

CHAPTER 6. DATA ENTRY AND CRASH TYPING

The primary purpose of this software product is to allow users to type pedestrian and bicyclist collisions in their community, which may lead to the selection and implementation of countermeasures targeted at specific crash types. This chapter covers the data entry and crash typing aspects of the application and includes several crash typing examples to assist users in understanding the logic of the software.

Prior to entering data in the application, the user should set the appropriate parameters in *Preferences*: (See chapters 3 and 4.)

- Create a new database and establish it as the default database on the *Data Sources* tab.
- Select the default pedestrian and bicyclist data entry forms from the lists of available data forms for the default database. If necessary, create a new form or edit one of the existing forms. (See chapter 5.)
- Set the crash typing options on the *Data Sources* tab. The options include enabling or disabling the pedestrian location option, pedestrian group typing option, and bicyclist group typing option.
- Choose or create the appropriate user profile and associated editing and crash typing options on the *User Profiles* tab.

DATA ENTRY

Basic Functions

Entering data and typing crashes begins by selecting either the *Pedestrian* or *Bicyclist* button on the toolbar, as shown in figure 36. A click on either of these buttons will open an empty data entry form and activate the other data entry/crash typing buttons on the toolbar. The form name and the database file name will appear in the header box. The record number will appear in the toolbar at the bottom of the page. The entire data entry form is contained on one scrollable screen. The window can also be maximized to see more fields at once.

The cursor will appear in the first field to be completed. The order of entry for the data will have been established through the *Reindexing* function when the form was designed. Proper form design and indexing will enable data entry personnel to tab from field to field in the desired order during data entry. As they become experienced with data entry, it may be more efficient to have a different order of entry. Refer to chapter 5 for instructions on *Reindexing* within *Form Design* to make such a change.

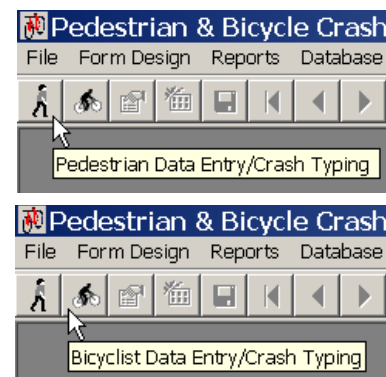


Figure 36. Image. Enter pedestrian or bicyclist crash data.

Error checks will be performed as data are entered for specific fields. The message received will depend on the field, but examples include:

- Field Report Number error—This field is required and a value must be entered before the user can tab to the next field. While the *Report Number* field is the only one that is initially required, the same type of message will appear for any other fields that have been established as required by the user in the *Database Fields* tab of *Preferences*.
- Field Date of Crash error—The format for this field requires eight characters entered as mmddyyyy. The months and days are also checked for validity. Any other format will not be accepted. This same error checking is used for other dates (e.g., birth dates) in the application.
- Non-integer error—Fields with an integer data type will not accept other types of characters. The error message will indicate this and tell the user to change the data type in *Preferences* if non-integer characters are desired.
- Field Crash Type Number error—This field is reserved for a value that will be produced when the crash typing is completed. Values cannot be entered directly. This same error message will appear when the user attempts to manually fill any field that is reserved for crash typing.
- Field length error—If the number of characters typed exceeds the field length that was set for a field, an error message will appear indicating this. If necessary, field lengths can be changed in the *Database Fields* tab of *Preferences*.

The crash typing function may be accessed at any time during data entry and is done with a click on the *Crash Typing* button on the toolbar, as shown in figure 37. When the crash typing is completed (i.e., a crash type is accepted after answering the series of questions/directives), the crash typing fields included on the data entry form will be completed. More details on crash typing, including several examples, are provided in a later section of this chapter.



Figure 37. Image. Access the *Crash Typing* function.

Entries can be saved with a click on the *Save Record* button in the toolbar, as shown in figure 38. The record can be saved and resaved at any time during data entry. Be sure to save once all data have been entered and the crash typing has been completed. If unsaved changes are made to a record, any attempt to close the data entry window or add a new record will prompt a message asking if the record should be saved.



Figure 38. Image. Save a data entry record.

A new record can be added by clicking on the *New Record* button, which will open an empty data entry form. (See figure 39.) The record number for the new entry will be shown in the bottom left of the screen.

Other Functions

The toolbar includes several other functions that may be useful for managing and navigating the database, as shown in figure 40. The *arrow key* buttons allow the user to navigate to the previous and next records, as well as the first and last records in the database. The *Delete* button, denoted by the trash can icon, can be used to delete a record. A click on this button will produce a confirmation window requiring a *Yes* response to delete the record.



Figure 39. Image. Open a new data entry form.



Figure 40. Image. Navigate to, delete, search, and browse records in a table.

The *Search* button (magnifying glass) allows the user to search the database for a specific record or records. This feature will be most useful when searching for the record of a specific crash using the *Report Number* field. A click on this button opens a search window. The user can input the value or text to search for and the variable (field) in which to search. A click on *Search* will produce a list of records that meet the search criteria. In the example shown in figure 41, records are listed that were coded as “M” for the variable *Driver Gender*.

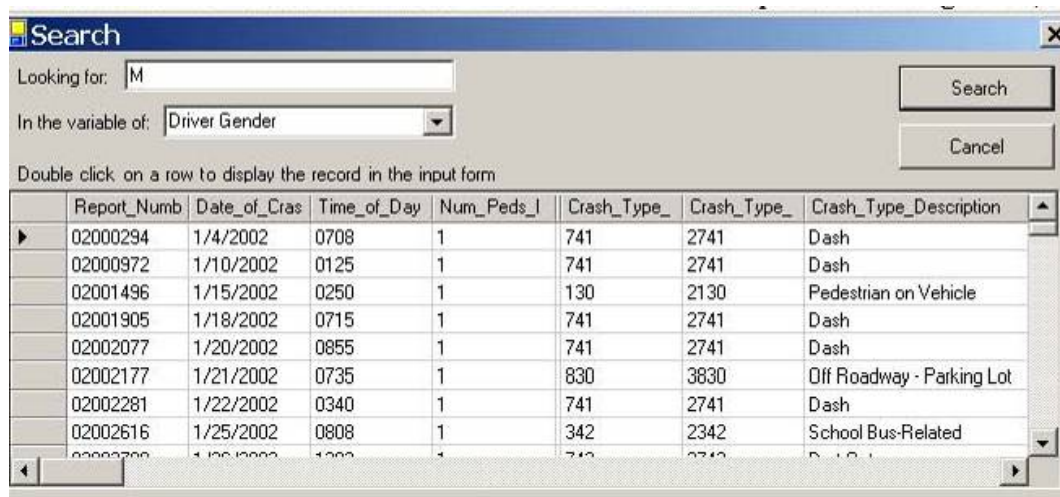
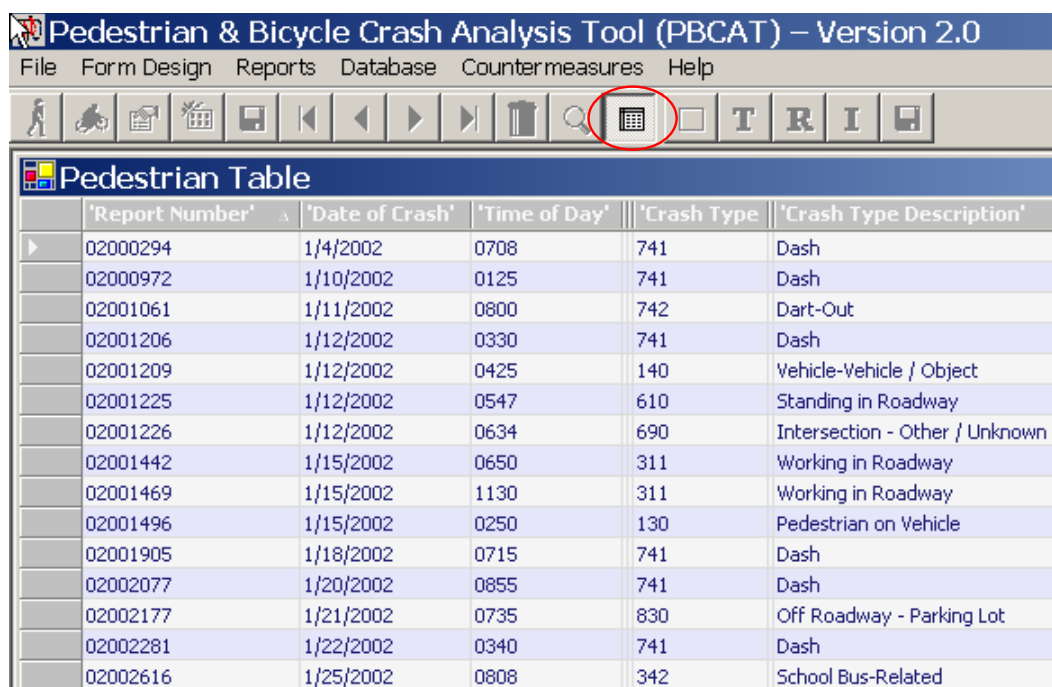


Figure 41. Image. Search the database for specific records.

The complete database can also be viewed as a table with a click of the *Browse* button on the toolbar, as shown in figure 42. Enabling browse editing on the *User Profiles* tab in *Preferences* allows the user to edit or delete existing records and create new records. A prompt to save changes will appear when the window is closed or browse mode is exited (another click on the *Browse* button). If browse editing is not enabled, the table can be viewed but not changed.



	'Report Number'	'Date of Crash'	'Time of Day'	'Crash Type'	'Crash Type Description'
▶	02000294	1/4/2002	0708	741	Dash
	02000972	1/10/2002	0125	741	Dash
	02001061	1/11/2002	0800	742	Dart-Out
	02001206	1/12/2002	0330	741	Dash
	02001209	1/12/2002	0425	140	Vehicle-Vehicle / Object
	02001225	1/12/2002	0547	610	Standing in Roadway
	02001226	1/12/2002	0634	690	Intersection - Other / Unknown
	02001442	1/15/2002	0650	311	Working in Roadway
	02001469	1/15/2002	1130	311	Working in Roadway
	02001496	1/15/2002	0250	130	Pedestrian on Vehicle
	02001905	1/18/2002	0715	741	Dash
	02002077	1/20/2002	0855	741	Dash
	02002177	1/21/2002	0735	830	Off Roadway - Parking Lot
	02002281	1/22/2002	0340	741	Dash
	02002616	1/25/2002	0808	342	School Bus-Related

Figure 42. Image. Browse all records in the database.

Any record in the database can be printed using the *Print* command under the *File* menu. The menu also includes options for *Page Setup* and *Print Preview*. The latter will generate the form in a window like the one shown in figure 43. This window can be maximized, and there is a zoom option to preview specific sections of the form.

CRASH TYPING OPTIONS AND DATABASE FIELDS

Crash typing requires the user to input answers to questions and directives on a series of screens. The number of questions and directives is determined by the crash typing options selected for a particular database. The options available are shown on the *Data Sources* tab in *Preferences* and are briefly described below. Refer to chapter 4 for more details on each option and instructions for enabling each one.

Pedestrian Location

The Pedestrian Location Option allows the user to add details regarding the specific location of pedestrian crashes at or near intersections. The answers are stored in the following fields in the database and may prove useful for conducting intersection-level analyses:

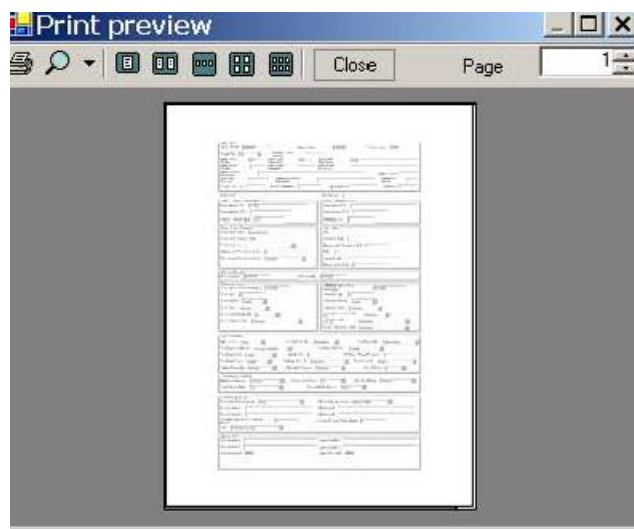


Figure 43. Image. Preview the data form that can be printed.

- *Motorist_Direction* (northbound, southbound, eastbound, westbound, unknown).
- *Motorist_Maneuver* (left turn, right turn, straight, unknown).
- *Leg_Intersection* (nearside, farside, unknown).
- *Pedestrian_Direction* (northbound, southbound, eastbound, westbound, unknown).
- *Scenario* (one of 36 scenarios based on the combination of motorist maneuver, intersection leg where the crash occurred, direction of travel of the pedestrian, and whether the pedestrian was in or out of the crosswalk).

