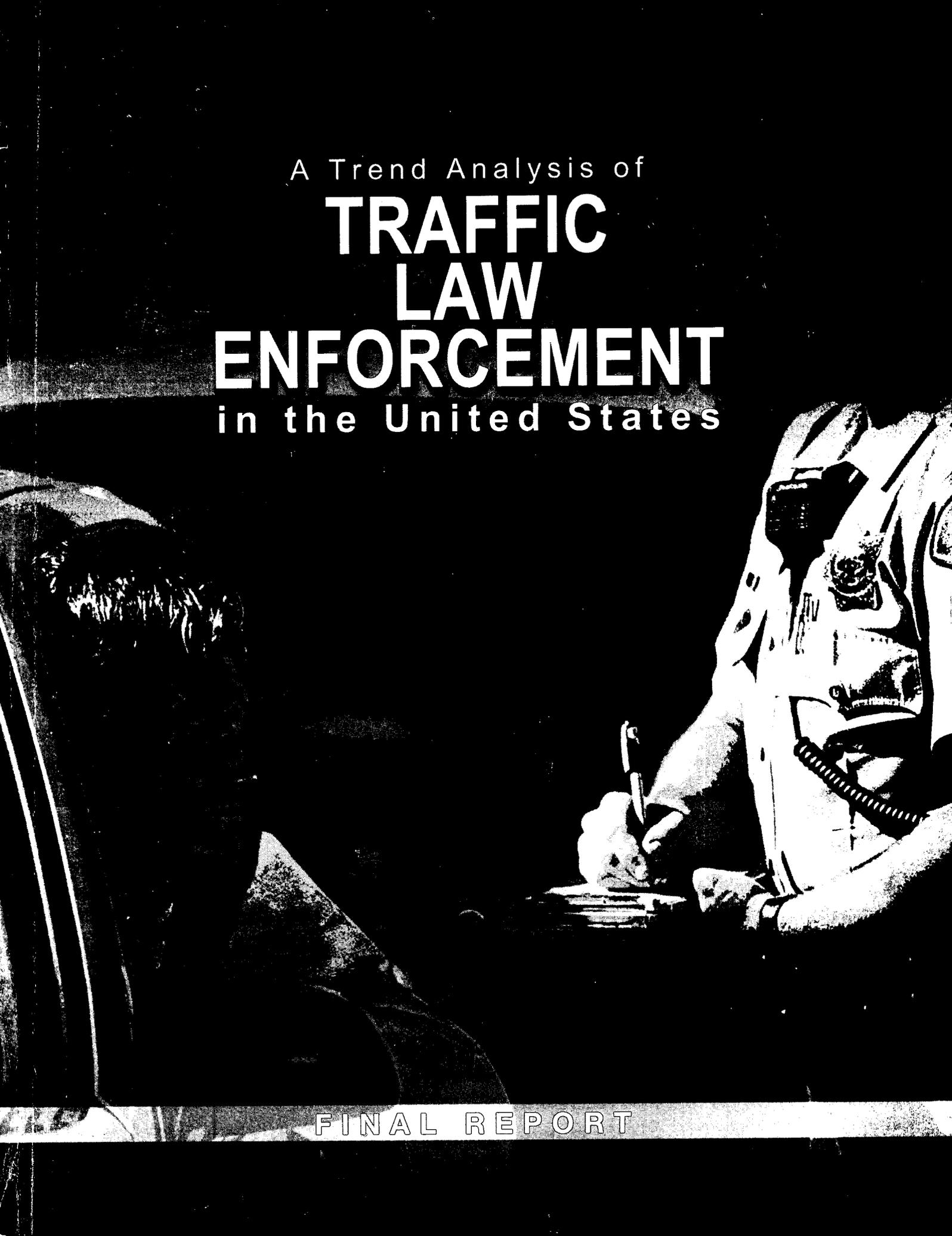


A Trend Analysis of
**TRAFFIC
LAW
ENFORCEMENT**
in the United States



FINAL REPORT

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16. Abstract This project assessed traffic law enforcement trends in eleven jurisdictions (State of California; San Diego, California; Douglas County, Colorado; State of Delaware, State of Florida; Orange County, Florida; Seminole County, Florida; Palos Heights, Illinois; Guilford County, North Carolina; Austin, Texas; and Fairfax County, Virginia). Data were collected, as available, including citation, violation, labor and budgetary information. The data were analyzed and comparisons were made where appropriate.					
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EXECUTIVE SUMMARY

This report summarizes the findings from a study of traffic law enforcement trends in eleven selected jurisdictions across the country. In recent years, the demand for law enforcement services has increased, while the resources available to provide those services has remained relatively stagnant. There is a perception in the traffic safety community that, in many instances, relatively fewer resources are being allocated to traffic safety enforcement as law enforcement agencies struggle to meet the many demands placed on them by society.

This study was designed to use objective measures of enforcement activity, such as numbers of traffic citations issued, to address the question of what the actual trends were in traffic law enforcement activity over the past decade, and to supplement that information with input gathered from law enforcement personnel.

To that end, eleven law enforcement agencies (LEAs) across the country which could provide data on moving traffic violation citations were identified and recruited to participate in this retrospective study. An effort was made to locate sites which represented a variety of types of law enforcement agencies and different regions of the country. LEAs with statewide, county wide and city wide jurisdiction, with adequate data bases, were recruited.

The sites and the participating law enforcement agencies are listed below. Three of the LEAs are statewide agencies, one county agency, three city and four full-service sheriff departments.

