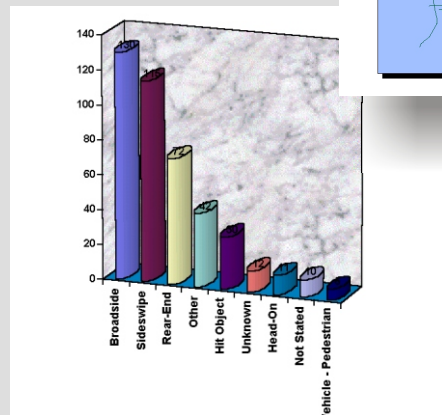
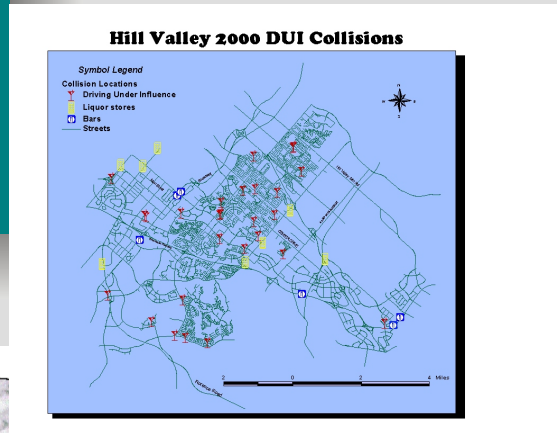
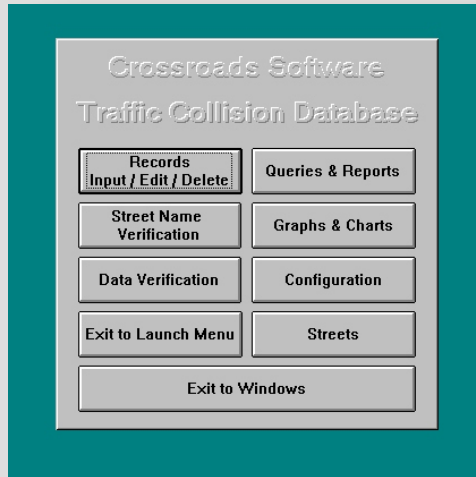


TRAFFIC COLLISION DATABASE SYSTEM



USER'S MANUAL

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PREFACE

Some Basics Before You Begin

Before you begin using Crossroads Software's Traffic Collision Database, you should be familiar with the basic layout of the structure and several commands (or, rather, "clicks") that you will use often.

The Traffic Collision Database employs the familiar Windows Software, which means you will rely on buttons, pull-down menus, and similar features. If this were the 1980s (and be thankful that it's not), you would have to enter those annoying and easily forgettable DOS key commands. Fortunately, DOS (at least for most of us) is a thing of the past.

Moving back and forth through the program is actually quite easy. Buttons, or, rather, descriptive boxes, will take you to different features of the software. All that is required is a simple mouse click.

To return to the previous screen, simply click on the "exit" button, which looks like this:



Note that the "door" button is not present in every screen in the Database. When it is not present, you will see other buttons that allow you to complete your tasks and then return to the previous screen. These buttons might say "exit," "input", "cancel," or "delete." In output report screens, you can click on the "File" menu at the top to pull down the menu, scroll your cursor over "Exit" or "Close" and then click once to execute the command.

To return to the main menu, simply select the "exit to main menu" button:



When inputting data, some fields are structured for ease of use and feature drop-down menus. You can utilize this feature by a simple mouse-click on the down arrow to the right of the input box.



Two other wonderful features include “auto-match” and “limit to list.” As you type an entry into a drop-down list, the software will match the entry, filling in possible matches as you type and saving you key-strokes and time. This is the “auto-match” feature.

“Limit to List” applies to those fields in the Database that have drop-down menus. Not every field is a “Limit to List” field, but some are -- this means that the information you enter into the field must be contained within the items in the drop-down list. If the information is not among the list, the Database will tell you that it cannot accept your entry. An example of this is a “Direction” field which contains a drop-down list with “North,” “South,” “East,” and “West.” If you were to enter a direction other than one of these four -- say, “up” or “down” or “north by northwest” -- you will be notified that you need to use one of the selections among the list.

Important aspects of the Collision Database, things to remember, and other noteworthy items are marked by a “hand icon”:



When you see the hand note, make sure you take a moment to read what follows; it is often important information about using the Traffic Collision Database.

Chapter and Verse...

This manual is divided into chapters for reading convenience, and each chapter is divided into sections. The pattern for chapter divisions is the chapter number followed by the section number, and the sections follow in consecutive order. So, for example, the first section is labeled “1.1”, the second “1.2”, the third “1.3,” and so on. Each section has its own heading, typically in bold letters, such as this: **Soft Verification of Street Names**. You can also use the Table of Contents to find your way through this book, particularly when you want to look up only one or two items.

CHAPTER ONE

Installing the Traffic Collision Database

If you are familiar with installation of Windows-based programs, then installing Crossroads Software's Traffic Collision Database should be quite simple. If you are not familiar with Windows-based programs, then guess what? Installing the Traffic Collision Database is still quite simple!

Crossroads Software has provided you with a CD containing the Traffic Collision Database application and data files.

Before installing the software, remember to close all Windows programs, otherwise they might interfere and create problems. **Also make sure that your computer's hard drive has about 120 MB of free disk space.**

With the CD in hand, just follow the steps...

STEP ONE

Place the Crossroads Software CD in your computer's CD-ROM drive. You need to locate and open the **Setup.exe** file. There are two ways to do this: using **Run** in the **Start Menu** or using **My Computer**.

Installing Through Run

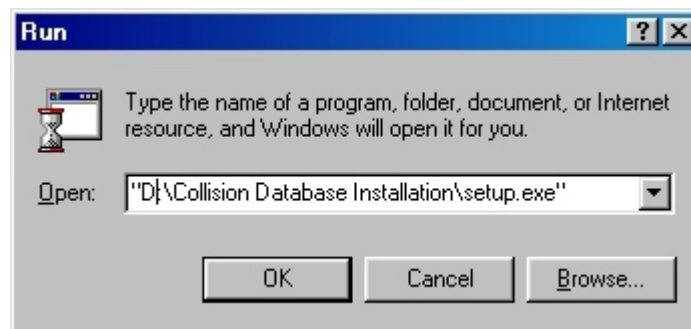


Fig. 1

Click and open the Windows **Start Menu** on the **Taskbar** and select **“Run...”** This brings up the **“Run”** dialog box, as seen above. Click on the **“Browse”** button to open a separate dialog box that will let you navigate through your computer and network. Locate the CD-ROM drive and click on it to highlight it. You should see a folder titled **“Collision Database Installation.”** It contains the installation files for the Collision Database. Open the folder and find the file titled **“Setup.exe.”** Click on the file to highlight it and then hit **“Open.”** Windows will place the **“path”** name to the **Setup.exe** file in the **Run** box, as shown in the Run box image above. **“D”** represents the letter of the CD-ROM drive; it's followed by the folder name and then the file name.

If you already know which letter represents your CD-ROM drive, you can type in the path name in the **Run** box. It should have the following format:

D:\Collision Database Installation\setup.exe

“D” represents the letter of the CD-ROM drive.

Click **“OK”** to run setup. Go to Step Two.

Installing Through My Computer

If you prefer, you can install the Collision Database through the Windows desktop. Double-click **My Computer** to open its window and then double-click the CD-ROM icon. You should see a folder titled **“Collision Database Installation.”** Double-click on the folder to reveal the contents.

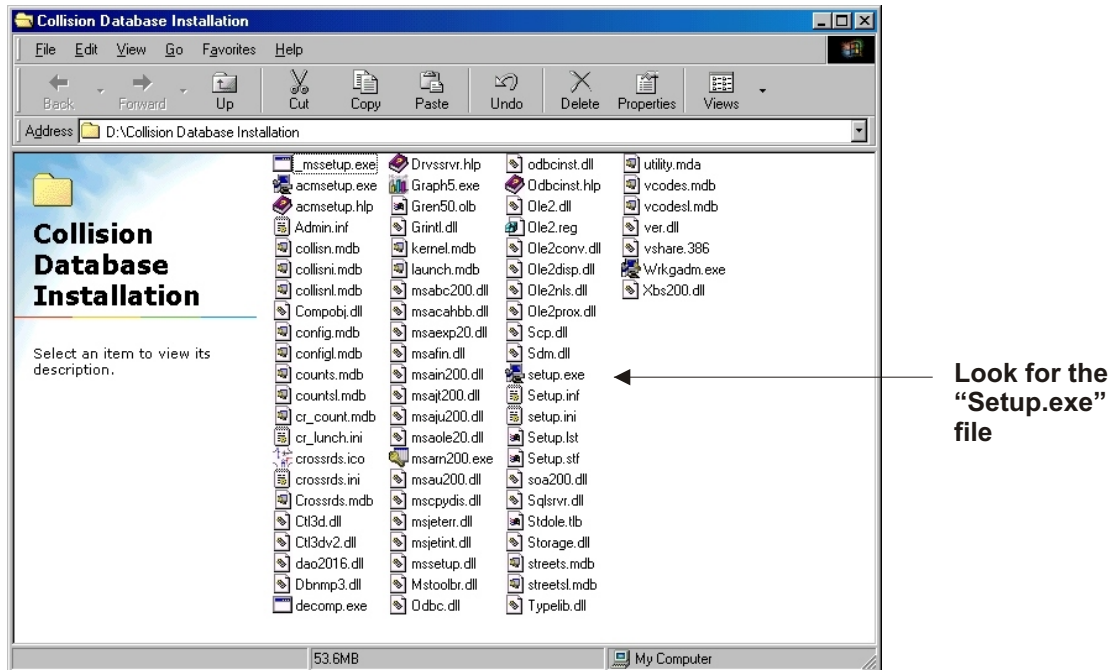


Fig. 2

STEP TWO

After opening the Setup.exe file, you will see a welcome screen (Fig. 3).

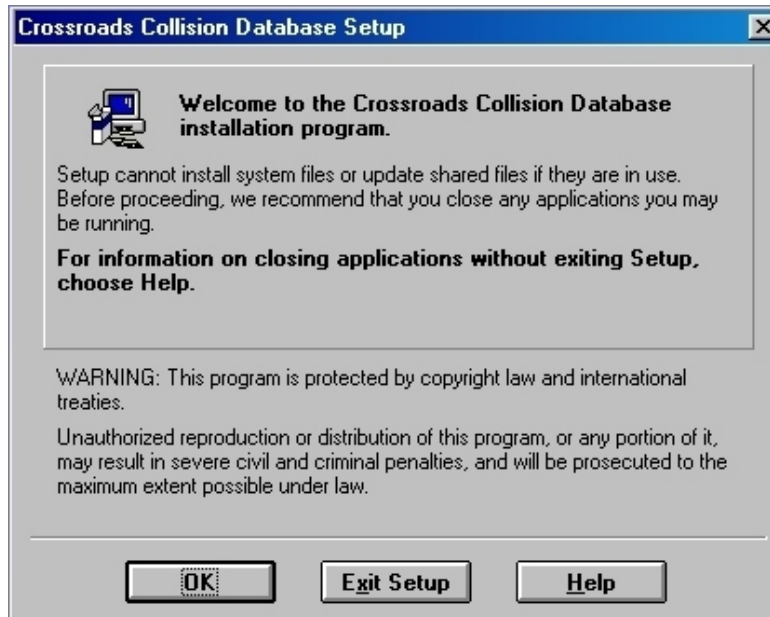


Fig. 3

The welcome screen contains a few preliminary instructions as well copyright information. To continue with setup, just hit “**OK**.” If you do not want to install the Database at this moment, choose “**Exit Setup**.” And if you want further information on setup, click “**Help**.”

STEP THREE

The third step involves selecting a directory; in other words, telling the software where to place the program files and data. Setup creates a default directory, containing a “Crossroads” folder (abbreviated “Crossrds”)we recommend that you use the default directory. Of course, it can be changed, but for ease of use and for the ease of future updates, it is best to use the given path.

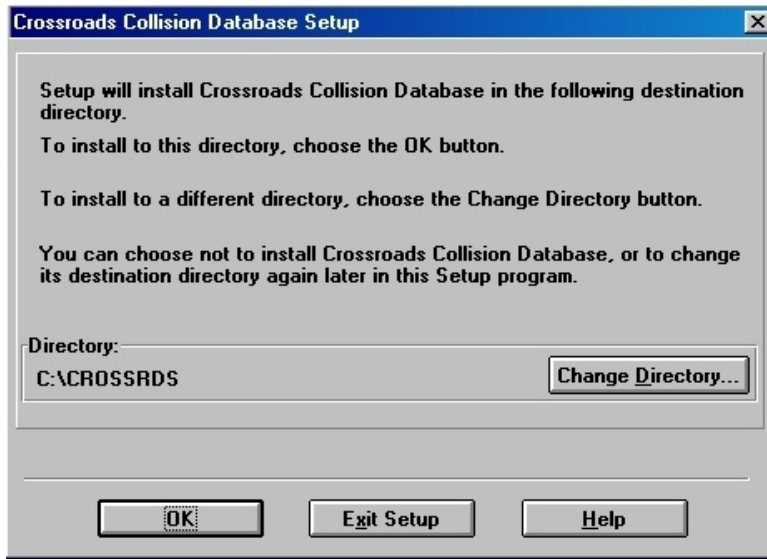


Fig. 4

As shown in Fig. 4, the default directory is **C:\Crossrds**. To change the destination, use the “**Change Directory...**” button. You can also exit setup if necessary.

To proceed, just click “OK.”

STEP FOUR

Now you are ready to begin installation. Click on the “**Complete**” button (Fig. 5). You still have the option of changing the directory or exiting setup.



Fig. 5

STEP FIVE

When new programs are installed in Windows, Windows itself sometimes creates “**program groups**.” A **program group** connotes several programs or program-related files that are placed together in one location, usually a single folder. After beginning the installation process, the Collision Database setup will specify a **program group**.

You can change the **program group** if you want, but setup does create a default program group. We do recommend that you stay with the default group.

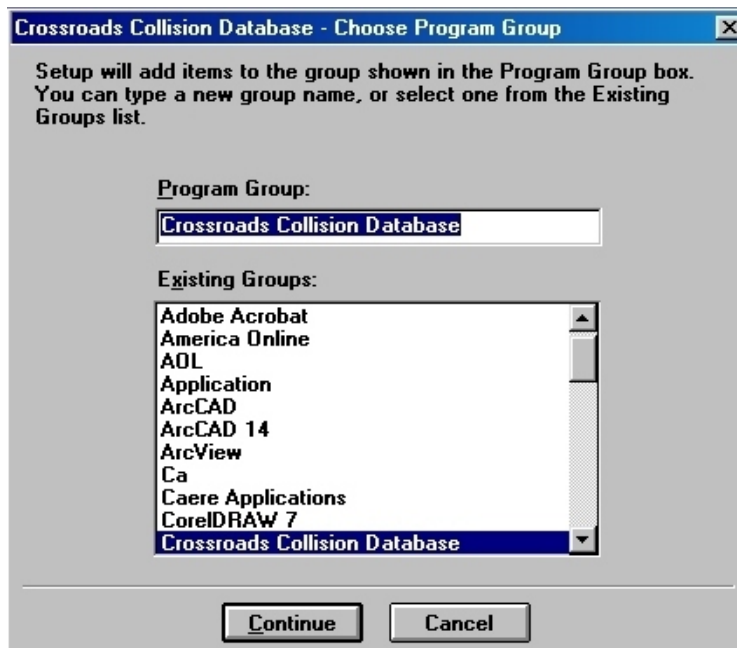


Fig. 6

After verifying the program group, hit “**Continue.**”

STEP SIX

Sit back, relax, and wait while the program installs. You might be asked to **restart Windows** to complete the setup; if this happens, go ahead and restart. Once the files have been installed from the CD, you should see a window containing the program icons that are contained in the “Programs” section of the Windows Start menu (Fig. 7).

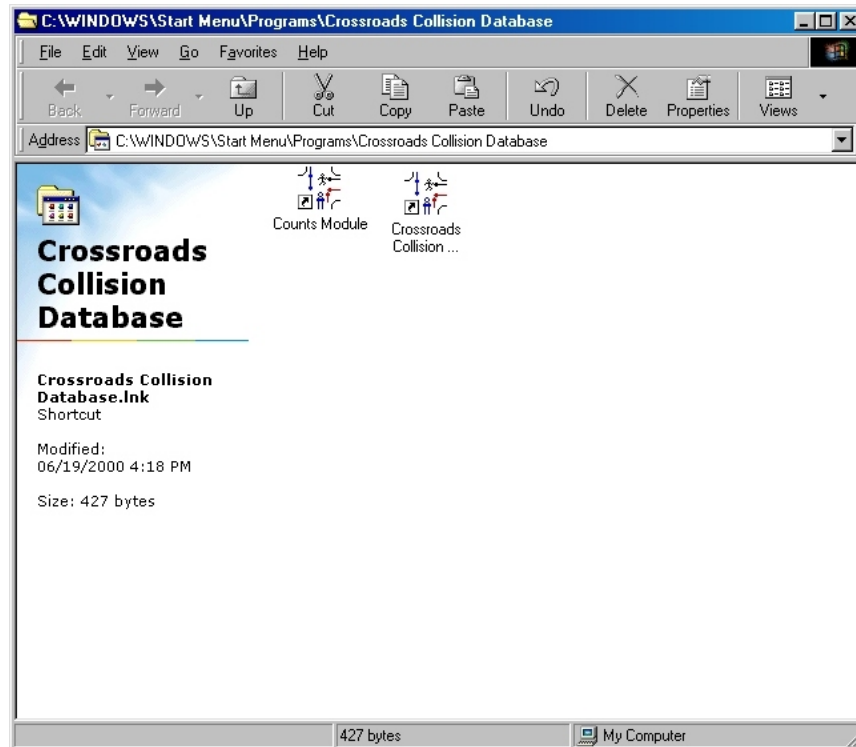


Fig. 7

The main icon is the “**Crossroads Collision Database**” icon, which opens the Collision Database.

STEP SEVEN

The Launch Menu

Installing the Collision Database from the CD is the main part of the setup process, but it is not the entire process. Once the program is installed, open the Database by either double-clicking the program icon (it will probably be the shortcut in the Start menu folder, as shown in Fig. 7 above) or by clicking **Start**, navigating to **Programs**, moving over to **Crossroads Collision Database**, and then highlighting and clicking the **Crossroads Collision Database** icon. Opening the program will bring up the **Launch Menu** (Fig. 8).

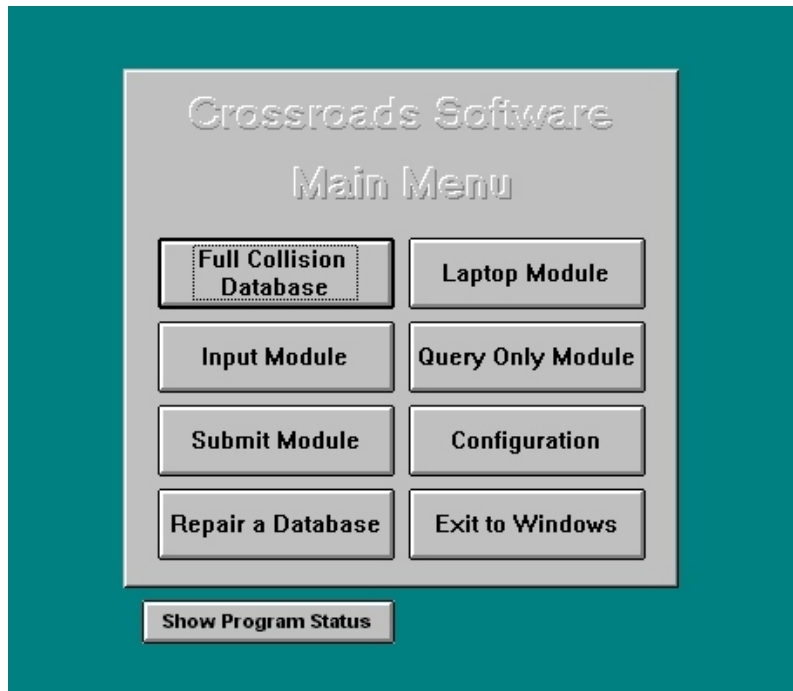


Fig. 8

The **Launch Menu** provides a variety of options, which include:

Full Collision Database: includes all input and edit options, all queries and reports, and all verification capabilities.

Laptop Module: the “laptop” version of the Database for use by officers in the field.

Input Module: allows only the input of data (no editing, verification, queries, or reports).

Query Only Module: allows only queries and reports, graphs and reports (no input or edit features).

Submit Module: works as an “approval process” to oversee and check data input and collision reports before the data is input into the full Traffic Collision Database; used in particular with data input through the Input Module and Laptop Module.

Configuration: configures the Database so that it can run properly; make sure to use this feature after installation but before running the Database.

Repair a Database: every once in a while, you might receive an error message stating that the Database files are corrupt; click on this feature to fix the problem.

Exit to Windows: closes the entire Database program.

STEP EIGHT

Program Status

When you select **Show Program Status** in the **Launch Menu**, a series of fields appears listing the main components of the Database, their location, and their status.

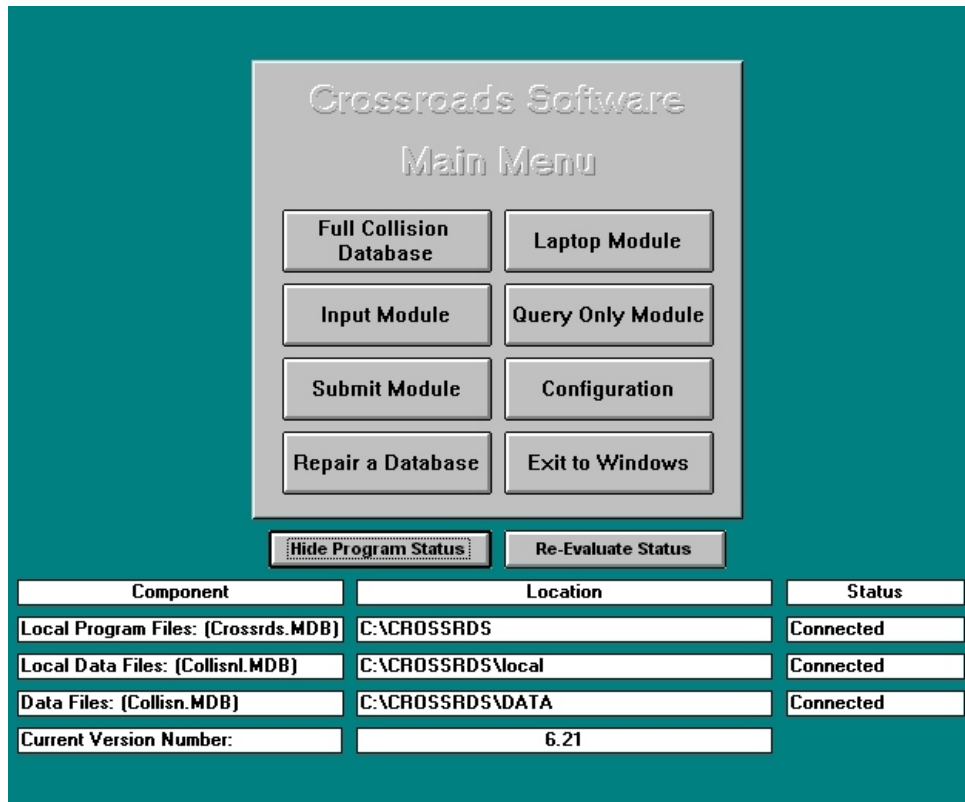


Fig. 9

The left column lists the necessary components: local program files, contained in “**Crossrds.mdb**” (“mdb” stands for “Microsoft Database”); local data files, embodied in “**Collisnl.mdb**”; and data files, contained in “**Collisn.mdb**.”

You've probably noticed that the data files have slightly different names: the local data files have an “I” at the end of “**Collisn**,” while the main data files do not. The reason is that, depending on how your computer is set up, the program will read to different data files.

The local data files simply include the data inputted in the computer on which you are working. If you work on a computer network, all of the inputting done on local computers will be read into the main data files located on the network's central server.

In addition, if you are working in the “**Input Module**” or the “**Laptop Module**,” data will be placed in the local data files until transferred to the main data files.

The important thing to remember here is that, if you are working on a network, the data files and their locations should be setup properly so that the Database functions correctly, and this is where **Program Status** comes in. Notice that the column in the middle shows the path names and locations of the data files. The columns on the right show the current status. If the status of each is “**Connected**,” then the Database will run properly. If the status says “**Not Connected**,” then either the data files (the “mdb” files) need to be placed in their proper locations or the path names need to be changed.

If you need to change the path names, you must enter the Configuration screen and make the appropriate changes (see Step Nine below).

Once you have made the proper corrections, you can check to see if all the files are set up properly. Just hit the “**Re-Evaluate Status**” button to have the program recognize the corrections. If the status of each component is “Connected,” you're ready to go!

STEP NINE

Configuration

Through **Configuration**, you specify the location of the “Crossrds” folder, the “Data” folder (which contains the “Collisn.mdb” file), and the Windows directory (which is important because installation of the Database places an “ini” file in Windows). After installing the Collision Database, it is a good idea to open **Configuration** and ensure that the file locations and directories are correct.

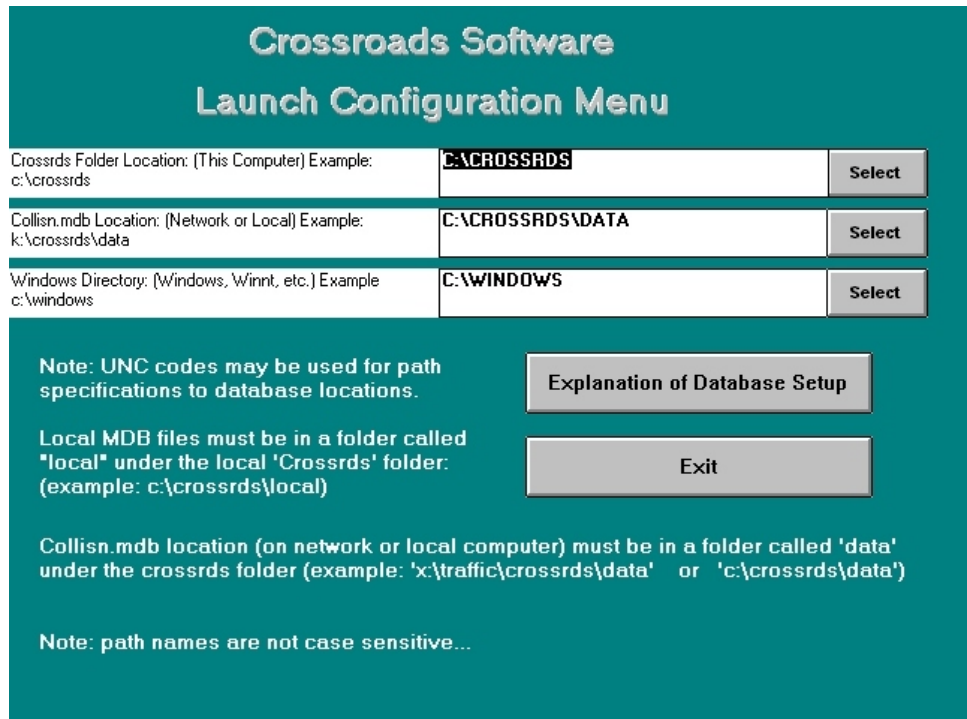


Fig. 10

Fig. 10 shows the **Launch Configuration Menu**. This is where you “configure” the software so that you can “launch” the Database. If you need to change any of the directories in the fields on the right, click the “Select” button of that directory. A Windows dialog box will appear in which you can find and select a specific folder location.