Illustrations of the scenarios are provided in Appendix B for reference and use in analyses. Only *Motorist_Direction* (motorist's initial travel direction before any turns) and *Scenario* are needed to identify the precise leg of the intersection and the maneuvers of the motorist and pedestrian. If additional variables are preferred to further define location information, the user can add other fields to the database, as discussed later in this chapter.

Special Note: To make use of the pedestrian location data in an analysis involving specific intersections, it is necessary to sort the data by intersection location. Refer to chapter 4 for a discussion of this issue.

Standard versus Group Typing

The logic for the standard crash typing within PBCAT will produce 56 unique pedestrian crash types and 79 unique bicyclist crash types. Some users may not want the level of detail that is available with these standard crash types. They may select the group typing option for pedestrian and/or bicyclist crashes on the *Data Sources* tab within *Preferences*. (See chapter 4.) If selected, the application will use a different logic that requires the user to answer a lesser number of questions/directives and places each crash into one of 16 pedestrian crash type groups or 20 bicyclist crash type groups.

As an example of the differences in these two options, consider a collision involving a motorist overtaking a bicyclist. Within the standard crash typing logic, the crash may be coded as one of four types: 1) *Motorist Overtaking—Undetected Bicyclist*, 2) *Motorist Overtaking—Bicyclist Swerved*, 3) *Motorist Overtaking—Misjudged Space*, or 4) *Motorist Overtaking—Other/Unknown*. If the group typing option were selected, the crash would be coded as *Motorist Overtaking Bicyclist*. The four detailed crash types available in the standard application are collapsed into the single choice in the group application. Appendix C includes a complete list of all pedestrian and bicyclist crash groups and the unique standard crash types included in each group.

Database Fields

The database fields that are completed by the software when a crash is typed and a record is saved in the data entry mode are listed below. These fields cannot be edited or deleted on the *Database Fields* tab within *Preferences*. While the information is saved to these fields in the database for each typed crash record, not all fields have to be included on the data entry form. For example, if the only crash type information desired by the user is the crash type description,

the pedestrian and bicyclist forms can be designed to include *Crash_Type_Description* and exclude all other fields. Refer to chapter 5 for more details on customizing data entry forms.

Pedestrian and Bicyclist Fields (present in both data tables)

- *Crash_Group_Basic*—integer value for crash group.
- *Crash_Group_Description*—text descriptor for crash group.
- *Crash_Group_Expanded*—integer value that combines the *Crash_Location*, *Crash_Group_Basic*, and other fields related to the pedestrian/bicyclist position and maneuver.
- *Crash_Location*—integer value for location of the crash.
- *Crash_Location_Desc*—text descriptor for location of the crash.
- *Crash_Type_Basic*—integer value for crash type.
- *Crash_Type_Description*—text descriptor for crash type.
- *Crash_Type_Expanded* – integer value that combines the *Crash_Location*, *Crash_Type_Basic*, and other fields related to the pedestrian/bicyclist position and maneuver.

Pedestrian Fields (not present in the bicyclist table)

- *Leg_Intersection*—text descriptor to further define the crash location.
- *Motorist_Direction*—text descriptor to define the travel direction of the motorist.
- *Motorist_Maneuver*—text descriptor to define the maneuver of the motorist.
- *Pedestrian_Direction*—text descriptor to define the travel direction of the pedestrian.
- *Pedestrian_Position*—integer value for pedestrian position.
- *Pedestrian_Position_Desc*—text descriptor for pedestrian position.
- *Scenario*—alphanumeric character for defining the crash on the basis of intersection leg, motorist maneuver and direction, and pedestrian direction.

Bicyclist Fields (not present in the pedestrian table)

- *Bicyclist_Direction*—integer value for bicyclist direction.
- *Bicyclist_Direction_Desc*—text descriptor for bicyclist direction.
- *Bicyclist_Position*—integer value for bicyclist position.
- *Bicyclist_Position_Desc*—text descriptor for bicyclist position.

CRASH TYPING SCREENS AND DEFINITIONS

Crash typing begins with a click on the *Crash Typing* button on the toolbar, as shown in figure 44, which opens a window with the first question regarding where the crash occurred. (See example for pedestrian crashes in figure 45.) The graphics on the screens provide examples of the circumstances described in the yellow narration boxes. As the cursor is placed over a graphic and the image is highlighted by a blue border, a narrative describing the details associated with that selection is provided in the box.



Figure 44. Image. Start the crash typing process.

Special Note: The graphic is an example and the text description must be read to interpret the differences (sometime subtle) between the options on the screen. Pay particular attention to the NOTES included in the descriptions.

Most of the screens are of the type shown below, with an image as an example of what is being described in the narrative. There are also screens with buttons (like the Unknown/Insufficient Information button below), which also require the user to read the information in the yellow narrative box. In addition, there are some screens that include radio buttons or small rectangular buttons and provide the needed descriptive information next to each button.

Each screen also includes a *Close* button, which if clicked, will ask the user whether they wish to exit crash typing. There is also a *Back* button on all screens except the first. Clicking this button will allow the user to return to the prior screen and view the response that was provided to the question on that screen. The application retains the answers provided to each question/directive as a crash is being typed, which allows a user to use the *Back* button to determine the response to any question in the sequence.

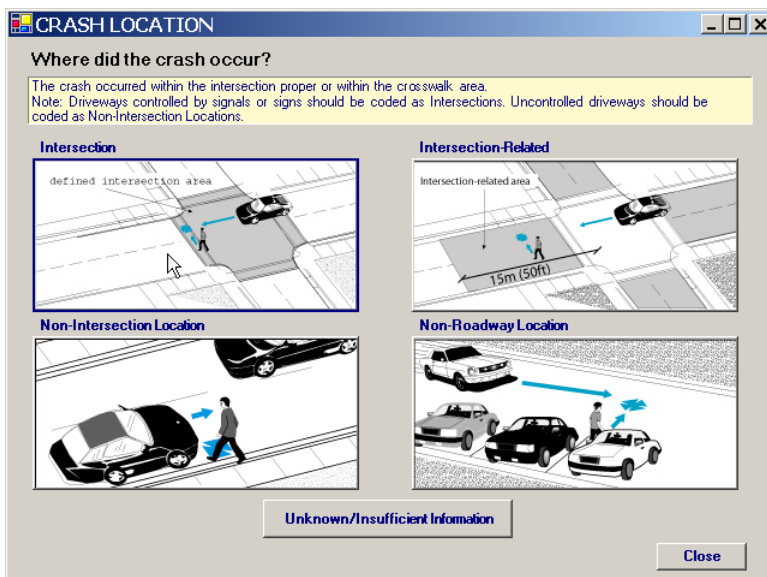


Figure 45. Image. Identify where the crash occurred.

Appendix F includes several tables of definitions related to the pedestrian and bicycle crash typing logic. Understanding the subtleties among some of these definitions may assist the user in understanding the choices available in the logic. Also provided in this appendix are definitions associated with other important selections such as crash location and pedestrian or bicyclist position.

CRASH TYPING EXAMPLES

Appendix G provides copies of 20 crash reports (10 involving pedestrians and 10 involving bicyclists) and the crash types associated with these reports, as well as the questions/directives and correct responses for the sequence of screens encountered for each crash. Using the program in conjunction with these reports gives the user with the opportunity to practice and sharpen crash typing skills and understand the logic built into the program. These examples may also be used as training materials for someone new to the concept of crash typing.

Following are three examples (one pedestrian and two bicyclist crashes) to illustrate the steps involved in typing a crash and the screens that appear in the application. The first two examples use standard crash typing, while the third illustrates the use of the group typing option. The pedestrian example is completed with the pedestrian location option enabled.

Before answering any questions, read the entire crash report, paying particular attention to the sketches and narratives and looking at the fields related to location, intersection control, and operator characteristics and condition.

Example 1—Bicyclist Crash (Standard Typing)

This example is from a crash in Florida involving a bicyclist and motorist. A 3-page police crash report is shown in figures 46, 47, and 48. The first two pages of the report include a description of the location, operator (bicyclist and driver) information, and a number of completed fields describing aspects of the location (e.g., type of traffic control) and contributing factors. The third page features a drawing of the scene and a narrative describing the sequence of events. Read the narrative, study the drawing, and become familiar with the characteristics of the location and operators involved.

Florida Crash Report

Time & Location	Date of Crash 2/12/92		Time of Crash AM 1:20 PM		Time Officer Notified 10:01 AM		Time Officer Arrived 10:12 AM		Agency Report No.		Crash Report No. REPORT 1	
	County/City Code 11/00		Feet or Miles 1.0		N S E W N S E W		City or Town GAINESVILLE, FL		In City/Town?		County ALACHUA	
	No. of Lanes 4		☐ Divided ☒ Undivided		On street, Road, or Highway SW. 75 STREET							
	At Intersection of W. UNIVER. AVENUE		N S E W N S E W		Feet/Miles of Intersection							
Vehicle 1	Driver Action 1 Phantom 2 Hit & Run 3 N/A		Year 92		Make Cannon Dale		Type 10		Use		POINT OF IMPACT Circle Area of Damage 14	
	Vehicle Traveling ☐ N ☒ S ☐ E ☐ W		On		Posted Speed 40		Estimated Damage \$ 50		1 Disabling 2 Functional 3 No Damage		2	
	BAC TEST 1 Blood 3 Urine 2 Breath 4 Refusec 5 None		Results 5		AL/Drugs 1		Phys. Def. 1		Res. 1		Race 1	
	Sex 1		Inj. 3		S. Equip 1		Eject 2		1 Tow Rotation 2 Tow Owner's 3 Driver 4 Other		3	
Vehicle 2	Driver Action 1 Phantom 2 Hit & Run 3 N/A		Year 88		Make Hyun		Type 1		Use		POINT OF IMPACT Circle Area of Damage 2	
	Vehicle Traveling ☐ N ☐ S ☐ E ☒ W		On		Posted Speed 30		Estimated Damage \$ 150		1 Disabling 2 Functional 3 No Damage		3	
	BAC TEST 1 Blood 3 Urine 2 Breath 4 Refusec 5 None		Results 5		AL/Drugs 1		Phys. Def. 1		Res. 1		Race 2	
	Sex 2		Inj. 1		S. Equip 2		Eject 1		1 Tow Rotation 2 Tow Owner's 3 Driver 4 Other		3	
Vehicle 3	Driver Action 1 Phantom 2 Hit & Run 3 N/A		Year		Make		Type		Use		POINT OF IMPACT Circle Area of Damage	
	Vehicle Traveling ☐ N ☐ S ☐ E ☐ W		On		Posted Speed		Estimated Damage \$		1 Disabling 2 Functional 3 No Damage			
	BAC TEST 1 Blood 3 Urine 2 Breath 4 Refusec 5 None		Results		AL/Drugs		Phys. Def.		Res.		Race	
	Sex		Inj.		S. Equip		Eject		1 Tow Rotation 2 Tow Owner's 3 Driver 4 Other			
Ped	Hazardous Mat. Transported		1 None 2 Flam. Liquid		3 Explosives 4 Poison Gas		5 Corrosive Material 6 Radioactive Mater.		7 Other		Driving Ability Questionable 1 Yes 2 No 3 NA	
	RECOMMEND RE-EXAM		2 No 3 NA									
Vehicle Type		Vehicle Use		Trailer Type		Physical Defects		Alcohol/Drug Use		Location (in Vehicle)		
01 Automobile		01 Private Transportation		01 Single Semi Trailer		1 No Defects Known		1 Not Drinking or using drugs		1 Front Left		
02 Passenger Van		02 Commercial Passengers		02 Tandem Semi Trailers		2 Eyesight Defect		2 Alcohol-Under Influence		2 Front Center		
03 Pickup/Light Truck (2 Rear tires)		03 Commercial Cargo		03 Tank Trailer		3 Fatigue/Asleep		3 Drugs- Under Influence		3 Front Right		
04 Medium Truck (4 rear tires)		04 Public Transportation		04 Saddle Mount/ Flatbed		4 Hearing Defect		4 Alcohol & Drugs-Under Influence		4 Rear Left		
05 Heavy Truck (2 or more rear axles)		05 Public School Bus		05 Boat Trailer		5 Illness		5 Had Been Drinking		5 Rear Center		
06 Truck Tractor (Cab)		06 Private School Bus		06 Utility Trailer		6 Seizure, Epilepsy, Blackout		6 Pending BAC Test Result		6 Rear Right		
07 Motor Home (RV)		07 Ambulance		07 House Trailer		7 Other Physical Defect				7 Body of truck		
08 Bus		08 Law Enforcement		08 Pole Tractor		Race		Safety Equipment		8 Bus Passenger		
09 Bicycle		09 Fire/Rescue		09 Towed Vehicle		1 White 3 Hispanic		1 Not in use		9 Other		
10 Motorcycle		10 Military		77 Other		2 Black 4 Other		2 Seat Belt / Shoulder Harness				
11 Moped		11 Other Government				Required Endorsements		3 Child Restraint		Ejected		
12 All Terrain Vehicle		DL Type 1 A 2 B 3 C		Residence 1 County of Crash		1 Yes 2 No 3 NR		4 Air Bag		1 No		
13 Train		4 D/Chauffeur 7 None		2 Elsewhere in State		Sex 1 Female 2 Male		5 Safety Helmet		2 Yes		
77 Other		5 E/Operator		3 Non-Resident (State)				6 Eye Protection		3 Partial		
		6 E/Oper-Rest		4 Foreign 5 Unknown								

Figure 46. Image. Page 1 of Florida Crash Report for example 1.