Table 1: Participating Sites and Law Enforcement Agencies

SITE	LEA	TYPE
State of California	California Highway Patrol	State
State of Delaware	Delaware State Police	State
State of Florida	Florida Highway Patrol	State
Douglas County, Colorado	Douglas County Sheriff's Office	Sheriff
Orange County, Florida	Orange County Sheriff's Office	Sheriff
Seminole County, Florida	Seminole County Sheriff's Office	Sheriff
Guilford County, North Carolina	Guilford County Sheriff's Department	Sheriff
Fairfax County, Virginia	Fairfax County Police Department	County
San Diego, California	San Diego Police Department	City
Palos Heights, Illinois	Palos Heights Police Department	City
Austin, Texas	Austin Police Department	City

The populations of the jurisdictions served by these LEAs range from approximately 12,000 (Palos Heights, Illinois) to 33,145,121 in the State of California.

The primary emphasis in data collection was to obtain quantitative measures of enforcement activity. The most crucial data element was number of moving violations and /or citations, ideally for the previous ten years and including monthly counts. These data were supplemented by information gathered through discussions with law enforcement officials in each of the jurisdictions. Specific categories of **quantitative** data are briefly discussed below:

Numbers of moving violations and/or citations - Most jurisdictions were able to provide these data, although the breakdown by violation or category varied widely. We were able to obtain monthly breakdowns by violation from some of the participating LEAs. Computerized data sets were available from some agencies; in other agencies, paper records were made available which were scanned to create a data set for analysis. For some agencies, data were available only on an annual or quarterly basis.

Average number of citations per patrol officer by year - Attempts were made to obtain patrol staffing levels from either the planning department or the patrol department to facilitate computing this measure. However, this was not possible in most jurisdictions.

Population of drivers per year - This information was provided by the various State Divisions of Motor Vehicles. Statewide figures were obtained easily; however, it was difficult to locate information from other smaller communities. Population figures were obtained for each site.

Data collected through discussions with law enforcement personnel are described below:

Level and type of proactive enforcement efforts. This type of data included general information about specialized traffic enforcement efforts such as DWI, safety belt and child restraint safety checks, speed crackdowns or other such programs. Additionally, law enforcement personnel were queried about the use of automated enforcement technology such as automated speed enforcement and red light running enforcement.

Police resources available for traffic enforcement - Attempts were made to learn about resources allocated to traffic enforcement over the ten-year period in terms of budget, personnel, equipment and other resources, taking into account total resources and the proportion allocated to traffic enforcement. This included a discussion of competing priorities, outside pressures and overall measures of police service demand, such as total calls for service. Also, discussions were held regarding other reasons for changes in command emphasis (e.g., a new chief or different patrol commanders).

Average number of person-hours for traffic enforcement - Attempts were made to obtain, at a minimum, estimates of this measure from both management and direct

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enforcement officers. In several cases, these data were provided which allowed for more objective measures of this important variable.

Both categories of data were then examined by jurisdiction and the experiences of the several jurisdictions compared. Separate chapters in the body of the report offer graphical and tabular presentations of the data and a site by site discussion of the data. Cross-jurisdictional comparisons are presented in another chapter of the report.

CONCLUSIONS

As indicated earlier, this study attempted to identify trends in *activity* relating to traffic law enforcement by the participating law enforcement agencies and was not intended to evaluate the effectiveness of the activities in the jurisdictions studied. Due to the relatively small number of LEAs reviewed, the findings should be viewed as trends which *might* be representative among similar types of law enforcement agencies across the country.

Traffic law enforcement is still considered a top priority by most law enforcement agencies. However, there is an overall declining trend in the number of citations being issued for all types of traffic violations combined. Demands on budgets and personnel have taken a toll on the amount of resources that can be expended for traffic safety. The shortfall in resources has been magnified in recent years. In addition to dealing with increasingly complex criminal issues which law enforcement agencies face today, in most of the jurisdictions studied, enforcement resources have remained stagnant in the face of an increasing population and number of licensed drivers. Generally, with increased driver exposure, there are greater numbers of crashes and the ensuing investigations. These can impact the resources available for other aspects of traffic enforcement.

Within the context of this study, the only category of law enforcement agency which exhibited increases in traffic law enforcement activity as measured by citation volume were sheriff's departments. Three of the four such agencies contacted demonstrated increasing trends of traffic citations. Most agencies of all categories reported that emphasis on traffic enforcement was stimulated by citizen input, rather than other reasons, such as the public good, or reducing the toll in injury and deaths due to traffic crashes. However, it is interesting to note that the only agencies actually exhibiting increasing activity were those where the top administrator was an elected official, possibly feeling a more immediately compelling impetus to respond to public sentiment.

Command emphasis is obviously essential to sustaining traffic law enforcement levels. During times of budget shortfalls or a public safety problem, traffic enforcement is one of the first areas to be cut back. Without the support of senior staff and officials, efforts may decline. And, while dedicated traffic departments and units within an agency may provide a certain enforcement level and continuity to traffic law enforcement efforts, agencies which promote traffic law enforcement duties agency-wide (and among supervisory personnel as well as officers), also can maintain a fairly high enforcement level, as well as endorse the importance of highway safety within the agency.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

Many of the jurisdictions studied used grants to supplement local resources for traffic law enforcement. However, some indicated that the grant process was burdensome and that some grant requirements directed enforcement resources away from direct enforcement.

While the rates of traffic-related injuries and fatalities have been declining across the country in recent years, this decline can be attributed to a number of factors: safer vehicles and roads, stronger laws, better public information and education campaigns, as well as law enforcement efforts. However, this decline may have been greater had law enforcement efforts remained steady or had been able to increase to keep pace with the increased number of drivers and miles driven on our nation's roadways.

