Crossroads Software, Inc

Crossroads Software has been in business in California for over 26 years and provides software systems for reporting and analysis of traffic citations and traffic collisions. Crossroads has provided Traffic Management Systems to over 340 public agency traffic engineering departments and over 210 police departments in the California and other states.

The Crossroads System provides over 100 different queries and reports in the Analytics System for collisions and citations. There are reports highlighting top locations (both for intersection and midblock), ranking by both total collisions and collision rates. Reports are provided for Collision Pattern Diagramming, Bar Charts, Pie Charts and other queries providing both overviews and detailed analysis of collision reports by cause, type, location, involved parties, injuries, safety equipment, etc. Individual collisions and high incident locations can be automatically mapped in GIS or Google Earth.

Management:
CEO/CTO – Jeff Cullen
Business Development – Robert Nkojo
Chief Data Officer – Joseph Bernardi

Industry: Information Technology/Software

Year Company Founded: 1993

Legal Structure: C-corp

Law Firm(s):
BurgherGray, LLP

Advisor: Azurest Partners

Technology Platforms

Crossroads produces software for public agency police departments for writing citation reports and collisions on a variety of computer hardware and computing platforms including Android, Windows, and Mac OS later in 2018.

Training and Support

Crossroads Software offers full training for installing, configuring, and using the Electronic Citation and Collision system, as well as providing detailed user manuals. Equally important, clients also receive product and technical support via phone and email directly from Crossroads Software's programmers, who know the software inside and out because they built it.

In addition, product and technical support is available online at www.crossroadssoftwarena.com, where users can view and download software manuals and guides and obtain the latest upgrades for the Traffic Collision Database System.

Most of all, Crossroads Software is dedicated to providing one-on-one support and to listening to clients' unique needs and ideas.

CROSSROADS SOFTWARE
210 West Birch Street, Suite 207
Brea, CA92821
Phone: (714) 990-6433 Fax: (714) 990-5628
www.crossroadssoftwarena.com

Electronic Citations and Collision Reports

Crossroads Software has been doing Handheld Citation Systems for over 15 years, and our newest systems are built for Tablets (Windows and Android) and Android Handhelds (Cell Phones and PDAs).

Our system looks just like the hard-copy citation on the tablet screen, which makes it very straightforward to use. The system scans bar codes on Drivers Licenses and Registration Docs for speed and ease of entering violator information and uses drop down lists for courts, valid court dates, and many other items. Violation codes are set up in Categories to allow for fast and accurate selection of appropriate codes. All items are configurable, so that lists can be set up to match requirements by other systems such as RMS and Court Systems. The system allows for an unlimited number of violations on a citation and produces the citation continuation form automatically. Along with the Citation, the system captures photos, sketches and officer notes.

The Crossroads Software Traffic Collision Database System provides powerful, easy solutions for traffic records management and analysis. Running in the familiar Windows environment, the Collision Database makes data input easy with drop-down menus, "auto-match" features, colored active fields, and easy-to-read navigation buttons. The system is also powerful; it uses city street layout information to verify the location of every collision in the database, thus providing an unparalleled level of accuracy. Using a full relational database engine to store, query, and edit collision records and an optional GIS mapping module, the Collision Database System analyzes collision data and produces multiple reports, collision diagrams, and maps of your collision information in just the format you need.

The Collision Database System also analyzes that data and produces reports so that engineering departments, police departments, and managers can fully understand collisions in their cities and, ultimately, take measures to prevent them. Users can run queries for virtually every parameter imaginable and then produce multiple, color-coded reports for Intersection Historical and High Incidence, Midblock Historical and High Incidence, citations, DUIs, collisions by month, week, or day, and many more.

Highly Developed Input Screens

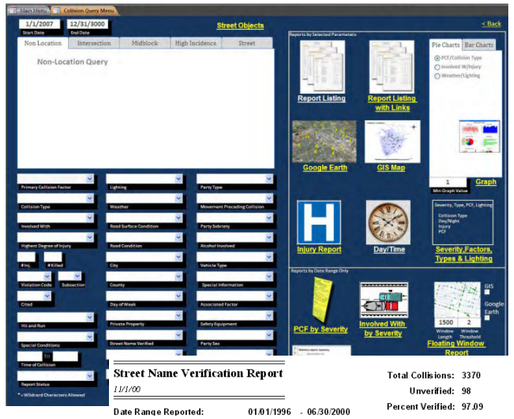
The data input screens within the Collision Database System allow inputting of full collision and citation records through easily navigable forms developed to reflect standardized collision record formats. These screens let users enter complete collision records through "one point of entry" which include all sections of the collision record.