Contributing Causes - Driver/Ped			Vehicle Defect			Vehicle Movement			
01 No Improper Driving/Action	1	2 3	01 No Defects	1	2 3	01 Straight Ahead	1	2 3	
02 Careless Driving			02 Def. Brakes	1	1	02 Slowing / Stopped / Stalled	1	5	
03 Failed to Yield Right-of-Way	1	3	03 Worn/Smooth Tires			03 Making Left Turn			
04 Improper Backing			04 Defective/Improper Lights			04 Backing	11 Passing		
05 Improper Turn			05 Puncture/Blowout			05 Making Right Turn	12 Driverless or runaway Veh.		
06 Alcohol-Under Influence			06 Steering Mech.			06 Changing Lanes	77 All Other (Explain)		
07 Drugs-Under Influence			07 Windshield Wipers			07 Entering / Leaving Parking Space			
08 Alcohol & Drugs-Under Influence			08 Equipment/Vehicle Defect			08 Improperly Parked			
09 Followed Too Closely			Vehicle Special Functions			Location Type		Location on Roadway	
11 Disregarded Stop Sign			1 None	1	2 3	1 Primarily Business	1 On road		
12 Exceeded Safe Speed Limit	19 Improper Load		2 Farm			2 Primarily Residential	2 Not on Road	1 2 3	
13 Disregarded Traffic Signal	20 Disregarded Other Traffic Control		3 Police Pursuit	1	1	3 Open Country	3 Shoulder	1 1	
14 Failed to Maintain Equip./Veh.	21 Driving Wrong Side/Way		4 Recreational				4 Median		
15 Improper Passing	22 Fleeing Police		5 Emergency Oper.				5 Turn Lane		
16 Drove Left of Center	23 Vehicle Modified		6 Construction/Maintenance						
17 Exceeded Stated Speed Limit	77 Other								
18 Obstructing Traffic									
Pedestrian Action			Road System Identifier	Road Surface	Light Condition	Road Surface Type			
01 Crossing Not at Intersection	1	2 3	01 Interstate	01 Dry	1	01 Daylight			
02 Crossing at Mid-block Crosswalk			02 U.S.	02 Wet		02 Dusk			
03 Crossing at Intersection			03 State	03 Slippery		03 Dawn			
04 Walking along Road with Traffic			04 County	04 Icy	77 Other	04 Dark (Street Light)			
05 Walking Along Road Against Traffic	09 Standing in Pedestrian Island		05 Local	Weather		05 Dark (No Street Light)			
06 Working on Vehicle in Road	77 All Other		06 Turnpike/Toll	01 Clear	03 Rain	77 Other			
07 Other Working in Road	88 Unknown		07 Forest Road	02 Cloudy	04 Fog	88 Unknown			
08 Standing/Playing in Road			77 All Other						
First/Subsequent Harmful Event									
01 Collision with MV in Transport (Rear End)			13 Collision with Moped			25 Collision with Crash Attenuators			
02 Collision with MV in Transport (Head-on)			14 Collision with Train			26 Collision with Fixed Object Above Road			
03 Collision with MV in Transport (Angle)			15 Collision with Animal			27 MV Hit Other Fixed Object			
04 Collision with MV in Transport (Left Turn)			16 MV Hit Sign/Sign Post			28 Collision with Moveable Object on Road			
05 Collision with MV in Transport (Right Turn)			17 MV Hit Utility Pole/Light Pole			29 MV Ran into Ditch/Culvert			
06 Collision with MV in Transport (Sideswipe)			18 MV Hit Guardrail			30 Ran Off Road into Water			
07 Collision with MV in Transport (Backed Into)			19 MV Hit Fence			31 Overturned			
08 Collision with Parked Car			20 MV Hit Concrete Barrier Wall			32 Occupant Fell from Vehicle			
09 Collision with MV on Other Roadway			21 MV Hit Bridge Pier Abutment/Rail			33 Tractor/Trailer Jackknifed			
10 Collision with Pedestrian			22 MV Hit Tree/Shrubbery			34 Fire			
11 Collision with Bicycle			23 Collision w/Construction Barricade/Sign			35 Explosion			
12 Collision with Bicycle (Bike Lane)			24 Collision with Traffic Gates			77 All Other			
First			Subsequent						
Contributing Causes - Road		Contributing Causes - Environment		Traffic Control		Site Location		Traffic Character	
01 No Defects	1	01 Vision Not Obscured		01 No Control	11 No Pass Zone	01 Not at Intersection/ RR Xing / Bridge	2	1 Straight Level	
02 Obstruction With / Without Warning		02 Inclement Weather		02 School Zone	77 All Other	02 At Intersection		2 Straight - Upgrade/Downgrade	1
03 Road Under Repair / Construction		03 Parked/Stopped Vehicle		03 Traffic Signal		03 Influenced by Intersection		3 Curve - Level	
04 Loose Surface Materials		04 Trees/Crops/Bushes		04 Stop Sign		04 Driveway Access		4 Curve - Upgrade/Downgrade	
05 Shoulders - Soft/Low/High		05 Load on Vehicle		05 Yield Sign	10	05 Railroad Crossing		Type Shoulder	
06 Holes/Ruts/Unsafe Paved Edge		06 Building/Fixed Object		06 Flashing Light		06 Bridge	11 Private Prop.	1 Paved	
07 Standing Water		07 Signs/Billboards	1	07 Railroad Signal	4	07 Entrance Ramp	77 Other	2 Unpaved	1
08 Worn/Polish Surface		08 Fog		08 Officer / Guard / Flagmen		08 Exit Ramp		3 Curb	
77 All Other		09 Smoke		09 Posted No U-Turn		09 Public Parking Lot			
		10 Glare		10 Special Speed Zone		10 Private Parking Lot			
		77 All Other							
Violator		FL Statute Number		Charge		Citation #			
1		316.065(1)		Failed to immediately report accident to law enforcement					
2		316.123(2xa)		Violation of right of way from stop sign to intersection					
Was Investigation Made at Scene?		Is Investigation Complete		Date of Report		Photos Taken?		Investigating Agency	
X 1 Yes		X 1 Yes		2/16/92		Yes			
2 No, Where?		2 No- Why?				No			

Figure 47. Image. Page 2 of Florida Crash Report for example 1.

EMS INFO FATALS ONLY	Time EMS Notified	Time EMS Notified	County/City Code 11/00	Date of Crash 2/12/92	Report No.1
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Diagram

INDICATE NORTH WITH ARROW

SW 75 STREET

NORTH-BOUND LANE

SIDEWALK

Stop Sign

W. UNIV. AVE WESTBOUND

OPERATOR V1

EASTBOUND

CURB

CURB

SW 75 STREET

NARRATIVE

V1, A BICYCLE, WAS SOUTHBOUND ON THE SIDEWALK OF SW 75 STREET. THE DRIVER OF V2 WAS WESTBOUND ON WEST UNIVERSITY AVENUE INTENDING TO MAKE A RIGHT TURN ONTO SW 75 STREET AND HAD STOPPED AT THE STOP SIGN. THE DRIVER OF V2 FAILED TO SEE V1 APPROACHING AS SHE BEGAN TO DRIVE FORWARD, WITH THE FRONT OF V1 STRIKING THE RIGHT FRONT OF V2 AND EJECTING THE OPERATOR OF V1 ONTO THE PAVEMENT.

Figure 48. Image. Page 3 of Florida Crash Report for example 1.

As shown in figure 49, click on the *Bicyclist* button to open a bicyclist crash data entry form.

Click on the *Crash Typing* button to begin the crash typing process.

Reminder: The screens that appear in this example are for standard crash typing, which means the group typing option was NOT enabled on the *User* tab in *Preferences*.

Screen 1—Crash Location

In the time and location section of the crash report (on page 1), the location of the crash is given as “SW 75 Street” at the intersection of “W. Univer. Avenue.” A review of the descriptions for the location options on the screen leads to the correct choice of *Intersection*. (See figure 50.) Click this graphic to advance to the next screen.



Figure 49. Image. Open a bicyclist crash data entry form then begin the crash typing process.

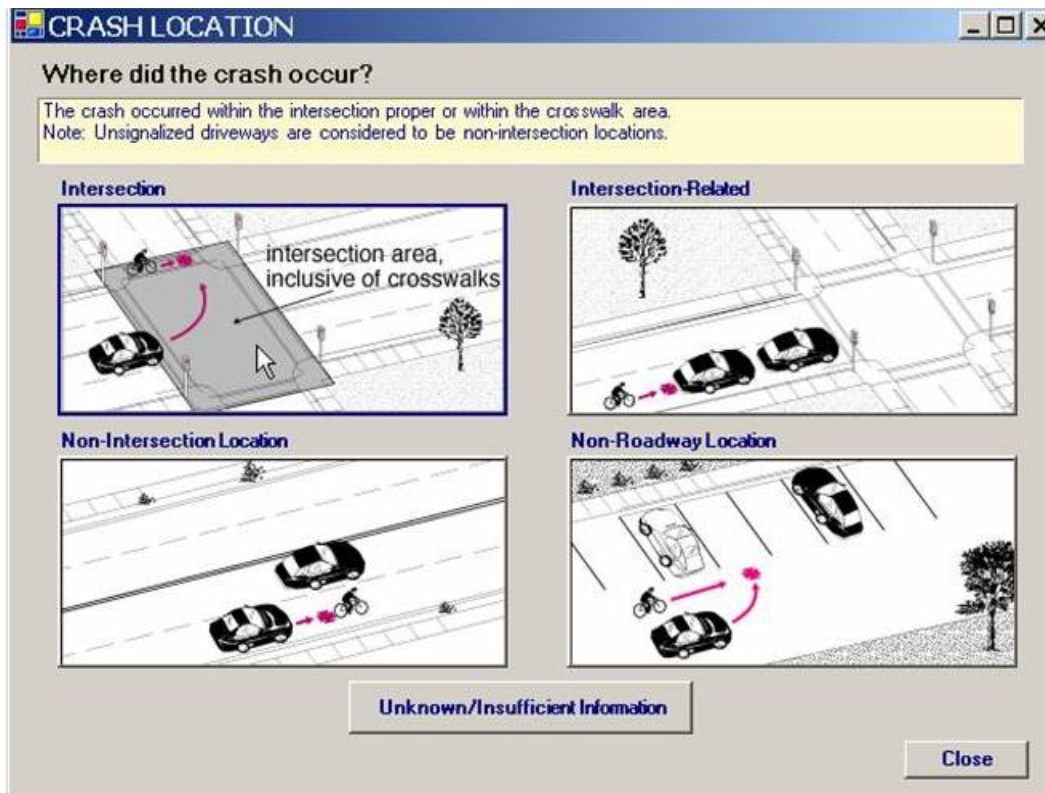


Figure 50. Image. Click on Intersection to indicate where crash occurred.

Screen 2—Bicyclist Position

The next screen asks for the initial position of the bicyclist. The crash report drawing shows the bicyclist (denoted as V1) on the sidewalk. The narrative also notes that the bicyclist “...was southbound on the sidewalk...” Finally, it is noted on page 1 of the crash report that vehicle 1 was traveling on the sidewalk. Thus, the correct answer on this screen is “On a sidewalk, crosswalk, or driveway crossing.” Click the radio button next to this text, as shown in figure 51.

Screen 3—Bicyclist Direction

The next screen asks for information related to where the bicyclist was riding just prior to the crash or prior to making a maneuver that caused the crash. From the drawing of the crash, it can be determined that the bicyclist was riding southbound on the sidewalk next to the northbound motor vehicle traffic. Thus, the correct choice on this screen is “Facing traffic.” Click the radio button next to this text, as shown in figure 52.

BICYCLIST POSITION

What was the initial position of the bicyclist?