RECOMMENDATIONS

Traffic law enforcement efforts on the roadways must be increased, but not at the expense of other worthwhile system components. In order to accomplish this and based on the conclusions drawn from this project, we offer the following recommendations.

- *Garner Command Emphasis.* Traffic safety experts and official agencies must stress the importance of traffic law enforcement to those in command of law enforcement agencies who direct the use of available resources and decide on how to fund efforts, perhaps by pointing out other enforcement benefits emanating from traffic stops (e.g., felony arrests, reduced burglaries, etc.). Another argument for increased emphasis on traffic enforcement, particularly with elected law enforcement commanders, is that the voting public considers this a primary concern.
- *Combat personnel shortages by hiring non-sworn staff members.* In most of the jurisdictions studied, enforcement resources have remained stagnant in the face of an increasing population and number of licensed drivers. Generally, with more licensed drivers on roadways driving more miles, there are greater numbers of crashes and the ensuing investigations. These can impact the resources available for other aspects of traffic enforcement. Where feasible, jurisdictions should consider the use of less expensive, non-sworn personnel for the investigation of non-injury producing crashes.
- *Value and Promote Officers Working in Traffic Law Enforcement.* While many police officers do not consider traffic law enforcement to be the most exciting or fulfilling work in their field, it is essential, and one way in which officers are certain to make a positive impact on public safety. Some agencies, that have endorsed the importance of officers handling traffic duties by offering various forms of special recognition to officers exhibiting extra effort in this area, also have accomplished a boost in morale.
- *Garner public support.* In many areas, public support for traffic law enforcement is there and can be tapped to demand public funds and increased enforcement efforts.
- *Encourage routine data collection efforts and use of those data.* Virtually all law enforcement agencies we have encountered during this and many other projects are routinely collecting data. However, many agencies are not summarizing and using these data to the fullest potential to identify enforcement areas which could be improved as well as those that have been successful.

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- *Promote grant funding for traffic-related labor, programs and equipment.* Grants are an important source of funding for most law enforcement organizations. Consideration should be given to streamlining grant processes wherever practical and to directing as much of the resources into enforcement through mechanisms such as overtime, targeted training, or the procurement of traffic enforcement-related equipment.
- *Promote accountability.* To some extent, law enforcement agencies should be held accountable for public safety on roadways passing through their jurisdictions. While assistance and support from civic, professional and governmental agencies are imperative, law enforcement agencies are the only means of enforcing traffic laws.

While motorists are responsible for driving safely, law enforcement agencies are the main means of ensuring that traffic laws are obeyed. The dedication of law enforcement personnel to promote safe driving and to apprehend dangerous drivers assures safer roads. Falling enforcement levels will ultimately threaten public safety. Therefore, it is important that the prevailing downward trend in traffic law enforcement be reversed. For its part, NHTSA intends to share the findings of this and other reports with members of law enforcement as a part of the agency's ongoing dialogue with LEAs to encourage the agencies to enforce traffic safety.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

1 - BACKGROUND AND METHODS

This report presents general traffic enforcement trends in eleven sites across the United States and compares the roles of different categories of law enforcement agencies in those communities regarding traffic law enforcement.

BACKGROUND

For many years, increased demand for police services and increased budgetary pressures that occurred in many jurisdictions across the United States strained traffic law enforcement resources. One indication of this is the decrease in the volume of driving while intoxicated (DWI) arrests on a nationwide basis. After peaking at near 2 million per year in the mid-1980's, these arrests have now decreased to about 1.4 million per year. In the late 1980s we examined reasons for changes in DWI enforcement levels in six jurisdictions¹ and found decreases in DWI arrest volume to be attributed to increasing volume of work within police agencies (as indicated by volume of calls for service) in the face of stable staffing levels, changing command emphasis in response to constituent demands in other areas (other drugs, gangs, etc) and officer burn out. Our continuing contacts with police agencies suggested that increased demands and costs have resulted in decreased enforcement of traffic laws in general, even with new interest in traffic issues such as aggressive and distracted driving, but the effect had not been quantified to any extent. Therefore the need for this project was clear. This study is an attempt to objectively quantify trends in traffic law enforcement in a variety of law enforcement agencies across the country.

OBJECTIVES

The general objective of the project was to evaluate any changes in traffic law enforcement trends in selected sites in the United States for the past ten years. Specific objectives were:

- to identify at least 10 sites in which to study the time variation of traffic law enforcement (i.e., trends) over the past 10 years;
- to collect data from those sites which would allow the determination of:
 - ✓ moving violation trends in those sites, and
 - ✓ other factors that may have influenced those trends; and
- to quantify those trends, accounting for the influence of other pertinent factors.

¹Lacey, J.H.; and Jones, R.K. (1991.) *Assessment of Changes in DWI Enforcement/Level*. DOT HS 807 690. Washington, DC: National Highway Traffic Safety Administration.

SCOPE AND APPROACH

To accomplish the objectives, project staff identified appropriate law enforcement agencies (LEAs) which could provide pertinent data. Staff members then collected the data, had discussions with appropriate individuals in the LEAs, analyzed the information and made comparisons between LEAs where appropriate. All of the information is summarized and presented in this report.

Site Selection

Regional diversity was sought during the site selection process. Obviously, the ability and willingness of each LEA to provide data were prime criteria in determining which agencies would participate in this project. A minimum of ten LEAs were to be included in this study, including State Highway Patrols, County Police Departments, City Police Departments and full-service Sheriff Departments.

The following table lists the eleven sites and the law enforcement agencies that were studied during this project. Three of the LEAs are statewide agencies, one is a County agency, three are City police departments and four are full-service Sheriff's Departments.