Collision records can actually be read into the system using several methods and from various sources. A variety of standard formats (such as the California SWITRS reports) can be read in from electronic files automatically.

GIS Mapping

Another aspect of the Collision Database System's analysis component is the ability to produce detailed GIS maps. After running a General Query or queries for Intersection High Incidence, Midblock Historical, and Midblock High Incidence, corresponding GIS maps are automatically updated in ESRI's ArcView. The query results are displayed on a citywide GIS map, and you can show individual locations as well as highlighted intersections and midblock segments. You can run, for example, a query to show all collisions involving school-age pedestrians on a specific day of the week and have the collision locations appear on the map. Even midblock collisions are located along the streets automatically. Clicking on an individual location yields the relevant information for that collision record.

Queries can be run to highlight the top ten intersection locations or midblock segments (or any number you prefer), ranking them by collision rate or number of collisions. Full color layouts are easily printed with maps, graphics, compasses, legends, and additional text and graphics.



Data Verification

A unique feature of the Crossroads Software Collision Database System is its ability to resolve conflicts in the location information. Conflicts are common because individuals often report street names with various spellings, abbreviations, and discrepancies. Street Name Verification is one of the most important steps in data input and analysis because it ensures that nearly all reported street names match the formal, uniform names in the Street Layout Table. Verification is necessary in order for all queries and reports to be accurate.

To be more precise, the system resolves street name conflicts by keeping a table of verified street names along with a street layout table which describes the layout of the intersections and the distances and directions between them. The system then verifies the street name information for each collision record by matching the street name in the Existing Streets Table. It then checks the cross street against the Street Layout Table. This process results in a database free from inaccuracies in query results caused by non-standard street name entries.

The Collision Database System also runs a check to verify that other information in each record is not conflicting by checking other fields, including: that collision type is possible, given the party direction of travel and the movement preceding collision; that "involved with" matches with the party types listed; that the distance and direction are possible by comparing against the Street Layout Table; and that party ages, sex and other party and victim information are accurate. The System also checks for duplicate records.

Street Name Verification Report

11/1/00

Total Collisions: 3370
Unverified: 98
Percent Verified: 97.09

Date Range Reported: 01/01/1996 - 06/30/2000

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Report #	Date	Time	Dist.	Dir.	Primary Road	Secondary Road
	1/1/96	11:35 A	240	South	S PALM CYN	S PALM CYN 670
	1/25/96	5:36 PM	250	South	INDIAN CANYON DRIVE	RT 10 BOFF-R
	1/28/96	5:52 AM	165	Not Stated	YORBA ROAD	RICO ROAD
	3/6/96	4:41 PM	158	East	EAST PALM CANYON DRIVE	MIRAMONTE CIR E
	3/13/96	6:39 PM	0	Not Stated	RAMON ROAD	E RAMON RD 900 BLK
	3/17/96	11:31 P	0	Not Stated	ARENAS ROAD	S CALLE EUCLID
	3/24/96	12:20 A	1056	North	HIGHWAY 111	MPM 57
	4/16/96	6:43 AM	0	Not Stated	SOUTH PALM CANYON DRIVE-TAHQ	NORTH PALM CANYON DRIVE
	4/27/96	6:39 AM	0	Not Stated	INDIAN	MONTE VISTA DRIVE
	5/6/96	4:48 AM	0	Not Stated	BAHADA ROAD	BAHADA RD 2930
	5/24/96	5:33 PM	455	South	NORTH PALM CYN DR	GARNET ROAD
	6/9/96	12:15 P	0	Not Stated	HIGHWAY 111	PORTOLA DRIVE
	6/22/96	2:21 AM	9	North	INDIAN AVENUE	THOMAS AV
	6/22/96	3:40 AM	224	North	HIGHWAY 111	PM 111 RV 57TH 36
	9/14/96	3:51 AM	1056	North	CALIENTE ROAD	VIA
	9/23/96	12:26 P	30	North	SUNRISE WAY	CAMINO PAROCELA
	10/6/96	11:33 A	0	Not Stated	INDIAN CANYON DRIVE	N INDIAN CYN 2743
	10/17/96	8:04 AM	0	Not Stated	WHISPERING PLMS	RAMON ROAD
	11/16/96	7:08 AM	0	North	PATENCIO ROAD	PATENCIO 990