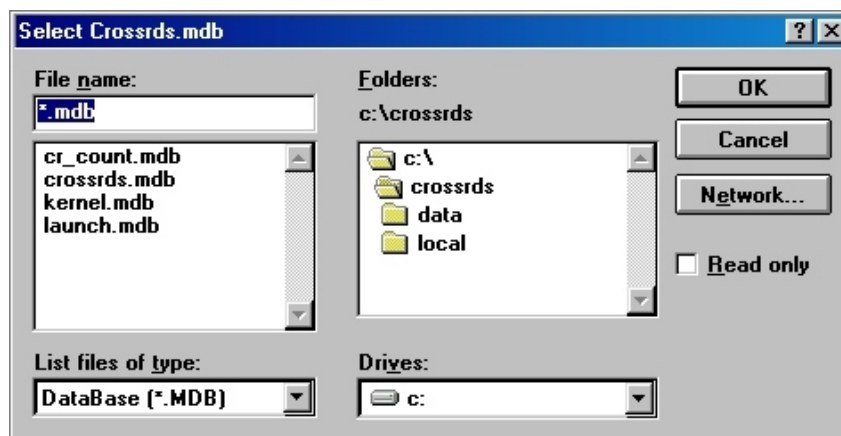


Fig. 11

Select the drive which contains the “Crossrds” or “Data” folder, locate the folder, click on it to select it, and then hit “OK.” The folder's path name will appear in the **Configuration menu**.

When you are finished, hit “**Exit**” to return to the **Launch Menu**.

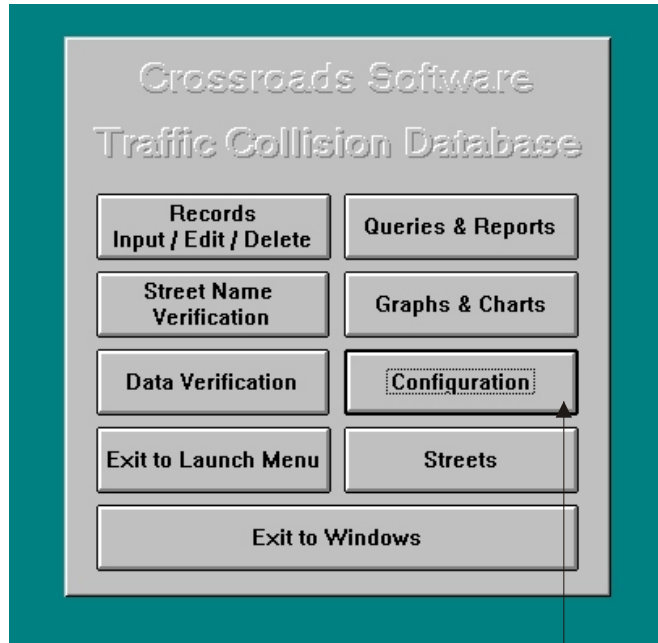
STEP TEN

Setting Up GIS

The last item to setup is the GIS feature, which provides mapping functions for the Collision Database. To setup GIS, you first need to make sure that the computer on which you are installing the Collision Database has the **GIS folder**. The folder itself is a separate item on the Installation CD. Copy the **GIS folder** into the “**Crossrds**” folder (dragging and dropping the folder will move all of its contents simultaneously). The easiest way to copy the **GIS folder** is to use Windows Explorer, which shows you all of the contents of your computer.

Next, navigate to the **GIS** folder on the hard drive and open it. Hit **Ctrl+A** on the keyboard to select all of the folder's contents and hit “Properties” on the Windows Explorer taskbar. When the Properties dialog box opens, the checkbox labeled “**Read Only**” should be checked. **Uncheck the Read Only box so that the files can be used and manipulated in the Database.** Finally, open the sub-folder in the **GIS folder** (it's known as the street categories directory, and it should bear your city's name -- or at least an abbreviation of it). Repeat the process for these files to change their properties as well. The **Read Only** option must be unchecked.

For the next step in setting up GIS, enter the full Collision Database and then click the “**Configuration**” button in the Main Menu (Fig. 12).



Click Here to Access Configuration

Fig. 12

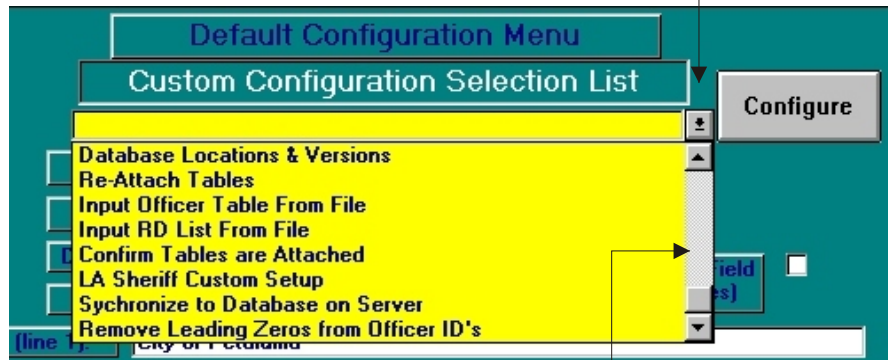
Once you hit the “**Configuration**” button, you'll see the **Configuration** screen (Fig. 13 below). At the top of the screen is a blank field labeled “**Custom Configuration Selection List**”note the small down arrow at the right of the field.



Fig. 13

Click on the arrow to open the **drop-down menu**, which contains a list of all customizable options. While the list is open, scroll down until you find **Confirm Tables Are Attached**. Click on it to highlight it; the drop-down list will disappear and “**Confirm Tables Are Attached**” will appear in the field at the top.

Click the down-arrow to open the drop-down list.



Scroll through the drop-down list by using the scroll bar.

Fig. 14

Next, hit the “**Configure**” button. A message should appear telling you that the Database needs to attach the necessary ArcView tables (Fig. 15).



Fig. 15

When you click “OK,” a Windows dialog box will open, and you will need to locate the “**aat.dbf**” file. It should be in the following path:

c:\crossrds\gis\[street coverage folder]

Where “C” represents the hard drive on which the **crossrds** folder is placed, and “[street coverage folder]” represents the folder that bears your city's name (or an abbreviation of the name) and contains more “dbf” files. Find the **aat.dbf** file; click on the file to select it and then hit “OK.”

The Database will then confirm that the proper tables are now attached.

In the Event of the “Uninstallable ISAM” Error Message

Depending on the operating system you are running (whether Windows 95/98 or Windows NT), you might get the dreaded “Uninstallable ISAM” error message while attaching the GIS tables. If this happens, the first thing to remember is not to panic! The problem has a very easy remedy.

Navigating through either My Computer or the Windows Explorer (which shows you everything on your computer), locate the Windows folder if you are running Windows 95/98 or the WinNT folder if you have Windows NT. Within the Windows or the WinNT folder, locate the **crossrds.ini** file and double-click to open it (it will open automatically in Notepad).

You can also use the “Find” feature in the Windows Start menu to locate files and folders. Just enter “crossrds.ini” as the name you want to find, set the feature to look in the hard drive which stores the Windows folder, and then hit “Find Now.” When Windows locates the crossrds.ini file, double click to open it.

To fix the Database so that the error message no longer appears and the Database works properly with GIS, you need to change one line in the **crossrds.ini** file.

```
[ISAM]
PageTimeout=5
LockedPageTimeout=5
CursorTimeout=10
LockRetry=20
CommitLockRetry=20
MaxBufferSize=512
ReadAheadPages=16
IdleFrequency=10

[Installable ISAMs]
dBASE III=C:\WINNT\SYSTEM\lbs200.dll

[dBASE III]
Filter=dBASE III (*.dbf)|*.dbf|All Files (*.*)|*.*|
Extension=dbf
OneTablePerFile=Yes
IndexDialog=Yes
IndexFilter=dBASE Index (*.ndx)|*.ndx|All Files (*.*)|*.*|
IndexExtension=ndx
CreateDbOnExport=No
```

Fig. 16
The Crossrds.ini File

Scroll through Notepad until you find the section in the file labeled “[Installable ISAMs]” (it’s between the “[ISAM]” section and the “[dBASE III]” section). Locate the line “**dBASE III=C:\WINDOWS\SYSTEM\xbs200.dll**” if the Database was configured for Windows NT, the line will read “**dBASE III=C:\WINNT\SYSTEM\xbs200.dll**.” If you had the “uninstallable ISAM” message, you need to change the path name to reflect the correct name of your operating system.

Simply click your cursor in that line to edit it. If you are running Windows 95/98, the line should read:

dBASE III=C:\WINDOWS\SYSTEM\xbs200.dll

If you are running Windows NT, the line should read:

dBASE III=C:\WINNT\SYSTEM\xbs200.dll

So all you are changing is the OS name in the line just after the “C:\” Be careful not to overwrite anything else.

Once you have made the change, go to the File menu at the top of Notepad, select “Save” to save the change, and then close Notepad.

You now have to backtrack a bit and repeat Step Ten to reattach the GIS tables. After that, your GIS table configuration should now work fine, and the Database is ready to use (once you finish the last step, Step Eleven, explained below).

STEP ELEVEN

The Final Step!

From the **Launch Menu**, select which form of the Database you wish to run by clicking on its button. For instructions on inputting data, editing data, and running queries and reports, consult your **Crossroads Software Traffic Collision Manual** and the **Data Input Module Manual**.

CHAPTER TWO

The Traffic Collision Database

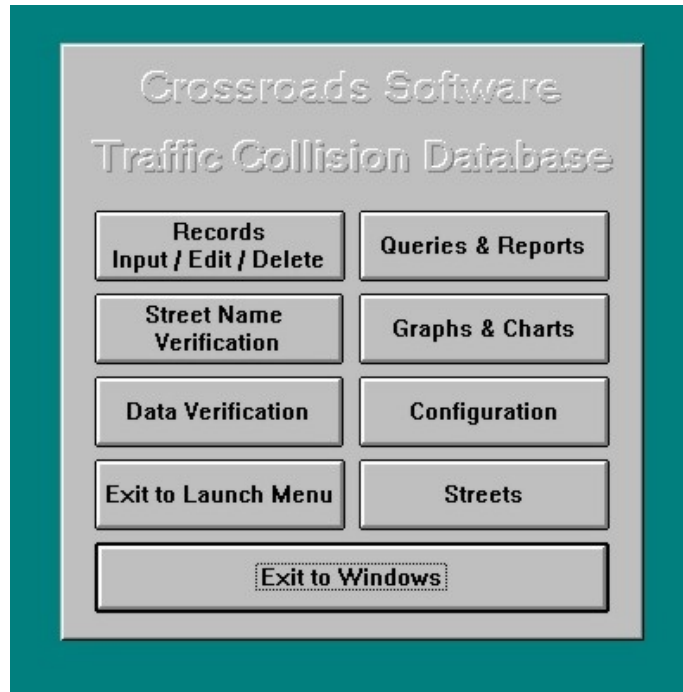


Fig. 1

TRAFFIC COLLISION DATABASE MAIN MENU

The main menu (Fig. 1) is the key with which you can enter, change, or delete data, generate reports and charts, customize the database to your own specifications, and perform other operations. The nine options in the main menu include:

Records Input/Edit/Delete

This will take you to the Records Menu, from which you can work with records for collisions, citations, DUIs, or parking citations. This is where you go to put records into the system and manage the information. For more information, see continue through this chapter.

Queries and Reports

This option will take you straight to the Queries Menu. This is where you go to get information out of the system; a variety of queries and reports are possible. For more information, go to Chapter Three.

Street Name Verification

Street name verification allows you to verify the correct name of a street (or streets) in collision records. For more information, head to section 2.2.

Graphs and Charts

Beyond this door lay multiple possibilities for charts and graphs covering collision types, degree of injury, weather conditions, and more. For more information, navigate to Chapter Four.

Data Verification

Provides the tools you need to improve data accuracy, including vehicle codes, completeness of reports, and general data scrubbing functions. For more information, head over to Chapter Five.

Configuration

This will take you to the Configuration Menu, where you can customize the database to suit your specific needs. Consult Chapter Six for more details.

Exit to Launch Menu

Clicking this button simply takes you back to the Crossroads Software Main “Launch” Menu.

Streets

This section is used to prepare and edit the street layout table that is the foundation of all location information in collision, citation, and DUI records.

Exit to Windows

Well, to clarify the obvious, this option exits the program and takes you back to Windows.

Part One

Collision Records: Inputting, Editing, and Deleting Data

From the main menu, click “**Records Input/Edit/Delete**” to take you to the Records Menu (Fig. 2).



Fig. 2

Select which type of record you wish to work with, whether it's for collisions, citations, DUIs, or parking citations. **Custom Input Forms** include customized records formats for specific cities. If your city is one of several cities for which custom input methods have been developed, choose this option. Otherwise, simply select whichever type of record you wish to generate or modify.

Let's begin with the first choice, **Collisions**. You will see the **Collision Records Menu**, and it will provide you with eight possibilities: Input Records by SWITRS; Enter Collision Report; Create 555 Report; Read/Write Collisions; Edit/Print Collisions; Delete Collisions; Case Tracking; and Exit to Main Menu (Fig. 3).

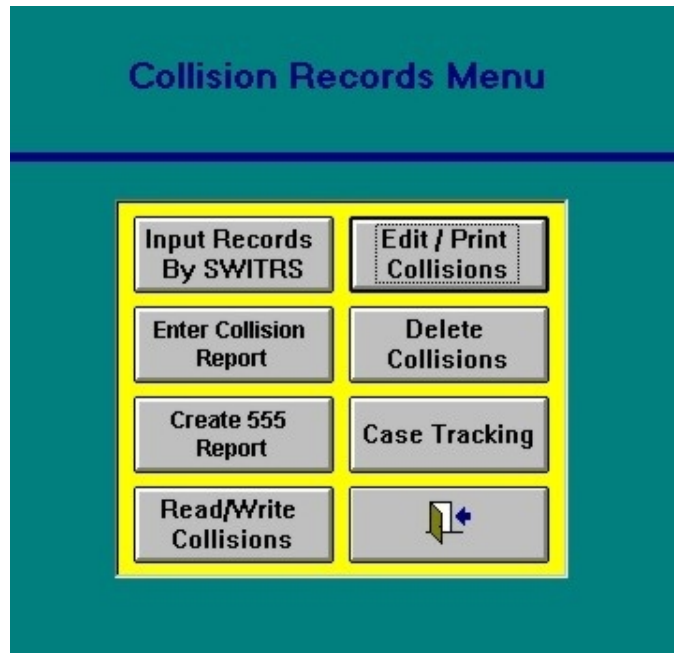


Fig. 3

2.1 INPUT RECORDS BY SWITRS

The first step in this process requires inputting starting and ending dates corresponding to the first and last collisions records you wish to read in (Fig. 4). The **date format** gives you two options, long or short. The default format is long, i.e. four digits for the year. The California Highway Patrol provides SWITRS records with four-digit years. Use the long-date format to read in these records; it's the older SWITRS records that use the two-digit date format. If you are using an older SWITRS record, simply push the drop-down menu arrow and select "short."

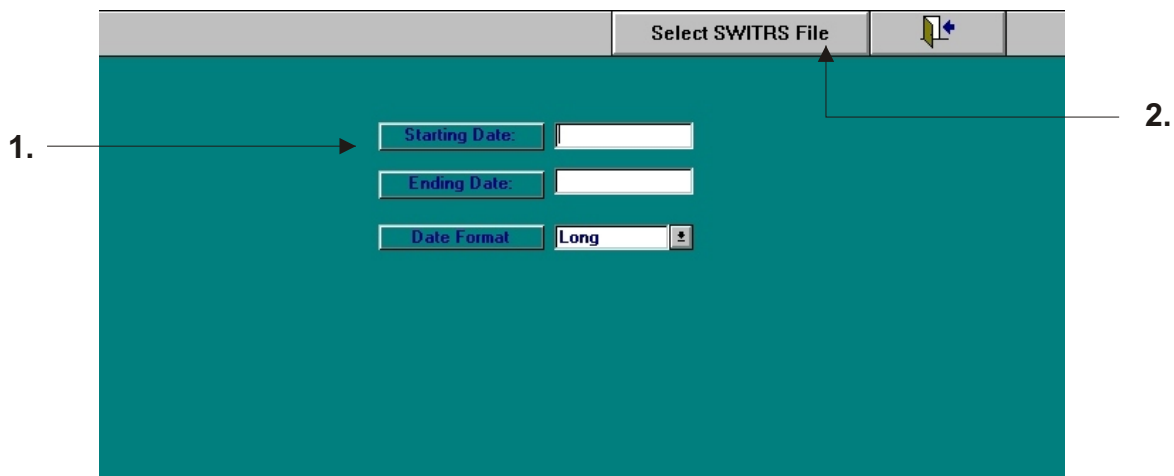


Fig. 4

Once you have entered the dates (step 1 in Fig. 4) and selected the appropriate date format, click the **Select SWITRS File** button (step 2 in Fig. 4). You will see a familiar Windows dialogue box (Fig. 5) that allows you to select the type of file you wish to retrieve as well as the various drives available to you. Select whichever drive has the SWITRS file, navigate to the location of the SWITRS file, select the file to highlight it, and then click “OK.”

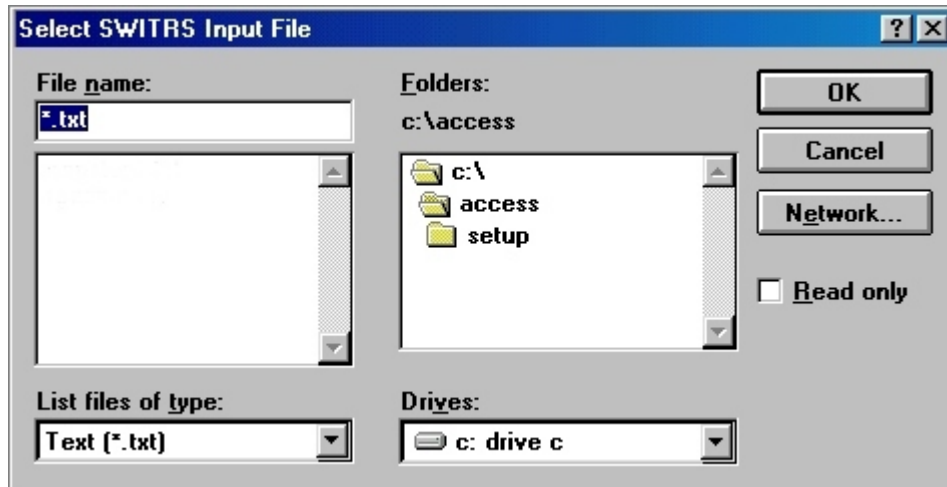


Fig. 5



If you have chosen the wrong date format, a dialog box will appear and tell you that **“The file does not seem to be in the proper SWITRS format. Check the file and try again...”** When you reply by clicking “OK,” a second dialog box will appear asking, **“Would you like to go to the Street Verification Menu now?”** Simply select “No,” which will return you to the Collision Records Menu, and click again on the **“Input Records by SWITRS”** button to begin the process again.

Once you have selected an individual SWITRS file and hit “OK,” the software immediately begins importing the data. As it goes through its multiple calculations in just a few seconds, you will be informed that the program is **“Reading Input File...”** followed by **“Total Records in File”** and the **“Records Read.”**

When the program is finished reading the SWITRS file, it will tell you so (“Finished reading the SWITRS input file”). For the sake of this lesson, let's suppose the SWITRS file you chose contains 850 new collisions. The program will tell you that “850 collisions were found in the file. 850 new collision reports were actually read into the database.” Hit “OK.” You will then be asked, “**Would you like to go to the Street Name Verification Menu now?**” Either click “Yes” or simply hit return to bring up the **Street Name Verification Screen** (Fig. 6).

Fig. 6

2.2 STREET NAME VERIFICATION

Street Name Verification is the second step in inputting collision data; it allows you to clean up your SWITRS report by making sure the street names conform to the formal, uniform names in the Collision Database. Once your data is cleaned up, you can generate much more accurate queries, reports, graphs, and other material.

The Street Name Verification feature will not work until starting and ending dates are entered this is already done if, before you got to this screen, you already selected your SWITRS file.



One of the wonderful features of Crossroads Software's Traffic Collision Database is its intuitive, user-friendly interface. As you type in the street name, the program will automatically fill in possible "matches". Thus, if you type "c" and "a," you might see "caBOT ROAD" filled in, spelling "Cabot Road." Instead of having to type the entirety of the street name, you can simply hit "enter" if the program fills in the street name you desire. If it doesn't, keep typing; your street name will eventually appear (if it exists in the street layout table).

The Street Name Verification Menu gives you a variety of options.

Open Street Name Verification Report will generate a report of collisions during a specified period of time and will tell you how many collision locations could not be verified, as well as the percent verified.

Unique Unverified Locations creates a report of those unique locations that cannot be verified by the Collision Database, along with the number of collisions at each of these locations.

Unverify Collision Records is a feature to help "bail you out" in the event of numerous errors or mistakes. By unverifying your collision records, you "undo" all verification, thus returning you to your starting point.

Check Collision Verification checks the Street Name Verification against a series of collision records and then gives you a report of those locations whose verification is suspect.

Verify Collisions in Check List is a "follow-up" step after doing "**Check Collision Verification.**" The Check Collision Verification will compare the primary and second streets against the formal, uniform names in the street layout table and then produce a report of unverified streets. This report, or "check list," can then be verified with soft and hard verification.

Verify Street Names checks all unverified locations against the formal, uniform street names in the database and then generates a Street Name Verification Report.

2.3 SOFT VERIFICATION OF STREET NAMES

Because Street Name Verification allows you to clean up collision reports by making sure the street names conform to the formal, uniform names in the street layout table of the Collision Database, it is a very important step towards using the other features of the Database. For example, a query that asks for all collisions by location during a specific time period will not yield accurate location results until street name verification is completed first.

Soft verification checks all the street names from your collision reports against all of the formal street names in the Database's street layout table. Due to the individual practices, preferences, and mistakes of each person who originally fills out a collision report, total, perfect verification is not possible through soft verification. The Database does its best to match all street names, but typically the process will result in a number of unmatched names. This is where **hard verification** comes in (see section 2.4).

Let's try verifying street names and then generate a Street Name Verification Report. With starting and ending dates in the appropriate fields, make sure **verification type** is selected as **soft** (step no. 1 in Fig. 7) and then click on "**Verify Street Names**" (step no. 2 in Fig. 7). This begins the verification process, which in most cases should take no more than a few minutes.

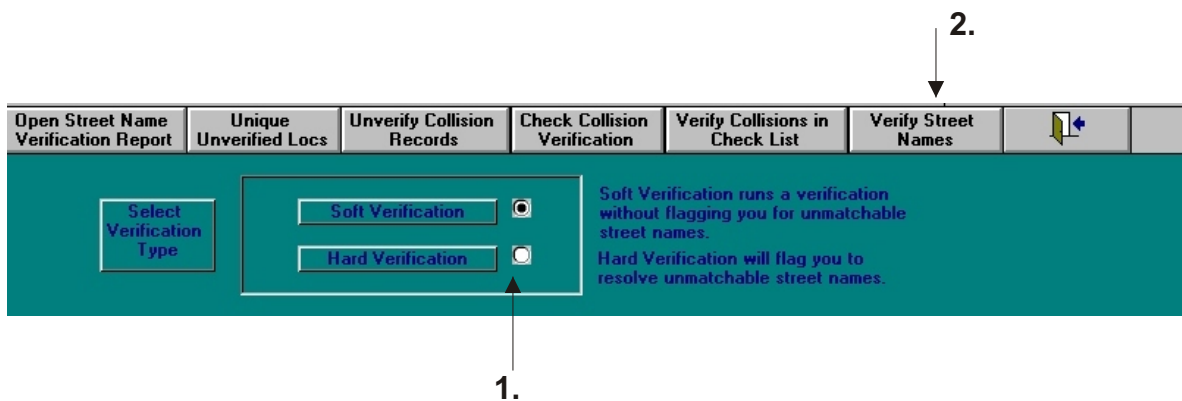


Fig. 7

When the program asks if you would like to open a report, simply click "Yes" (or hit return). You will see a report that looks very similar to the one in Fig. 8.

Street Name Verification Report

5/1/00

Date Range Reported: 01/1999 - 12/31/1999

Total Collisions: 2397

Unverified: 770

Percent Verified: 67.88

Page 1

Report #	Date	Time	Dist.	Dir.	Primary Road	Secondary Road
06501152	1/1/99	12:55 P			18 EB OFFRAMP	null
06493317	1/3/99	1:21 AM			20TH STREET	48TH STREET
06501175	1/3/99	9:30 AM			95	ENGLER AVENUE
06570051	1/4/99	10:45 A			08	
06492706	1/4/99	10:50 A			08	
06521700	1/4/99	12:10 P			SOUTH FRONTAGE RD	PAYSON DR
06562296	1/4/99	2:05 PM			SOUTH FRONTAGE RD	AVENUE 10E
06501203	1/4/99	2:30 PM			08 0	
07290005	1/4/99	4:07 PM			95	G ST
06503150	1/4/99	6:00 PM			80	08003C
06501216	1/5/99	8:05 AM			08	
06501218	1/5/99	11:40 A			08037C	
06503154	1/5/99	12:40 P			08	
06562291	1/5/99	2:17 PM			GILA RIDGE RD	PACIFIC AV
06521522	1/5/99	2:46 PM			08	
06492899	1/5/99	5:36 PM			OLD HWY 80	AVENUE 5E

Fig. 8

This is a sample report for the period from February 1, 1999 through December 21, 1999. The total number of collisions for the period is 2,397. 770 location names could not be verified, and the percent of verified locations is 67.88.



Soft verification compares location information for collision records with the street layout table, changing as many reported street names as it can on its own. After completion, the **hard verification** process will let you correct street names for collision records that the **soft verification** process was not able to correctly identify. After the **hard verification** process, the percentage of verified street names will increase, usually some point between 97 and 98 per cent. Getting as close to complete verification 100 percent is ideal, of course, but is not achievable, primarily due to the personal, idiosyncratic, and sometimes erroneous practices of human beings!