Table 2: Project Sites, LEAs and Agency Type

State	Site	LEA	Agency Type
CA	Statewide	California Highway Patrol	State
CA	San Diego	San Diego Police Department	City
CO	Douglas County	Douglas County Sheriff's Office	Sheriff
DE	Statewide	Delaware State Police	State
FL	Statewide	Florida Highway Patrol	State
FL	Orange County	Orange County Sheriff's Office	Sheriff
FL	Seminole County	Seminole County Sheriff's Office	Sheriff
IL	Palos Heights	Palos Heights Police Department	City
NC	Guilford County	Guilford County Sheriff's Dept.	Sheriff
TX	Austin	Austin Police Department	City
VA	Fairfax County	Fairfax County Police Dept.	County

The populations of the jurisdictions served by these LEAs range from approximately 12,000 (Palos Heights, Illinois) to 33,145,121 in the State of California. Specific site information is provided in the corresponding chapter devoted to each site.

BACKGROUND AND METHODS

Data Collection

The data collected during this project emphasized quantitative indicators of activity, which were measured by such dependent variables as citations and citations per licensed driver, and were influenced by factors such as numbers of patrol officers and department budget, among others. However, more subjective information was also gathered through discussions with enforcement personnel (e.g., the implementation of new enforcement policies and special enforcement programs, and the application of new technologies).

Quantitative Data Collection. This portion of the data collection encompassed gathering much of the objectively quantifiable data which was used in the analysis. The project called for gathering fairly detailed data on a number of variables over the preceding 10 years on an annualized basis. In order to enhance analysis possibilities, an endeavor was made to obtain monthly counts of data where appropriate.

Specific categories of data are discussed briefly below:

Numbers of moving violations and/or citations - Most jurisdictions were able to provide these data, although the breakdown by violation or category varied widely. We were able to obtain monthly breakdowns by violation from some of the participating LEAs. Computerized data sets were available from some agencies; in others, paper records were made available, which were scanned to create a data set for analysis. For some agencies, annualized data were available in annual or quarterly reports.

For some specific violations, such as aggressive driving, child restraint and seat belt use, the laws have been in a state of flux and this had to be taken into account in both data collection and analysis. For example, jurisdictions which kept specific records on aggressive driving citations were rare, because an aggressive driving category often did not exist by law, or the act of aggressive driving recently was defined by law. Therefore, these types of incidences were sometimes recorded under a combined reckless driving category, and in a few instances, under an aggressive driving category in more recent years. And seat belt and child restraint laws were dynamic over the past decade, moving from secondary to primary enforcement, and in the technical aspects of what constituted a violation. In any event, project staff sought to gather citation data in as great detail as possible. (Note: The acronyms DWI, DUI, OWI and others are used interchangeably throughout this report depending on pertinent state law. All refer to the criminal action of driving a motor vehicle, while either "illegal per se," impaired, under the influence or intoxicated by alcohol or other drugs.)

Average number of citations per patrol officer by year - Patrol staffing levels were obtained from either the planning department or the patrol department. However, this was not possible in most jurisdictions.

Population of drivers per year - This information was provided by the various State Departments of Motor Vehicles. Statewide figures were easier to obtain than information from smaller communities. Population figures also were obtained for each site.

Discussions with Law Enforcement Officers. At each of the sites, project staff talked with various agency personnel about issues surrounding traffic law enforcement including:

Level and type of proactive enforcement efforts. General information was obtained relating to specialized traffic enforcement efforts pertaining to DWI, safety belt and child restraint safety checks, speed crackdowns and other such programs. Additionally, we queried officers about the use of automated enforcement technology such as automated speed detection and red light running detection equipment.

Police resources available for traffic enforcement - We endeavored to learn about resources allocated to traffic enforcement over the ten year period in terms of budget, personnel, equipment and other resources, taking into account total resources and the proportion allocated to traffic enforcement. Here, a discussion of competing priorities, what the outside pressures are and overall measures of police service demand such as total calls for service are appropriate. Also, we discussed other reasons for changes in command emphasis (e.g., a new chief or different patrol commanders).

Average number of person hours for traffic enforcement - We attempted to obtain, at a minimum, estimates of this measure from both management and direct enforcement officers. In several cases, we were able to obtain these data which gave us more objective measures of this important variable.

Naturally, the data we collected from the various agencies were in different formats and contained different data elements. We processed the data so that, where possible, they would fit into a data set which allowed the analytic work to be conducted. In the figures throughout this report, solid lines most often represent the data. In many of the figures, a thin, dotted line also appears along with the solid data line. This dotted line is the trend line and designates the general trend of the data displayed.