Queries and Reports

Multiple queries and reports are available to give you just the information you need. Using the system's query screens, you can select date ranges and locations; you can make your query as inclusive as you wish, covering all collisions citywide or narrowing the search to include only collisions with specific attributes of fields such as primary collision factor, collision type, conditions, degree of injury, and more; and you can select your query parameters from nearly any field kept in the collision records. You can easily select query specifications using drop-down lists.

Some of the most useful reports include:

General Query: This provides the ability to query nearly any field in a collision report. You can query for all collisions that are within nearly any combination of primary factors, conditions, injury extent, collision type, and more.

High Incidence Queries: These queries search for the top collision intersection locations or midblock segments within the city or the top collision locations on a specific roadway within a specified date range. These queries may be narrowed by collision factors and surrounding data. The accident rate may be requested in the query.

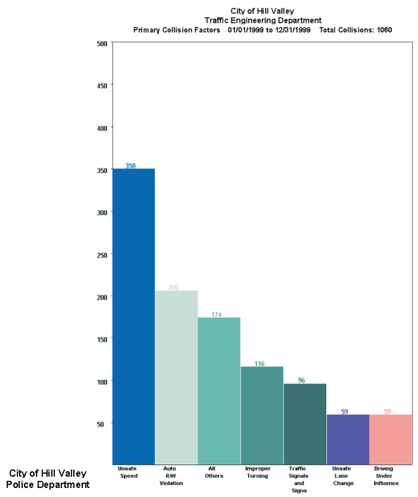
Intersection Historical Query: Allows you to query a specific intersection within a chosen date range. Collision factors and other information may be used to limit the query further.

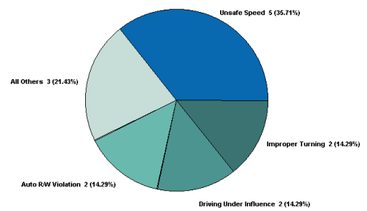
City of Hill Valley
Police Department

Primary Collision Factors vs. Citations
Month: September Year: 2000

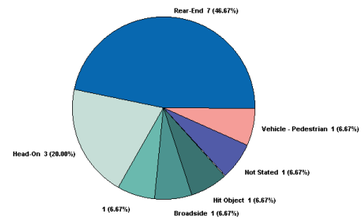
Type	# of Total PCF Collisions	% of Total PCF's	# of Total Citations	% of Total Citations
1. Excessive Speed	17	22.1%	265	51.3%
2. DUI (Actual)	0	0.0%	0	0.0%
3. Signs and Signals	5	6.5%	100	19.3%
4. Unsafe Turning	20	26.0%	12	2.3%
5. Failure to Yield	7	9.1%	9	1.7%
6. Child Restraint	0	0.0%	1	0.2%
7. Safety Belt	0	0.0%	43	8.3%
8. All Other Hazards	21	27.3%	73	14.1%
9. All Non-Hazards	0	0.0%	58	11.2%
10. Parking	0	0.0%	0	0.0%
Totals	77	100.0%	517	100.0%

Enforcement Index	This Month	Last Month	% Change
	19	26	-26.6%





Primary Collision Factors



Collision Types

01/01/1999 to 12/31/2001 Total Collisions: 14
Bristol Street at 17th Street

In addition, a variety of queries and reports are available for pedestrian collisions, bicycle collisions, traffic citations, citations versus collisions, DUIs, and much more. For law enforcement agencies, the ability to track, analyze, and query citations is particularly useful. Users can run reports for citation statistics, query for citations based on age, race, day and time, and other parameters, and produce officer activity reports.

All reports can be viewed on screen and printed for presentation. In addition, results for most queries can be viewed on a GIS map.