2.4 HARD VERIFICATION OF STREET NAMES

Hard Verification allows you to verify one-by-one those locations that could not be verified through the regular soft verification process. By selecting the verification type as **hard** and then clicking on “**Verify Street Names**,” you will see the following screen (Fig. 9):

Select Street Names

No Street Names matching the Secondary Street can be found in the Existing Streets Table. Please enter the correct street names for each Primary and Secondary Roads. If the Secondary Road as reported is a commonly used abbreviation for the true name, then add it to the Street Alias Table using the *Add Secondary to Alias Table* Button.

Primary Road		Secondary Road	
Reported As:	IMPERIAL HWY	Reported As:	MERVYNS DR
Best Guess:	IMPERIAL HIGHWAY	Best Guess:	MERVYNS DRIVE
Existing Streets:	*	Existing Streets:	*
Write In:		Write In:	
Closest Matches:		Closest Matches:	MONTE MAR VISTA DRIVE AVENIDA SAN LORENZO AVENUE OF THE MIRADA

Scratch Pad

Street Name: *
Cross Street: *

Selected Street Names:

Primary Road:		Secondary Road:	
Collision Date:	02/13/1995	Add Secondary to Alias Table	OK
Collision Time:	1:02:00 PM		
Distance:	0	CANCEL	Delete this Collision
Direction:	Not Stated		
Postmile:	2.52		
Party 1:	West	Proceeding Straight	
Party 2:	West	Stopped in Road	

Fig. 9

Street locations are listed by **primary road** and **secondary road**, and streets are automatically listed in the “**Reported As**” field. Street names are often reported in abbreviated, unusual, or idiosyncratic form, and the Collision Database is unable to recognize automatically such nomenclature. The **Best Guess** field will contain the closest possible match if one is available. The **Existing Streets** field contains a drop-down menu that includes the formal names of all of the streets in your city. You can select the appropriate name from this list.

Take a note of the **Closest Matches** field. If the Collision Database finds a perfect match for a street name, this field will be blank, and the street name will appear in the **Best Guess** field. If, however, the Database does not find a perfect match, the three closest matches will appear in the **Closest Matches** field. (The Closest Matches search is based on locating similar letters among all the street names in the street layout table.) If the proper street name appears in this list, you can select it by clicking on it with the mouse.



Another of Crossroads Software's user-friendly features is the **Scratch Pad**, located at the center of the **Select Street Names** screen (see Fig. 9). You can use the Scratch Pad if the Collision Database is unable to find perfect matches for the reported street names. Either type in the name of the primary or secondary road in the **Street Name** field of the **Scratch Pad** or select it from the drop-down menu (just hit the down-arrow on the right). Once you find a match, click on the drop-down menu of the **Cross Street** name to bring up a list of all the streets that cross the first **Street Name**. Once you find the appropriate name, click on it to highlight and place it in the field box.

A screenshot of the 'Scratch Pad' interface. It features a green border and a white background. On the left, there is a small box labeled 'Scratch Pad'. To its right are two input fields. The top field is labeled 'Street Name:' and has a small asterisk to its right. The bottom field is labeled 'Cross Street:' and also has a small asterisk to its right. Both fields are currently empty. To the right of each field is a small square button with a downward-pointing arrow, indicating a drop-down menu.

Note that when you select a street name from any of the boxes above the **Scratch Pad**, the street name will appear in the **Scratch Pad**. A convenient way to pick the correct street names is to select a street name for either the “Primary” or “Secondary” road from above that you know to be correct, and then select the correct “Cross Street” name from the **Scratch Pad**.

Once you have verified a location, simply click the “OK” button to enter it into the collision report and to proceed to the next unverified location.

“Aliases”

Some street names, typically major streets, have commonly-used abbreviations. For example, if your city has a Martin Luther King Avenue, chances are it is often abbreviated as “MLK Ave” or “MLK.” Such “aliases” can be added to the database by simply clicking the “**Add Primary to Alias Table**” if it's a primary street name or “**Add Secondary to Alias Table**” if it's a secondary street name. Use this feature only when the abbreviated street name translates to one, and only one, possible solution street.



The reason why aliases can only be used with one, and only one, possible solution street is because the Collision Database will always translate the alias into one, and only one, formal street name. Thus “MLK” is entered as an alias for Martin Luther King Boulevard; from that point on, the Database will always read “MLK” as Martin Luther King Boulevard. Avoid using aliases if there is more than one possible solution street. Let's say, for example, that “Rt 30” (meaning “route” 30) is a typical abbreviation for Main Street. But the same street eventually changes names and becomes First Street. If the alias “Rt 30” is entered for Main Street but a collision actually occurred on First Street, the collision report will therefore be incorrect.

At the bottom half of the hard verification screen are the “**Selected Street Names**” boxes (Fig. 10). If a street name has been selected (by clicking on it), that name will appear in either the primary or secondary road field of this section. These are the street names that will go directly into the collision report. Notice that the form also contains date, time, distance, direction, and other information about the collision.

Selected Street Names:			
Primary Road:	<input type="text"/>	Secondary Road:	<input type="text"/>
Collision Date:	02/13/1995	Add Secondary to Alias Table	OK
Collision Time:	1:02:00 PM		
Distance:	0	CANCEL	
Direction:	Not Stated		
Postmile:	2.52		
Party 1:	West	Proceeding Straight	Delete this Collision
Party 2:	West	Stopped in Road	

Fig. 10

Once you have finished hard verification of your street names, click “OK” to proceed to the collision record.

2.5 VERIFYING A SPECIFIC LOCATION

If you want to run a verification for specific street-name spelling of a primary or secondary road, enter the names in the **street name** and/or **cross street** fields on the **Street Name Verification** form.

2.6 ENTERING COLLISION REPORTS USING THE COLLISION INPUT FORM

If you are not entering traffic collision information in SWITRS format or through a 555 report (for entering 555 reports, see section 2.7), you can input collision reports through the Collision Input Form. From the **Traffic Collision Database Main Menu**, click **“Records Input/Edit/Delete,”** and click **“Collisions.”** From the **Collision Records Menu**, select the **“Enter Collision Report”** option; this will take you directly to the **Collision Input Form** screen (Fig. 11).

The screenshot shows the 'Collision Input Form' interface. At the top right, there are two buttons: 'Input This Record' and 'Cancel This Record'. The form is organized into several sections:

- Special Conditions:** Includes a dropdown menu, '#Injured: 0', '#Killed: 0', and checkboxes for 'Hit & Run' (Felony, Misd.).
- Location Fields:** Includes 'City' (Los Angeles), 'County', 'Judicial District', 'Reporting District', and 'Beat'.
- Collision Occurred On:** Includes 'Date: 03/21/2000', 'Time', 'NCIC#', and 'Officer ID'.
- Milepost Information:** Includes 'At Intersection With', 'Or', 'Dist', 'Ft/Miles', 'Feet', and 'Direction'.
- Secondary Road:** A text input field.
- Action Buttons:** A grid of buttons for 'Parties' (Add/Edit a Party), 'Conditions' (Conditions), 'Injured, Witnesses & Passengers' (Add/Edit a Witness / Passenger / Victim), and 'Narrative / Custom' (Long Narrative, Custom Input).
- Bottom Section:** Includes 'Preparer's Name', 'Dispatch Notified', 'Reviewer's Name', 'Date Reviewed', and 'Highest Degree of Injury'.

Fig. 11

Simply enter in the conventional collision information in the appropriate fields, such as city, judicial district, county, date, time, officer ID number, etc. Note that some of the fields offer drop-down menus, as well as the user-friendly “fill-in” feature that suggests possibilities as you type. See the separate **Collision Type Manual** for detailed descriptions of each entry.

Near the bottom of the screen are seven buttons, grouped according to type, that will take you to additional screens. For example, to add a new party, simply click on the “**Add a Party**” button; to edit a partywell, there's an “**Edit a Party**” button as you might expect.

The “**Add a Party**” screen looks just like Fig. 12 below.

The screenshot shows a complex data entry form with multiple sections. The left side contains personal and identification details for a party, including fields for Party #, Party Type, Driver's Lic#, State of D.L., Class, Safety Equip., First Name, Middle Name, Last Name, Street Address, City, State, Zip, Country, Sex, Hair, Eyes, Height, Wt. (lbs), Birthdate, Race, Home Phone, Business Phone, Extension, Insurance Carrier, Policy Number, Dir. of Travel, On Street, and Speed Limit. The right side contains vehicle and trailer information, including Veh Yr., Vehicle Make, Model, Veh. Color, Veh Lic#, State, Trl. Yr., Trailer Make, Trailer Model, Trailer Color, Trailer Lic#, Trailer State, Owner's Name, Owner's Address, Disposition of Vehicle on Orders of, Officer, Driver, Other, Prior Mechanical Defects, and Describe Vehicle Damage (with options UNK, NONE, MINOR, MOD, MAJOR, TOTAL). At the bottom, there are three buttons: 'Custom Input', 'Input This Party', and 'Delete This Party'.

Fig. 12

Once you have entered all of the necessary information, select “**Input This Party**,” unless you decide not to keep the data. In that case, select “**Delete This Party**.”

The **Conditions** screen (Fig. 13) in the **Collision Input Form** allows you to enter information concerning weather, road conditions, and other condition and party information found on page two of the 555 collision report form. Once in this screen, you may enter additional party information. When finished with the Conditions form, simply click the “**Back to Page 1**” button to return to the **Input Form**.

The screenshot shows a form with several sections:

- Property Damage - Owner & Address:** A yellow highlighted field.
- Owner Notified:** A checkbox labeled "No".
- Back to Page 1:** A button in the top right.
- Property Damage - Description:** A text input field.
- Party at Fault:** A table with columns: Party at Fault, VC Section Violated, Sub, Cited No, and a checkbox.
- Prim. Collision Factor:** A dropdown menu.
- Weather - 1, Weather - 2, Lighting, Road Surface, Roadway Conditions - 1, Roadway Conditions - 2:** Each has a dropdown menu.
- Traffic Control Devices, Type of Collision, Motor Vehicle Involved With, Pedestrian Action:** Each has a dropdown menu.
- Action Buttons:** A vertical stack of three buttons: "Add Page 2 Party Info", "Edit Page 2 Party Info", and "Short Narrative".

Fig. 13

Finally, you can use the remaining additional forms (or screens) to enter additional data about witnesses, passengers, or victims, as well as a **narrative** about the traffic collision and **custom** information.

When you have finished filling out the **Collision Input Form**, the collision record itself cannot be entered into the database until you hit the **"Input This Record"** button at the top right of the form (Fig. 14). If for any reason you wish not to input this record and want to delete the information -- hey, we all make mistakes, right? -- simply select the **"Cancel this Record"** button at the top right.

The screenshot shows the bottom section of the form with two buttons at the top right: "Input This Record" and "Cancel This Record". Arrows point from the text "When You're Finished" to the "Input This Record" button and from "If You Change Your Mind" to the "Cancel This Record" button.

The form fields below the buttons are:

- Special Conditions:** A dropdown menu.
- #Injured:** A text input field with "0".
- #Killed:** A text input field with "0".
- Hit & Run:** Two checkboxes: "Felony" and "Misd.", both unchecked.
- City:** A dropdown menu with "Fullerton".
- County:** A dropdown menu with "Orange County".
- Judicial District:** A dropdown menu with "North Municipal Court".
- Reporting District:** A dropdown menu.
- Beat:** A dropdown menu.
- Report Number:** A text input field with "98-".
- Collision Occured On:** A dropdown menu.
- Date:** A text input field with "03/28/2000".
- Time:** A dropdown menu.
- NCIC#:** A dropdown menu.
- Officer ID:** A dropdown menu.

Fig. 14

2.7 ENTERING COLLISION INFORMATION THROUGH A 555 REPORT

STATE OF CALIFORNIA TRAFFIC COLLISION REPORT CHP 555 Page 1								
SPECIAL CONDITIONS		# INJURED 0	HT & Rth FOLLOW	CITY	JUDICIAL DISTRICT	LOCAL REPORT NUMBER		
		# KILLED 0	HT & Rth MTH	COUNTY Los Angeles	REPORTING DISTRICT	BEAT		
# OF REPORT	COLLISION OCCURRED ON				MO. DAY YEAR 03:21/2000	TIME (24:00)	HIC#	OFFICER I.D.
	MILEPOST INFORMATION				DAY OF WEEK Tuesday	TOW AWAY <input type="checkbox"/> No	PHOTOGRAPHS BY:	
	AT INTERSECTION WITH OR Feet OF					STATE HWY <input type="checkbox"/> No		
PREPARER'S NAME			DISPATCH NOTED	REVIEWER'S NAME			DATE REVIEWED	

Add a Party

Page 2

Add Injured / Witness / Passengers

556 (Narrative)

Edit a Party

Edit Injured / Witness / Passengers

Collision Investigation Manual

Configuration

Input This Record

Cancel This Record

Fig. 15

Fig. 15 shows page one of the **555 Report**, which is very similar to the **Collision Input Form** and generally follows the same steps as the Input Form. The **555 Report** is simply another way to enter collision information into the Collision Database.

This input method is best used if you want to create a printed copy of the 555 form as well as input the collision record for analysis.

Page 1 displays the first page of the 555 form; to see and fill out the second page, click the **“Page 2”** button (when you are at page 2 and you wish to return to the first page, all you have to do is hit the **“Back to Page 1”** button). To enter collision information and other data, just click in the field you wish to write in. The field will turn yellow and a cursor will appear. Start typing, and when you complete each field, press the “tab” key to advance to the next one. Note that, like many other parts of the Collision Database, the **555 Report** has drop-down menus that allow you to select a street name, weather condition, or other information from a list of possibilities -- or the Database's smart features will fill in those possibilities as you type.



Some of the fields such as date and time have fixed spaces or digits. For example, you can enter a maximum of eight digits for the date. Once you have reached the total number of spaces or digits, the cursor automatically jumps to the next field, thus saving you a keystroke or a mouse-click. Some of these fixed fields have alterable settings, which can be changed in the **Configuration** feature of the Collision Database. For more information, go to chapter five.

Like the **Collision Input Form**, the **555 Report Form** has options to:

- Add a Party**
- Edit a Party**
- Add Injured/Witness/Passengers**
- Edit Injured/Witness/Passengers**
- Create a Narrative (556 Report)**

There is one option available only to the **555 Report Form**: the **Collision Investigation Manual**. The **Collision Investigation Manual** will reference the actual CHP Collision Investigation Manual for each field in the 555 Report. The feature will not work if you have not selected one of the fields in the report form. If you have selected a particular field and wish to look it up in the manual, click the "**Collision Investigation Manual**" button, and the manual will appear in a separate pop-up window (Fig. 16)

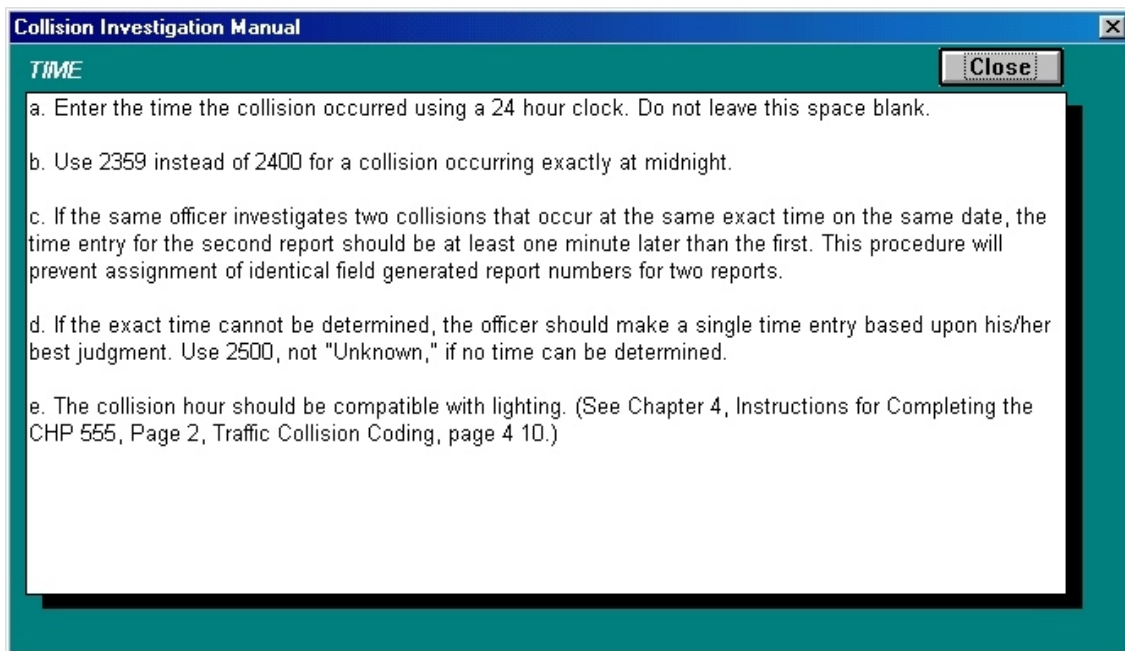


Fig. 16

The “Add a Party,” “Edit a Party,” “Add or Edit Injured/Witness/ Passengers,” and “556” options work quite similarly -- click on whichever feature you wish to use, enter your data in the appropriate fields, and then click “Input” or “Delete” to enter the information into the Database or to delete it completely.

Let's look at an example. From the **555 Input Form**, hit the “Add a Party” button.

STATE OF CALIFORNIA
TRAFFIC COLLISION REPORT
CHP 555 Page 1

SPECIAL CONDITIONS

# INJURED 0	HIT & RUN FELONY <input type="checkbox"/>	CITY
# KILLED 0	HIT & RUN MURDER <input type="checkbox"/>	COUNTY Los Angeles

COLLISION OCCURRED ON

MILEPOST INFORMATION

AT INTERSECTION WITH

OR Feet OF

PREPARER'S NAME

DISPATCH NOTED

Click Here → Add a Party

Edit a Party

Page 2

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You should now see the **Party Input Form** as shown in Fig. 17 below.

Party No. 1 **Party Type** [dropdown]
DRIVERS LICENSE NUMBER **STATE** CA **CLASS** C **SAFETY EQUIP.** [dropdown]
NAME (FIRST, MIDDLE, LAST) _____
STREET ADDRESS _____
CITY _____ **STATE** CA **ZIP** _____
SEX [dropdown] **HAIR** [dropdown] **EYES** [dropdown] **HEIGHT** [dropdown] **WT. (LBS)** [dropdown] **BIRTH DATE** [dropdown] **RACE** [dropdown]
HOME PHONE: _____ **BUSINESS PHONE:** _____ **EXTENSION:** _____
INSURANCE CARRIER _____ **POLICY NUMBER** _____
DIR. OF TRAVEL [dropdown] **ON STREET OR HIGHWAY :** [dropdown] **SPEED LIMIT** [dropdown]
TYPE OF VEHICLE [dropdown] **VC SECTION** [dropdown] **SUB** [dropdown] **CITED** [checkbox]
OTN ASSC FACTOR [dropdown] **OTN ASSC FACTOR** [dropdown]
Party Type
D - Driver
PE - Pedestrian
PA - Parked Vehicle
B - Bicyclist
O - Other
VEH. YR. [dropdown] **MAKE** [dropdown] **MODEL** [dropdown] **COLOR** [dropdown] **LICENSE NO.** CA **STATE** CA
OWNERS NAME _____ SAME AS DRIVER
OWNERS ADDRESS _____ SAME AS DRIVER
DISPOSITION OF VEHICLE ON ORDERS OF: [dropdown] OFFICER DRIVER OTHER
PRIOR MECHANICAL DEFECTS: [dropdown] NONE APPARENT REFER TO NARRATIVE
VEHICLE IDENTIFICATION NUMBER: _____
CAP. VEH. TYPE [dropdown] **DESCRIBE VEHICLE DAMAGE**
 TRK NOVE MINOR SHADE IN DAMAGED AREA
 TRCO MAJOR ROLL-OVER
MOVEMENT PREC COL [dropdown]
SOBERETY [dropdown]
SOBERETY [dropdown]
SPECIAL INFO [dropdown]
Input This Party **Pick a Person**
Delete This Party **Collision Investigation Manual**

Fig. 17

The other add and edit features follow the same principle, although one extra step is added if you edit a party or edit injured/witness/passengers: a dialog box will appear allowing you to select a specific party or injured/witness/passengers from a list. Click the one you want to edit and then hit the “OK” button.

2.8 READ/WRITE COLLISIONS

A very uncomplicated feature of the Collisions Database, the **Read/Write Collisions** option allows collision records to output to an external database or to be read into the internal, Crossroads Software Database from an external database. From the **Records Menu**, select “**Read/Write Collisions.**” Once the “Archive Collision Records” screen appears, simply enter a range of dates and then click on the appropriate button at the top left, whether you wish to write the records into another, external database or you are reading the records into this Database (see Fig. 18).

Output Collisions to External Database	Input Collisions from External Database		
----------------------------------------	-----------------------------------------	--	--

Enter starting and ending dates for which you want records written to or read from the external database.

Starting Date:

Ending Date:

City (determined by RD List)

Fig. 18

When you output records to an external database, the program will tell you how many collision records it will export and prompt you to confirm the process. Fig. 19 is a sample of such a message. Once you click this “Yes” button, a dialog box appears for you to specify the location and name of a database file that you will create that will hold the collision records. Note that this process “copies” the collision records out; it does not “move” them out.



Fig. 19

When you read records into the Collision Database, a Windows dialog box will appear allowing you to find the data file you wish to import. Select whichever drive has the file, navigate to the location of the file, click on it to highlight it, and then click “OK” (Fig. 20). Any collision records in the selected database, and within the specified date range, will be copied into your database.

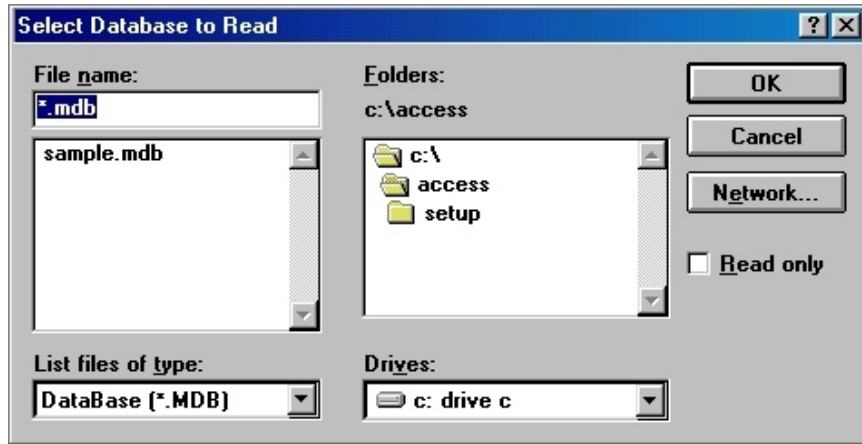


Fig. 20

2.9 EDIT AND PRINT COLLISION RECORDS

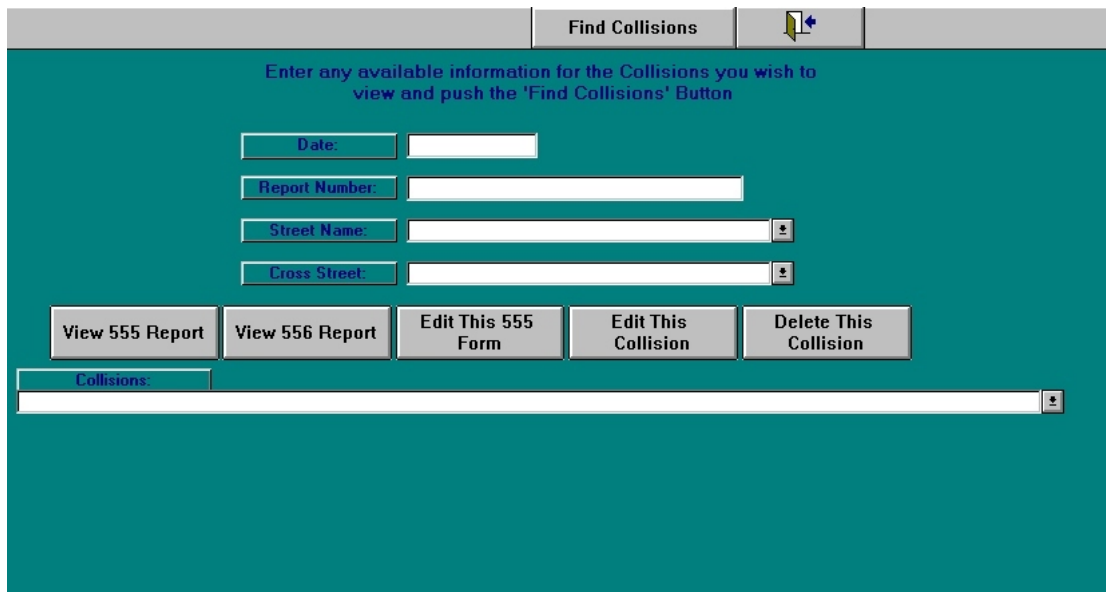


Fig. 21

Fig. 21 shows the screen of the **Edit/Print Collisions** option, one of the wonderfully ingenious features of the Collision Database. You can edit the information for any collision record or make a print-out of any collision record. And to find a specific collision, you only need one piece of information, whether it's a date, report number, or street name. Of course, the more information you enter to find a specific collision, the quicker it is to bring that record up.

Looking at the **Edit/Print Collisions** screen in Fig. 21, notice that there are four blank fields covering **date**, **report number**, **street name**, and **cross street**. Enter whatever appropriate information you have. If you only know the date of the collision, put in the date. If you only know the street name, enter it. Once you have entered the search criteria, click on the “**Find Collisions**” button at the top of the screen. The database will find and display all relevant collisions virtually instantaneously. The resulting collision records will appear in the “**Collisions**” field at the bottom.

For example, using our hypothetical database for Hill Valley and entering only a date of January 30, 1995, the Collision Database will give all collisions that occurred on that day within the city and then display the records in the **Collisions** field (see Fig. 22 below).

Find Collisions

Enter any available information for the Collisions you wish to view and push the 'Find Collisions' Button

Date:

Report Number:

Street Name:

Cross Street:

View 555 Report

View 556 Report

Edit This 555 Form

Edit This Collision

Delete This Collision

Collisions:

accident number	Report Number	date	time	primary road	secondary road	distan	direction
5508015204883.00		01/30/1995	1:52 AM	LEMON STREET	SHADOW LANE	63	North
5508094500827.00		01/30/1995	9:45 AM	ORANGETHORPE AVE	PLACENTIA AVENUE	100	West
5508113200738.00		01/30/1995	11:32 AM	CHAPMAN AVENUE	LADERA VISTA DRIVE	200	East
5508153200662.00		01/30/1995	3:32 PM	COMMONWEALTH AVI	HIGHLAND AVENUE	0	Not Stated
5508163200662.00		01/30/1995	4:32 PM	EUCLID STREET	ORANGETHORPE AVE	450	North

Fig. 22

If you search for collisions using only a date or a street name, there is a good chance the database will present you with more than one collision record. If that happens, simply click on the collision record you wish to edit, print, or delete. After you have selected it, it will appear in the **Collisions** field.