- ☐ On a roadway, in a shared travel lane
- ☐ On a roadway, in a bicycle lane or on a paved shoulder
- ☒ On a sidewalk, crosswalk, or driveway crossing
- ☐ On a separate bicycle/multi-use path
- ☐ On a driveway or alley
- ☐ Other non-roadway areas (parking lot, open areas, etc.)
- ☐ Other (e.g., unpaved shoulder, worn path, etc.)
- ☐ Unknown

Back Close

Figure 51. Image. Indicate where the bicyclist was initially positioned.

BICYCLIST DIRECTION

In what direction was the bicyclist initially traveling prior to being struck or prior to making any turns which caused the crash?

- ☐ With traffic
- ☒ Facing traffic
- ☐ Not applicable (e.g., exiting a driveway, in a parking lot, or other non-roadway area)
- ☐ Unknown

Back Close

Figure 52. Image. Indicate travel direction of the bicyclist.

Screen 4—Unusual/Specific Circumstances

The next screen asks if the crash was one of several unusual or specific circumstances. After reading the descriptions associated with the five specific crash types on the screen, it is apparent that the correct answer is “None of the Above.” As shown in figure 53, click this button to advance to the next screen.

Special Note: In most cases, the answer to this question will be “None of the Above.” However, the user should be familiar with each of these unique types of collisions in the event that such a crash does fit the specific circumstances.

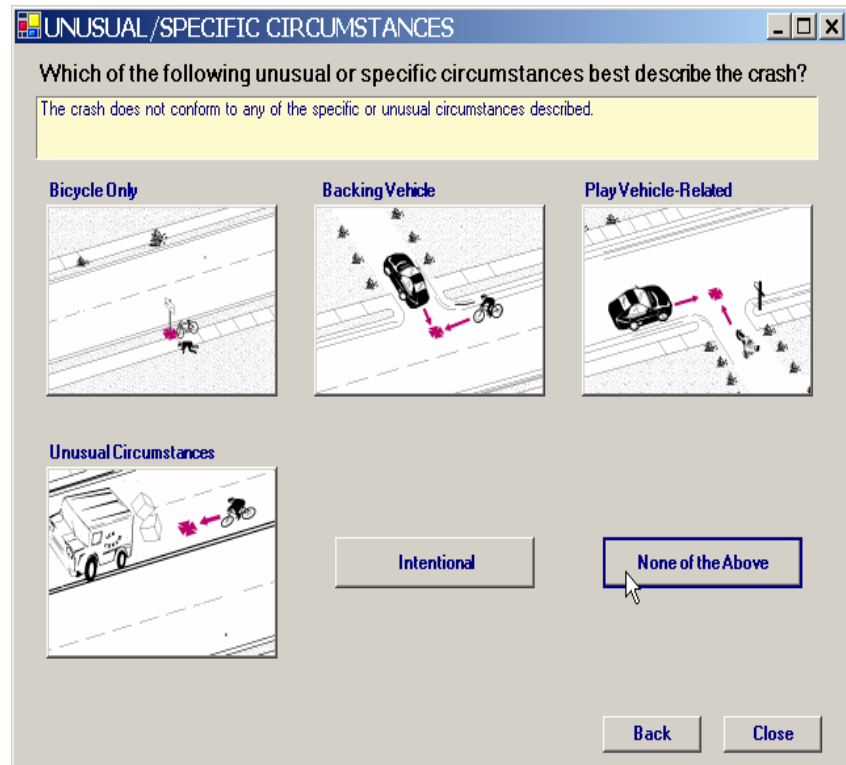


Figure 53. Image. Indicate unusual/specific circumstances.

Screen 5—Initial Approach Paths

The approach paths of the two parties is a major decision point in the crash typing logic. The choices are “Crossing Paths” and “Parallel Paths” and are defined as the paths of the two parties prior to the crash and prior to any turns that caused the crash. In this example, the diagram clearly shows the bicyclist and motorist on intersecting paths. As shown in figure 54, click on any of the crossing path graphics (in blue) to advance to the next screen.

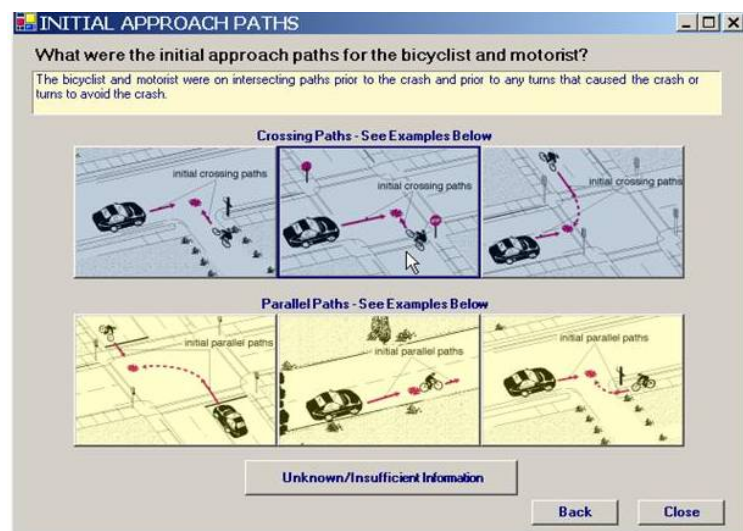


Figure 54. Image. Indicate initial approach paths.

Screen 6—Crossing Path Crash—Intersection

The remaining screens prompt the user with a series of questions about the maneuvers of one or both parties involved or about the characteristics of the site of the crash. The question shown here and the choices available are based on prior choices—the fact that the crash occurred at an intersection and that the two parties were on crossing paths. From the narrative and diagram on page 3 of the crash report, “Drive/Ride—Out/Through” is the correct choice. Click on this graphic, as shown in figure 55.

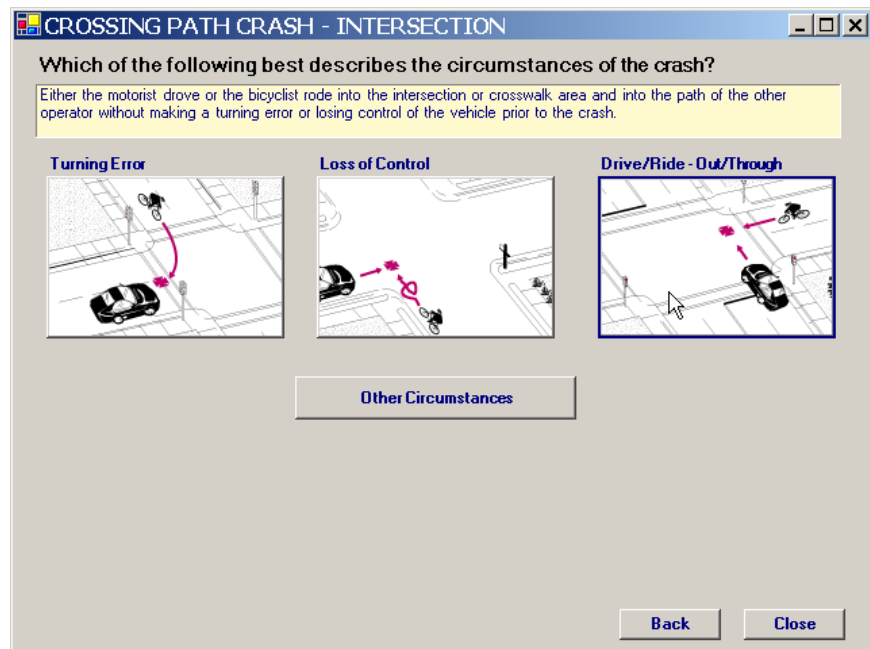


Figure 55. Image. Indicate maneuvers made by the parties.

Screen 7—Type of Traffic Control

The next screen asks the user to select the type of traffic control present at the intersection. There is a traffic control variable on page 1 of the crash report form; one of the codes entered is for a stop sign. The diagram on the crash also shows a stop sign. Thus, “Stop signs, yield signs, or flashing signals” is the correct choice. Click on the radio button next to that selection, as shown in figure 56.

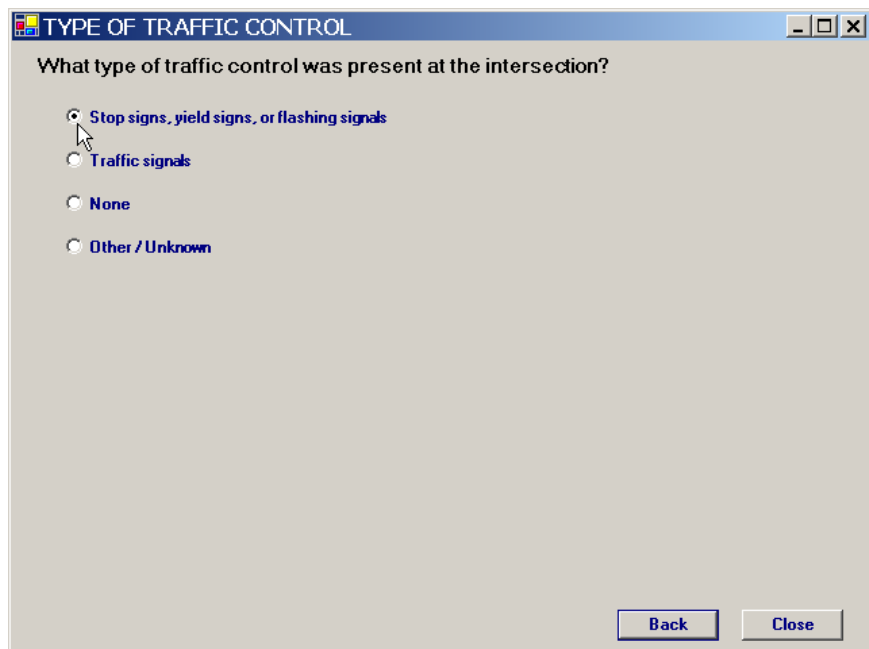


Figure 56. Image. Indicate type of traffic control at the intersection.

Screen 8—Sign-Controlled Intersection Crash

The next screen prompts the user for more details on the basis that the crash occurred at a sign-controlled intersection. After reading all the choices carefully and then reading the narrative of the crash report, the correct choice is “Motorist Drive-Out,” as shown in figure 57. The key words in the narrative that lead to this decision are that the motorist “...stopped at the stop sign.”

Special Note: This is an example of where care must be taken to read the narrative and review the report sketch, as there are subtle differences in the definitions of “Drive-Out” and Drive-Through.”

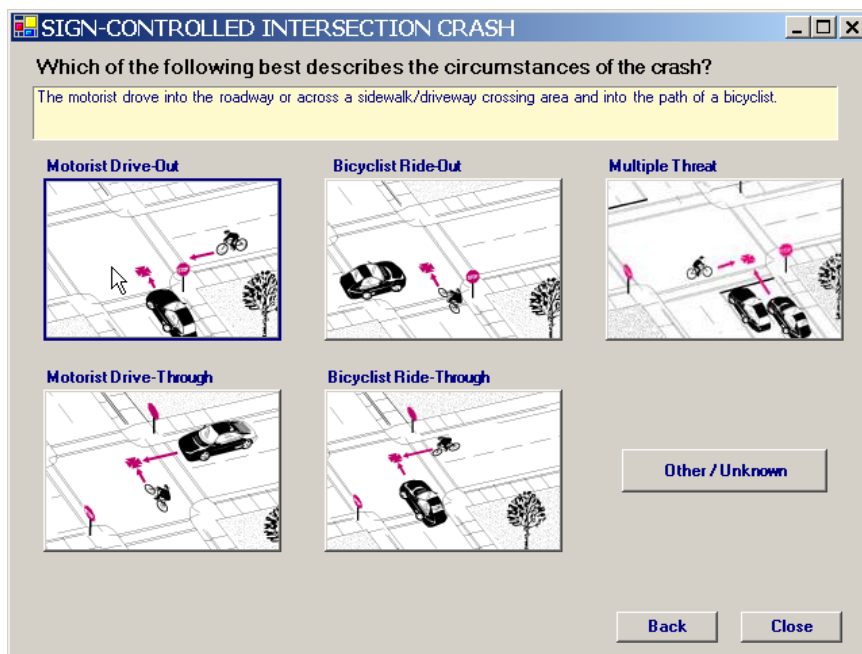


Figure 57. Image. Describe the circumstances of a sign-controlled intersection crash.

Screen 9—Crash Typing

The final screen that will appear when all required questions and directives have been answered is the crash typing window, which will include the name and number of the crash type. In this example, the crash type is a “Motorist Drive-Out Sign-Controlled Intersection” crash. Clicking *Change* will return the user to the previous screen and allow the answer to be changed on this screen (or other screens by clicking on the *Back* button). As shown in figure 58, clicking *Accept* will complete the fields on the data entry form and save the crash typing information in the database.