ORGANIZATION OF THE REPORT

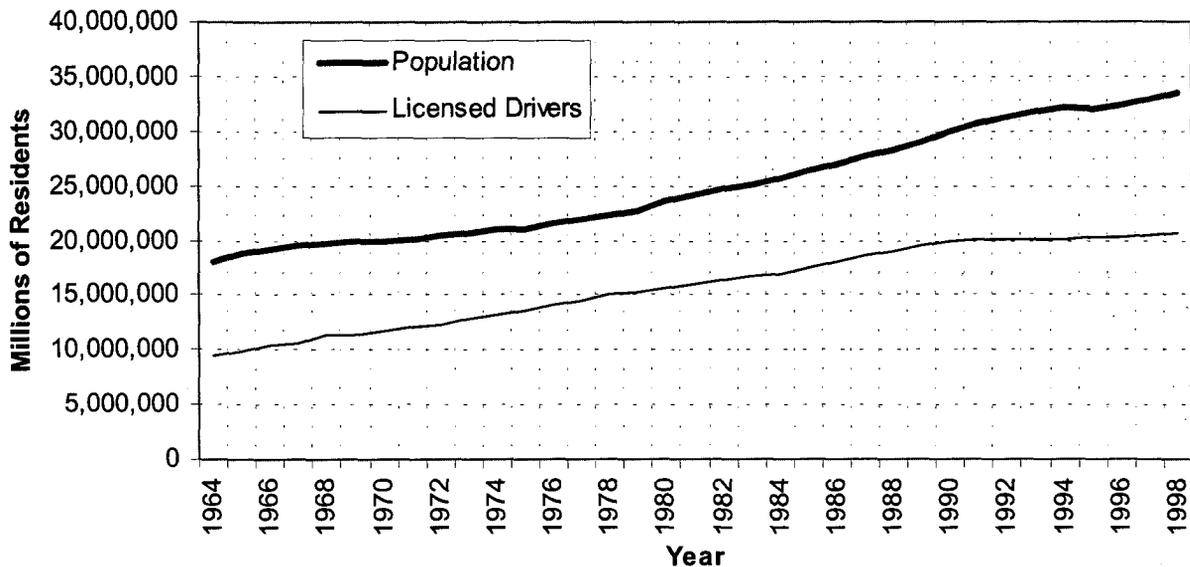
This report contains 14 chapters. Beginning with Chapter 2, a chapter is devoted to each project site (Chapters 2 - 12). Chapter 13 contains discussions and compares the findings. The final chapter presents our conclusions and recommendations.

2 - CALIFORNIA HIGHWAY PATROL-CALIFORNIA

SITE DESCRIPTION

Geographically, California is the third largest state in the nation, with 158,693 square miles. The highest elevation is Mt. Whitney at 14,494 feet above sea level; the lowest geographic point is Death Valley at 282 feet below sea level. Twelve percent (12%) of the total population in the United States resides in California, making it the most populous state in the nation. According to the U.S. Census Bureau, in 1998, California had an estimated population of 32,682,794. The estimated 1999 population was 33,145,121, a 1.4% increase. California's population is projected to reach over 39,900,000 by the year 2010. The numbers of licensed drivers in the State have increased steadily, although the numbers have leveled off during the past decade. Population figures and the numbers of licensed drivers are depicted below for the years 1964 through 1998 (Figure 1).

Figure 1: California Population Versus Licensed Drivers, 1964-1998

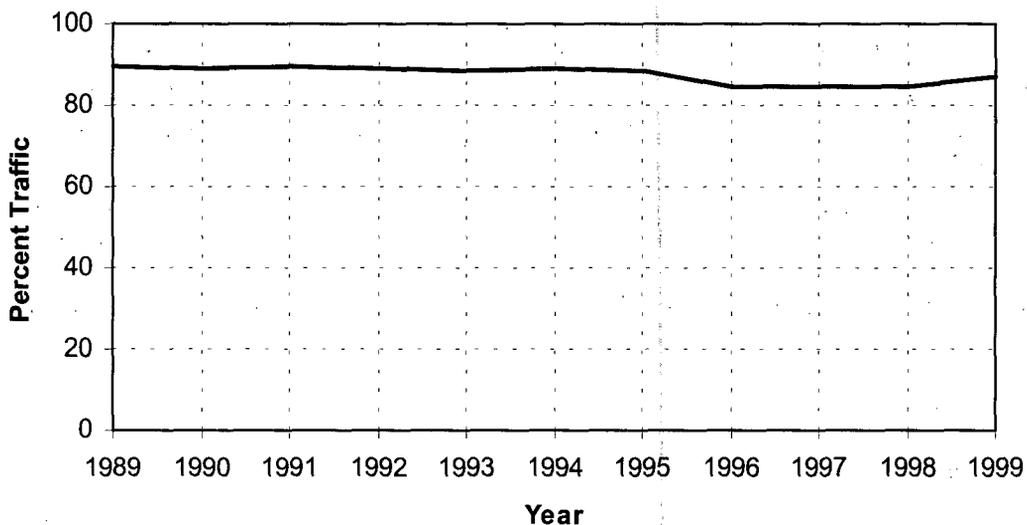


The largest city in the State is Los Angeles, which also ranks as the second largest city in the country. Tourism is an important industry and officials in California claim it is the "most visited state" in the nation, meaning a large number of tourists travel to and within the State each year (increasing the numbers of persons and vehicles driving on California's roads).

LEA DESCRIPTION

The California Highway Patrol (CHP) is the largest statewide law enforcement agency in the United States with more than 6,750 uniformed and 3,400 non-uniformed full and part-time employees. CHP officers patrol over 100,000 miles of state highways and county roads. Labor and budgetary information were provided by the Office of Special Projects at the Department of the California Highway Patrol. According to a staffing study², in 1998 alone, CHP officers statewide provided two million services to motorists, arrested 2.2 million people for various violations, investigated 206,000 collisions and gave 842,000 verbal warnings, among other activities. These activities involved more than 4.3 million hours of time by patrol, enforcement, and service-related personnel. While traffic law enforcement always has been a primary focus for the Department, as indicated by the large percentage of the CHP budget dedicated to traffic (**Figure 2**), other significant program areas include drug interdiction, protective and safety services, vehicle theft reduction and recovery, and community outreach.