Once you have located the collision record you wish to edit or print, the next step involves the five large buttons at the center of the screen. They look like this:



Fig. 23

These options should be relatively self-explanatory. To view either the 555 report or the 556 report of the collision you have selected, just click the appropriate button.

If you choose the **“Edit this Collision”** option, the collision information will appear in the **collision report format**, the very same format used for the **Enter Collision Report** feature. Once you have made the appropriate changes, click the **“Keep Edit Changes”** button to enter the changes into the database or the **“Cancel Edit Changes”** if you decide to discard whatever amendments you have made.

“Delete This Collision” does exactly what it says--it removes the specific collision record from the database.

2.10 DELETE COLLISIONS

The next-to-last option in the **Records Menu** is **“Delete Collisions.”** This allows you to delete all collisions within a range of dates. So, for instance, if you want to delete all records between February 1, 1995 and March 31, 1995, all you would need to do is enter the **starting date** and **ending date** and then click the **“Delete From Collision Database”** button (Fig 24).

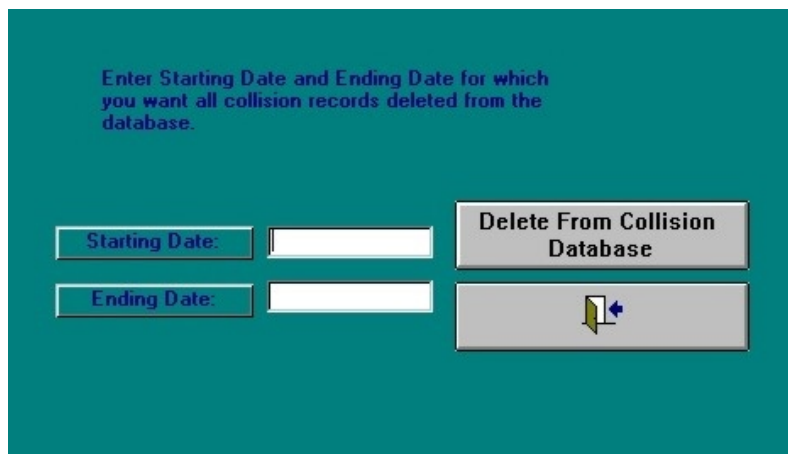


Fig. 24



Keep in mind that the dates you enter are *through* the starting and ending dates, not *up to* those dates. This means that if you want to delete records between January 1 and January 31, 1996, *including* the collisions that occurred on January 1 and 31, you would make “01/01/1996” your starting date and “01/31/1996” your ending date. But if, for example, you want to delete records from January 1 *up to* January 31 (meaning, not including January 31), you would make “01/01/1996” your starting date and “01/30/1996” your ending date.

Part Two Citations and DUIs

2.11 CITATIONS AND DUIs

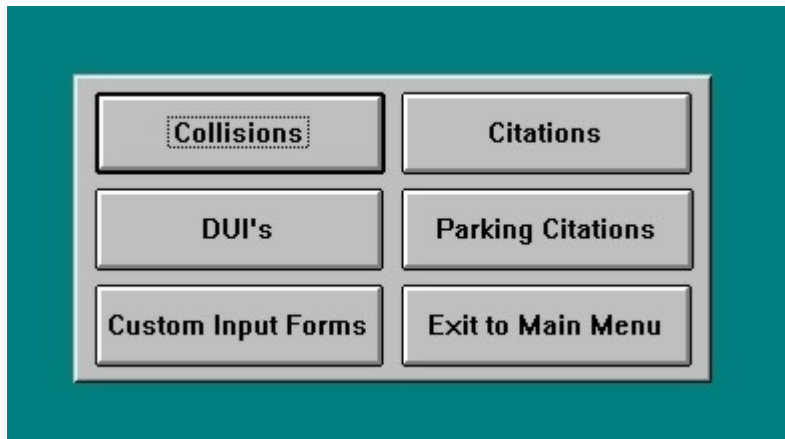


Fig. 25

From the Main Menu (Fig. 25), select the “**Citations**” button to bring up the “**Citations Records Menu**” (Fig. 26).



Fig. 26

The “Citation Records Menu” gives you four possibilities: **enter citations**, **edit reports**, **read/write records**, and **delete citations**. For detailed, step by step instruction for entering citation information, please refer to your **Data Input Module**. In the meantime, you will find some brief explanations of the citations features below, along with a few screen shots to help you through the process.

The image shows a complex data entry form for a citation. The form is organized into several sections with black headers. At the top, there are fields for "Citation" (Date, Day of Week, Time) and "Citation Number" (BG, Case Number, Reporting District). Below this are fields for "First Name", "Middle Name", "Last Name", and "Address". The next section includes "City", "State" (dropdown with "CA" selected), "Zip", "Commercial" (checkbox), and "Haz Mat" (checkbox). The "Driver" section includes "Driver Lic. No.", "State" (dropdown with "CA" selected), "Birthdate", "Juvenile" (checkbox), "Sex", "Race", "Race Descript.", "Hair", "Eyes", "Height", and "Weight". The "Vehicle" section includes "Vehicle Lic. No.", "State" (dropdown with "CA" selected), "VehYr", "Vehicle Make", "Model", "Body Style", and "Veh. Color". There are four rows for "Violation" information, each with "Violation" (dropdown), "Sub" (dropdown), and "Violation Description" (text field). The "Speed" section includes "Speed", "Speed Limit", and "Radar" (checkbox). The "Address" section includes "Address #", "Addr. Direction", "Street Name", "at", and "Secondary Road" (dropdown). The "Officer" section includes "Officer ID", "Officer Name", "Court", and "Court Date" (dropdown). On the right side, there are "Input Citation" and "Cancel Input" buttons, and a "City" dropdown field.

Fig. 27

Fig. 27 displays the **Citation Input Form**. Like the other forms in the Collision Database, each field highlights in yellow when you click it, and the cursor appears. To move to the next field, all you have to do is hit the tab key. If the field has a fixed length, the cursor will automatically jump to the next field once you have filled in the maximum number of spaces.

Note that many of the fields have drop-down lists -- just click on the down arrow -- and you can select from the available options or (without clicking the down-arrow) you can start typing and the Collision Database will fill in possibilities.

Another way to open the drop-down list is to hit the <F4> key.

Upon completing the form, click the “**Input Citation**” button to enter the citation or, if you decide you want to trash the citation, click the “**Cancel Input**” button.

The **DUI Input Form** works essentially the same way and possesses the same features. From the **DUI Records Menu** (Fig. 28), hit the “**Enter DUI Reports**” button; this will bring up the Input Form (Fig. 29).

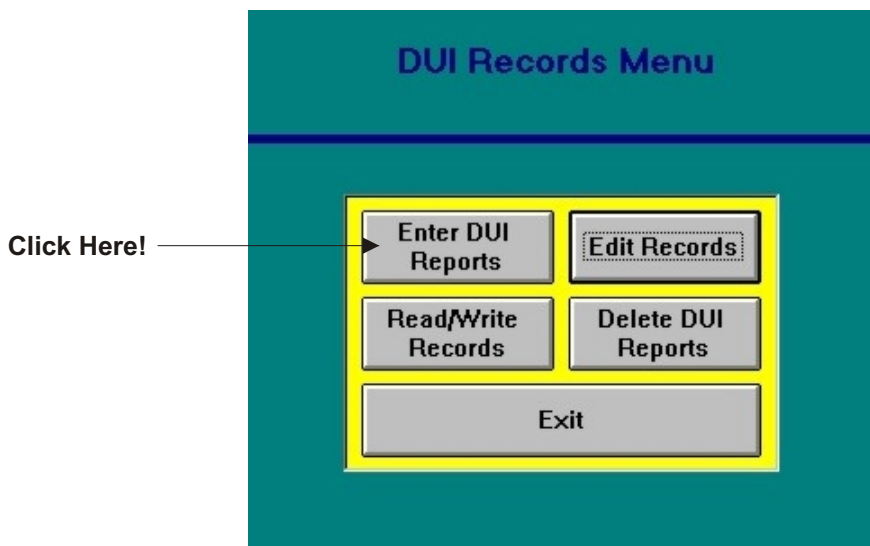


Fig. 28

Input DUI Report					Cancel Input	
Citation Number		Case Number		Date	Day of Week	Time
First Name		Middle Name		Last Name		
Sex	Race	D.O.B.	Age	BAC	Chem Test	
Arrest Date	Violation 1	Sub	Description			
Court Date	Violation 2	Sub	Description			
Status	Violation 3	Sub	Description			
	Violation 4	Sub	Description			
Report Dist.	Officer ID:	Officer Name:		Drugs:	IBAR:	
Drug Results						
Primary Road:						
Secondary Road:						

Fig. 29

Enter all the relevant data in the fields and then click the appropriate button to input the DUI record (or to cancel the record). Once again, for a more detailed description of the DUI Input form, see your **Data Input Module** manual.

2.12 DELETE CITATIONS OR DUIs

To delete citations or DUIs, select the **Delete Citations** option from the **Citations Record Menu** (Fig. 30) or the **Delete DUI Reports** from the **DUI Records Menu** (easy, isn't it?). Both delete features will ask you to enter a range of dates; once that is done, just click the **Delete** button to the right of the date fields (Fig. 31). If you want to bail out without deleting any records, click the back button.

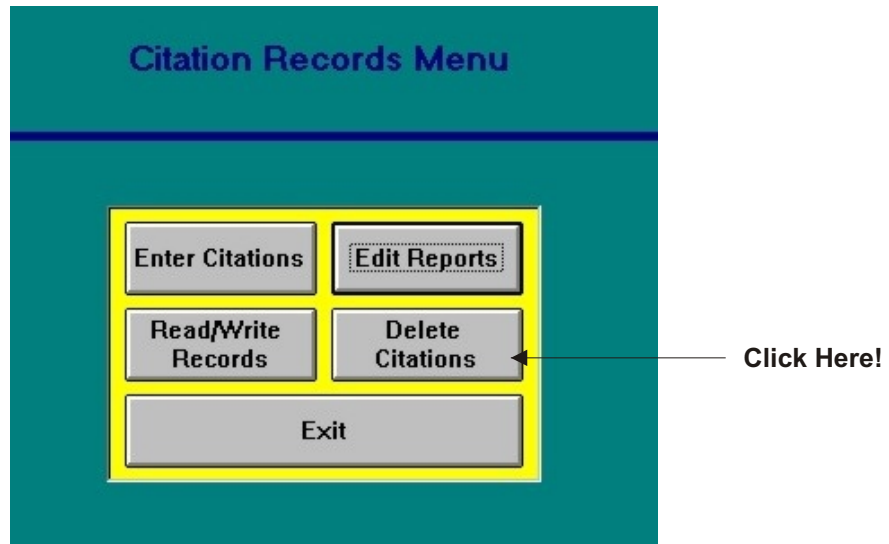


Fig. 30



For details about entering dates, see the “hand note” at the end of section 2.10.

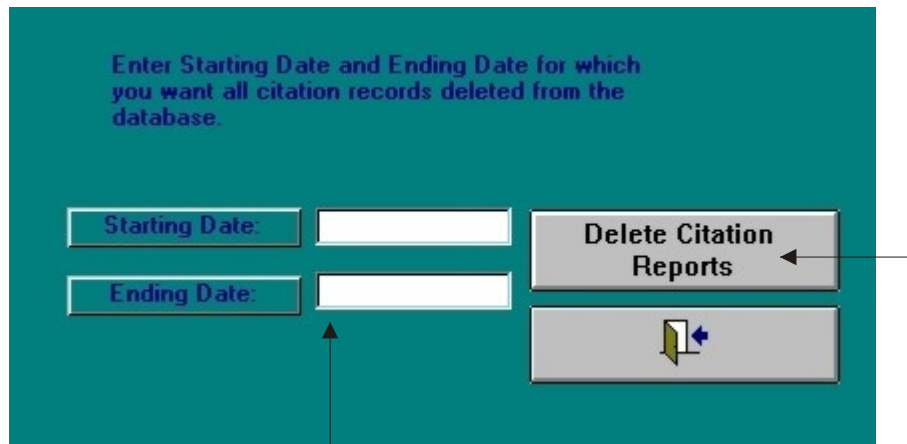


Fig. 31

Enter Dates

Click Here to Finish the Job

2.13 EDIT REPORTS

If you have read every page so far (and thank you if you have!), you might remember the section on editing and printing collisions (section 1.9). The **Edit Report** option in both the **Citation Records Menu** and the **DUI Records Menu** provides similar editing and printing power, but at three times the capability. It allows you to find, edit, delete, and view DUIs, citations, and collisions.

So, how do you use this powerful feature? All it requires is a few set of clicks and data input.

First, click the “**Edit Reports**” from either the **Citation Records Menu** or the **DUI Records Menu** (Fig. 32).

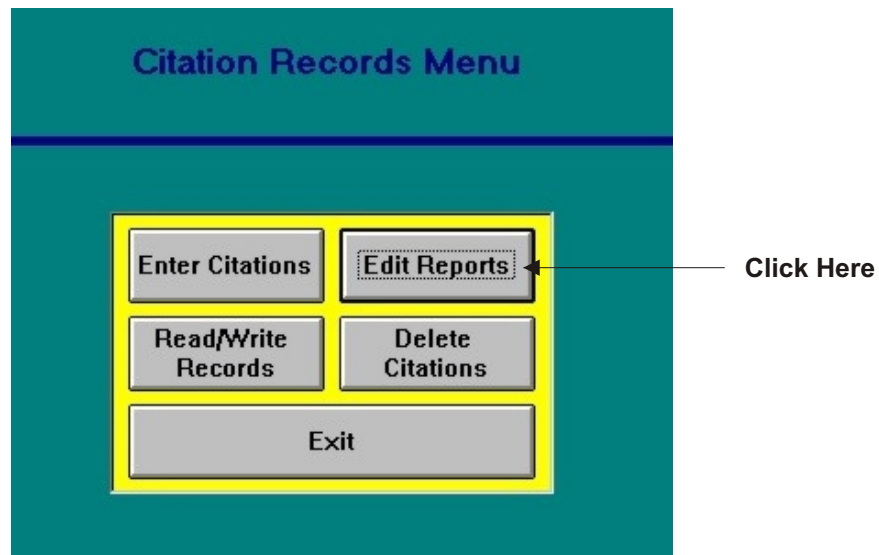


Fig. 32

This will bring up the following screen (Fig. 33):

Enter any available information for the records you wish to view and push 'Find Collisions' or 'Find Cites' or 'Find DUI's' (Note that you may enter a single date or a date range)

Fig. 33

As the instructions at the top of the screen state, you can “enter any available information” that you might have, or you can fill all the fields. Notice the three large buttons at the very top: “**Find DUIs**,” “**Find Cites**,” and “**Find Collisions**.” Simply click the type of record you wish to search, and the results will appear in the respective field at the bottom of the screen. To select a specific citation, DUI, or collision record, click it once to highlight it.

Now, notice the seven large grey buttons on the left and the right. These do exactly as they’re labeled -- edit or delete citations, edit or delete DUIs, and edit or delete collisions. The “**Show 555 Form**” button will bring up the respective 555 report, which you have the option of printing.

For an example, take a look at Fig. 34 below. In this sample, we have a **starting date** of January 1, 1999 and an **ending date** of January 31, 1999. With only those two fields completed and the others blank, we hit the “**Find Cites**” button, and it brings up a list of all citations for the month of January. Notice that the records are presented in a list in the **Citations** field near the bottom.

Find DUI's Find Cites Find Collisions

Enter any available information for the records you wish to view
 and push 'Find Collisions' or 'Find Cites' or 'Find DUI's'
 (Note that you may enter a single date or a date range)

Edit This Citation

Delete This Citation

Edit This DUI

Delete This DUI

Start Date: **End Date:**

Report Number:

Last Name:

Property Damage Owner:

Sort By:

Show 555 Form

Edit This Collision

Delete This Collision

Collisions:

Citations:

Report Num	Date	Date Entere	Last Name	First Name	Violation	Juve	District	City
L5139	01/22/1999	11/23/1999	DOE	JAKE	27315D	No	2245	CALABASAS
L5117	01/12/1999	11/13/1999	DOE	JANE	27315D	No	1014	MALIBU
L5117	01/12/1999	11/13/1999	DOE	JANET	22100B	No	1014	MALIBU
L5131	01/17/1999	11/17/1999	DOE	JOHN	22350	No	1017	MALIBU
L5131	01/19/1999	11/22/1999	DOE	JOHN	22350	No	1017	MALIBU
L5117	01/12/1999	11/13/1999	DOE	JOHNNY	22350	No	1014	MALIBU

Fig. 34

2.14 READ/WRITE RECORDS

The **Read/Write Records** feature can be accessed from either the **Citation Records Menu** or the **DUI Records Menu** by simply selecting the “**Read/Write Records**” option. One mouse click will bring up the **External File Input/Output Screen** (Fig. 35).

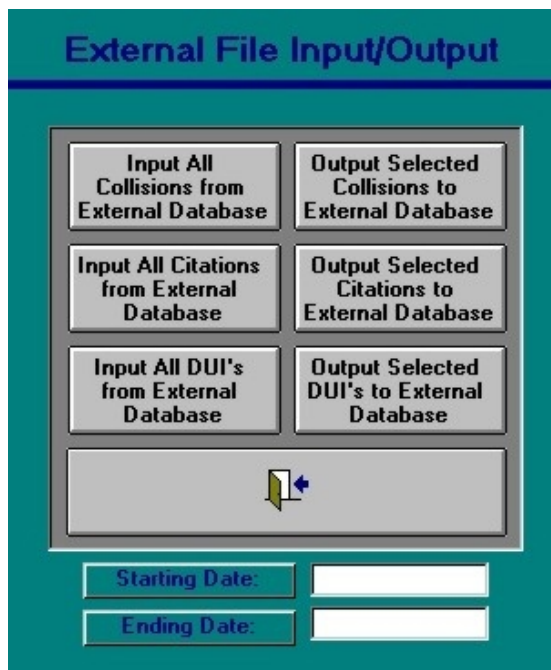


Fig. 35

Inputting or outputting collision, citations, or DUI records to or from an external database is a relatively easy process, and it works much like that of the **Read/Write Collision** feature in the Collision portion of this database (see section 2.8). The first step requires setting the parameters of the data you wish to import or export, or, in other words, the **starting date** and the **ending date**. This will include all collision, citation, or DUI records between and including those dates (for more on entering dates, see the “hand note” at the end of section 2.10).

Once you have entered a range of dates, take a look at the buttons in the menu. All the buttons on the left are for inputting data from an external database; all the buttons on the right are for outputting data to an external database. If you are importing records, simply select the type of records you will be retrieving collision, citations, or DUI and a Windows dialog box will appear, from which you can select the appropriate file (Fig. 36).

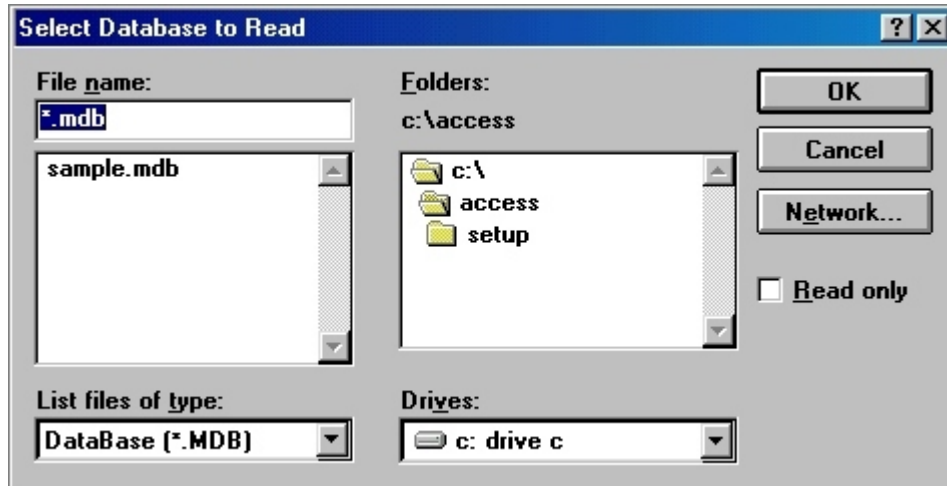


Fig. 36

Select the drive your database is located on, navigate to the folder that contains the file, click on the file to highlight it, and then hit “OK.” The Collision Database program will then read the file, allowing you to use the data with any of the program's features.

If you are **outputting** records to an external database, make sure you have a range of dates entered, and then hit the relevant button (whether collision, citation, or DUI). The program will tell you the exact number of records to be exported and ask you if you are certain about outputting them (Fig. 37).



Fig. 37

Click “Yes” or hit return. A Windows dialog box just like the one in Fig. 36 will pop up. Type in a name for your new file, select the folder you wish to place it in and the drive on which you want to place it, and then hit “OK.” The Collision Database software will then create the external database with the records you have chosen.

Part Three Parking Citations

2.15 PARKING CITATIONS

Entering parking citations into the Traffic Collision Database is as easy as giving them out to mis-parked motorists! From the Main Menu (Fig. 2), select the “**Parking Citations**” option to open the **Parking Citations Records Menu** (Fig. 38 below).



Fig. 38

Let's begin with entering parking citations. Clicking on the “**Entering Parking Citation**” button will take you straight to the **Parking Citation Input Form**, where you can enter all your citation information (Fig. 39). The form works the same way as our other forms do -- you can click on a field to enter information, and it will turn yellow and contain a blinking cursor. If the field has a fixed length, the cursor will jump to the successive field automatically, or, if this does not occur, you can tab over to the next field or click in it with the mouse. A few fields contain drop-down menus (notice the down arrows) to simplify your work. Once you have entered all of the necessary information, select “**Input Citation**” to enter the record into the database. If you decide you do not want the citation or if you wish to start over, hit the “**Cancel Input**” button.



Date	Time			Input Citation	Cancel Input
Vehicle License Number	State	Reg Year			
	CA				
Vehicle Make					
Primary Road					
Secondary Road					
Location (other description)				Report Dist.	
Violation		Description		Fees	
Officer ID	Officer Name	Citation Number			

Fig. 39

There are two other features in the **Parking Citation Records Menu**: **Edit Parking Citations** and **Delete Parking Cites**.

2.16 EDIT PARKING CITATIONS

If there is any information in a parking citation that you wish to change, you can edit the record you guessed it by hitting the **"Edit Parking Citations"** button on the **Parking Citations Records Menu**. This will bring up the **Parking Citation Table** (Fig.40), which includes a column of fields in which you can edit any amount of the parking citation information that you wish.

Parking Citation Table  

Report Number:

file number:

District:

Violation Code:

edp code:

date:

Time:

Day of Week:

Officer ID:

primary road:

secondary road:

license number:

reg year:

state:

other location:

fees:

vehicle make:

Violation Code 2:

edp code 2:


Record: 5 of 7 

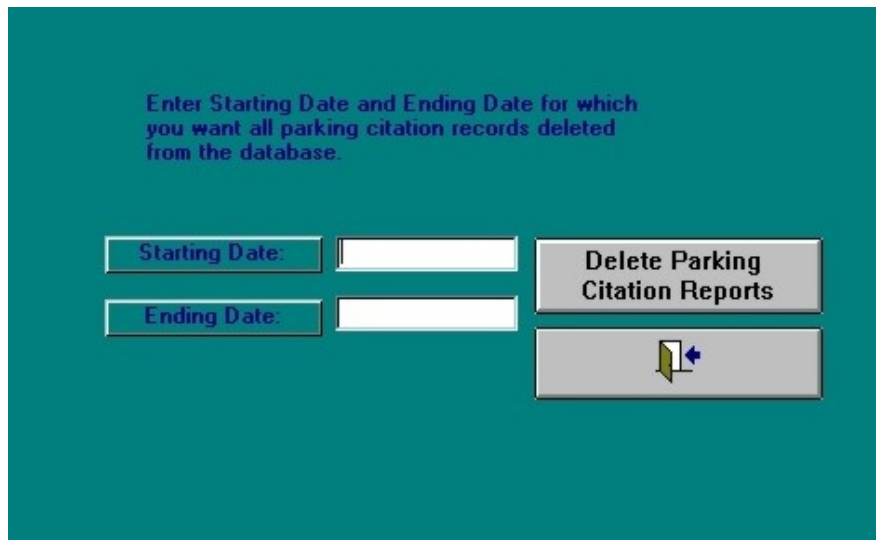
Fig. 40

Once you have finished making your changes, simply click the exit button:



2.17 DELETE PARKING CITATIONS

Deleting parking citation reports is a simple two-step process: first, enter a range of dates for those parking citations you wish to excise; second, hit the aptly-named **“Deleting Parking Citation Reports”** box (Fig. 41). (For more detail on entering dates, see the “hand note” at the end of section 2.10.)



The screenshot shows a teal-colored window with the following elements:

- Text at the top: "Enter Starting Date and Ending Date for which you want all parking citation records deleted from the database."
- Two input fields: "Starting Date:" and "Ending Date:", each followed by a white text box.
- A button labeled "Delete Parking Citation Reports" to the right of the input fields.
- A button with a right-pointing arrow and a blue plus sign below the "Delete Parking Citation Reports" button.

Fig. 41

The program will prompt you once it has calculated the exact number of records to be deleted; it will ask you to confirm your decision to throw out those records. Hit “Yes” to delete the records (well, of course!).

CHAPTER THREE

Queries and Reports

In this chapter, you will learn how to generate the many queries and reports available through Crossroads Software's Traffic Collision Database. These queries and reports illustrate the amazing capacity of the software and give you the power to use your traffic collision data in important, productive, and efficient ways. In a sense, the **Queries & Reports** and the **Graphs & Charts** section are the heart of the Database and represent the most substantial features of this product. We'll reserve **Graphs & Charts** for the next chapter, but let's go ahead and plunge into **Queries & Reports**.

Let's start at the beginning. From the **Traffic Collision Database Main Menu**, select the "**Queries and Reports**" option.

This will take you to the "**Queries Menu**" screen, as seen in Fig. 1 below.

