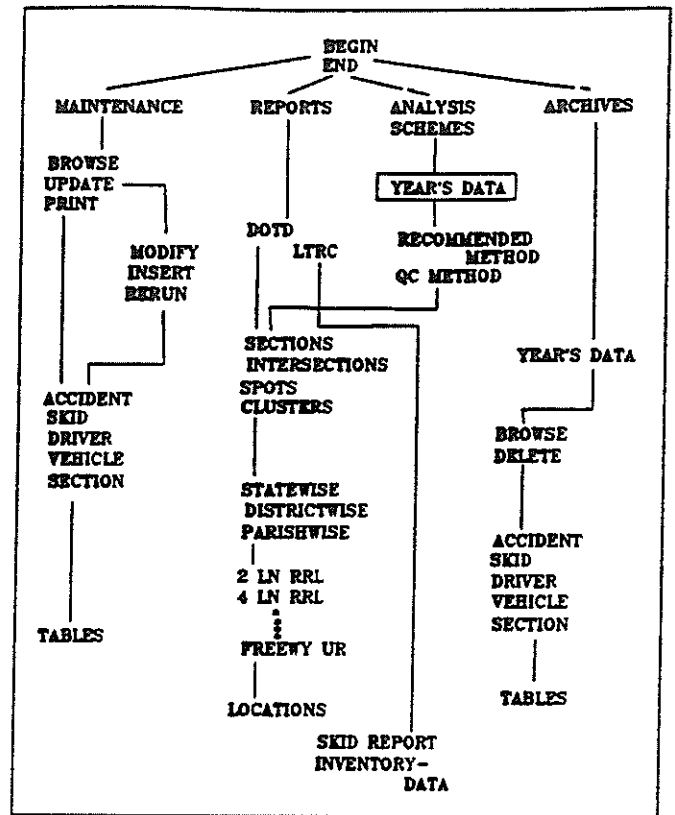
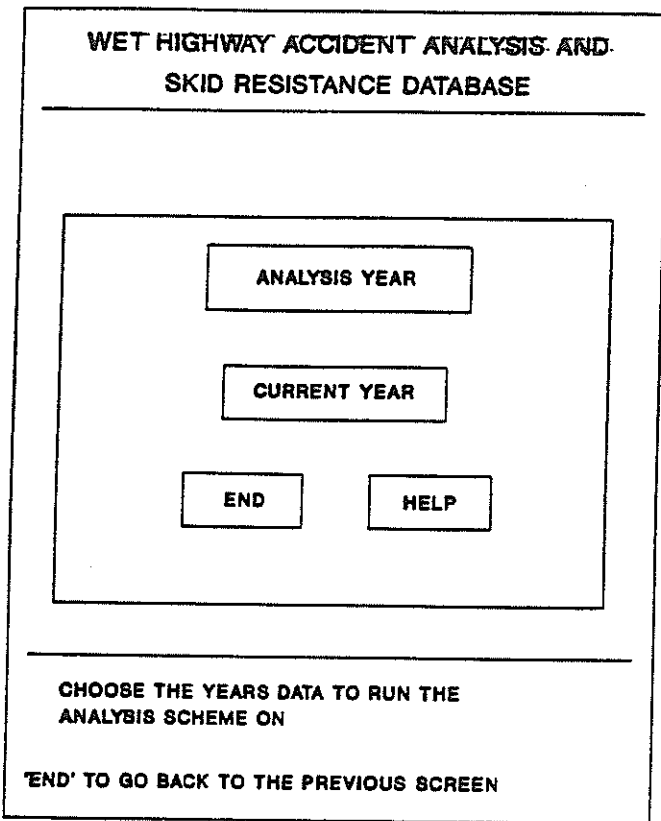
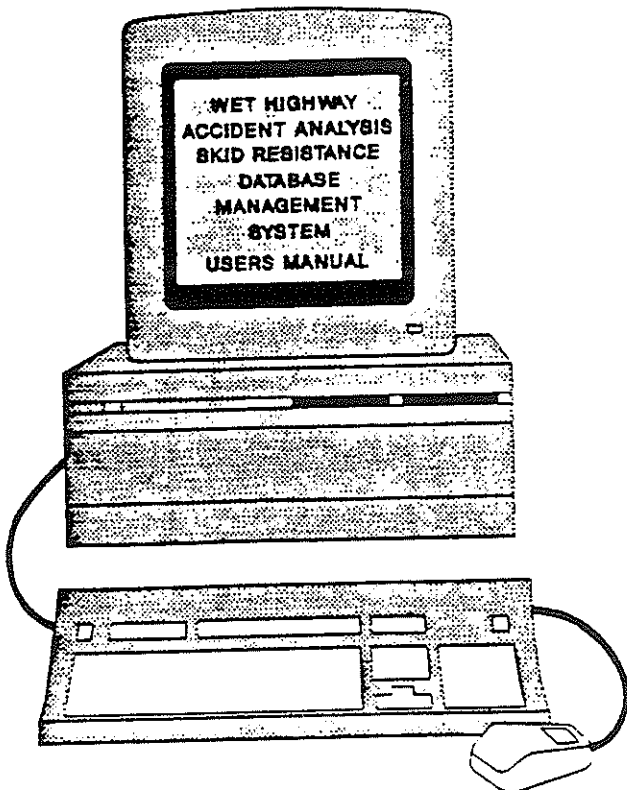