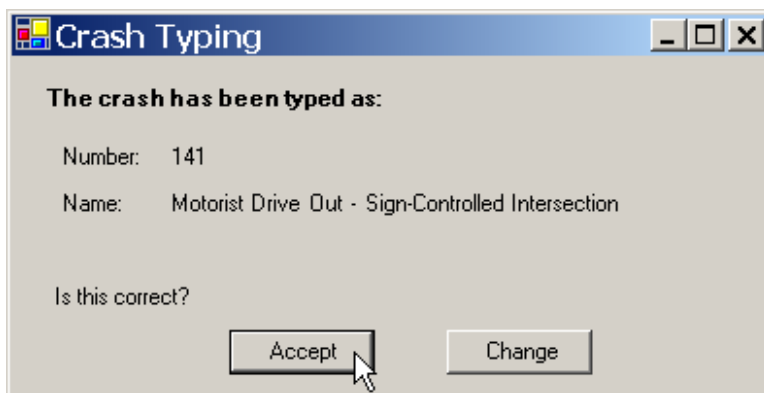


Figure 58. Image. Enter crash typing data into the entry form.

Completed Crash Typing Fields

The values for the crash typing fields in this example that will appear in the database and on the form (for those fields chosen to be included on the form) are shown in table 1:

Table 1. Values for Crash Typing Fields for Example 1

Field Name	Alias	Value for This Example
<i>Crash_Location</i>	Crash Location	1
<i>Crash_Location_Desc</i>	Crash Location Description	Intersection
<i>Crash_Type_Basic</i>	Crash Type Number	141
<i>Crash_Type_Description</i>	Crash Type Description	Motorist Drive Out—Sign-Controlled Intersection
<i>Crash_Type_Expanded</i>	Crash Type Expanded	132141
<i>Crash_Group_Basic</i>	Crash Group Number	140
<i>Crash_Group_Description</i>	Crash Group Description	Motorist Failed to Yield—Sign-Controlled Intersection
<i>Crash_Group_Expanded</i>	Crash Group Expanded	132140
<i>Bicyclist_Direction</i>	Bicyclist Direction	2
<i>Bicyclist_Direction_Desc</i>	Bicyclist Direction Position	Facing Traffic
<i>Bicyclist_Position</i>	Bicyclist Position	3
<i>Bicyclist_Position_Desc</i>	Bicyclist Position Description	Sidewalk/Crosswalk/Driveway Crossing

Example 2—Pedestrian Crash (Standard Typing, Location Option Enabled)

This example is from a crash in North Carolina involving a pedestrian and motorist. A police crash report is shown in figures 59, 60, and 61. The first page of the report, figure 59, includes a description of the location, operator (pedestrian and driver) information, and a number of completed fields describing aspects of the location (e.g., type of traffic control) and characteristics of the crash. The second page, figure 60, includes contributing factors, a drawing of the scene and a narrative describing the sequence of events. The third page, figure 61, shows the list of codes for the fields used on the report. Read the narrative, study the drawing, and become familiar with the characteristics of the location and operators involved.

North Carolina Crash Report

Date 4/1/91	Day of Week MONDAY	County WAKE	Time 17:04 (24 hr. Clock)	Local Use/Patrol Areas	REPORT NUMBER NUMBER 4
Month Day Year Municipality or Miles N S E W Outside Municip.					
Location: on <u>AVERSBO RD.</u> (R.R. Crossing # _____) Miles <u>0</u> ft. _____ Highway Number, or Highway, Street, (If ramp or service road, indicate on line) at or from <u>FOREST DR.</u> toward <u>WADE AVE.</u> N S E W					
Use Highway Number, Street Name, or Adjacent County or State Line					

☒ Vehicle 1 ☐ Hit & Run 1. Vision Obstruction <u>1</u> 2. Physical Condition <u>1</u> 3. Intoxication <u>1</u> Restrictions <u>None</u> Veh. Year <u>88</u> Veh. Make <u>FORD</u> Veh. Type Code <u>P</u> <table style="width:100%;"> <tr> <th>Yes</th> <th>No</th> <th>Trailer Type Code</th> </tr> <tr> <td>☒</td> <td>☐</td> <td><u> </u></td> </tr> <tr> <td>☒</td> <td>☐</td> <td>1st Trailer No. of Axes <u> </u></td> </tr> <tr> <td>☒</td> <td>☐</td> <td>Width <u> </u> inches</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>Length <u> </u> feet</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>2nd Trailer No. of Axes <u> </u></td> </tr> <tr> <td>☒</td> <td>☐</td> <td>Width <u> </u> inches</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>Length <u> </u> feet</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>TAD <u>None</u></td> </tr> <tr> <td>☒</td> <td>☐</td> <td>Est. Damage \$ <u>0</u></td> </tr> </table>	Yes	No	Trailer Type Code	☒	☐	<u> </u>	☒	☐	1st Trailer No. of Axes <u> </u>	☒	☐	Width <u> </u> inches	☒	☐	Length <u> </u> feet	☒	☐	2nd Trailer No. of Axes <u> </u>	☒	☐	Width <u> </u> inches	☒	☐	Length <u> </u> feet	☒	☐	TAD <u>None</u>	☒	☐	Est. Damage \$ <u>0</u>	☐ Veh. 2 ☒ Pedestrian ☐ Hit & Run ☐ Other 1. Vision Obstruction <u>1</u> 2. P physical Condition <u>1</u> 3. Intoxication <u>1</u> Restrictions <u> </u> Veh. Year <u> </u> Veh. Make <u> </u> Veh. Type Code <u> </u> <table style="width:100%;"> <tr> <th>Yes</th> <th>No</th> <th>Trailer Type Code</th> </tr> <tr> <td>☐</td> <td>☐</td> <td><u> </u></td> </tr> <tr> <td>☐</td> <td>☐</td> <td>1st Trailer No. of Axes <u> </u></td> </tr> <tr> <td>☐</td> <td>☐</td> <td>Width <u> </u> inches</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>Length <u> </u> feet</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>2nd Trailer No. of Axes <u> </u></td> </tr> <tr> <td>☐</td> <td>☐</td> <td>Width <u> </u> inches</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>Length <u> </u> feet</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>TAD <u> </u></td> </tr> <tr> <td>☐</td> <td>☐</td> <td>Est. Damage \$ <u> </u></td> </tr> </table>	Yes	No	Trailer Type Code	☐	☐	<u> </u>	☐	☐	1st Trailer No. of Axes <u> </u>	☐	☐	Width <u> </u> inches	☐	☐	Length <u> </u> feet	☐	☐	2nd Trailer No. of Axes <u> </u>	☐	☐	Width <u> </u> inches	☐	☐	Length <u> </u> feet	☐	☐	TAD <u> </u>	☐	☐	Est. Damage \$ <u> </u>
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OCCUPANT SECTION INSTRUCTIONS: Give Injury Class, Belt/Helmet Usage, Race/Sex and Age of **all occupants** in the space corresponding to the seat occupied (see codes at top).

Driver 1					Driver 2, Pedestrian, Other				
Seat	4. Inj. Class	5. Belt/Helmet	Race/Sex	Age	Seat	4. Inj. Class	5. Belt/Helmet	Race/Sex	Age
Left Front	0	3	W/F	26	Left Front	C	N/A	B/F	25
Center Front					Center Front				
Right Front	0	3	W/M	3	Right Front				
Left Rear	0	4	W/M	6 mon.	Left Rear				
Center Rear					Center Rear				
Right Rear					Right Rear				
Total No. Occupants <u>3</u> Total Number Injured <u>0</u>					Total No. Occupants <u>N/A</u> Total Number Injured <u>1</u>				

Ambulance Requested Yes If yes, Ambulance Arrived At (24 Hour Clock)
 Injured Taken to Cone Hospital 1200 N. Elm St. Greensboro Serviced by

Points of Initial Contact (write in codes)

Passenger Cars/Small Trucks		Tractor-Trailers		Motorcycle, Bicycle, or Moped	
Accident Sequence	Veh. 1 or Ped.	Veh. 1 or Ped.	Veh. 2 or Ped.	Roadway Information	19. Road Defects
6. Vehicle Maneuver/ Ped Action	<u>8</u>	<u>17</u>	<u>35</u>	11. Locality	<u>3</u>
7. First Harmful Event	<u>6</u>	<u>6</u>	Speed Limit (each vehicle)	12. Development Type	<u>2</u>
7. Most Harmful Event	<u>7</u>	<u>6</u>	Estimated Original Traveling Speed	13. Road Feature	<u>6</u>
8. Object Struck	<u>7</u>	<u>6</u>	Estimated Speed at Impact	14. Road Character	<u>2</u>
9. Distance to Object Struck	<u>8</u>	<u>6</u>	Tire Impression Before Impact (ft.)	15. Road Class	<u>4</u>
10. Vehicle Defects	<u>8</u>	<u>6</u>	Distance Traveled After Impact (ft.)	16. Number of Lanes	<u>4</u>
				17. Road Config.	<u>2</u>
				18. Road Surface	<u>4</u>
				Operating?	<u>Y</u>
				Visible?	<u>Y</u>

Figure 59. Image. Page 1 of North Carolina Crash Report for example 2.

Circumstances Contributing to the Collision (Check as many apply)										Vehicle 1	
										Removed to	
										by	
										Authority	
										Vehicle 1	
										Removed to	
										by	
										Authority	

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Driver</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> </tr> <tr><td>1. None</td><td>☒</td><td></td></tr> <tr><td>2. Alcohol Use</td><td></td><td></td></tr> <tr><td>3. Drug Use</td><td></td><td></td></tr> <tr><td>4. Yield</td><td>☒</td><td></td></tr> <tr><td>5. Stop sign</td><td></td><td></td></tr> <tr><td>6. Traffic signal</td><td></td><td></td></tr> <tr><td>7. Exceeding speed limit</td><td></td><td></td></tr> <tr><td>8. Exceeding safe speed</td><td></td><td></td></tr> <tr><td>9. Failure to reduce speed</td><td></td><td></td></tr> </table>	Driver	1	2	1. None	☒		2. Alcohol Use			3. Drug Use			4. Yield	☒		5. Stop sign			6. Traffic signal			7. Exceeding speed limit			8. Exceeding safe speed			9. Failure to reduce speed			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Driver</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> </tr> <tr><td>10. Pass stopped school bus</td><td></td><td></td></tr> <tr><td>11. Passing on hill</td><td></td><td></td></tr> <tr><td>12. Passing on curve</td><td></td><td></td></tr> <tr><td>13. Other improper passing</td><td></td><td></td></tr> <tr><td>14. Improper lane</td><td></td><td></td></tr> <tr><td>15. Use of improper lane</td><td></td><td></td></tr> <tr><td>16. Improper turn</td><td></td><td></td></tr> <tr><td>17. Improper or no signal</td><td></td><td></td></tr> <tr><td>18. Improper vehicle equip.</td><td></td><td></td></tr> </table>	Driver	1	2	10. Pass stopped school bus			11. Passing on hill			12. Passing on curve			13. Other improper passing			14. Improper lane			15. Use of improper lane			16. Improper turn			17. Improper or no signal			18. Improper vehicle equip.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">Driver</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> </tr> <tr><td>19. Safe movement violation</td><td></td><td></td></tr> <tr><td>20. Following too closely</td><td></td><td></td></tr> <tr><td>21. Improper backing</td><td></td><td></td></tr> <tr><td>22. Improper parking</td><td></td><td></td></tr> <tr><td>23. Unable to determine</td><td></td><td></td></tr> <tr><td>24. Left of center</td><td></td><td></td></tr> <tr><td>25. Right turn on red</td><td></td><td></td></tr> <tr><td>26. Other</td><td></td><td></td></tr> </table>	Driver	1	2	19. Safe movement violation			20. Following too closely			21. Improper backing			22. Improper parking			23. Unable to determine			24. Left of center			25. Right turn on red			26. Other			Vehicle 1 was traveling ☐ N ☒ S ☐ E ☐ W on <i>Aversboro Rd.</i> Report Number 4
Driver	1	2																																																																																								
1. None	☒																																																																																									
2. Alcohol Use																																																																																										
3. Drug Use																																																																																										
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Vehicle 1 was traveling ☐ N ☐ S ☐ E ☒ W on <i>Aversboro Rd.</i>																																																																																										

DIAGRAM

INDICATE NORTH

FOREST DR.

AVESBORO RD.