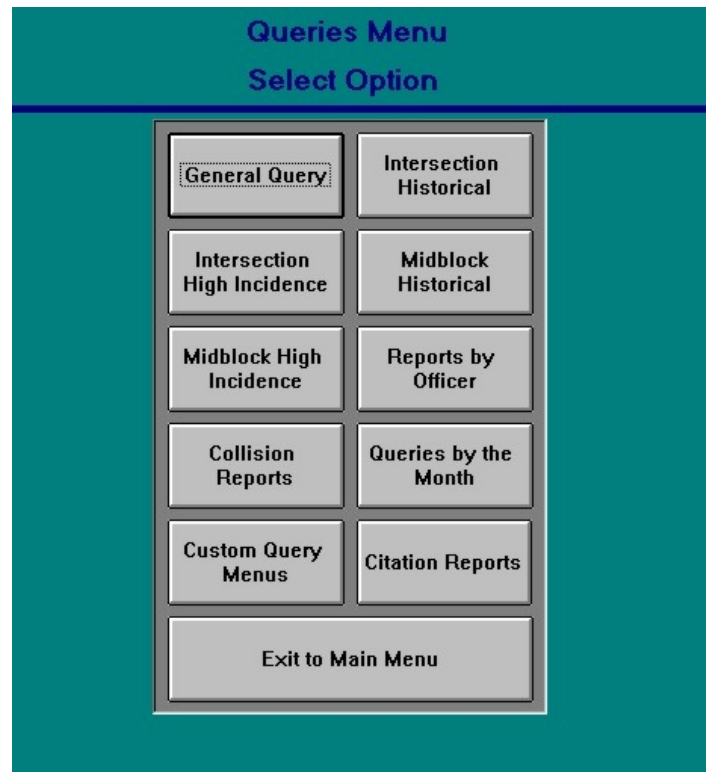


Fig. 1

3.1 GENERAL QUERY

Let's start with making a general query in the Collision Database. Click the “**General Query**” button at the top of the left column in the **Queries Menu**. A general query allows you to extract data on collisions that occurred during a specific time period. But the really important thing is that you can be as inclusive or as exclusive, as exhaustive or specific, as you wish, all depending on the type of information you desire or the type of report you want to generate. For example, you can run a query on all collisions between a starting date or an ending date. Or you can look at all collisions that occurred on a specific street, or that occurred on a specific day of the week; you can just as easily run a query on head-on collisions only, or perhaps a query based on a specific number of injured parties.

The screenshot shows a web-based query interface for a collision database. At the top, there are navigation tabs for 'Page 1 Collision Info', 'Page 2 Party Info', 'Page 3 Victims/Cond', and 'Page 4 Custom Input'. To the right of these tabs are 'Query Type: Summary' and 'Sort By: Date and Time', along with a 'Run Query' button and a navigation arrow. The main form area is teal and contains numerous input fields and dropdown menus. Fields include 'Street Name' (COMMONWEALTH AVENUE), 'Cross Street' (*), 'Starting Date' (01/01/1997), 'Ending Date' (12/31/1997), 'Distance (Non Rear-End)' (>= 0), 'Distance (Rear-End)' (>= 0), 'Starting Time' (*), 'Ending Time' (*), 'Direction' (*), 'Day of the Week' (*), 'Prim. Coll. Factor' (*), 'Reporting District' (*), 'VC & Sub. Cited' (*), 'Special Conditions' (*), 'Hit and Run' (*), 'Intersection Accident' (*), 'Collision Type' (Head-On), 'Highest Degree of Injury' (*), 'Involved With' (*), '# Injured' (>= *), 'Pedestrian Action' (*), '# Killed' (>= *), 'Verified' (*), 'City Name' (*), 'City ID' (*), 'Private Property' (checkbox), '# Victims' (>= *), '# Parties' (>= *), 'At Intersection Only' (checkbox), 'Not At Intersection' (checkbox), and 'Officer ID' (*). At the bottom left, there is a 'Party Information' section with a 'Party Type' dropdown menu. On the right side of the form, there are two buttons: 'Update GIS Map' and 'Select Shapefile Location', each with a small square icon below it.

Fig. 2

Fig. 2 above shows page 1 of the **General Query** screen. Notice the buttons at the top. The **General Query** option has four pages, one for **collision info** (page 1), one for **party info** (page 2), one for **victims/conditions** (page 3), and one for **custom input** (page 4). After those buttons, the remaining are:

query type: here, you have three options, which will control the amount of information to be printed in a report: "summary," "complete," or "abbreviated."

sort by: tell the program how you want to sort the query results; you have twenty-four different settings to choose from.

run Query: the most important button on the screen once you have entered the information by which you want to query the Database, hit this button and let the program do the rest of the work!

Pages two, three, and four operate by the same procedures. If you want to conduct a query according to party information, use the fields on page two; if you want to execute it with weather or road condition or victim information, go to page three; and if you want to use a custom input, well, that's what page four is for.

At each page, you simply enter the data with which you want to run a query, select the "query type" and then tell the Database how you want your information sorted. *Note that the default setting for "Query Type" is "summary," and the default setting for "Sorted by" is "date and time." To change each field, click the down-arrow to open the drop-down menu and select your choice by clicking on it or begin typing in one of the fields and the program will auto-match your choice.*

Sample Query

Let's try running a sample general query to give you a concrete idea of how the process works. For our city of "Hill Valley," we'll run a query for all collisions during 1997 that occurred on "Commonwealth Avenue," were rear-end type collisions, and that took place on Fridays. We'll leave the "Query Type" and "Sorted by" with their default settings.

The steps for the query would be as follows:

1. In the **Street Name** field, enter the name of the street (in this case, "Commonwealth Avenue").
2. Enter **Starting** and **Ending Dates** if they are not there already (in this case, "01/01/1997" and "12/31/1997").
3. In the **Collision Type** field, click on the down-arrow to open the drop-down menu, find the type "rear-end," and click it to highlight it.
4. In the **Day of the Week** field, click on the down-arrow to open the drop-down menu, find "Friday," and click it to select it.
5. Finally, click the **Run Query** button.

Once the program calculates the results, it will open a **Collision Summary Report** that will look similar to that in Fig. 3 below.

City of Hill Valley
Traffic Engineering Department
Collision Report Summary

04/10/2000
Date Range Reported: 1/1/97 - 12/31/97
Total Number of Collisions: 7

Page 1

Report#	Date	Time	Location	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Dir. of Travel 1	Movement Prec. Coll. 1	Dir. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil.
	1/17/97	07:56	Commonwealth Avenue & Jensen Way	0'	In Int.	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped in Road	Unsafe Speed	3	0
	2/14/97	12:40	Commonwealth Avenue & Yale Avenue	0'	In Int.	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped in Road	Unsafe Speed	0	0
	3/7/97	02:11	Commonwealth Avenue & Jefferson Avenue	102'	East	Rear-End	Parked Motor Vehicle	East	Proceeding Straight	East	Parked	Driving Under Influence	1	0
	3/14/97	07:57	Commonwealth Avenue & Highland Avenue	0'	In Int.	Rear-End	Other Motor Vehicle	East	Proceeding Straight	West	Stopped in Road	Unsafe Speed	0	0
	4/11/97	17:34	Commonwealth Avenue & Lawrence Avenue	120'	West	Rear-End	Other Motor Vehicle	East	Slowing/Stopping	East	Stopped in Road	Unsafe Speed	1	0
	5/16/97	12:36	Commonwealth Avenue & Harbor Boulevard	53'	East	Rear-End	Other Motor Vehicle	West	Proceeding Straight	West	Stopped in Road	Unsafe Speed	1	0
	6/27/97	17:21	Commonwealth Avenue & Magnolia Avenue	0'	In Int.	Rear-End	Other Motor Vehicle	West	Slowing/Stopping	West	Stopped in Road	Unsafe Speed	1	0

Fig. 3

You might be thinking, “Well, what if I want to run a query that includes collision information and party and condition information?” The answer is: you can do it! The Collision Database General Query feature allows the user to combine various types of information across the four pages for a search and for generating reports.

In this manual, we'll use another example from the city of “Hill Valley.” This time, let's say we want to run a query based on the following information: collisions involved with any pedestrian between the ages of five and eighteen that occurred during 1997 on clear days.

The steps for this query would be:

1. On **Page 1** of the **General Query** screen, in the field noted “**Involved With,**” click the down-arrow to open the drop-down menu, find “**Pedestrian**” and click it once to select it. Check the **Starting Date** and **Ending Date** fields to make sure the proper dates have been entered.
2. At the top of the screen, hit the “**Page 2 Party Info**” button to go to the second page of the **General Query** screen.
3. In the field marked “**Age (between),**” type a “5” in the first box and an “18” in the second box.
4. Go to page three by pushing the “**Page 3 Victims/Cond**” button.
5. In page three, locate the “**Weather**” field (it's the first one at the top) and click the down-arrow. Find the word “clear” and click it to highlight it.

6. Last, hit **“Run Query”** and just try counting the milliseconds it takes for the program to generate results.

Fig. 4 is the summary report for this sample query:

City of Hill Valley
Traffic Engineering Department
Collision Report Summary

04/10/2000
Date Range Reported: 1/1/97 - 12/31/97
Total Number of Collisions: 6

Page 1

Report#	Date	Time	Location	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Dir. of Travel 1	Movement Prec. Coll. 1	Dir. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil.
	2/6/97	07:06	Gilbert Street & Pioneer Avenue	0'	In Int.	Vehicle - Pedestrian	Pedestrian	South	Proceeding Straight	South	Proceeding Straight	Pedestrian Violation	3	0
	3/29/97	12:44	Harbor Boulevard & Houston Avenue	24'	South	Vehicle - Pedestrian	Pedestrian	North	Proceeding Straight	East	Not Applicable -	Pedestrian Violation	1	0
	4/30/97	12:38	Alley & Alley	48'	North	Vehicle - Pedestrian	Pedestrian	North	Proceeding Straight	Not Stated	Not Applicable -	Other Than Driver or Ped	1	0
	5/14/97	15:48	Gilbert Street & Flower Avenue	65'	South	Vehicle - Pedestrian	Pedestrian	West	Not Applicable -	North	Proceeding Straight	Pedestrian Violation	1	0
	6/2/97	17:44	Garret Lane & Cameo Lane (W)	8'	West	Vehicle - Pedestrian	Pedestrian	West	Proceeding Straight	North	Not Applicable -	Pedestrian Violation	1	0
	6/17/97	17:43	Orangethorpe Avenue & Raymond Avenue	0'	In Int.	Vehicle - Pedestrian	Pedestrian	East	Proceeding Straight	North	Not Applicable -	Ped R/W Violation	1	0

Fig. 4

Hopefully, these examples have given you an idea of just how flexible and powerful the **General Query** feature is. It's a good idea to go through each page of the **Query** screen to familiarize yourself with all of the fields and options, and you might want to run various queries of your own using different fields to help you get used to this feature.

3.2 INTERSECTION HISTORICAL

Another powerful tool in Crossroads Software's Traffic Collision Database, the **Intersection Historical** query, creates collision reports and diagrams of collision activity during a specified period of time at a specific intersection. **Reports** are text-based, table-oriented print-outs of collision information while **diagrams** include a diagram of the specified intersection and “directional,” color-coded images for each collision.

Take a look at the **Collision Diagram/Intersection Historical Report Form** in Fig. 5 below.

Page 1 Page 2 Color Configuration Intersection Historical Report Intersection Collision Diagram

Collision Diagram Specifications

Street Name: [dropdown]

Cross Street: [dropdown]

Starting Date: 01/01/1995

Ending Date: 12/31/1995

Distance (All Collisions) <= 50

Distance (Rear-End) <= 150

At Intersection

Show on Collision Diagram: Date and

Primary Collision Factor

Time of Collision

Distance and Direction

Enter 24 Hour Entering Volume if you want accident rate shown on intersection historical report

24 Hour Entering Volume: [input]

Get Volume

Fig. 5

Gander at the large buttons across the top and the fields running from top to bottom in the screen. You'll notice that there are two pages (Fig. 5 is a screen shot of page 1), each asking for different types of collision data. Let's go through this step by step, although you will probably realize fairly quickly how easy this powerful tool is to use.

For the first step, you must provide the Database with “**Collision Diagram Specifications.**” Working from the top down, enter the names of the intersecting streets in the **Street Name** and **Cross Street** fields (note the drop-down menus, from which you can select your street names).

Now enter the **Starting Date** and **Ending Date** to specify the time period.

Below the date fields are the **distance** fields (Fig 6).

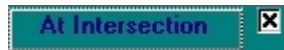
Distance (All Collisions) <= 50

Distance (Rear-End) <= 150

Fig. 6

“Distance” refers to the distance from the specified intersection in which all collisions occurred. So, for example, you can have the collision diagram and report include all collisions within fifty feet of the intersection (the default setting) or within any distance you prefer. You may select a second distance for rear-end collisions, “on approach” to the intersection. This allows you to define rear-end collisions (that are approaching the intersection) as intersection-related collisions even further back if you desire. The default is 150 feet, but you can change this measurement as well.

*If you want to exclude all collisions that occurred outside the intersection and include only those that occurred inside it, click the box in the “**at intersection**” field:*



Before you generate a report or collision diagram, there are two more options to consider: which type of information you want to show on the collision diagram and whether or not you want a “collision rate” to be reported.

Take a look at the box in the bottom left of the **Collision Diagram/ Intersection Historical Report Form**. This little box allows you to select the type of information to include in your collision diagram (fig. 7 below).

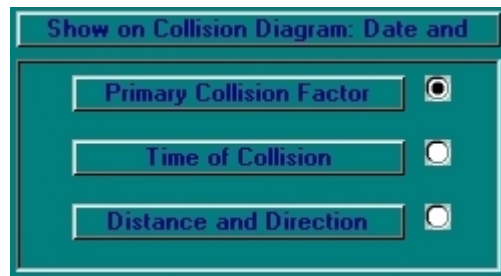


Fig. 7

The collision diagram will show the date of each collision and one of the three additional options: **primary collision factor**, **time of collision**, **distance and direction**. It is not possible to include all of this information on the same collision diagram because doing so would make the diagram too overcrowded and unreadable. But you can go through each option and generate three separate reports on the same collisions.

At the bottom right of the **Report Form** is a field for “traffic volume” (Fig. 8). You have the option of including typical 24-hour traffic volume for the specified intersection in your **Intersection Historical** report. The volume figure represents the number of automobiles that pass through the specified intersection in a 24-hour period. If you enter a volume for this intersection, the “collision rate” will be calculated and shown on the report.

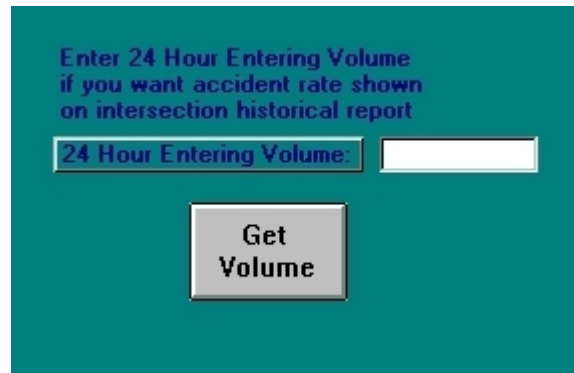
A screenshot of a web form with a teal background. At the top, there is a line of text in blue: "Enter 24 Hour Entering Volume if you want accident rate shown on intersection historical report". Below this text is a label "24 Hour Entering Volume:" in blue, followed by a white text input field. Centered below the input field is a grey button with the text "Get Volume" in black.

Fig. 8

To include the 24-hour volume in your report, simply click the “**Get Volume**” button.

Now, on to page two ...

Page 1	Page 2	Color Configuration	Intersection Historical Report	Intersection Collision Diagram	
<div style="background-color: #008080; color: white; padding: 10px;"> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid white; margin-bottom: 10px;"> Page 1 Page 2 Color Configuration Intersection Historical Report Intersection Collision Diagram ↩ </div> <div style="display: flex; flex-direction: column; gap: 5px;"> <div>Prim. Coll. Factor: <input style="width: 100%; border: none;" type="text"/></div> <div>Highest Degree of Injury: <input style="width: 100%; border: none;" type="text"/></div> <div>Hit and Run: <input style="width: 100%; border: none;" type="text"/></div> <div>Collision Type: <input style="width: 100%; border: none;" type="text"/></div> <div>Involved With: <input style="width: 100%; border: none;" type="text"/></div> <div>Pedestrian Action: <input style="width: 100%; border: none;" type="text"/></div> <div>Lighting: <input style="width: 100%; border: none;" type="text"/></div> <div>Starting Time: <input style="width: 100%; border: none;" type="text"/></div> <div>Ending Time: <input style="width: 100%; border: none;" type="text"/></div> <div>Day of the Week: <input style="width: 100%; border: none;" type="text"/></div> <div>Direction: <input style="width: 100%; border: none;" type="text"/></div> <div>Disable "Settings Used for Query" Section on Report <input type="checkbox"/></div> </div> </div>					

Fig. 9

Take a look at the figure above. This is page two of the **Intersection Historical Report** form. These fields allow you to narrow the types of collisions that will appear in your historical report and collision diagram. You have the option of filling in all the fields, some of the fields, or none of them. All of the fields, save two, have drop-down menus from which you can select possibilities. Look over the fields to get an idea of the parameters with which you can narrow the report and diagram. For example, you can restrict the primary collision factor, selecting “unsafe speed” or “improper turning.” If you want to set the query to include information about pedestrians, collision type, lighting, day of the week, time, or direction, you can do so by filling in the appropriate fields.

These settings will be listed in your historical report. If, however, you choose not to list them, just click in the little box next to the option “**Disable 'Settings Used for Query' Section on Report.**”

Once you have taken all of the necessary steps, just click on the “**Intersection Historical Report**” to generate the report or on the “**Intersection Collision Diagram**” if you want to bring up a diagram.



No matter which button you hit first -- either the “**Intersection Historical Report**” or the “**Intersection Collision Diagram**” -- the Database preserves the query specifications you entered. Thus if you generate the report first and then want to create the diagram, you are not required to re-enter your specs. When you go back to the Report Form, you will find that your query parameters have remained intact, allowing you to hit the “Intersection Collision Diagram” button immediately. Of course, you have the option of changing any, or all, of your specifications if you so desire.

Sample Intersection Historical Report

Let's look at an example. We'll take a sample from the city of “Hill Valley,” asking the Database to generate an Intersection Historical Report for the intersection of Chapman Avenue and Harbor Boulevard involving broadside collisions during the entire year of 1996.

After entering the street names and the dates on page 1 and then setting the “**Collision Type**” at “Broadside” on page 2, the resulting Intersection Historical Report looks like this:

City of Hill Valley Traffic Engineering Department Traffic Collision History Report												04/10/2000 Page 1	
Location: Chapman Avenue / Harbor Boulevard Date Range Reported: 1/1/96 - 12/31/96													
Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil	
1/25/96	12:56	0	In Int.	Broadside	Other Motor Vehicle	North	Making Left Turn	South	Proceeding Straight	Auto RWV Violation	0	0	
3/20/96	13:34	0	In Int.	Broadside	Other Motor Vehicle	West	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs	0	0	
4/9/96	20:16	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	East	Proceeding Straight	Improper Turning	3	0	
5/3/96	17:23	0	In Int.	Broadside	Other Motor Vehicle	South	Proceeding Straight	West	Making Left Turn	Traffic Signals and Signs	0	0	
6/8/96	10:09	0	In Int.	Broadside	Other Motor Vehicle	South	Proceeding Straight	East	Proceeding Straight	Traffic Signals and Signs	0	0	
6/28/96	15:35	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	North	Proceeding Straight	Auto RWV Violation	1	0	
6/29/96	15:36	0	In Int.	Broadside	Other Motor Vehicle	East	Proceeding Straight	South	Proceeding Straight	Traffic Signals and Signs	1	0	
7/23/96	21:47	0	In Int.	Broadside	Other Motor Vehicle	West	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs	1	0	
10/3/96	08:10	30	South	Broadside	Other Motor Vehicle	North	Changing Lanes	North	Proceeding Straight	Unsafe Lane Change	0	0	
11/12/96	12:58	0	In Int.	Broadside	Other Motor Vehicle	East	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs	0	0	

Fig. 10

Notice that the report categorizes collision data by category: time, distance (from intersection), direction, and so on. We can look at a detail of the report to illustrate the type of collision information in the report (Fig. 11).

Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF
North	Making Left Turn	South	Proceeding Straight	Auto RW Violation
West	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs
South	Making Left Turn	East	Proceeding Straight	Improper Turning
South	Proceeding Straight	West	Making Left Turn	Traffic Signals and Signs
South	Proceeding Straight	East	Proceeding Straight	Traffic Signals and Signs
South	Making Left Turn	North	Proceeding Straight	Auto RW Violation
East	Proceeding Straight	South	Proceeding Straight	Traffic Signals and Signs
West	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs
North	Changing Lanes	North	Proceeding Straight	Unsafe Lane Change
East	Proceeding Straight	North	Proceeding Straight	Traffic Signals and Signs

Fig. 11

Look over this detail to make yourself familiar with the format and the type of information in the report.

Well, if you think that's impressive, wait until you see the Collision Diagram ...

Sample Intersection Collision Diagram

The **Intersection Collision Diagram** provides a “diagram” of the specified intersection with color-coded, directional images for the collisions. The top of the diagram lists the street names and the dates included in the query; the bottom of the diagram has a table of the number of collisions and a legend for understanding the images in the diagram.

Fig. 12 below is a detail of the top half of the Collision Diagram.

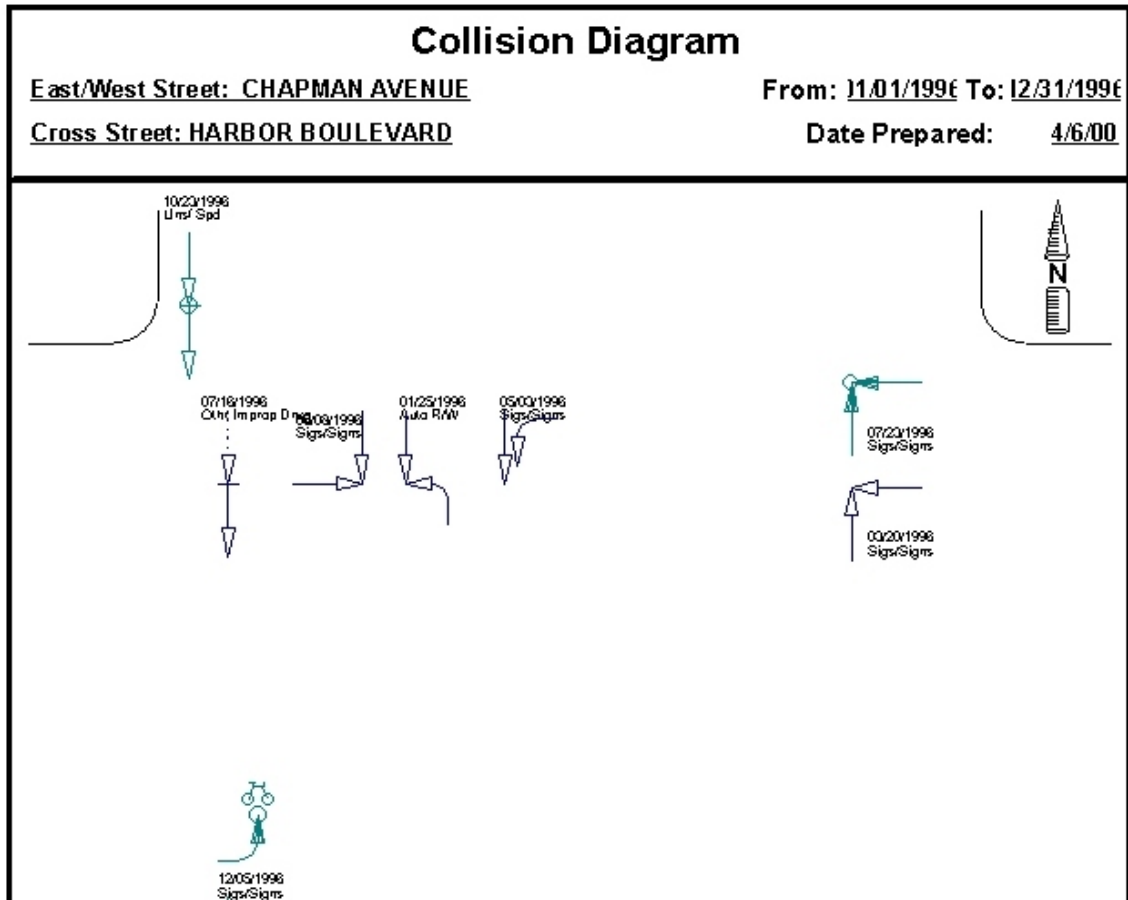


Fig. 12

In this particular Intersection Collision Diagram, notice that:

Each collision is represented by two symbols and two phrases of information -- in this case, the date and the "primary collision factor."

Each arrow represents one party.

In the collision near the bottom, there is only one arrow and a bicycle, signifying, of course, that a motorist collided with a cyclist.

Now, notice that the arrows are different colors. These colors correspond to the extent of injury, whether it is property damage only, injury, severe injury, or a fatality. The color key is on page 2 of the collision diagram, along with a list of the settings used to specify the query. If you want to change the key to the color coding, click on the "**Color Configuration**" button at the top of the **Collision Diagram/ Intersection Historical Report** form. You will see the following screen:

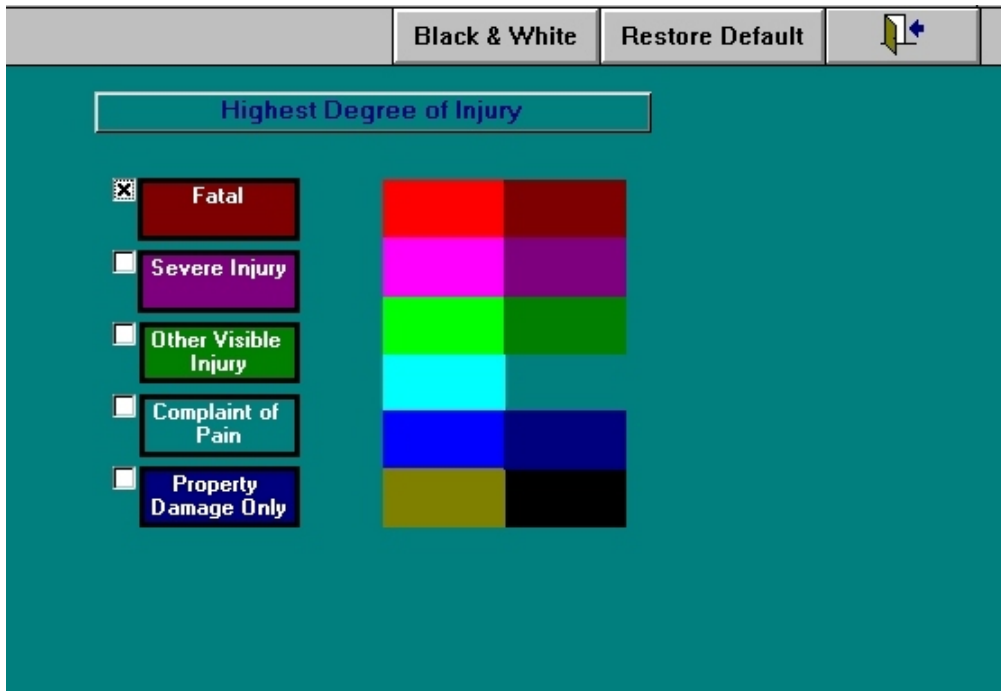


Fig. 13

You can use the default color settings or you can select colors of your own. Click in the box of whichever field you wish to alter, and then left-click once on the color you want. Right now, the “Fatal” field is maroon, but we can change it to, say, light blue:

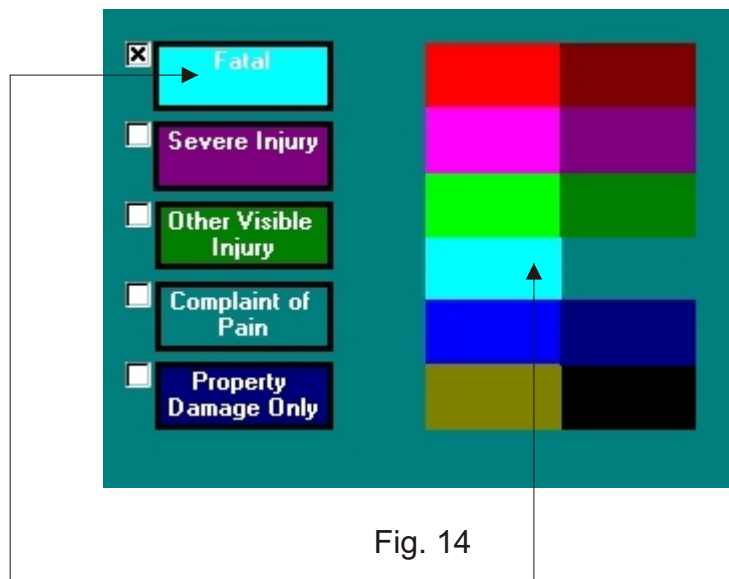


Fig. 14

Notice the change, done simply by clicking here.