Figure 2: California Highway Patrol Budget - Percent Traffic, 1989-1999

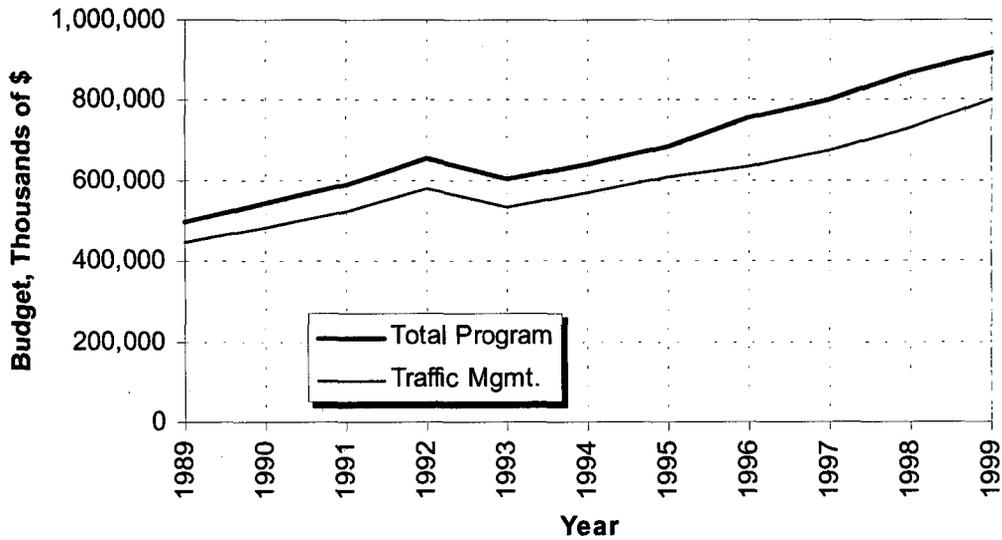


The fact that traffic law enforcement is the primary focus for this LEA also is reflected in the budget information provided by CHP which is illustrated in **Figure 3**. As the total programs budget has been growing, from 1989 to 1999, the large percentage allocated to traffic law enforcement has remained proportionate.

² California Highway Patrol. 1999. *CHP Staffing and Workload Study*. Sacramento, California: California Highway Patrol.

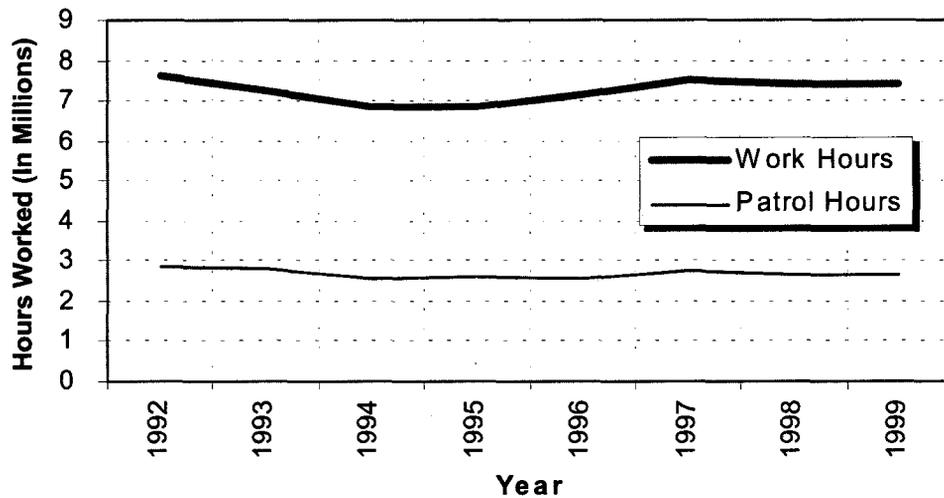
CALIFORNIA HIGHWAY PATROL-CALIFORNIA

Figure 3: California Highway Patrol Budget Dollars, 1989-1999



The Office of Special Projects at CHP provided extensive historical labor information for the Department. Total work hours versus hours spent patrolling for the years 1992 through 1999 are displayed below in **Figure 4**. Hours spent patrolling are defined as driving an enforcement vehicle within view of the motoring public, but does not include time spent issuing citations, assisting motorists, etc. Total work hours are defined as total activity time including regular and overtime hours. Both categories of hours have remained fairly constant from 1992 through 1999.

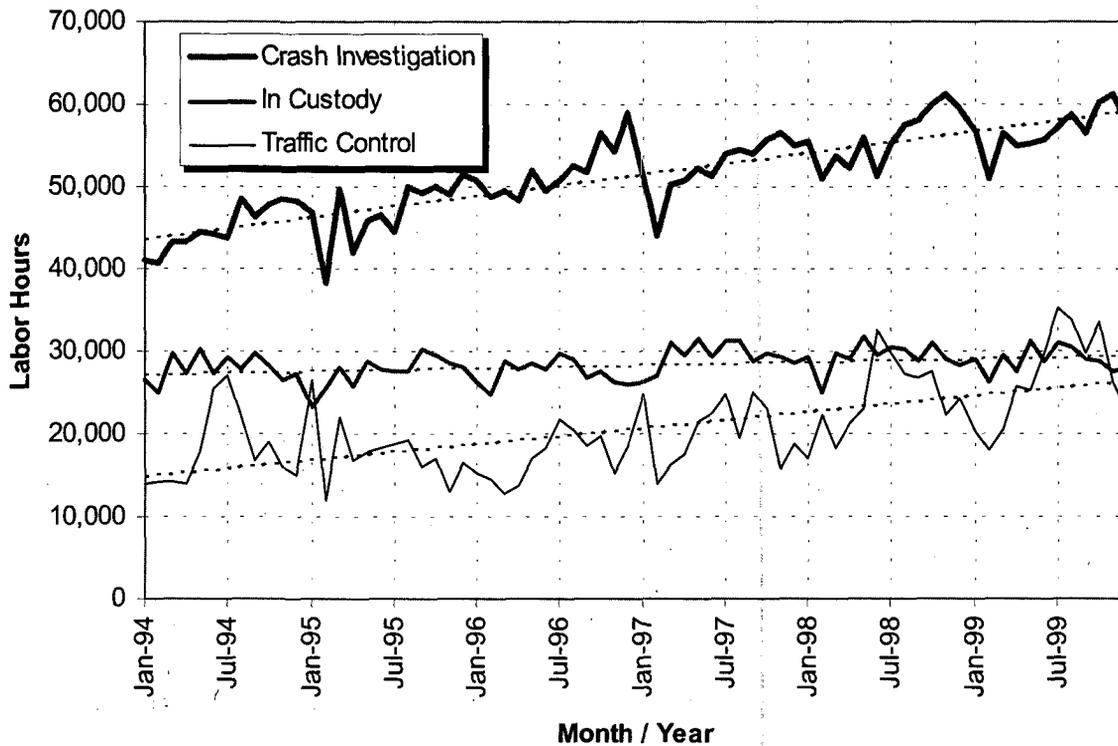
Figure 4: California Highway Patrol Work Hours Vs. Patrol Hours, 1992-1999