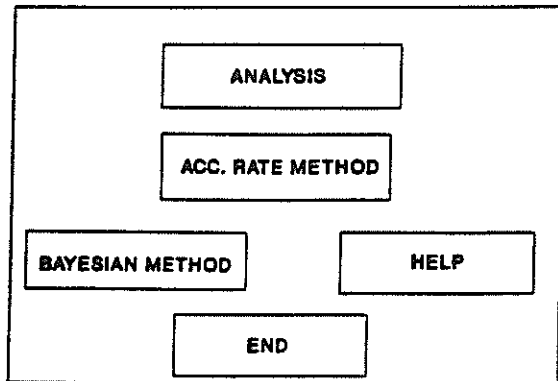
Figure 17



ANALYSIS YEAR Options

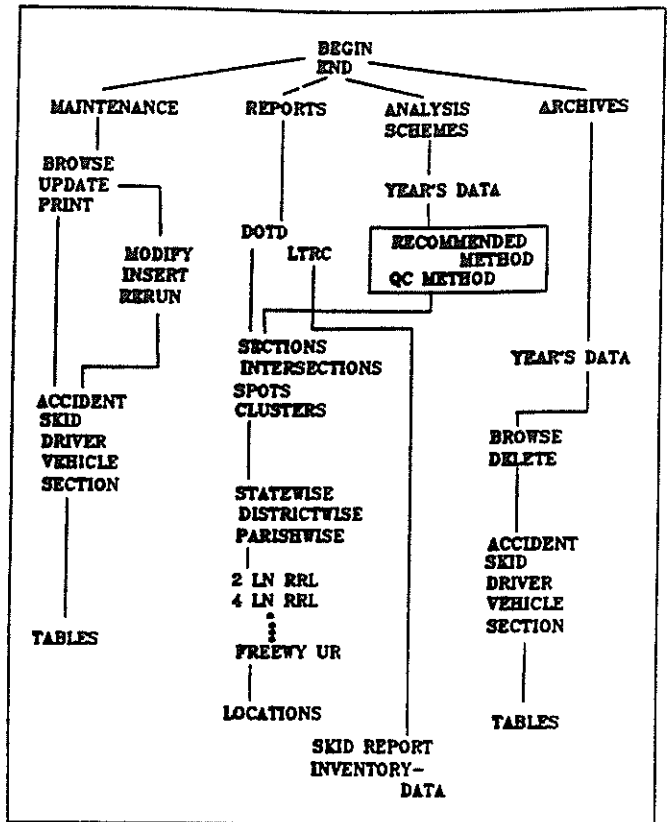
This figure (figure 17) shows exactly the screen associated with the Analysis year option. To get back to the previous screen, press ALT-PF3 keys simultaneously or go to END selection and press ENTER. This alternative command holds good for all the menus in this DMS.