You can also set the color coding to basic black and white by clicking the “**Black and White**” button at the top of the Color Configuration screen.

If you decide you do not want to use the color changes you have made, just hit the “**Restore Default**” button to return to the original color settings.

You should also notice that in the Collision Diagram some of the arrowheads are hollow while some are solid; some of the arrows contain circles and other shapes. To decipher these images, all you need to do is consult the legend, which will appear at the bottom of the Intersection Collision Diagram, as seen in Fig. 15.

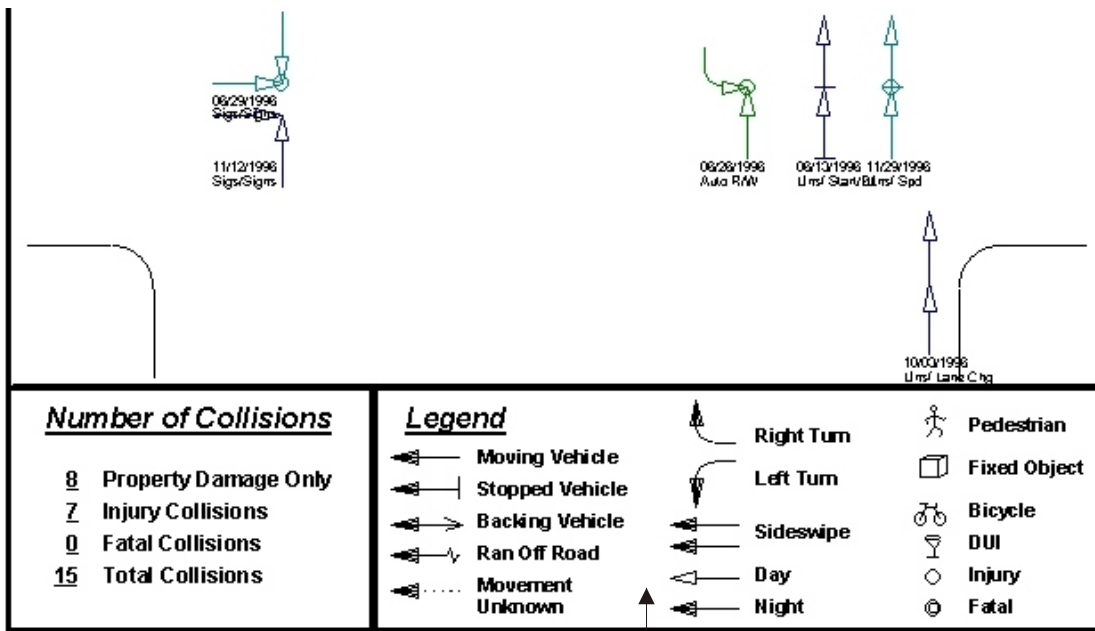
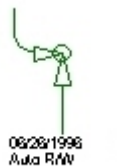


Fig. 15

The “answer key”!

This particular Collision Diagram contains the date of each collision and “Primary Collision Factor” (which, you might recall, can be selected from the Collision Diagram/Intersection Historical Report form.) Here's a detail:

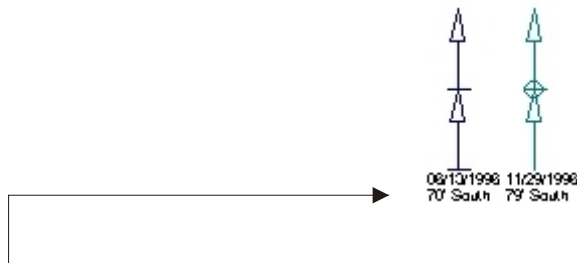


But we can ask the Database to include date and, say, distance and direction instead of primary collision factor. If so, the diagram would read:



Notice that the “distance and direction” information is now included with the date.

In this case, the distance is listed as “0” because the collision occurred in the intersection. If a collision occurs outside the intersection, the number of feet and the direction are recorded, as in this example:



Notice that the “distance and direction” are now listed below each date.

This is essentially how the Intersection Collision Diagram feature works. It is a powerful, yet simple, tool.

3.3 INTERSECTION HIGH INCIDENCE

The next feature in the Queries Menu is **Intersection High Incidence**. You can query the Database about the intersections with the highest incidences of collisions over a specified period of time. To begin, take a look at page 1 of the **Intersection High Incidence** input form (Fig. 16).

Page 1	Page 2	Top <input type="text" value="10"/> Locations	
Collision Ranking Summary	High Incidence Query - Intersection Collisions		
Collision Severity Summary	Starting Date:	<input type="text" value="01/01/1996"/>	
Collision Type Summary	Ending Date:	<input type="text" value="12/31/1996"/>	
	Distance [All Collisions]	<= <input type="text" value="50"/>	
	Distance [Rear-End]	<= <input type="text" value="150"/>	
	At Intersection	<input type="checkbox"/>	
	Street Name:	<input type="text" value="*"/>	
	Update GIS Map	<input type="checkbox"/>	
	Select Shapefile Location	<input type="checkbox"/>	
	Rank Intersections by Collision Rate	<input type="checkbox"/>	
	Minimum Number of Collisions	<input type="text" value="1"/>	

Fig. 16

First, look at the large buttons at the top of the screen. “**Page 2**” will take you to the second page of the form, where you can add more specific information to limit your query. The “**Top Locations**” field is set at “10” as a default, which means that when you run a query, the resulting report will include those ten locations with the highest incidences of collisions. You can, however, change this number by clicking with the mouse in the box and then typing a larger or smaller number.

Before we look at the option on page 2, let's look at the steps involved in running a query from page 1 only.

- the **starting date** and **ending date** must be entered in the Database's standard format (“00/00/0000”).
- the **distance** fields work the same way as the distance fields in the Collision Diagram/Intersection Historical Report form. The default for “**All Collisions**” is 50 feet, and the default for “**Rear-End**” is 150 feet. You can change the distance field if you wish.
- if you want to include only those collisions that occurred in the intersection, click the box in the “**At Intersection**” field.
- “**Update GIS Map**”: for information on this option, refer to the **Collision GIS Mapping Manual**.
- “**Select Shapefile Location**”: allows you to give the resulting GIS map a name and specify where it will be saved on the hard drive in your computer.

- if you want to list the intersections according to collision rate (highest to lowest), click the box in the field “**Rank Intersections by Collision Rate.**”
- finally, you can alter the minimum number of collisions in the last field of page 1. The default minimum number is 1.

Now take note of the three large buttons on the left side of the screen.



Fig. 17

Click on each one to generate a specific report -- each one shows the top intersections as specified, but the “collision severity summary” breaks each intersection down by the number of each degree of injury (fatal, severe injury, etc.). The “collision type summary” breaks down the collision at each intersection by number of rear-end, head-on, sideswipe, and other collisions. Let's take a look at the Collision Ranking Summary report (Fig. 18). The intersections are ranked by number of collisions, highest to lowest. In the figure below, the time period is the entire year of 1997.

High Incidence Intersection Report

4/6/00

Number of collisions for the top 10 locations

From 1/1/97 To 12/31/97

Rank	Intersection	Total Collisions
1	Chapman Avenue / Lemon Street	10
2	Pomona Avenue / Orangethorpe Avenue	9
3	Commonwealth Avenue / Harbor Boulevard	7
4	Brookhurst Road / Valencia Drive	6
5	Chapman Avenue / Harbor Boulevard	6
6	Euclid Street / Orangethorpe Avenue	6
7	Kimberly Avenue / Acacia Avenue	6
8	Brookhurst Road / Orangethorpe Avenue	5
9	Chapman Avenue / State College Boulevard	5
10	Commonwealth Avenue / State College Boulevard	5
10	Euclid Street / Commonwealth Avenue	5
10	Euclid Street / Valencia Drive	5
10	Harbor Boulevard / Bastanchury Road	5
10	Harbor Boulevard / Orangethorpe Avenue	5
10	Longview Drive / Brea Boulevard	5

Fig. 18

There is more than one intersection listed for the tenth location because, as you can see in the report, several intersections had the same number of collisions over the course of the year.

A copy of **Collision Severity Summary** report can be seen in Fig. 19. It covers a one-year period.

Intersection Collision Severity Summary

4/6/00

Number of collisions for the top 10 locations
From 1/1/97 To 12/31/97

Rank	Intersection	Fatal Collisions	Severe Injury	Other Visible Inj	Complain of Pain	Non-Injury	Total Collisions
1	Chapman Avenue / Lemon Street	0	0	0	2	8	10
2	Pomona Avenue / Orangethorpe Avenue	0	0	0	5	4	9
3	Commonwealth Avenue / Harbor Boulevard	0	0	1	3	3	7
4	Brookhurst Road / Valencia Drive	0	0	1	3	2	6
5	Chapman Avenue / Harbor Boulevard	0	0	0	3	3	6
6	Euclid Street / Orangethorpe Avenue	0	0	0	3	3	6
7	Kimberly Avenue / Acacia Avenue	0	0	3	2	1	6
8	Brookhurst Road / Orangethorpe Avenue	0	0	2	1	2	5
9	Chapman Avenue / State College Boulevard	0	0	0	3	2	5
10	Commonwealth Avenue / State College Boulevard	0	0	1	1	3	5
10	Euclid Street / Commonwealth Avenue	0	0	0	0	5	5
10	Euclid Street / Valencia Drive	0	0	1	0	4	5
10	Harbor Boulevard / Bastanchury Road	0	0	0	0	5	5
10	Harbor Boulevard / Orangethorpe Avenue	0	0	2	2	1	5
10	Longview Drive / Brea Boulevard	0	0	0	1	4	5

Fig. 19

The **Collision Severity Summary** takes the “highest incidence” intersections from the **Collision Ranking Summary** and reports the extent of collision injury across five fields (fatal, severe, other visible injury, complaint of pain, and non-injury).

Lastly, there is the **Collision Type Summary**, which takes the “highest incidence” intersections and provides data on the number of each of eight collision types for each intersection (rear-end, head-on, side-swipe, broadside, hit object, overturn, vehicle and pedestrian, and other; there's also a “not stated” category, just in case!).

Take a look at Fig. 20 below. This is a sample **Collision Type Summary**.

Intersection Collision Type Summary

4/10/00

Number of collisions for the top 10 locations

From 1/1/97 To 12/31/97

Rank	Intersection	Rear End	Head On	Side Swipe	Broad Side	Hit Obj.	Over Turn	Veh Ped	Other	Not Stated	Total Collisions
1	Chapman Avenue / Lemon Street	3	1	0	6	0	0	0	0	0	10
2	Pomona Avenue / Orangethorpe Avenue	2	0	0	6	0	0	0	1	0	9
3	Commonwealth Avenue / Harbor Boulevard	2	1	1	3	0	0	0	0	0	7
4	Brookhurst Road / Valencia Drive	2	0	0	1	1	0	2	0	0	6
5	Chapman Avenue / Harbor Boulevard	2	1	0	0	2	0	1	0	0	6
6	Euclid Street / Orangethorpe Avenue	2	1	0	3	0	0	0	0	0	6
7	Kimberly Avenue / Acacia Avenue	0	0	0	6	0	0	0	0	0	6
8	Brookhurst Road / Orangethorpe Avenue	0	0	0	2	2	0	0	1	0	5
9	Chapman Avenue / State College Boulevard	0	0	1	3	0	0	1	0	0	5
10	Commonwealth Avenue / State College Boulevard	0	0	0	5	0	0	0	0	0	5
10	Euclid Street / Commonwealth Avenue	4	0	0	1	0	0	0	0	0	5
10	Euclid Street / Valencia Drive	3	0	0	2	0	0	0	0	0	5
10	Harbor Boulevard / Bastanchury Road	2	0	2	1	0	0	0	0	0	5
10	Harbor Boulevard / Orangethorpe Avenue	2	0	1	2	0	0	0	0	0	5
10	Longview Drive / Brea Boulevard	1	0	1	2	0	0	1	0	0	5

Fig. 20

The layout is very simple; each column represents one type of collision. So, for example, the intersection of Chapman Avenue and Lemon Street had 3 rear-end, 1 head-on, and 6 broadside collisions during 1997.



You might notice that in Fig. 18, 19, and 20, each report states “Number of Collision for the Top 10 Locations.” Remember that the default number of locations is ten, but you can change the number if you wish to include fewer or more locations. Simply enter the number of locations you want in the box at the top of the **Intersection High Incidence** input form (see Fig. 16).

3.4 RANKING BY COLLISION RATE

If you decide to rank the intersections by **Collision Rate**, this will add two additional columns of data to the report. The Collision Rate is the number of collisions per one million vehicles that enter an intersection.

City of Hill Valley
Traffic Engineering Department

High Incidence Intersection Report
4/11/00

Collision Rates for the top 10 locations
From 1/1/97 To 12/31/97

Rank	Intersection	Collision Rate	Total Collisions	Entering ADT Volume
1	Kimberly Avenue / Acacia Avenue	2.04	6	8,068
2	Pomona Avenue / Orangethorpe Avenue	0.87	9	28,394
3	Longview Drive / Brea Boulevard	0.68	5	20,255
4	Pioneer Avenue / Gilbert Street	0.65	3	12,729
5	Acacia Avenue / Valencia Drive	0.64	2	8,626
6	Chapman Avenue / Lemon Street	0.60	10	45,600
7	Domingo Road / Laguna Road	0.58	1	4,758
8	Brookhurst Road / Valencia Drive	0.55	6	29,781
9	Malvern Avenue / Basque Avenue-Carhart Avenue	0.55	4	20,096
10	Highland Avenue / Commonwealth Avenue	0.40	4	27,324

Fig. 21

The sample **Collision Ranking Summary** report above ranks the locations by collision rate.

3.5 USING PAGE 2 OF THE INTERSECTION HIGH INCIDENCE FORM

When you click the “**Page 2**” button at the top of the **Intersection High Incidence** form, you will see the following screen (Fig. 22):

Page 1	Page 2	Top <input type="text" value="10"/> Locations	
--------	--------	-----------------------------------------------	--

Prim. Coll. Factor:	<input type="text"/>
VC# & Subsection	* <input type="text"/> * <input type="text"/>
Highest Degree of Injury:	* <input type="text"/> *
Hit and Run:	* <input type="text"/> *
Collision Type:	* <input type="text"/> *
Involved With:	* <input type="text"/> *
Pedestrian Action:	* <input type="text"/> *
Lighting:	* <input type="text"/> *
Starting Time:	* <input type="text"/> *
Ending Time:	* <input type="text"/> *
Day of the Week:	* <input type="text"/> *
Direction:	* <input type="text"/> *
Party Type:	* <input type="text"/> *
Age [between]:	* <input type="text"/> and <input type="text"/> *
Party Sobriety:	* <input type="text"/> *
Movement Preceding Collision:	* <input type="text"/> *

Show only locations for which no volume information is available [Note that the 'rank intersections by accident rate' box will be unchecked]

"T" Intersections Only Disable "Settings Used for Query" Section on Report

Fig. 22

Page 2 allows you to set the parameters for each type of query and report. You can select such fields as “primary collision factor,” “collision type,” “lighting,” “day of the week,” among others. Take a few minutes to familiarize yourself with the various parameters in page 2. Virtually every field, save a few, have drop-down menus that contain available options and that can save you some key strokes (and, hopefully, the dangers of metacarpal-tunnel syndrome!). Also notice the three options at the bottom; here you can tell the Database to show only those locations with no volume information, to include “T” intersections only, or to disable the “Settings Used for Query” section on the report. The “Settings Used for Query” looks like this (Fig. 23):

Settings Used For Query

<u>Parameter</u>	<u>Setting</u>
Starting Date	01/01/1997
Ending Date	12/31/1997
Distance from Intersection	<= 50' for non rear-end collisions <= 150' for rear-end collisions
Minimum Number of Collisions	1

Fig. 23

Simply click in the box at the bottom of Page 2 to toggle this feature “off” if you do not want it to appear in your report.



You can set as many parameters as you wish in the fields on Page 2; you are not limited to any particular combination of parameters either. What is more, the parameters themselves will not limit the amount of collision and location information in the ranking, summary, or collision type reports. Thus if you ask the Database to generate a ranking summary with the top 10 locations, it will still produce a report with the top 10 locations.

To use the features on page 2, all you need to do is:

- fill in whichever parameters you wish to set for your query and report.
- check any, or all, of the three options at the bottom if you want to use them.
- click the “**Page 1**” button at the top to return to page 1.
- select which type of report you want to generate by clicking the “**Collision Ranking Summary**,” “**Collision Severity Summary**,” or “**Collision Type Summary**” button.

3.6 MIDBLOCK HISTORICAL REPORT

It certainly doesn't take a genius to know that not every automobile collision occurs in an intersection. Many collisions occur quite some distance from intersections, in the “middle,” so to speak, of highways, avenues, and streets.

The Traffic Collision Software Database programmers were well aware of this fact when they designed the software, and the feature they built in to the program is the **Midblock Historical** section of **Queries and Reports**.

From the **Queries Menu**, click the “**Midblock Historical**” button to bring up the **Midblock Historical** input form (Fig. 24).

The screenshot shows a software interface for "Midblock Collisions". At the top, there are tabs for "Page 1" and "Page 2", and a button labeled "Open Report". The main area is a teal-colored form with the following fields and controls:

- Arterial:** A dropdown menu.
- Limit 1:** A text input field.
- Distance [All Collisions]:** A numeric input field with a value of 50.
- Distance [Rear-End]:** A numeric input field with a value of 150.
- Limit 2:** A text input field.
- Distance [All Collisions]:** A numeric input field with a value of 50.
- Distance [Rear-End]:** A numeric input field with a value of 150.
- Starting Date:** A date input field with the value 01/01/1997.
- Ending Date:** A date input field with the value 12/31/1997.
- Distance [All Collisions]:** A numeric input field with a value of 50.
- Distance [Rear-End]:** A numeric input field with a value of 150.
- Use Mileposts:** A checkbox that is unchecked.
- Update GIS Map:** A checkbox that is unchecked.
- Only Movement On Arterial:** A dropdown menu set to "No".
- Lookup ADT Volumes:** A button.
- ADT:** A text input field.
- Prim. Coll. Factor:** A text input field.
- Highest Degree of Injury:** A text input field.

Below the ADT field, there is a note: "Enter ADT if you want accident rate shown on report".

Fig. 24

Like many of the other query and report forms, the **Midblock Historical** form has two pages, the first for entering essential query information, the second for selecting additional parameters. Fig. 24 above shows page 1.

In order to process a midblock query, you need to give the Database several important pieces of information. These are: the **Arterial** (the street that the collision occurred on); **Limit 1** and **Limit 2** (the two cross streets that will serve as limits to the arterial; collision occurring outside these limits, while on the arterial, will not be included); and **starting date** and **ending date**.

When you enter the arterial, begin typing in the field, and the Database will offer possible matches as you type. You also have option of selecting the street name from the drop-down menu.

Once an arterial is selected, you can enter the first and second limits. One way is to open the drop-down menu in either the **Limit 1** or **Limit 2** field; the menu will provide you with the names of all possible cross streets, as well as the direction of these streets. Click to highlight and select the street name you want, or you can simply type it in.

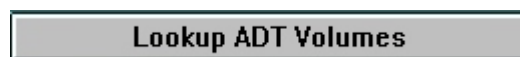
Enter the **starting date** and **ending date**.

You can now generate a **Midblock Historical** report with this information -- just click the **“Open Report”** button at the top of the screen. Notice, however, that you can alter some of the query data, as well as select more parameters if you need to.

In page 1, the default values for **“Distance”** (for all collisions) is set at 50 feet, while that for rear-end collisions is set at 150 feet. You can change these values if necessary.

You can also ask the Database to generate a **GIS map** for your query (for more, refer to the **Collision GIS Mapping Manual**) or to limit the query to **“only movement on arterial.”** Selecting “only movement on arterial” will limit the query results to those collisions that had at least one party that was traveling on, or turning out or off of, the specified arterial. In other words, this will eliminate all purely “cross-street” collisions.

If you wish to **use Mileposts**, simply click the box next to the command (Mileposts are still in use in most counties to measure distance from a given point). You can lookup **ADT Volumes** (Average Daily Traffic) and include these in the query. Click on the button to look them up:



If you want to include ADT volume data in your report, *you need to enter the volume number in the blank ADT Volume field*, just below the “Lookup” button. The field looks like this:

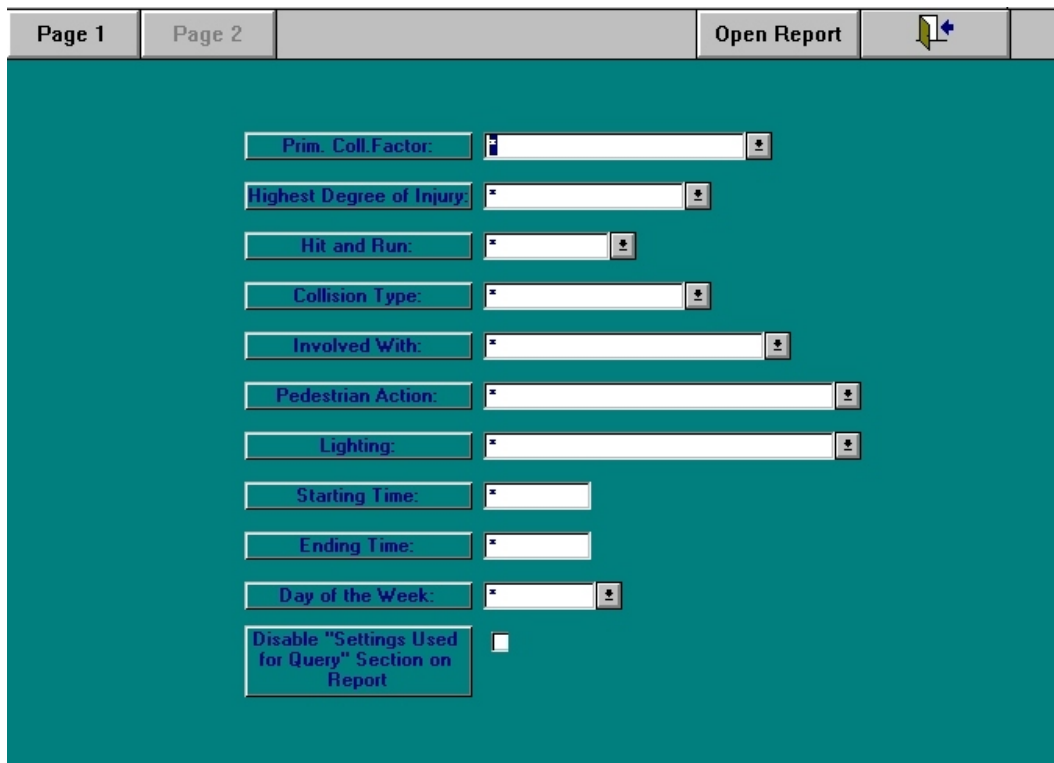


Finally, you can set your query to include **Primary Collision Factor** and/or **Highest Degree of Injury**. Just type within each field or use the drop-down menu to select your choice.

Once you have adjusted these settings, just click the **“Open Report”** button to create the report.

Now, on to page 2 ...

Page 2 of the **Midblock Historical** form (click the “**Page 2**” button at the top of page 1) allows you to set parameters for your query, just like page 2 of the **Intersectional Historical** and **Intersection High Incidence** forms. Fig. 25 below is an image of page 2.



The screenshot shows a web form interface for 'Page 2' of the 'Midblock Historical' report. At the top, there are navigation buttons for 'Page 1', 'Page 2', and 'Open Report', along with a help icon. The main area is a teal background with several filter fields, each with a label and a selection mechanism (text input, dropdown, or checkbox):

- Prim. Coll.Factor:** A dropdown menu.
- Highest Degree of Injury:** A dropdown menu.
- Hit and Run:** A dropdown menu.
- Collision Type:** A dropdown menu.
- Involved With:** A dropdown menu.
- Pedestrian Action:** A dropdown menu.
- Lighting:** A dropdown menu.
- Starting Time:** A text input field.
- Ending Time:** A text input field.
- Day of the Week:** A dropdown menu.
- Disable "Settings Used for Query" Section on Report:** A checkbox.

Fig. 25

Just like the other second pages of the other historical report forms, you can select as few or as many of the parameters as you wish, simply by typing in the fields you want to include or selecting options from the drop-down menus. If you want to **disable "Settings Used for Query" section**, make sure to check the box at the bottom of the screen.