According to the CHP Staffing Study, traditional road patrols have diminished greatly over the years due to legislatively-mandated programs which require uniformed staff to handle commercial vehicle compliance enforcement, vehicle anti-theft enforcement, as well as special assignments. In addition, officers are required by legislation to receive approximately twelve hours of training per month per officer in areas such as cultural diversity and domestic violence. This is in addition to monthly firearms shoots, learning physical methods of arrest, and emergency medical technician training. In addition to these legislatively-mandated training programs, reportedly many grant-funded programs have changed the Department's focus from patrolling and arresting violators to educating motorists and providing services (e.g., pedestrian and bicycle safety programs).

Hours spent by officers in traffic-related enforcement duties are presented below. The numbers of hours worked were available monthly for the years 1994 through 1999 for crash investigations, time spent placing and handling persons in custody, and traffic control duties. The category, "in custody" includes DUI arrests and felony arrests. **Figure 5** displays this information.

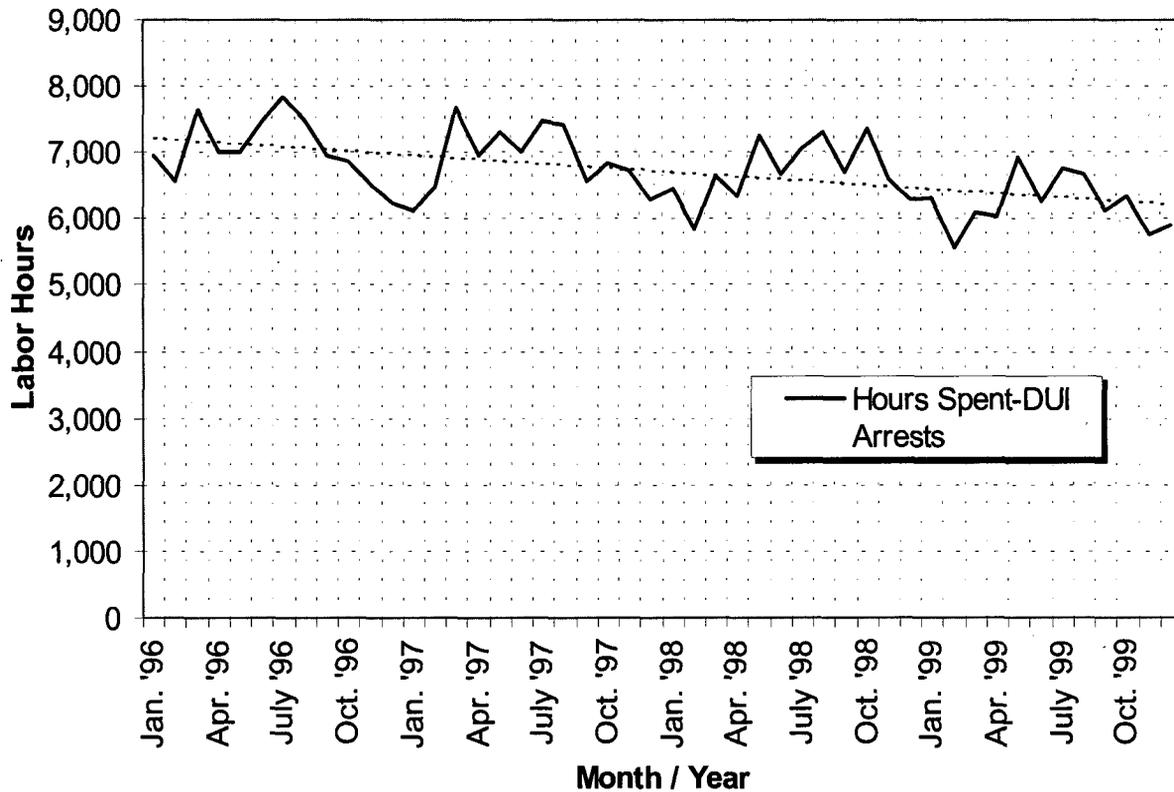
Figure 5: California Highway Patrol Traffic-Related Labor Hours, 1994-1999



CALIFORNIA HIGHWAY PATROL-CALIFORNIA

Hours which CHP officers spent handling persons in custody remained fairly constant over the past six years, while there was a substantial increase in time spent controlling traffic, and crash investigations increased significantly. Hours expended during DUI arrests have been decreasing as indicated in the next figure which isolates labor hours attributed to DUI arrests.