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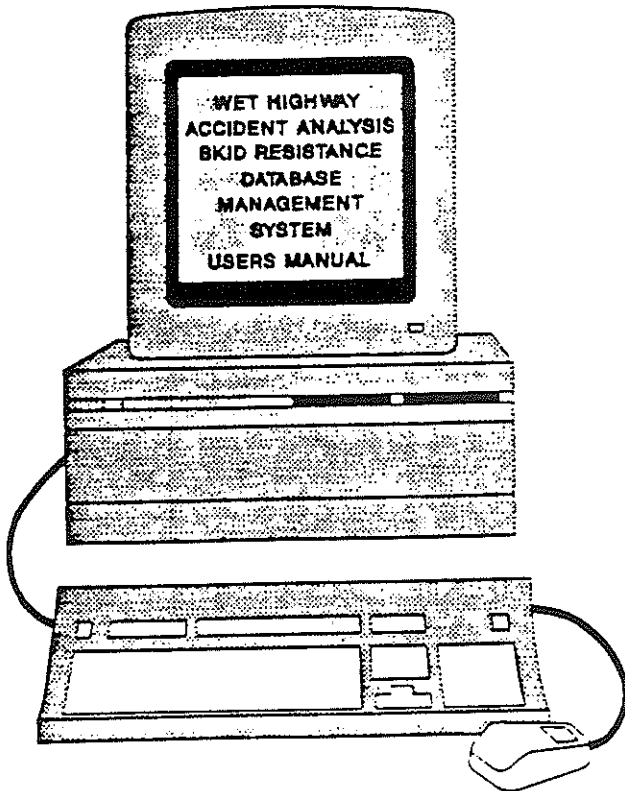
CHOOSE THE DESIRED ANALYSIS SCHEME TO RUN
THE SELECTED YEARS' DATA ON
THIS SCREEN LEADS TO SCREENS SIMILAR TO ONES
GENERATED FOR THE REPORT UTILITY
'END' TO GO BACK TO THE PREVIOUS SCREEN

Figure 16



ANALYSIS SCHEMES

This screen shows the two alternate methods of analysis available within this system. Selection of one of these methods prompts the system to analyze the data corresponding to the year chosen from the previous menu as shown in figure 17.



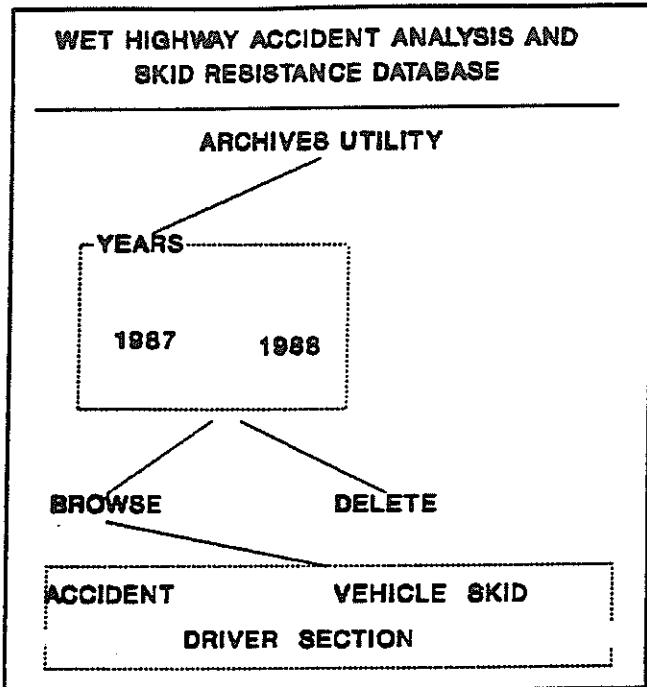
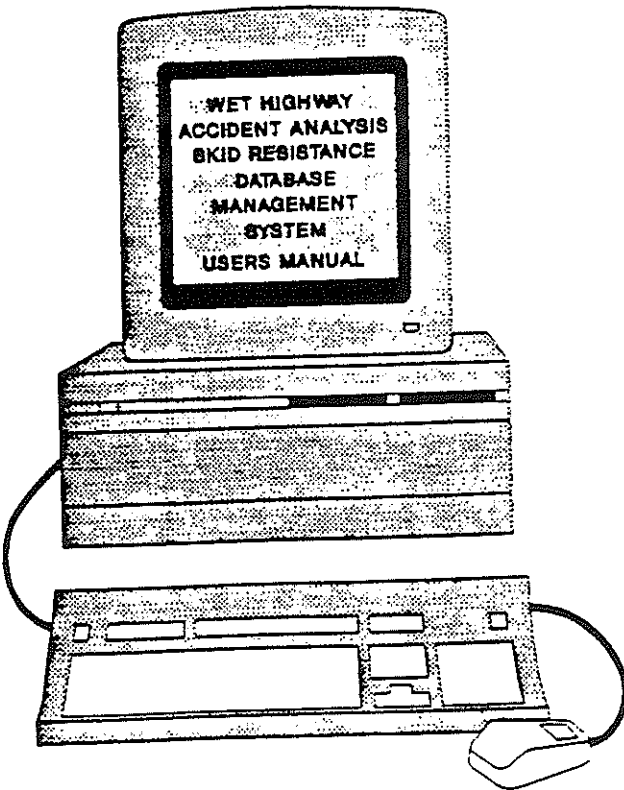