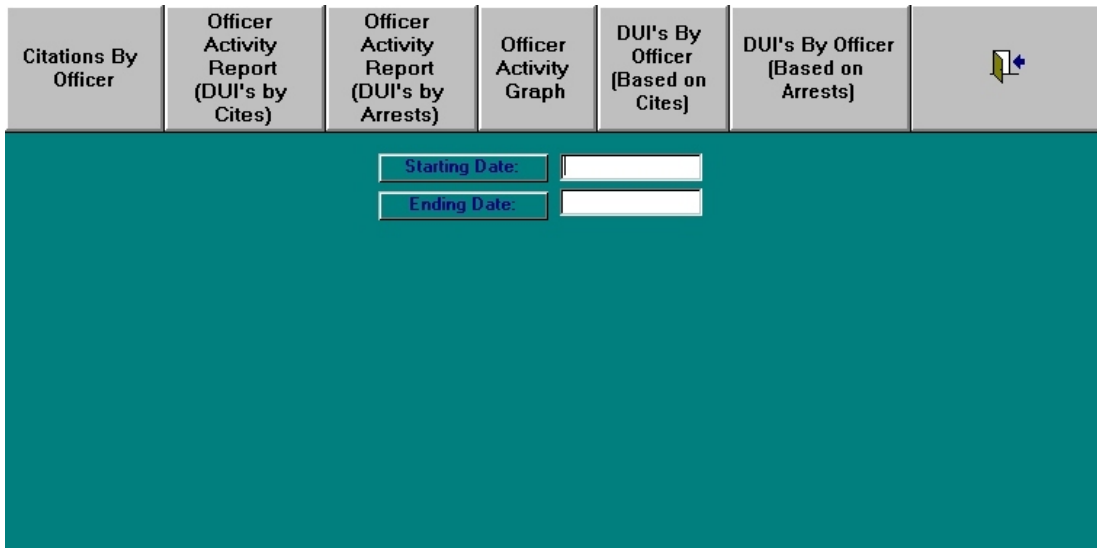
Once you are finished with page 2, hit the “**Page 1**” button to return to the first page; then hit the “**Open Report**” button to create the report.

3.7 MIDBLOCK HIGH INCIDENCE

The **Midblock High Incidence** form works the same way as the **Intersection High Incidence** form. It has two pages, as well as the same fields, and allows you to generate the same three reports: **Collision Ranking Summary**, **Collision Severity Summary**, and **Collision Type Summary**. For details on making a query and generating reports, see the instructions for **Intersection High Incidence** above, section 2.3.

3.8 REPORTS BY OFFICER

Through the **Queries Menu**, you can ask the Collision Database to create reports and graphs of collisions, officer activity, citations, and DUIs. This is an incredibly easy feature to use. First, take a look at the **Reports by Officer** screen (Fig. 26). Notice the seven buttons at the top and the two fields in the middle.



Citations By Officer	Officer Activity Report (DUI's by Cites)	Officer Activity Report (DUI's by Arrests)	Officer Activity Graph	DUI's By Officer (Based on Cites)	DUI's By Officer (Based on Arrests)	Exit
----------------------	------------------------------------------	--------------------------------------------	------------------------	-----------------------------------	-------------------------------------	------

Starting Date:

Ending Date:

Fig. 26

You have five reports, one graph, and an exit button to choose from, and all you need to enter are the **starting date** and **ending date**. Once the dates have been entered, you can generate the following **reports**:

1. **Citations by Officer:** this report will list each officer's name and the number of citations issued during the specified time period.
2. **Officer Activity Report (DUIs by Cites):** this option breaks down the total number of citations by category (e.g., unsafe speed, failure to yield, safety belt) and lists the number of citations issued for DUIs.
3. **Officer Activity Report (DUIs by Arrests):** produces a report similar to the Activity Report above, but lists arrests for DUIs, as opposed to citations for DUIs.
4. **DUIs by Officer (Based on Cites):** lists the names of officers and the number of DUIs reported. Some police departments, however, choose to issue DUI citations as well, and this is why this report is possible. It bases its results on the number of citations.
5. **DUIs by Officer (Based on Arrests):** this report is similar to the other DUI report, except it bases its information on the number of arrests entered for DUIs.

You can produce a graph of officer activity, the **Officer Activity Graph**, which is a more “visually accessible” report, providing a colored graph of the number of citations and DUIs by officer during a specified time period.

After you have entered beginning and ending dates, just click the “**Officer Activity Graph**” button. Fig. 27 is a detail of a sample Activity Graph.

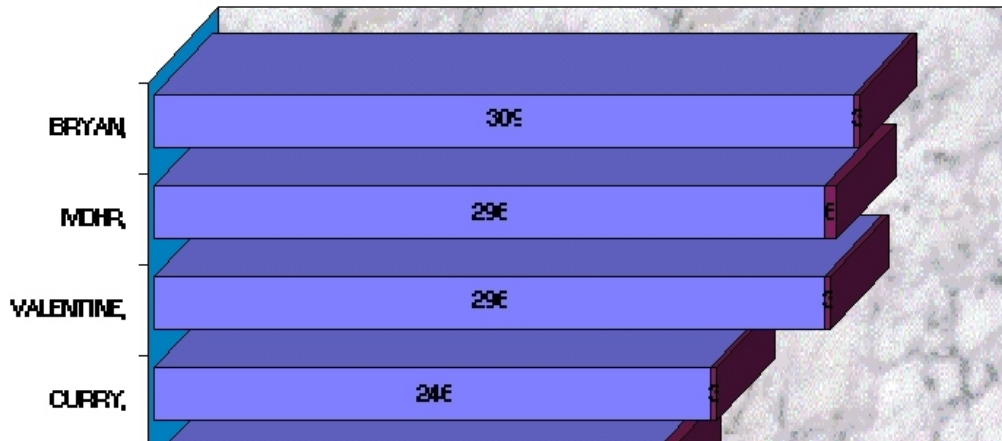


Fig. 27

3.9 COLLISION REPORTS

By entering a range of dates, you can use the **Collision Reports** section to generate a variety of reports that, in essence, provide summary collision information in many categories. Fig. 28 shows the **Collision Reports** screen.

Summary Report	PCF by Severity	PCF's vs. Citations	Bicycle Collision Summary	Monthly Traffic Collision Report	
Collisions by Day and Time	Involved With By Severity	Traffic Collision Log	Ped Collision Summary	Collision Statistical Report	Unidentified Officer Report
Collision Tally by Reporting Agency	Collision Tally by Reporting District	Collisions by PDO/Injury/Fatal	Intersection Collisions by Night/Day	Midblock Collisions by Night/Day	DUI Log
Intersections Above Average Rate	Segments Above Average Rate	Collision Parties by ZIP Code	Parties at Fault by Age		

Dates for Report

Starting Date:

Ending Date:

City Name (for Day and Time Report Only):

Distance (All Collisions) <=

Distance (Rear-End) <=

Fig. 28

You can also run the query by city name, although notice that this can only be used for the **Collisions by Day and Time** report.



You'll notice that nine of the buttons in the **Collision Reports** screen are in gray type, as opposed to black type: this means that these reports are unavailable. Crossroads Software will make them available in the near future. You can generate these reports in the **Monthly Reports** section, but, as the name implies, only for individual months. The **Collision Reports** section here is a "variable date" section, which allows reports to be produced for varying date ranges.

Because there are so many reports possible through this section, we won't provide a sample for each one, but, rather, give you a few screen images so you can obtain an overall idea of this part of the Database.

To use the **Collision Reports** feature, simply enter a range of dates using the standard Database date format ("00/00/0000"). Change the values in the **Distance** fields if necessary (the defaults, as usual, are 50 feet for all collisions, 150 feet for rear-end collisions). And then just click the appropriate button for the report you wish to generate.

Once you have generated a report and it appears on your screen, you have the option of printing the report out. Click on "File" to open the File Menu and select "Print Report." If you wish to return to the input form, open the File Menu and select "Close" or just click the "exit" button:



This will take you back to the **Collision Reports** form, and the dates you originally entered will still be there, in case you want to generate another report.

If you do not want to print the report but wish to save it, you can save it to your hard drive. Click on the "File" menu and click and select "Output to." A dialog box will appear asking you to select a file format -- "xls" for an Excel spreadsheet, "rtf" for rich-text format, or "txt" for MS-DOS text. Click to highlight and select the format you want and hit "OK." A Windows dialog box appears allowing you to name your file and specify a drive location and a folder location where you will place your file.

Fig. 29 below is a sample "**Collisions by Day and Time**" report for the city of "Hill Valley" for 1999.

Collisions by Day of Week and Hour of Day

13-Apr-00

From 01/01/1999 To 12/31/1999

Time Period	Total	Weekday	Weekend	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
00:00 - 00:59	2	2	0	0	0	0	1	1	0	0
01:00 - 01:59	1	1	0	0	0	0	0	1	0	0
02:00 - 02:59	1	0	1	1	0	0	0	0	0	0
03:00 - 03:59	1	1	0	0	0	0	0	1	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	2	2	0	0	1	0	1	0	0	0
07:00 - 07:59	10	10	0	0	3	3	3	0	1	0
08:00 - 08:59	11	11	0	0	1	3	2	2	3	0
09:00 - 09:59	6	5	1	1	0	2	2	1	0	0
10:00 - 10:59	7	5	2	1	2	1	1	0	1	1
11:00 - 11:59	5	4	1	1	1	0	1	2	0	0
12:00 - 12:59	12	10	2	1	1	2	3	2	2	1
13:00 - 13:59	6	6	0	0	1	0	1	4	0	0
14:00 - 14:59	9	9	0	0	3	4	1	0	1	0
15:00 - 15:59	9	8	1	1	1	0	1	4	2	0
16:00 - 16:59	10	9	1	1	3	1	3	0	2	0
17:00 - 17:59	13	11	2	0	4	0	3	2	2	2
18:00 - 18:59	8	7	1	1	0	1	2	2	2	0
19:00 - 19:59	5	3	2	2	1	0	1	1	0	0
20:00 - 20:59	6	4	2	2	1	0	0	0	3	0
21:00 - 21:59	3	2	1	1	0	0	1	0	1	0
22:00 - 22:59	2	2	0	0	0	0	0	1	1	0
23:00 - 23:59	1	1	0	0	0	0	0	0	1	0
Total	130	113	17	13	23	17	27	24	22	4

Fig. 29

In Fig. 30, we have a detail of a sample “Involved with by Severity” report for 1999.

Motor Vehicle Involved With by Degree of Injury

13-Apr-00

From 01/01/1999 To 12/31/1999

Involved With	Total		Fatal		Severe Injury		Other Visible Inj.		Complaint of Pain		Prop. Damage Only	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Other Motor Vehicle	85	64.39%			2	66.67%	3	60.00%	15	78.95%	63	63.64%
Parked Motor Vehicle	14	10.61%									13	13.13%
Fixed Object	13	9.85%					1	20.00%	2	10.53%	10	10.10%
Non-Collision	7	5.30%			1	33.33%			2	10.53%	3	3.03%
Bicycle	6	4.55%									6	6.06%
Bicycle	6	4.55%	1	100.00%			1	20.00%			3	3.03%
Other Object	1	0.76%									1	1.01%
Totals:	132		1		3		5		19		99	

Fig. 30


Finally, Fig. 31 shows a sample “Collisions by PDO/Injury/Fatal” report.

Collisions by Injury Severity	
<i>04/13/2000</i>	
From 01/01/1999 to 12/31/1999	
Injury Category	Number of Collisions
Property Damage Only	99
Injury	27
Fatal	1
Unknown Injury	5
<u>Total Collisions</u>	<u>132</u>
Total Persons Injured	39
Total Persons Killed	1
<u>Total Victims</u>	<u>40</u>

Fig. 31

3.10 QUERIES BY THE MONTH

Through Crossroads Software's Traffic Collision Database, you can run queries for collision, DUI, and citation data and generate tabular reports, all based by a particular month and year. The tabular reports are informative and easy to read. To run the queries and generate the report, open the **Queries by the Month** (Fig. 32) screen by clicking the appropriate button in the **Queries Menu**.

Summary Report (Monthly)	PCF's vs. Citations (Monthly)	DUI Log (from DUI Arrests) (Monthly)	Bicycle Collision Summary (Monthly)	Monthly Traffic Collision Report (Monthly)	
Citation Activity Log (Monthly)		DUI Log (from Cites) (Monthly)	Ped Collision Summary (Monthly)	Collision Statistical Report (Monthly)	Traffic Collision Log (Monthly)

Month and Year for Report

Month:

Year:

Fig. 32

You have ten possible queries/reports to choose from, each represented by a large button at the top of the screen. As far as specifying data is concerned, all you need to do is pick the month and the year for which you want to run a query. The month field has a drop-down menu to make it easy for you to select a month with a simple click of the mouse.

Once you have entered the month and year, simply click the button for the query/report you need. When you are finished, or if you decide not to run a query, just click the “back” button at the top right of the screen.

Fig. 33 (on the following page) shows a detail of the **Citation Activity Log**.

Category	This Month	Last Month	% Change	This Year To Date	Last Year To Date	% Change
Excessive Speed Citations	1081	1132	-4.5%	2216	0	0.0%
Excessive Speed Violations	1081	1133	-4.6%	2217	0	0.0%
Signs and Signals Citations	306	307	-0.3%	614	0	0.0%
Signs and Signals Violations	306	308	-0.6%	615	0	0.0%
Unsafe Turning Citations	187	198	-5.6%	386	0	0.0%
Unsafe Turning Violations	187	198	-5.6%	386	0	0.0%
Failure to Yield Citations	36	15	140.0%	51	0	0.0%
Failure to Yield Violations	36	15	140.0%	51	0	0.0%
Child Restraint Citations	1	5	-80.0%	6	0	0.0%
Child Restraint Violations	1	5	-80.0%	6	0	0.0%
Safety Belt Citations	155	288	-46.2%	445	0	0.0%
Safety Belt Violations	156	288	-45.8%	446	0	0.0%
DUI Cites	0	34	-100.0%	34	0	0.0%
DUI Arrests	34	1	3300.0%	35	0	0.0%
Other Hazardous Citations	92	113	-18.6%	205	0	0.0%
Other Hazardous Violations	376	579	-35.1%	957	0	0.0%
Non-Hazardous Citations	214	216	-0.9%	430	0	0.0%
Non-Hazardous Violations	475	460	3.3%	936	0	0.0%
Total Hazardous Citations	1921	2167	-11.4%	4095	0	0.0%
Total Hazardous Violations	1986	2233	-11.1%	4226	0	0.0%
Pedestrian Citations	0	3	-100.0%	3	0	0.0%
Pedestrian Violations	0	3	-100.0%	3	0	0.0%

Fig. 33

This is the tabular format used for all of the reports in this section of the Database.

3.11 COLLISION STATISTICAL REPORT

The **Collision Statistical Report** is the only query/report (in the **Queries by the Month** section) that asks you for more information than just the month and the year.

Once you enter a month and year in the **Queries by Month** screen, you will see the following screen (Fig. 34 on the next page):

**Enter Information for Counter Reports, DUI Arrests
and Hit & Run Investigations**

	Current Month	This YTD	Last YTD		
Counter Reports	<input type="text"/>	<input type="text"/>	<input type="text"/>		
DUI Arrests	<input type="text"/>	<input type="text"/>	<input type="text"/>		
	Assigned	Last YTD	This YTD	Closed	Open
Hit & Run	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Fig. 34

As the instructions at the top of the screen state, enter data for counter reports, DUI arrests, and hit and run investigations. “YTD,” of course, stands for “Year to Date” and, in the Hit & Run field, “Closed” means closed investigations, “open” means that the investigation is still pending.

Once you have entered your information, click the “OK” button. The program will return you to the previous screen and then automatically generate a report.



Remember that, like all reports in Crossroads Software's Collision Database, these reports can be printed out. Open the “File” menu at the very top of the screen, move your cursor to “Print Report,” and then click your mouse button. When you are finished viewing your report on-screen, pull down the “File” menu and select “Close” (or hit the “exit” button) to return to the **Queries by the Month** screen.

3.12 CUSTOM QUERY MENUS

These menus will be pertinent only if custom queries have been designed by Crossroads Software for your city. You are welcome to try out some of these reports you might find them quite useful.

3.13 CITATION REPORTS

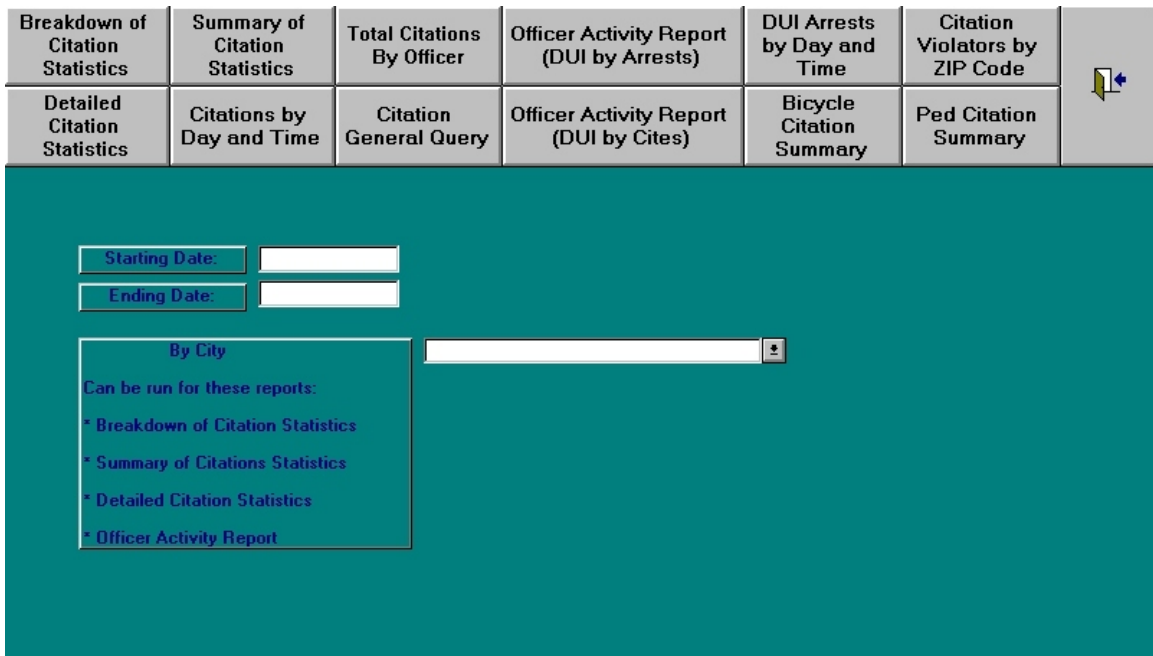


Fig. 35

The figure above is the **Citation Reports** screen, accessed via the **Citation Reports** button near the bottom of the **Queries Menu**. As you can see in this screen, you can run a variety of separate queries.

Because each query/report uses the same basic procedure, we won't run through all of them but we'll provide a few examples to give you an idea of the options, as well as the power, embodied in this part of the Database.

All you need to do is enter a range of dates (**starting date** and **ending date**, of course), and then click the appropriate button for the report you want to create. Like other reports in Crossroads Software's Traffic Collision Database, you can print each report by selecting the "Print Report" command from the "File" menu.

Let's take a look at two sample reports. Fig. 36 below shows a sample "**Breakdown of Citation Statistics**" report for the date range 01/01/1999-12/31/1999.

Date Range Reported: 01/01/1999 to 12/31/1999

<u>Category</u>	<u>Total</u>
Total Citation Stops	4525
Total Violations Written	5162
Total Hazardous Citation Stops	4095
Total Hazardous Violations Written	4226
Total Non-Hazardous Citation Stops	430
Total Non-Hazardous Violations Written	936
Total DUI Arrests	35
Total DUI Citations	34
Total Radar Citations	1998
Total Pedestrian Citation Stops	3
Total Pedestrian Violations Written	3
Total Bicycle Citation Stops	0
Total Bicycle Violations Written	0
Total Safety Belt Citation Stops	445
Total Safety Belt Violations Written	446
Total Child Restraint Citation Stops	6
Total Child Restraint Violations Written	6
Total Financial Responsibility Citation Stops	272
Total Parking Citations	0
Total Hazardous Citations (Double Seat Safety Belts & Child Restraints)	4546

Fig. 36

For the same date range, let's look at a sample "**Citations by Day and Time**" report. Notice that the times are listed at the column on the left; the days are listed along the row at the top (Fig 37 on the following page).

Time Period	Total	Weekday	Weekend	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
00:00 - 00:59	4	2	2	2	1	0	0	1	0	0
01:00 - 01:59	22	11	11	5	4	3	0	2	2	6
02:00 - 02:59	15	6	9	8	0	0	1	3	2	1
03:00 - 03:59	8	6	2	1	1	2	0	0	3	1
04:00 - 04:59	7	4	3	3	2	1	1	0	0	0
05:00 - 05:59	11	9	2	1	0	2	2	3	2	1
06:00 - 06:59	68	50	18	6	13	13	10	6	8	12
07:00 - 07:59	332	295	37	16	64	49	67	66	49	21
08:00 - 08:59	431	385	46	26	79	85	80	75	66	20
09:00 - 09:59	343	274	69	26	59	52	72	46	45	43
10:00 - 10:59	363	305	58	23	70	68	80	47	40	35
11:00 - 11:59	301	251	50	27	49	62	64	52	24	23
12:00 - 12:59	419	342	77	37	77	75	68	58	64	40
13:00 - 13:59	225	176	49	26	29	48	32	33	34	23
14:00 - 14:59	200	165	35	18	30	41	27	31	36	17
15:00 - 15:59	149	121	28	13	15	34	29	17	26	15
16:00 - 16:59	191	146	45	16	28	30	31	27	30	29
17:00 - 17:59	267	199	68	30	41	31	43	38	46	38
18:00 - 18:59	291	221	70	38	43	46	44	49	39	32
19:00 - 19:59	265	202	63	29	34	39	42	40	47	34
20:00 - 20:59	190	133	57	25	21	29	26	29	28	32
21:00 - 21:59	195	141	54	21	24	23	35	38	21	33
22:00 - 22:59	129	95	34	19	17	17	24	16	21	15
23:00 - 23:59	99	65	34	15	7	7	21	10	20	19
Total	4525	3604	921	431	708	757	799	687	653	490

Fig. 37

3.14 CITATION GENERAL QUERY

The one query in the **Citation Reports** section that requires more than a range of dates is the **Citation General Query**. This query works quite similar to the **General Query** process we looked at earlier (see section 2.1). This Citation General Query allows you to extract data on citations that were issued during a specified time period, and you can be as inclusive or as exclusive, as exhaustive or specific, as you wish, all depending on the type of information you desire or the type of report you eventually want to generate. If you want, you can run a query on all citations covering a range of dates; or a query on all citations covering a specific street name; or perhaps a query on all citations given to male drivers between the ages of 18 and 25. It all depends on the amount of information you have or the type of report you desire.

From the **Citation Reports** screen, enter a range of dates and then click the **“Citation General Query”** (steps 1 and 2 in Fig. 38).

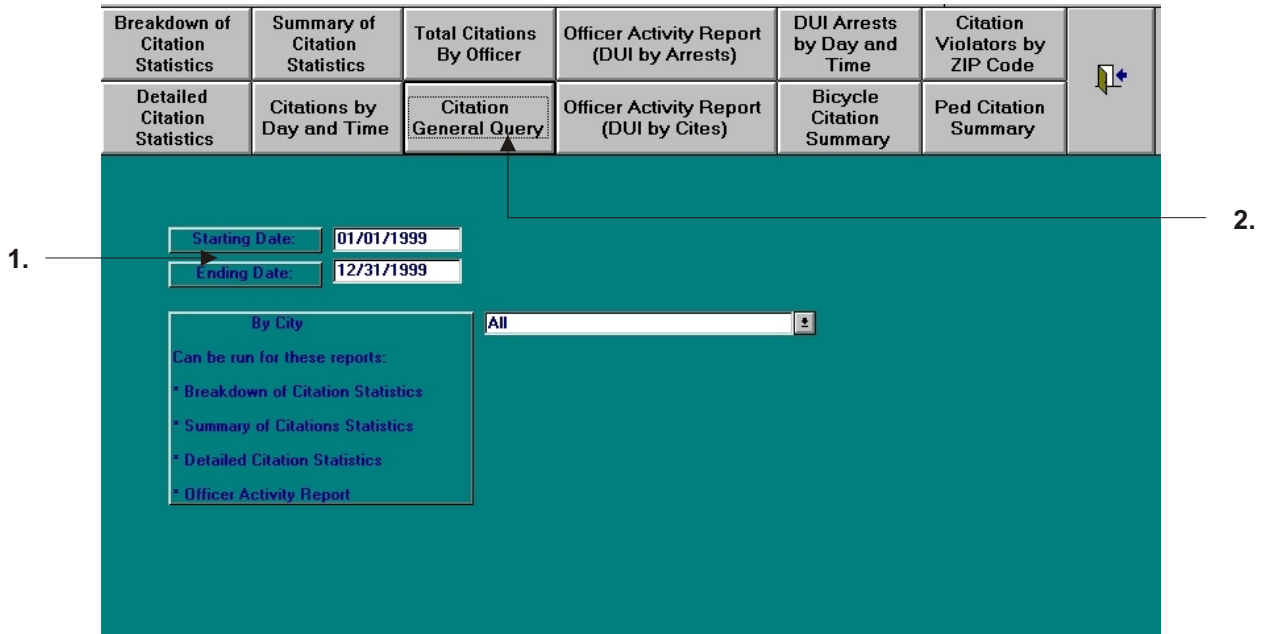


Fig. 38

Simply enter your information in the appropriate fields, either by typing the information or by using the drop-down menus. Once you have entered your information, click the **“Run Query”** button at the top right of the screen.

Citation		Citation Number		Update GIS Map Select GIS Location		Run Query	Exit
From Date	To Date	Day of Week	From Time	To Time	Case Number	Reporting District	
01/01/1999	12/31/1999						
First Name		Last Name		Address			
City		State	Zip	Commercial	Haz Mat		
Driver Lic. No.	State	frm DOB	to DOB	Juvenile	Sex	Race	Hair
							Eyes
							Ht Range
							Wt Range
Vehicle Lic. No.		State	frm Yr	to Yr	Vehicle Make	Model	Body Style
							Veh. Color
Violation 1	Sub	Citation Category		Violation Description			
Violation 2	Sub	Citation Category		Violation Description			
Violation 3	Sub	Citation Category		Violation Description			
Violation 4	Sub	Citation Category		Violation Description			
Speed:	Speed Limit:	Radar:					
Address		Addr. Direction	Street Name		City		
at							
Secondary Road:		At Int.	Direction:				
Officer ID:	Officer Name:		Court		Court Date		

Fig. 39

Each query will produce a report, and each report can be printed out.



For some fields, you can enter only partial information. For example, you do not have to enter an entire citation number if you want a report of all citations that begin, say, with “L” or with “1MR” or any other letters or numbers. Or you might want to run a query on all citations issued to vehicles with license numbers that begin with “R”. In each case, enter the “partial data,” followed by an asterisk (*), and then click the “**Run Query**” button. A report will follow.

Finally, you can include GIS mapping in your query. Notice the two fields at the top center of the “**Citation General Query**” screen:



Click either field, or both, if necessary. For more on GIS mapping, refer to the **Collision GIS Mapping Manual**.