DESCRIPTION

DRIVER #1 STATED THAT SHE STOPPED AT INTERSECTION, WAITED FOR AN OPENING IN TRAFFIC, AND PROCEEDED TO TURN LEFT ONTO AVESBORO RD. SHE SAID SHE DID NOT SEE THE PEDESTRIAN UNTIL SHE STRUCK HER. THE PEDESTRIAN STATED THAT WHEN THERE WAS AN OPENING IN TRAFFIC AND STARTED TO CROSS THE ROAD. SHE SAID SHE SAW VEH #1 STOPPED AND DID NOT KNOW SHE WOULD PULL OUT. WITNESSES STATED THAT THE PEDESTRIAN WAS CROSSING THE ROAD WHEN VEHICLE #1 PULLED OUT AND THEY COLLIDED.

Figure 60. Image. Page 2 of North Carolina Crash Report for example 2.

Codes for North Carolina Collision Report Forms

Accident Sequence Codes				
6. Vehicle Maneuver/ Pedestrian Action: VEHICLE 1. Stopped in travel lane 2. Parked out of travel lanes 3. Parked in travel lanes 4. Going straight ahead 5. Changing lanes or merging 6. Passing 7. Making right turn 8. Making left turn 9. Making U turn 10. Backing 11. Slowing or stopping 12. Starting in roadway 13. Parking 14. Leaving parked position 15. Avoiding object in road 16. Other (describe) PEDESTRIAN 17. Crossing at intersection 18. Crossing not at intersection 19. Coming from behind parked vehicle 20. Walking with traffic 21. Walking against traffic 22. Getting on or off vehicle 23. Standing in road 24. Working in road 25. Playing in road 26. Lying in road 27. Other in road 28. Not in road	7. First Harmful Event: RAN OFF ROAD 1. Right 2. Left 3. Straight ahead NON-COLLISION 4. Overtake 5. Other COLLISION OF MV WITH 6. Pedestrian 7. Parked vehicle 8. Train 9. Bicycle 10. Moped 11. Animal 12. Fixed object 13. Other object COLLISION OF MV WITH ANOTHER VEHICLE 14. Rear end, slow or stop 15. Rear end, turn 16. Left turn, same roadway 17. Left turn, different roadways 18. Right turn same roadway 19. Right turn, different roadways 20. Head on 21. Sideswipe 22. Angle 23. Backing	8. OBJECT STRUCK (excluding another MV in traffic) 1. None 2. Parked vehicle 3. Bicycle, moped 4. Pedestrian 5. Animal 6. Tree 7. Utility pole (with or without light) 8. Luminaire pole (non-breakaway) 8. Luminaire pole (breakaway) 10. Official highway sign (non-breakaway) 11. Official highway sign (breakaway) 12. Commercial sign 13. Guardrail end on shoulder 14. Guardrail face on shoulder 15. Guardrail end in median 16. Guardrail face in median Non-Guardrail: 17. Shoulder barrier end 18. Shoulder barrier face 19. Median barrier end 20. Median barrier face 21. Bridge rail end 22. Bridge rail face 23. Overhead part of underpass 24. Pier on shoulder of underpass 25. Pier in median of underpass 26. Abutment (supporting wall of underpass) 27. Curb, median or traffic island	28. Catch basin or culvert on shoulder 29. Catch basin or culvert in median 30. Ditch bank 31. Mailbox 32. Fence or fence post 33. Construction barrier 34. Crash cushion 35. Other object (Write in narrative) 9. DISTANCE TO OBJECT STRUCK 1. In road 2. Right of road, 0-10 ft. 3. Right of road, 11-30 ft.. 4. Right of road, over 30 ft. 5. Left of road, 0-10 ft. 6. Left of road, 11-30 ft. 7. Left of road, over 30 ft. 8. None or N/A 9. Straight ahead, 0- 10 ft. 10. Straight ahead, 11 -30 ft. 11. Straight ahead, over 30 ft. 10. VEHICLE DEFECTS 1. Defective brakes 2. Defective headlights 3. Defective rearlights 4. Defective steering 5. Defective tires 6. Other defects 7. Not known if defective 8. No defects detected	
1. Vision Obstruction 1. None 2. Vehicle windows 3. Trees, crops, brush, etc. 4. Building(s) 5. Embankment 6. Sign(s) 7. Hillcrest 8. Parked Vehicle(s) 9. Moving Vehicle(s) 10. Blinded, headlights 11. Blinded, sunlight 12. Blinded, other lights 13. Other (write in narrative) 14. Unknown 2. Physical Condition 1. Normal 2. Ill 3. Fatigued 4. Asleep 5. Impairment due to medicine, alcohol, or drugs 6. Other physical impairment 7. Restriction not complied with 8. Condition not known 3. INTOXICATION 1. Had not been drinking 2. Drinking--test given 3. Drinking--test refused 4. Unknown	5. Drinking--no test 4. INJURY CLASS K-Killed A-Incapacitating B-Nonincapacitating C-No visible-But complaint of pain O-No injury 5. Belt/Helmet 1. None or not used 2. Lap only 3. Lap and shoulder 4. Child restraint system 7. If motorcycle, Helmet in use 9. Unable to determine 11. Locality 1. Rural (<30% developed) 2. Mixed (30%-70% developed) 3. Urban (>70% developed) 12. Predominant development 1. Farms, wood, pastures 2. Residential 3. Commercial 4. Institutional 5. Industrial 13. Road Feature 1. Bridge 2. Underpass 3. Driveway Public	4. Driveway private 5. Alley Intersection 6. Intersection of roadways 7. Non-Intersection median crossing 8. End or beginning of divided highway 9. Interchange ramp 10. Interchange service road 11. Railroad crossing 12. Tunnel 13. Other (write in narrative) 14. No special feature 14. Road Character 1. Straight, level 2. Straight, hillcrest 3. Straight, grade 4. Straight, bottom (sag) 5. Curve, level 6. Curve, hillcrest 7. Curve, grade 8. Curve, bottom (sag) 15. Road Class 1. Interstate 2. U.S. Route 3. N.C. Route 4. State secondary route 5. Local street 6. Public vehicular area 7. Private road, property or driveway 16. Number of Lanes Enter "0" if parking lot	17. Road configuration 1. Undivided, one-way 2. Undivided, two-way 3. Divided 18. Road Surface 1. Concrete 2. Grooved concrete 3. Smooth Asphalt 4. Coarse Asphalt 5. Gravel 6. Sand 7. Soil 8. Other 19. Road Defects 1. Loose material on surface 2. Holes, deep ruts 3. Low shoulders 4. Soft shoulders 5. Other defects 6. Under construction with defects 7. No defects 8. Under construction, no defects 20. Road Condition 1. Dry 2. Wet 3. Muddy 4. Snowy 5. Icy 6. Other (write in narrative)	21. Light Condition 1. Daylight 2. Dusk 3. Dawn 4. Darkness (street lighted) 5. Darkness (not street lighted) 22. Weather 1. Clear 2. Cloudy 3. Raining 4. Snowing 5. Fog, smog, smoke, dust 6. Sleet or hail 23. Traffic Control 1. Stop sign 2. Yield sign 3. Stop and go signal 4. Flashing signal with stop sign 5. Flashing signal without stop sign 6. RR gate and flasher 7. RR Flasher 8. RR crossbucks only 9. Human control 10. Other (write in narrative) 11. No control present

Figure 61. Image. Page 3 of North Carolina Crash Report for example 2.

As shown in figure 62, click on the *Pedestrian* button to open a pedestrian crash data entry form. Then click on the *Crash Typing* button to begin the crash typing process.

Reminder: The screens that appear in this example are for standard crash typing, which means the group typing option was NOT enabled on the *User* tab in *Preferences*.

Screen 1—Crash Location

In the time and location section of the crash report (page 1), the location of the crash is given as “Aversboro Rd” 0 feet from “Forest Dr.” The crash report drawing shows the collision occurred within an intersection. A review of the descriptions for the location options on the screen leads to the correct choice of *Intersection*, as shown in figure 63. Click this graphic to advance to the next screen.

Special Note: Pay attention to the notes in the descriptions to correctly assign the location.



Figure 62. Images. Pedestrian crash data entry forms.

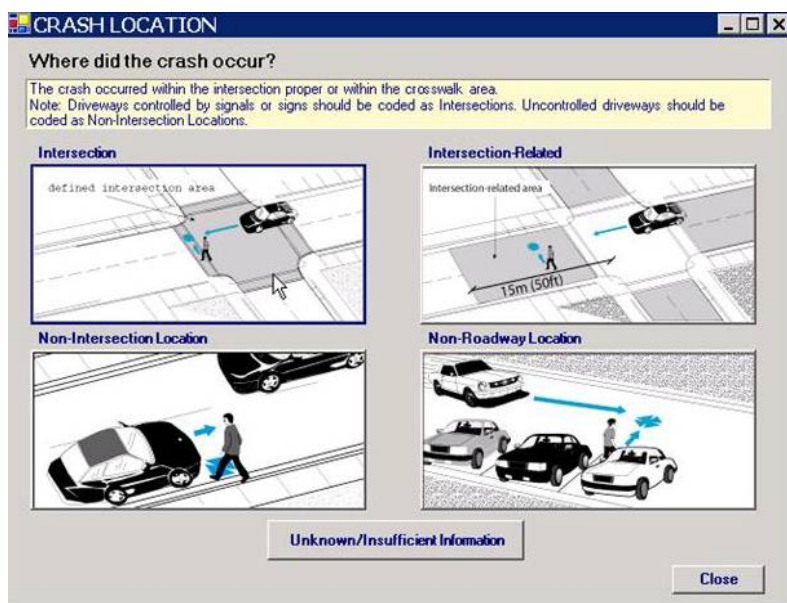


Figure 63. Image. Indicate where the crash occurred.

Screen 2—Pedestrian Position—Intersection or Intersection-Related

The next screen asks for the initial position of the bicyclist. The crash report drawing shows the pedestrian in the crosswalk when struck. Thus, the correct answer on this screen is “Within a crosswalk, marked or unmarked.” Click the radio button next to this text, as shown in figure 64.

Special Note: The choices shown on this screen are a function of the location selected on the previous screen.

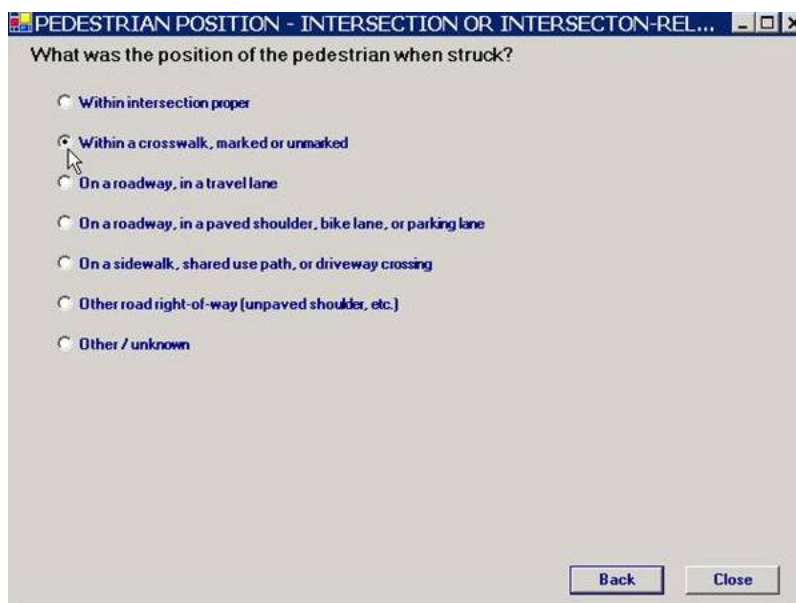


Figure 64. Image. Indicate position of pedestrian when struck.

Screen 3—Motorist Initial Direction of Travel

With the *Pedestrian Location* option enabled, the next four screens ask for specific information about the travel directions and maneuvers of the motorist and pedestrian. The first directive requires the initial travel direction of the motorist. From the crash report drawing, it can be determined that the motorist was traveling “Westbound.” Click this button, as shown in figure 65.

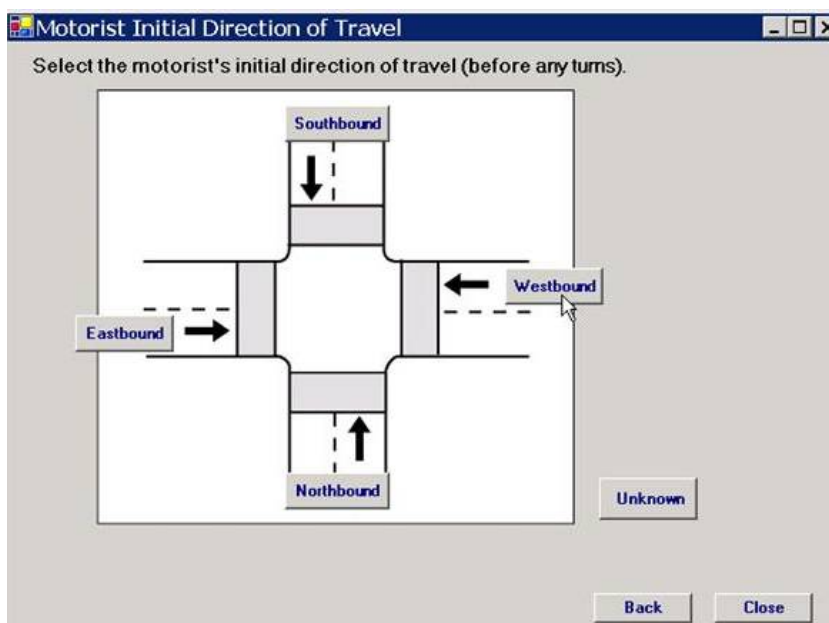


Figure 65. Image. Indicate initial direction of travel of the motorist.