Figure 19

FREQUENTLY USED KEYS

- ALT-PF3 TO GO TO PREVIOUS SCREEN
- ALT-PF7 TO SCROLL UP
- ALT-PF8 TO SCROLL DOWN
- ALT-PF10 TO MOVE LEFT
- ALT-PF11 TO MOVE RIGHT
- ALT-CURSOR TO MODIFY THE CURSOR
- RETURN TO MOVE THE CURSOR DOWN
- TAB TO MOVE THE CURSOR LEFT/RIGHT



ARCHIVES Options

This figure (figure 19) gives the user an overview of the various options provided with the ARCHIVES utility.

As shown in the figure, the user can have access to the previous year's information not available in the active database.

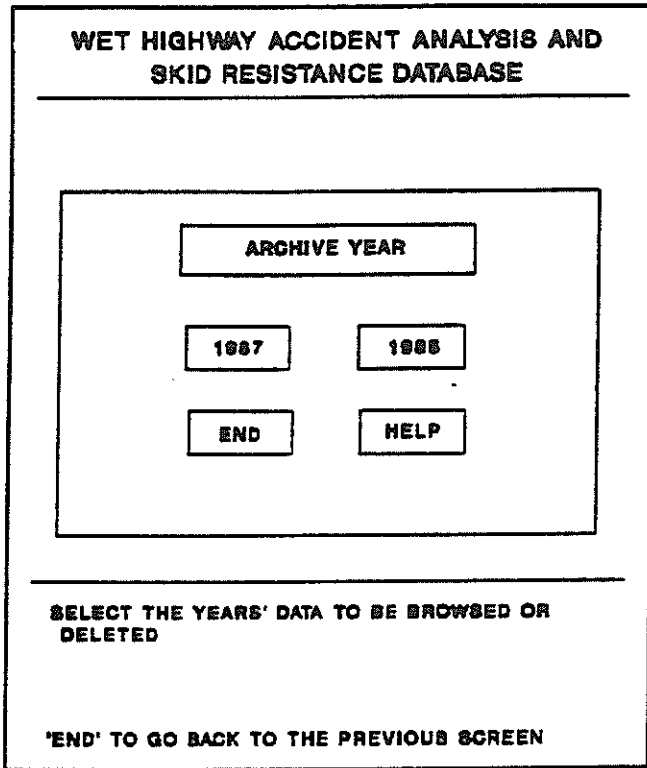
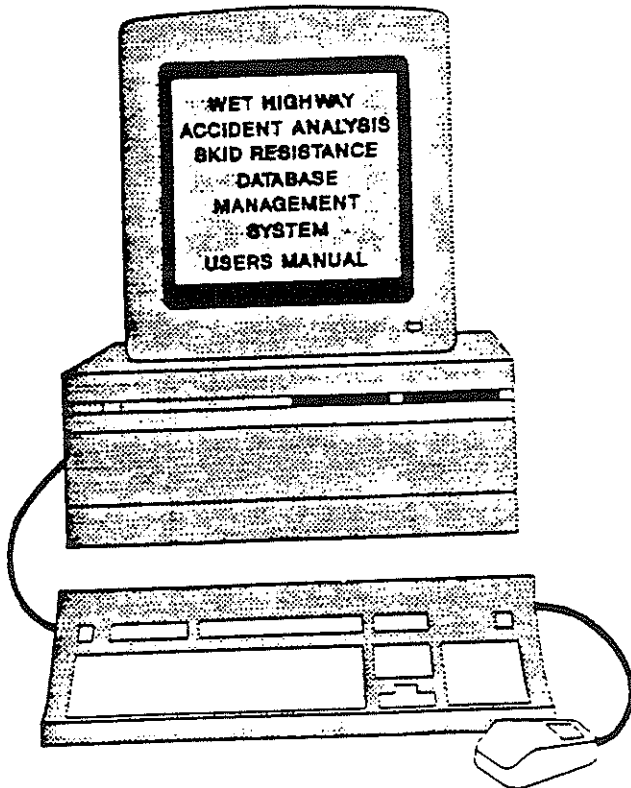
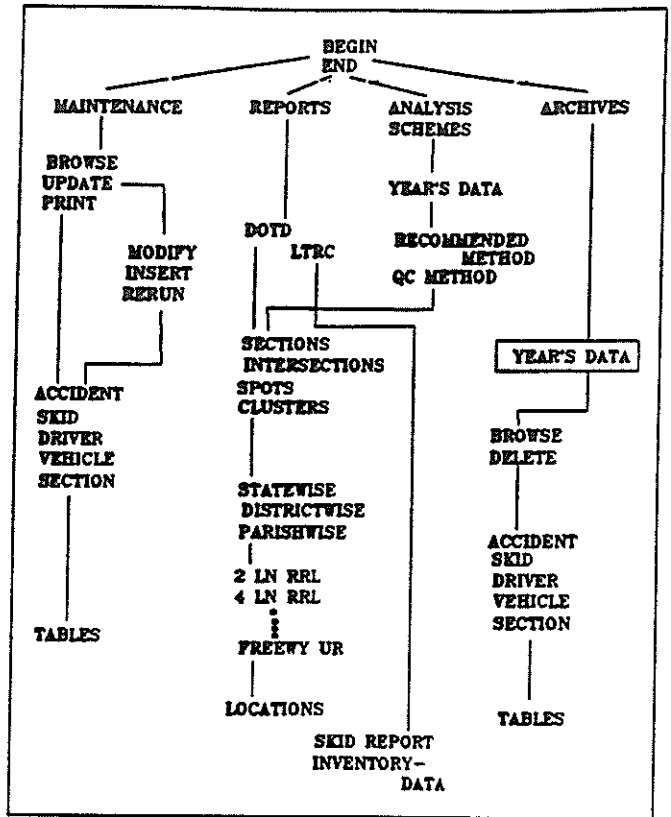


Figure 20



ARCHIVES YEAR options

This figure (figure 20) shows exactly the screen associated with the Archives year option.

To get back to the previous screen, press ALT-PF3 keys simultaneously or go to END selection and press ENTER. This alternative command holds good for all the menus in this DMS.