CHAPTER FOUR

Graphs and Charts

Crossroad Software's Traffic Collision Database includes a **Graph Query Form** (Fig. 1 below) through which you can produce graphs and charts for collision information.

Page 1	Page 2	Highest Degree of Injury & Primary Collision Factor	Collision Type & Involved With	Weather & Lighting Conditions	Search	
Primary Collision Factor	Collision Type	Involved With	Degree of Injury	Year	Month	Day of Week

Graph Query Form

Street Name: [dropdown]
Cross Street: [dropdown]
Starting Date: 01/01/1996
Ending Date: 12/31/1996
Distance (All Collisions): >= 0
Distance (Rear-End): >= 0
At Intersection:

Fig. 1

4.1 PRODUCING GRAPHS AND CHARTS

The **Graphs and Charts** feature is quite easy to use. It has two pages of entry fields and can generate a variety of graphs and charts. The procedures for producing the graphs and charts are akin to those for such features as **Intersection Historical** and **Intersection High Incidence**: by inputting a small amount of data -- particularly street names and a range of dates -- you can output some sophisticated results.

Let's start with the first page. There are four steps you need to follow.

1. Enter the **street name** and the **cross street (optional)**. This constitutes the particular intersection on which a query will be based, but it is not required. Enter street names if you want to query a specific intersection. By not entering an intersection or street, the Database will query "jurisdiction-wide."
2. Enter the **starting date** and the **ending date** (using the standard date format for this Database: "00/00/0000"). *Of all the four steps, this one is absolutely required.*

3. There are two **Distance** fields, one for "all collisions" and one for "rear-end collisions." All collisions that occurred within the distance specified -- distance from the intersection, measured in feet and covering all directions -- will be included in the query. Notice the drop-down menu in each field. The menus give you more options by letting you set additional distance parameters: less than or equal to (\leq), less than ($<$), greater than ($>$), or greater than or equal to (\geq). Pull down the menu and then click and highlight the option you wish to use.

4. Click the "**At Intersection**" field if you wish to query only those collisions that

Once you have completed these steps, you can generate a graph or chart by selecting the one you want to generate among the choices at the top of page 1; or you can go on to page 2 first to enter additional collision information (Fig. 2).

Page 1	Page 2	Highest Degree of Injury & Primary Collision Factor	Collision Type & Involved With	Weather & Lighting Conditions		
Primary Collision Factor	Collision Type	Involved With	Degree of Injury	Year	Month	Day of Week
Prim. Coll. Factor:	*	*	*	*	*	*
Highest Degree of Injury:	*	*	*	*	*	*
Hit and Run:	*	*	*	*	*	*
Collision Type:	*	*	*	*	*	*
Involved With:	*	*	*	*	*	*
Pedestrian Action:	*	*	*	*	*	*
Lighting:	*	*	*	*	*	*
Starting Time:	*	*	*	*	*	*
Ending Time:	*	*	*	*	*	*
Day of the Week:	*	*	*	*	*	*
Direction:	*	*	*	*	*	*

Fig. 2

Let's deal with page 2 first. There are a number of separate fields that allow you to limit your query; by setting specific parameters, you can directly affect the query and the information in each resulting report. So, for example, you can ask for collision information on collisions with a specific degree of injury, a specific type of accident, whether or not a pedestrian was involved, a specific type of lighting, and so on. All of the fields, except two, have drop-down menus from which you can select from a list of possibilities.

Use as few or as many of the fields you need. You are not required to fill in any of the fields in page 2 to run a query and generate a report (but they're present in case you need them, thanks to the thoughtful folks at Crossroads Software!).

If you need to return to page 1 before running your query, just hit the “**Page 1**” button. If not, go ahead and click the button that corresponds to the type of query and report you need. Note that your choices are:

- **Highest Degree of Injury & Primary Collision Factor**
- **Collision Type & Involved With**
- **Weather & Lighting Conditions**
- **Primary Collision Factor**
- **Collision Type**
- **Involved With**
- **Degree of Injury**
- **Year**
- **Month**
- **Day of Week**

Each option will produce a report, which you can then print out (as usual, open the “File” menu at the top and click the “Print Report” command).

Fig. 3 is a sample graph produced by a “**Collision Type**” query for the entire year of 1999.

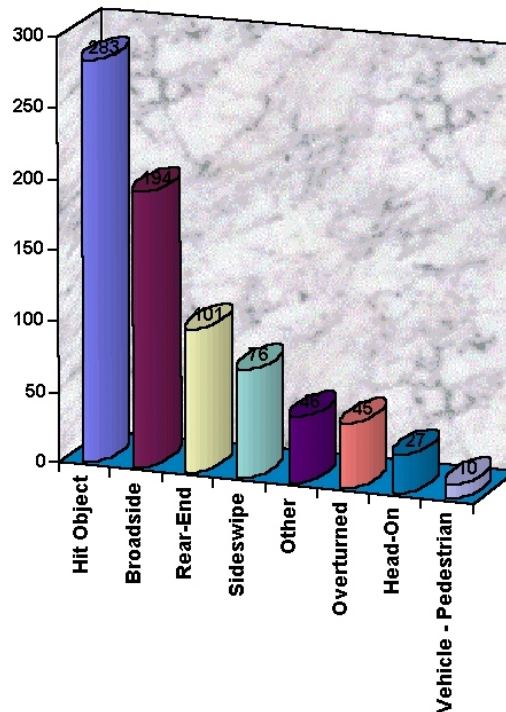


Fig. 3

This bar graph is one of the handy, informative features of the **Graphs and Charts** section, but it is not the only one. Take a look at Fig. 4 below. This is an example of a color-coded chart, produced by entering a range of dates (in this case, January 1, 1999 to December 31 1999) and then running a “**Collision Type and Involved With**” query.

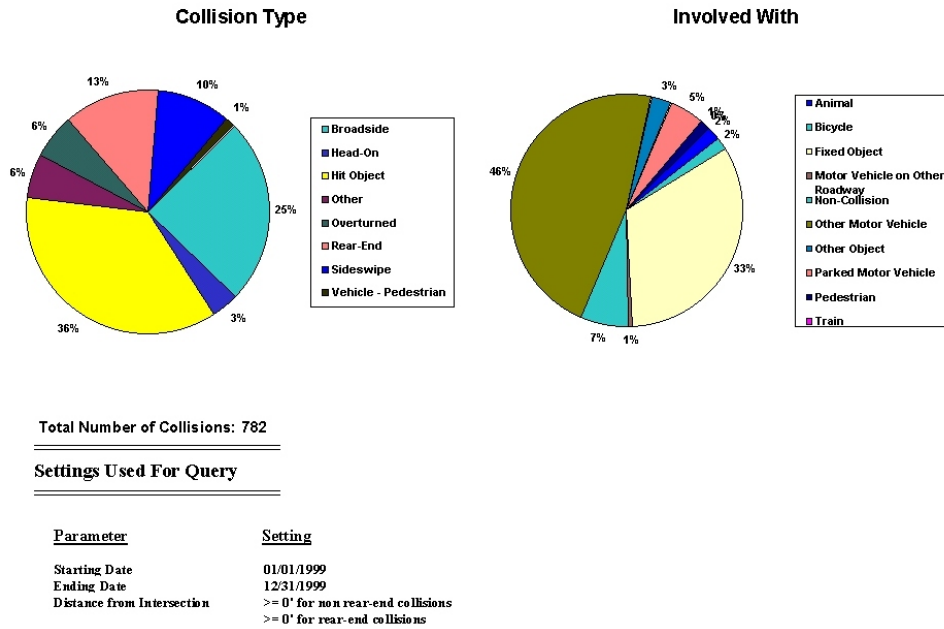
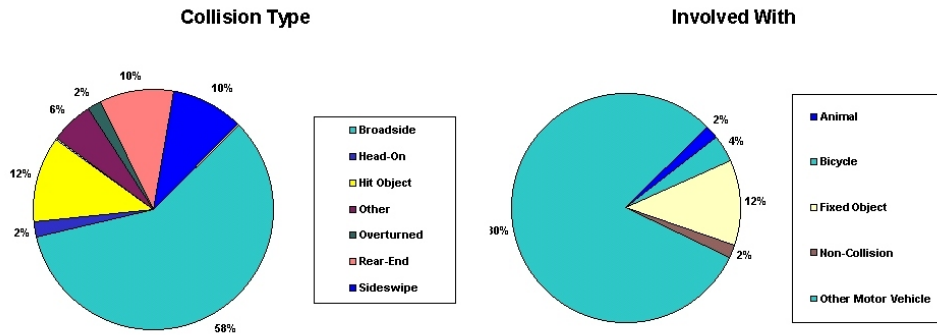


Fig. 4

Notice the information in the bottom left-hand corner; these indicate the settings used for the query. In the example above, a basic query was done, with only a starting date and an ending date entered. But, if we add parameters for distance and then specify, say, that we only want collisions that occurred on Fridays, the chart will look like this (Fig. 5, on the following page):



Total Number of Collisions: 51

Settings Used For Query

<u>Parameter</u>	<u>Setting</u>
Starting Date	01/01/1999
Ending Date	12/31/1999
Distance from Intersection	<= 50' for non rear-end collisions <= 50' for rear-end collisions
Day of the Week	'Friday'

Fig. 5

Not only do the pie charts contain different information now, but so too does the “Settings Used For Query” information. Notice that the distance parameters are listed, along with “Day of the Week.”

The graph and chart examples above are simply a few of the possibilities in the **Graphs and Charts** section. Once you become familiar with the software, you will realize how versatile and powerful it is.

4.2 GRAPHS BY YEAR, MONTH, AND DAY OF WEEK

The **Year**, **Month**, and **Day of Week** are particularly interesting features. They break down collision data in historical format, and can be broken down further if you want to run a year, month, or day of week query for a specific intersection, specific collision type, or other parameter.

By simply entering a range of dates and then clicking the “**Year**” button, you can generate a historical graph that displays the number of collisions per year, as seen in Fig. 6.

Total Number of Collisions: 6459

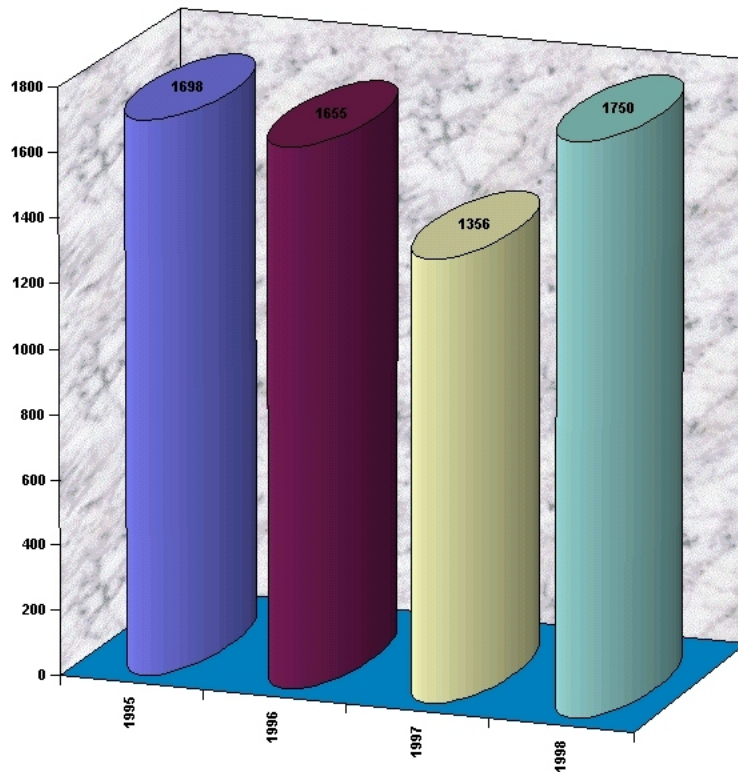


Fig. 6

Note that the years are listed on the horizontal axis at the bottom, the number of collisions on the vertical axis; also notice that the exact number of collisions for each year is printed at the top of each bar. Now, it is possible to take the data in this graph and create a more specific query. Suppose we want a historical graph covering the same time period (in this case, 1995-1998) but only want to query the number of broadside collisions per year. All we need to do is keep the dates as they are in the date fields, go to page 2, and then select "Broadside" from the **Collision Type** drop-down menu.

The resulting graph appears in Fig. 7:

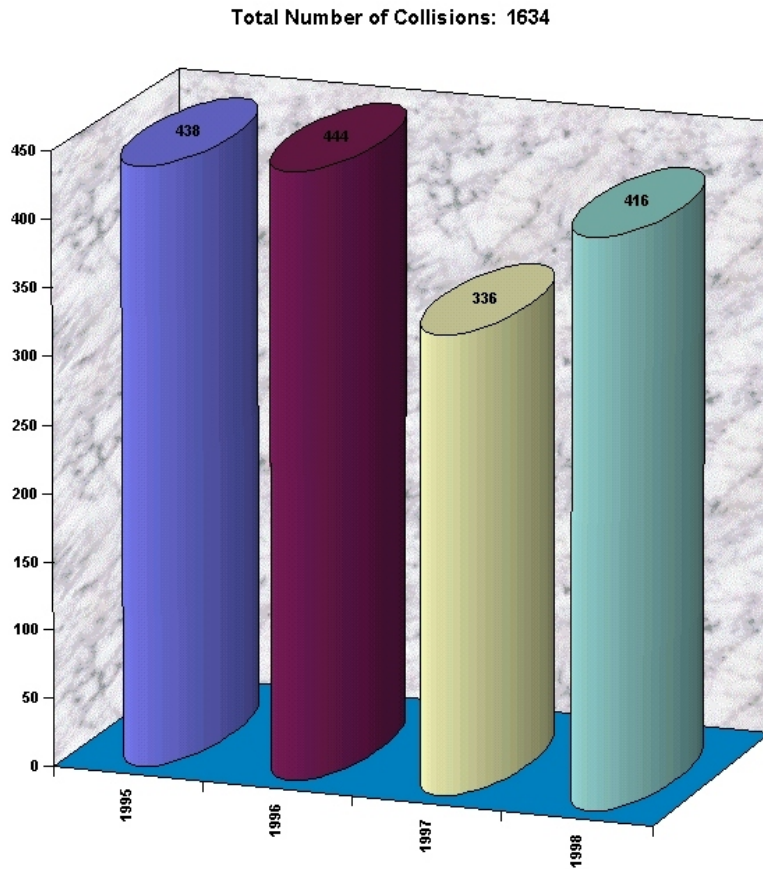


Fig. 7

Notice that the total number of collisions, as well as the total for each year, is lower because this is a graph based on one type of collision.

These are just examples -- you can break down the **Year**, **Month**, and **Day of Week** queries/graphs even more by setting other parameters.

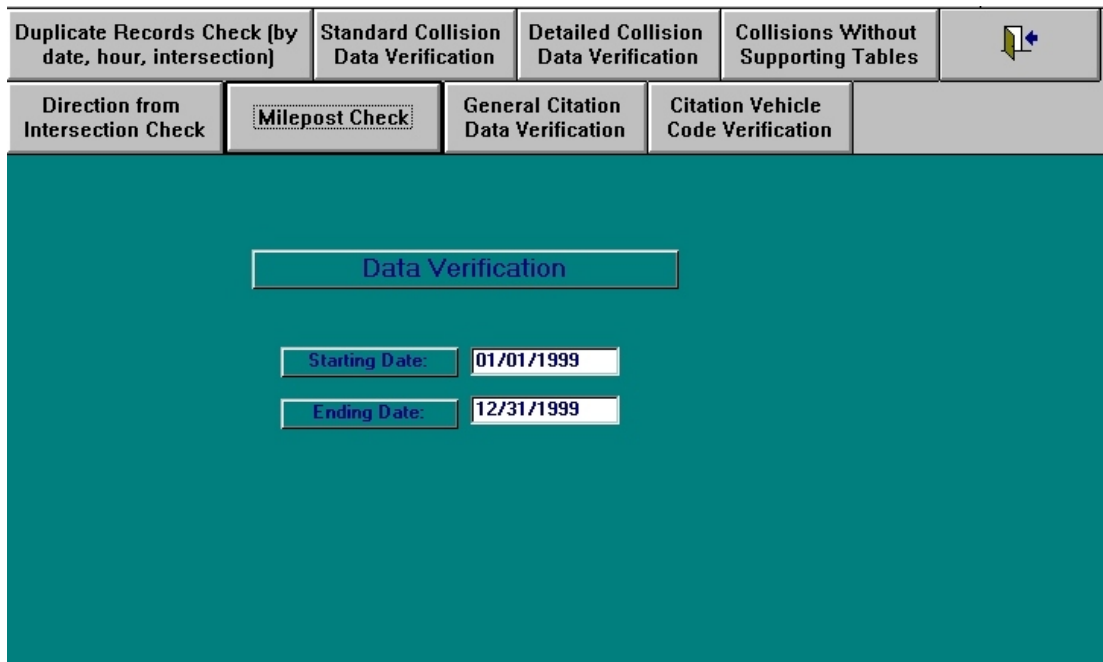
CHAPTER FIVE

Data Verification

Data Verification is an easy-to-use feature that allows you to run checks on duplicate records, citations, mileposts, and other information. It checks various parts of the data in collisions and citations to see if the information is conflicting or inaccurate.

All **Data Verification** requires from you are two basic pieces of information: a starting date and an ending date. It doesn't get much easier than that, does it?

From the Traffic Collision Database Main Menu, simply click the “**Data Verification**” button to bring up the **Data Verification** screen, as seen in Fig. 1 below.



The screenshot shows a software interface with a menu of verification options at the top and a form below. The menu options are: Duplicate Records Check (by date, hour, intersection), Standard Collision Data Verification, Detailed Collision Data Verification, Collisions Without Supporting Tables, Direction from Intersection Check, Milepost Check, General Citation Data Verification, and Citation Vehicle Code Verification. The 'Milepost Check' option is highlighted. Below the menu is a large teal area containing a 'Data Verification' button and two date input fields: 'Starting Date: 01/01/1999' and 'Ending Date: 12/31/1999'.

Fig. 1

All eight of the verification procedures require a **starting date** and an **ending date**, so make sure you enter these first, using the standard Database date format (“00/00/0000”). Once you have entered the date range, click the appropriate button for the verification you wish to run. The Database will retrieve and sort the data and then produce a report (except with **Duplicate Records Check**), which you can print if necessary.

5.1 DUPLICATE RECORDS CHECK

The **Duplicate Records Check** does not produce a report, but, rather, allows you to select and delete unnecessary duplicate records. Once you have entered starting and ending dates in the **Data Verification** screen (Fig. 1 above), click the “**Duplicate Records Check**” button; you will see a screen similar to the one in Fig. 2 below.

Create a list of collisions you want to delete by double clicking on the collision to add to the list below.

Collision date	Collision Hour	Collision T	Report Number	Primary Road	Secondary Road	Distanc	Directio	officer id
01/12/1999	08	8:50:00 A		AVENUE 152	ROAD 168	200	West	10415
01/12/1999	08	8:35:00 A		AVENUE 152	ROAD 168	140	West	10415
02/04/1999	08	8:11:00 A		ROAD 80	AVENUE 368	1750	North	13721
02/04/1999	08	8:10:00 A		ROAD 80	AVENUE 368	1755	North	13721
02/04/1999	08	8:00:00 A		ROAD 80	AVENUE 368	13	North	10293

Delete Collisions in Bottom List

Collisions to Delete (Double click to remove from list)

Fig. 2

Notice that there are two “windows,” one containing a list of all duplicate records found, the other one blank. As the instructions at the top of the screen state, you create a list of those duplicate records you want to delete by double-clicking each record, one by one. The records you select for deletion will appear in the bottom window. Once you have selected all the records that need to be deleted, simply hit the “**Delete Collisions in Bottom List**” button at the top of the screen. This will delete those duplicate records, thereby “cleaning up” the Database.

Fig. 3 below shows the **Duplicate Record Check** with a list of duplicates in the bottom window.

Click here to complete the process.

Create a list of collisions you want to delete by double clicking on the collision to add to the list below.

Delete Collisions in Bottom List

Collision date	Collision Hour	Collision T	Report Number	Primary Road	Secondary Road	Distanc	Directio	officer id
01/12/1999	08	8:50:00 A		AVENUE 152	ROAD 168	200	West	10415
01/12/1999	08	8:35:00 A		AVENUE 152	ROAD 168	140	West	10415
02/04/1999	08	8:11:00 A		ROAD 80	AVENUE 368	1750	North	13721
02/04/1999	08	8:10:00 A		ROAD 80	AVENUE 368	1755	North	13721
02/04/1999	08	8:00:00 A		ROAD 80	AVENUE 368	13	North	10293

Collisions to Delete (Double click to remove from list)

Collision date	Collision Hour	Collision T	Report Number	Primary Road	Secondary Road	Distanc	Directio	officer id
01/12/1999	08	8:35		AVENUE 152	ROAD 168	140	West	10415
02/04/1999	08	8:10		ROAD 80	AVENUE 368	1755	North	13721
02/04/1999	08	8:11		ROAD 80	AVENUE 368	1750	North	13721

Fig. 3

Double-click the duplicate records to be deleted, and then view the records to verify them.

If you mistakenly double-click on a record that you do not want deleted, all you need to do is locate that record among the list of "Collisions to Delete" in the bottom window and double click on it. It will disappear!

Sample Data Verification Report

Let's take a look at sample **Data Verification** report, just to give you an idea of the type of report available to you in this section of the Database. Fig. 3 (on the following page) shows a detail of a **Standard Collision Data Verification** report.

Accident No.	Report No.	Primary Road	Secondary Road	Date	Time	Field	Problem
6940023012883		ROCHE STREET	CHASE AVENUE	1/1/99	2:30 AM	Distance	Distance (350') greater than segment length (324') at ROCHE STREET and CHASE AVENUE on North approach.
6941160012251		CHARTER OAK DRIVE	ROAD 168	1/2/99	4:00 PM	Direction	No East approach found at CHARTER OAK DRIVE and ROAD 168
6943235915047		AVENUE 392	ROAD 48 (N)	1/4/99	11:59 PM	Direction	No East approach found at AVENUE 392 and ROAD 48 (N)
6944151014713		AVENUE 296	ROAD 156	1/5/99	3:10 PM	Distance	Distance (1056') greater than segment length (324') at AVENUE 296 and ROAD 156 on West approach.
6947235913267		DINELY DRIVE	ROUTE 198-SKY LINE DRIVE	1/8/99	11:59 PM	Distance	Distance (3168') greater than segment length (534') at DINELY DRIVE and ROUTE 198-SKY LINE DRIVE on North
6949020015169		WESTSIDE STREET	ATKINS WAY	1/10/99	2:00 AM	Collision Type /Involved With	Parked vehicle party found but Collision Type or Involved With does not indicate parked motor vehicle
6950014511312		ORANGE BELT DRIVE	AVENUE 200	1/11/99	1:45 AM	Collision Type /Involved With	Parked vehicle party found but Collision Type or Involved With does not indicate parked motor vehicle
6956143012316		BELMONT ROAD	MEADOW AVENUE	1/17/99	2:30 PM	Direction of Travel	Not Stated
6959101011863		AVENUE 24	ROUTE 99	1/20/99	10:10 AM	Distance	Distance (600') greater than segment length (193') at AVENUE 24 and ROUTE 99 on East approach.

Fig. 4

To produce this verification report, all that was required was the entry of a **starting date** and an **ending date**, followed by a single mouse-click on the “**Standard Collision Data Verification**” button.

Now, take a look at Fig. 4. The first seven columns contain collision information, and the final column at the right, labeled “**Problem**,” states the discrepancies found within the collision data.

CHAPTER SIX

Configuration

Configuration allows you to “configure” or “customize” the database by changing and setting default values for a variety of fields, set headings for various reports, and create lists of available options for other fields. Once you have made changes, they will automatically appear on input screens, query menus, and reports. Think of it as altering various default values in order to customize the Collision Database for your specific needs.

To open the **Configuration** screen, select “**Configuration**” from the Traffic Collision Database Main Menu. The **Configuration** screen is shown in Fig. 1 below.

Default Configuration Menu	
Custom Configuration Selection List	
[Configure]	
Starting Date:	01/01/1996
Ending Date:	12/31/1996
Distance (All Collisions):	50
Distance (Rear-End):	150
Use 'At Intersection' Field (Over-rides Distances) <input type="checkbox"/>	
Report Heading (line 1):	Tulare County
Report Heading (line 2):	Traffic Engineering Department
Collision Report No. Prefix	98-
Collision Report No. Format: [enter '#s to show length]	0000
Citation Report No. Prefix	BG
Citation Report No. Format: [enter '#s to show length]	#####
Citation Case No. Prefix	
Citation Case No. Format: [enter '#s to show length]	
Reporting District Format	##
NCIC Number	1909
Default City	xxx
Default County	xxx
Default Judicial District	
DUI Citation No. Prefix	
DUI Citation No. Format: [enter '#s to show length]	
DUI Case No. Prefix	
DUI Case No. Format: [enter '#s to show length]	
[Y2K Modification]	

Fig. 1

Take a look at the **Configuration** screen. As you can see the customizable fields are laid out in this screen, allowing you to change default values for twenty-two different fields. You can:

- set the *default* starting and ending dates for all of your queries
- set the *default* distance value (number of feet) for all of your queries
- configure the format for report numbers
- set default city, county, and district names
- set prefixes for citations and cases

- configure report headings
- and other default values

Note the **Custom Configuration Selection List** at the top (Fig. 2).

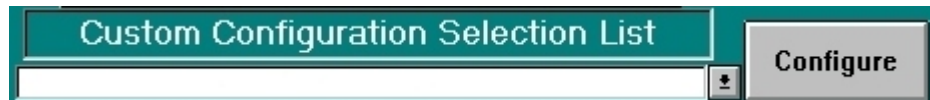


Fig. 2

This drop-down list allows you to select different customizable options. You can configure settings for:

- tow companies
- hospitals
- transportation companies
- vehicle body styles
- officers
- city names
- race
- reporting districts
- vehicle codes
- custom input fields
- custom party input fields
- collision input screen
- citation input screen
- DUI input screen
- database locations and versions

You can also:

- reattach tables
- input officer table from file
- input RD list from file
- confirm tables are attached

Each selection from the drop-down list will open a table or form. **For details on each feature of the Custom Configuration Selection List, please refer to your Data Input Module. It will explain how to customize each selection in the list** (because the *Data Input Module* contains detailed instructions for the **Configuration** section, we won't get into those instructions in this manual).



We hope this manual has helped you use our Traffic Collision Database. We also hope that it answers questions you might have about inputting, editing, and deleting data, running queries and reports, configuring, and performing other tasks. If you find that you need further assistance or have technical concerns, you can contact Crossroads Software at (714) 990-6433. Our fax number is (714) 990-5628. You might also visit us on the world wide web at www.crossroadssoftware.com. Our web site contains product information, upgrades, online manuals, and much more.