Screen 4—Motorist Maneuver

On this screen, select the maneuver being made by the motorist at the time of the collision. The crash report drawing indicates that the motorist was making a left turn. Thus, the correct choice is “Left turn,” as shown in figure 66. Click this button to advance to the next screen.

Screen 5—Motorist Turning Left—Leg of Intersection Where Crash Occurred

The next directive requires the user to select the correct leg of the intersection where the crash occurred. The choices, regardless of the motorist maneuver, will always be “Nearside” and “Farside.” From the crash report drawing, it is evident that the correct choice in this example is “Farside,” as shown in figure 67.” Click this button to advance to the next screen.

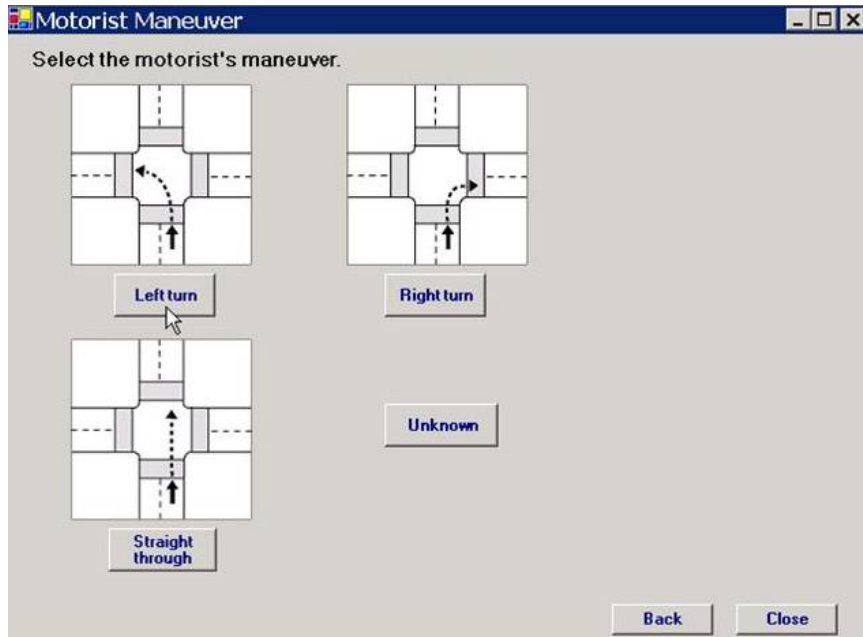


Figure 66. Image. Indicate the motorist maneuver.

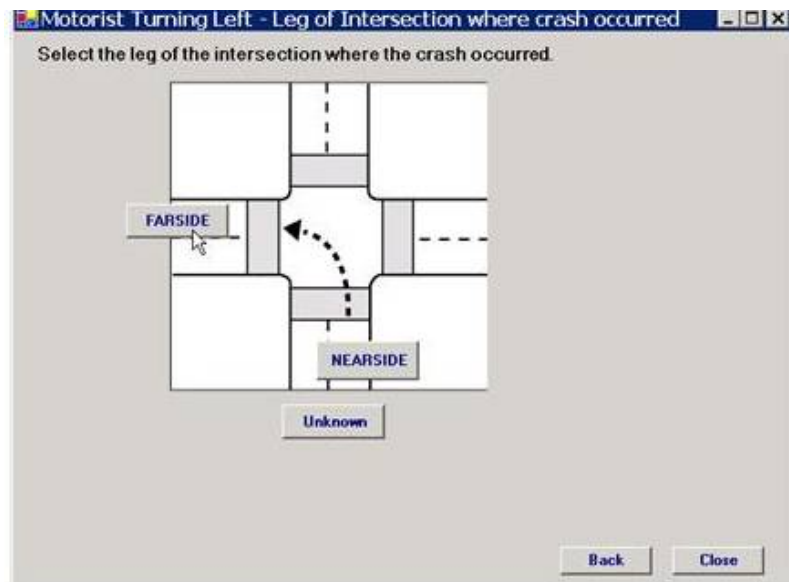


Figure 67. Image. Indicate where the crash occurred at the intersection.

Screen 6—Motorist Turning Left, Struck Pedestrian on Far Leg of Intersection

The final screen with the *Pedestrian Location* option enabled requires the user to select the scenario that best describes the direction of travel of the pedestrian and indicates whether the pedestrian was in or out of the crosswalk. A review of the crash report drawing indicates the best choice is the first graphic (denoted as 11a in figure 68). The pedestrian was traveling in the same direction as the motorist and was in the crosswalk. Click this button to advance to the next screen.

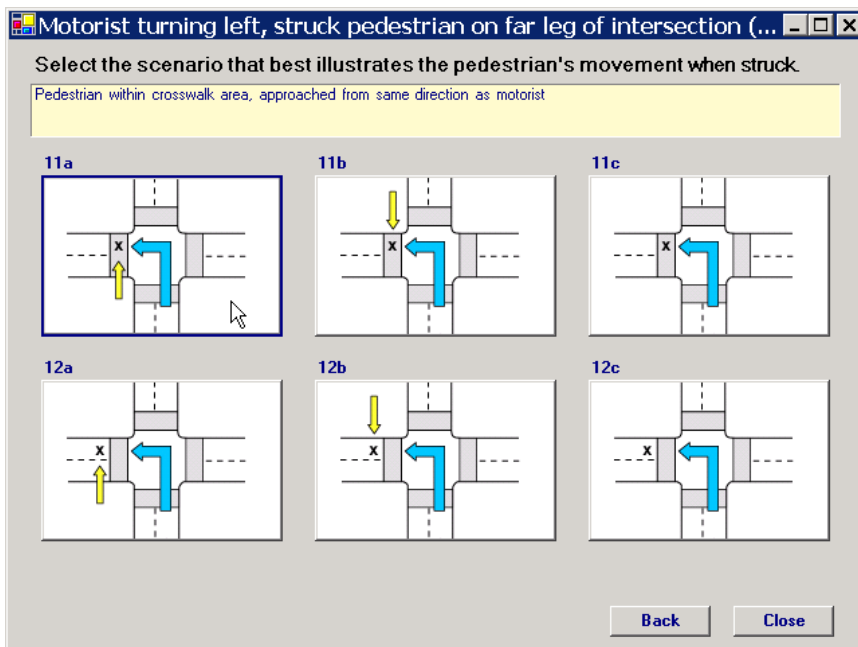


Figure 68. Image. Select the scenario that illustrates the pedestrian's movement when struck.

Screen 7—Unusual Circumstances Crash

The next screen asks if the crash was one of several unusual circumstances. After reading the descriptions associated with the seven specific crash types on the screen, it is apparent that the correct answer is "None of the Above," as shown in figure 69. Click this button to advance to the next screen.

Special Note: This screen and the next two screens ask questions about very unusual circumstances or very specific actions or vehicle types. In most cases, the answers to these questions will be "None of the Above." However, the user should be familiar with each of these unique types of collisions in the event that such a crash does fit the circumstances described.

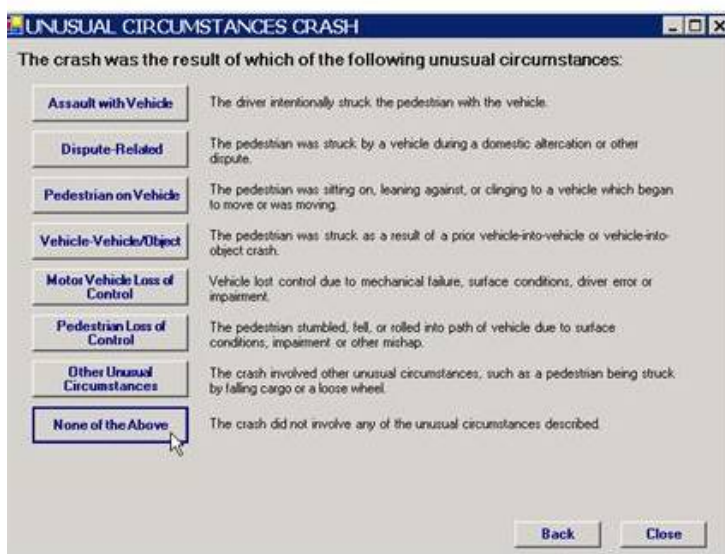


Figure 69. Image. Indicate no unusual circumstances.

Screen 8—Unusual Vehicle Type/Vehicle Action Crash

The next screen asks whether the crash involved a unique vehicle action (e.g., backing vehicle) or a specific type of vehicle (e.g., disabled vehicle). After reviewing the descriptions, the correct choice is “None of the Above,” as shown in figure 70. Click this button to advance to the next screen.

Screen 9—Unusual Pedestrian Action Crash

The next screen asks whether the pedestrian was performing one of six unique actions. These actions are very specific and either related to specific type of vehicle (e.g., buses) or a specific maneuver (e.g., crossing to/from a mailbox). In this example, the crossing was a normal street crossing that did not fall into any of these unique categories. Thus, the correct choice is “None of the Above,” As shown in figure 71. Click this button to advance to the next screen.



Figure 70. Image. Indicate no unusual vehicle types or vehicle actions.

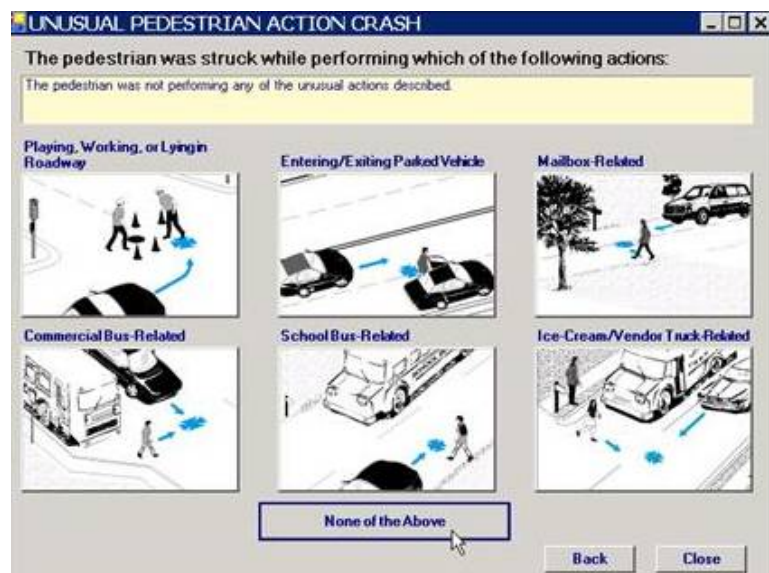


Figure 71. Image. Indicate no unusual pedestrian action.

Screen 10—Intersection Crash—Typical Pedestrian Action

The next screen asks about the pedestrian action at the time of the crash. The majority of pedestrian crashes will fall into one of these four actions. The narrative of the crash report includes a statement from the pedestrian that “...there was an opening in traffic and [she] started to cross the road.” Thus, the correct choice is “Crossing the Roadway or In the Roadway,” as shown in figure 72. Click this graphic to advance to the next screen.

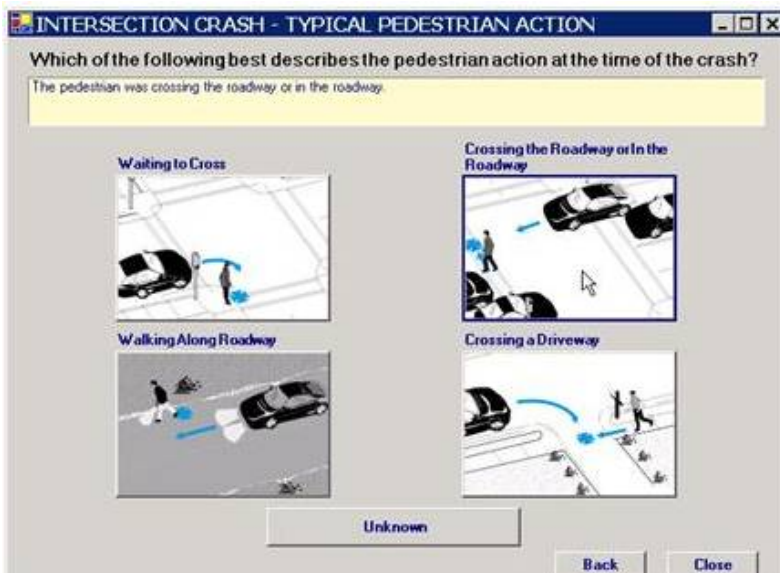


Figure 72. Image. Describe the typical pedestrian action in the crash.