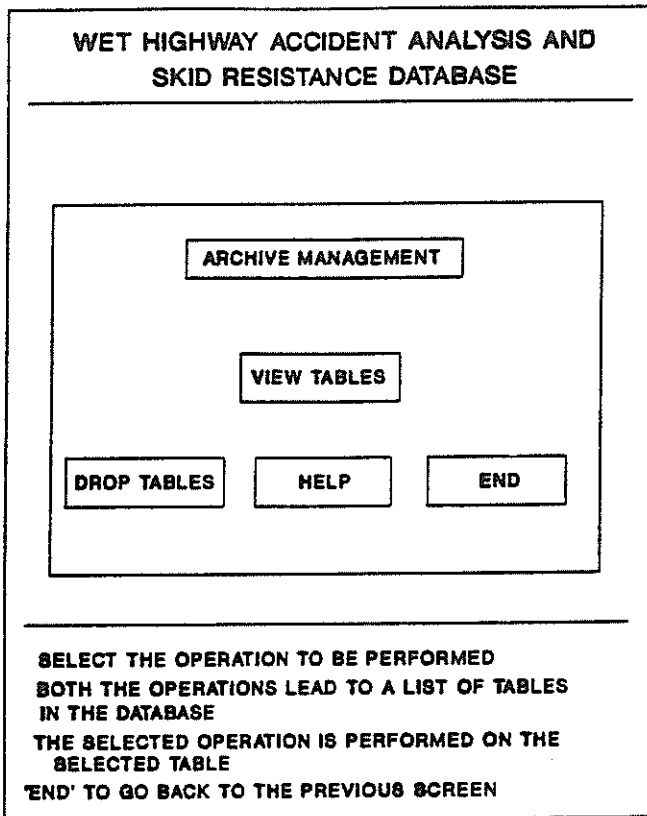
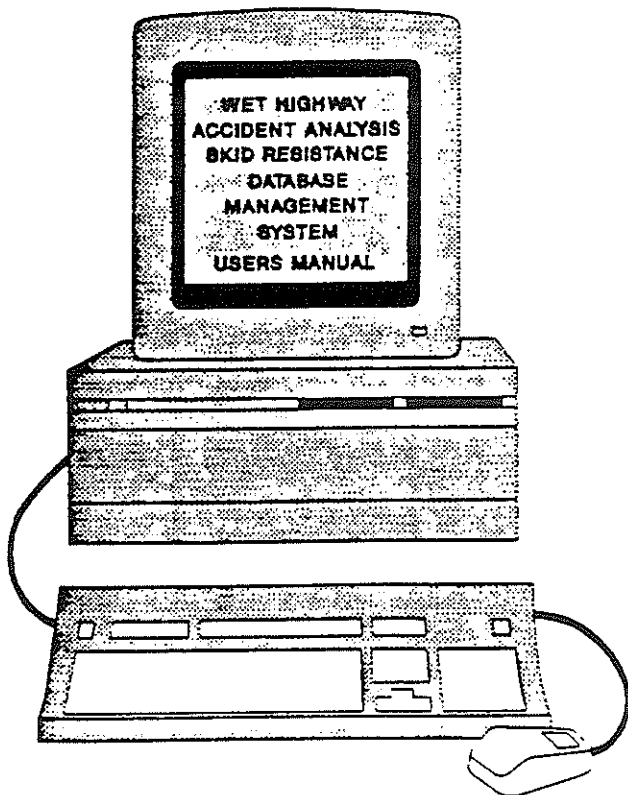
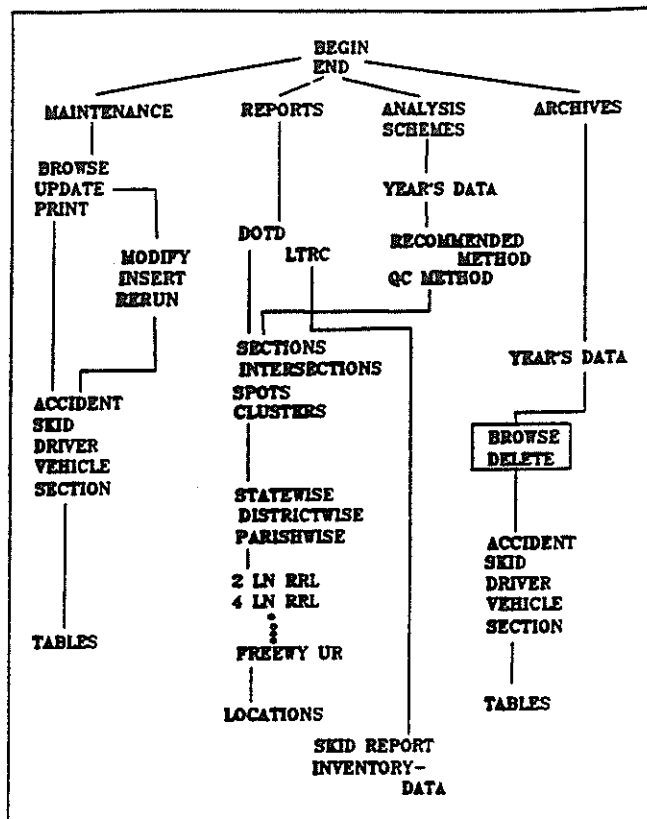


Figure 21



ARCHIVE MANAGEMENT

This figure (figure 21) gives the user a view of various manipulation options supported by this utility.

As shown in the figure, the user can

1. Browse the various files present in the archive.
2. Delete files corresponding to a year that is no more than five years old.