Screen 11—Crossing/In the Roadway—Intersection

The next screen describes five specific scenarios involving a crossing pedestrian. Read each one carefully. From the crash report drawing and narrative, it is clear that the motorist was turning at the time of the collision. Thus, the correct choice is “Turn/Merge,” as shown in figure 73. Click on this graphic to advance to the next screen.

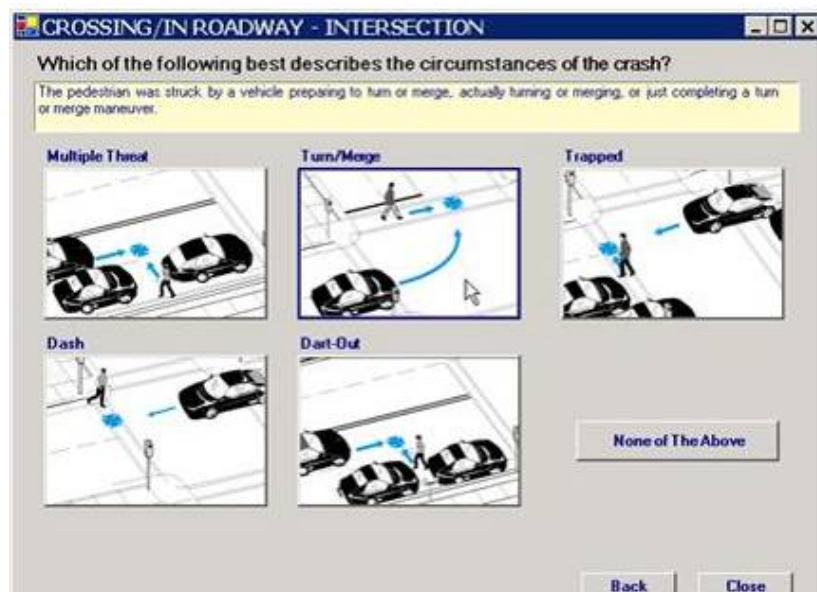


Figure 73. Image. Describe the circumstances of the crash.

Screen 12—Turn/Merge—Intersection

The next screen asks for more detail about the paths of the parties involved in the turn-merge crash. The narrative describes, and the crash report drawing shows, that the parties were on parallel paths prior to the collision. The drawing also shows that the motorist turned left and struck the crossing pedestrian. The correct choice is “Left Turn—Parallel Paths,” as shown in figure 74. Click this graphic to advance to the next screen.

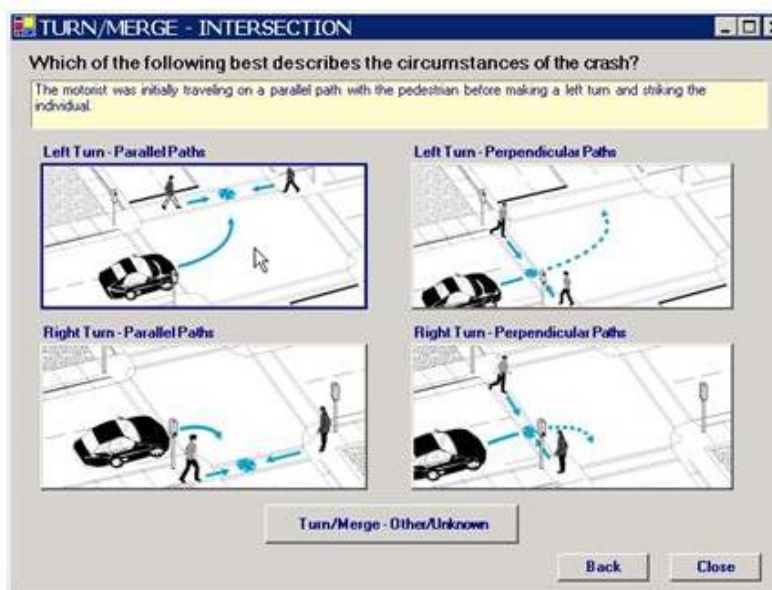


Figure 74. Image. Describe the circumstances of the crash in more detail.

Screen 13—Crash Typing

The final screen that will appear when all required questions and directives have been answered is the crash typing window, which will include the name and number of the crash type. (See figure 75.) In this example, the crash type is “Motorist Left Turn—Parallel Paths.” Clicking *Change* will return the user to the previous screen and allow the answer to be changed on this screen (or other screens by clicking on the *Back* button). Clicking *Accept* will complete the fields on the data entry form and save the crash typing information in the database.

Figure 75. Image. Enter crash typing data into data entry form.

Completed Crash Typing Fields

The values for the crash typing fields in this example that will appear in the database and on the form (for those fields chosen to be included on the form) are shown in table 2.

Table 2. Values for Crash Typing Fields for Example 2

Field Name	Alias	Value for this Example
<i>Crash_Location</i>	Crash Location	1
<i>Crash_Location_Desc</i>	Crash Location Description	Intersection
<i>Crash_Type_Basic</i>	Crash Type Number	781
<i>Crash_Type_Description</i>	Crash Type Description	Motorist Left Turn—Parallel Paths
<i>Crash_Type_Expanded</i>	Crash Type Expanded	12781
<i>Crash_Group_Basic</i>	Crash Group Number	790
<i>Crash_Group_Description</i>	Crash Group Description	Crossing Roadway—Vehicle Turning
<i>Crash_Group_Expanded</i>	Crash Group Expanded	12790
<u>Location Option Fields</u>		
<i>Leg_Intersection</i>	Leg Intersection	Far
<i>Motorist_Direction</i>	Motorist Direction	West
<i>Motorist_Maneuver</i>	Motorist Maneuver	Left Turn
<i>Pedestrian_Direction</i>	Pedestrian Direction	West
<i>Pedestrian_Position</i>	Pedestrian Position	2
<i>Pedestrian_Position_Desc</i>	Pedestrian Position Description	Crosswalk area
<i>Scenario</i>	Scenario	11a

Example 3—Bicyclist Crash (Group Typing)

This example makes use of the Florida bicyclist crash report used in example 1, but employs the group typing option. This option is set on the *Data Sources* tab in *Preferences*. As shown in figure 76, click on the box next to the text “Enable Group Typing for Bicyclist Crashes” to turn on this option. *Save* this change and *Exit* the *Preferences* window.

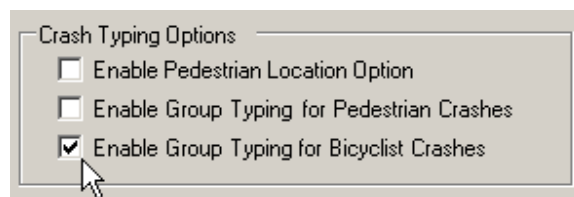


Figure 76. Image. Enable group typing for bicyclist crashes.

With the correct options set in *Preferences*, open a bicyclist crash data entry form with a click on the *Bicyclist* button. Click on the *Crash Typing* button to begin the crash typing process. (See figure 77.) These steps are the same regardless of the crash typing options selected.

The first three screens that appear with group typing enabled are the same as the ones that appear with standard group typing. From reviewing the crash report and the example 1 responses, the correct choices are as follows:

Screen 1—*Crash Location*: Intersection

Screen 2—*Bicyclist Position*: On a Sidewalk, Crosswalk, or Driveway Crossing

Screen 3—*Bicyclist Direction*: Facing Traffic

Screen 4—Initial Approach Paths

The next screen that appears asks about the approach paths of the two parties involved in the collision. This is the same question that is asked within the standard typing option and is still a major decision point in the crash typing logic. The choices are “crossing paths” and “parallel paths” and are defined as the paths of the two parties prior to the crash and prior to any turns that caused the crash. In this example, the crash report drawing clearly shows the bicyclist and motorist on intersecting paths. As shown in figure 78, click on any of the crossing path graphics (in blue) to advance to the next screen.



Figure 77. Image. Open a bicyclist crash data entry form then begin the crash typing process.

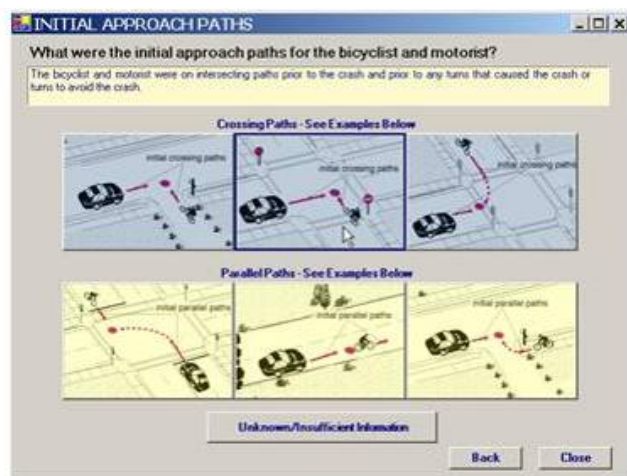


Figure 78. Image. Indicate initial approach paths for bicyclist and motorist.

Screen 5—Intersection Crashes—Crossing Paths

The next screen presents five options to describe the circumstances of the crash. After reading the options and reviewing the crash report narrative and drawing, the correct choice is determined to be “Motorist Failed to Yield—Sign-Controlled Intersection,” as shown in figure 79. Click on this button to advance to the next screen.

INTERSECTION CRASHES - CROSSING PATHS

The motorist drove into the crosswalk, area or intersection and collided with the bicyclist. The motorist either violated the sign (stop, yield, flashing signal) or did not properly yield right-of-way to the bicyclist.
Note: Crashes at traffic circles / roundabouts with yield control are included here.

Motorist Failed to Yield - Signalized Intersection

Bicyclist Failed to Yield - Signalized Intersection

Motorist Failed to Yield - Sign-Controlled Intersection

Bicyclist Failed to Yield - Sign-Controlled Intersection

None of the Above

Back Close

Figure 79. Image. Describe the circumstances of the crash in this case.

Screen 6—Crash Typing

The final screen that will appear when all required questions and directives have been answered is the crash typing window. With group typing enabled, the answer will include the name and number of the crash group. In this example, the crash group is “Motorist Failed to Yield—Sign-Controlled Intersection.” (See figure 80.)

Clicking *Change* will return the user

to the previous screen and allow the answer to be changed on this screen (or other screens by clicking on the *Back* button). Clicking *Accept* will complete the fields on the data entry form and save the crash typing information in the database.

Crash Typing

The crash has been typed as:

Number: 140

Name: Motorist Failed to Yield - Sign-Controlled Intersection

Is this correct?

Accept Change

Figure 80. Image. Enter crash typing data into form.

Completed Crash Typing Fields

The values for the crash typing fields in this example that will appear in the database and on the form (for those fields chosen to be included on the form) are in table 3.

Table 3. Values for Crash Typing Fields for Example 3

Field Name	Alias	Value for this Example
<i>Crash_Location</i>	Crash Location	1
<i>Crash_Location_Desc</i>	Crash Location Description	Intersection
<i>Crash_Type_Basic</i>	Crash Type Number	<i>These fields will not be filled when the group typing option is enabled.</i>
<i>Crash_Type_Description</i>	Crash Type Description	
<i>Crash_Type_Expanded</i>	Crash Type Expanded	
<i>Crash_Group_Basic</i>	Crash Group Number	140
<i>Crash_Group_Description</i>	Crash Group Description	Motorist Failed to Yield— Sign-Controlled Intersection
<i>Crash_Group_Expanded</i>	Crash Group Expanded	132140
<i>Bicyclist_Direction</i>	Bicyclist Direction	2
<i>Bicyclist_Direction_Desc</i>	Bicyclist Direction Position	Facing Traffic
<i>Bicyclist_Position</i>	Bicyclist Position	3
<i>Bicyclist_Position_Desc</i>	Bicyclist Position Description	Sidewalk/Crosswalk/Driveway Crossing

Special Note: Group typing will result in fewer screens and questions or directives that must be answered. In this example, three fewer screens appeared with group typing enabled. The small time savings that result with group typing may not outweigh the advantages of having additional details about crashes that standard crash typing provides. The user needs to be familiar with both options and assess the advantages of each.