Figure 6: CHP Hours Expended - DUI Arrests, 1996-1999



Reportedly, current uniformed staffing is only roughly seven percent greater than in 1969/1970, despite the fact that there has been approximately an 80% increase in the number of licensed drivers (and a 68% increase in the California population) during the same period. Also the number of vehicle miles of travel has more than doubled. Nevertheless, the mileage death rate³ has fallen from 4.53 in 1969 to 1.19 in 1998.⁴

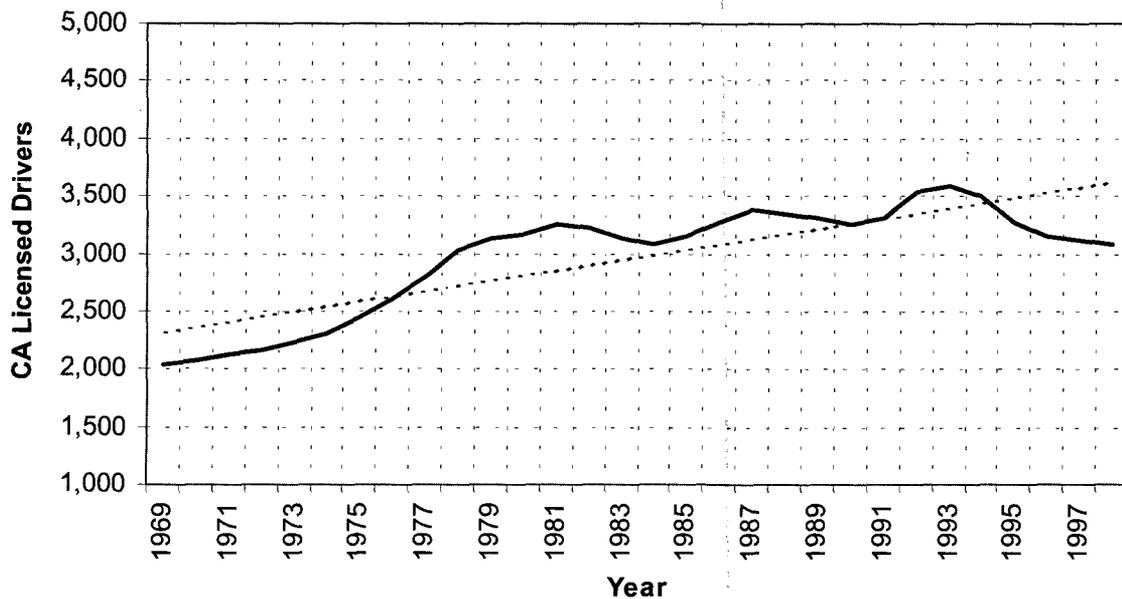
Figure 7 depicts the number of licensed drivers in California per CHP officer from 1969 to 1997. The indication is that the number of licensed drivers in California per CHP officer has been increasing over the past decade. (In addition, California has a large tourism industry resulting in large numbers of out-of-state drivers who are not accounted for in these ratios.)

³Number of persons killed per 100 million miles of travel.

⁴From California statewide statistical historical data as reported by CHP.

Meanwhile, for years, there has been a shortage of qualified personnel to fill positions vacated at CHP due to medical leave and retirement. If corrective measures are not taken, the rate of attrition is expected to worsen, due to an enhanced retirement package which was negotiated by the union, and the eligibility of a large number of CHP personnel to retire. In order to reverse this trend, a staffing study was conducted which projected the need for 1,942 officers in addition to the 6,726 positions authorized in 1998. CHP officials maintain that these additional positions are needed to bring the Department back to the 1969 level of service (the last time staffing was considered adequate relative to the continued growth in State population, licensed drivers, numbers of registered vehicles, and vehicle miles traveled). Also, any additional uniformed positions naturally would require additional equipment and non-uniformed support staff.

Figure 7: Ratio of Licensed Drivers in California per CHP Officer, 1969-1997



In fact, the authorization request for an additional 1,942 uniformed staffing positions is considered conservative by the California Highway Patrol Staffing Study, which has calculated current Statewide workloads compared to higher levels of service provided by CHP in 1969. These projections indicate a range of 3,857-9,541 additional uniformed positions would be required based on the increase in California's population, the increase in the number of licensed drivers Statewide, the increase in the number of registered vehicles in California, and the increase in miles traveled Statewide.

As always, the funding issue is the major obstacle to overcome when discussing an expansion program. CHP has identified its main funding sources and ways these resources may be expanded. As with most statewide LEAs, a state general fund and portions of monies from motor vehicle and driver fees are allocated to the Department. It may be possible to increase allocations and/or fees to increase fiscal support. Grants and state highway funds also have provided some funding in the past.

CALIFORNIA HIGHWAY PATROL-CALIFORNIA

CHP has identified the other major problem as one of logistics. The process of recruiting, hiring, training, and assigning the large number of new personnel is a massive undertaking which must be distributed over a number of years.

TRAFFIC ENFORCEMENT TRENDS

We received statewide citation data from the California Department of Justice and extracted pertinent information from this database. In addition, we received citation information from the California Highway Patrol. The information from both of these sources was used as the basis for the figures presented in this section.

The numbers of all hazardous arrests are displayed in **Figure 9** on the following page. Hazardous arrests are arrests made when the first violation was in one of the following categories: public drunkenness, DUI alcohol / drugs, manslaughter, stop signal or sign, speed, improper lane, impeding traffic, reckless driving, wrong side of road, improper lane change, improper passing, improper turn, following too closely, vehicle right-of-way, pedestrian right-of-way violated, unsafe starting and backing, pedestrian violation, hazardous parking, lights, brakes, other equipment, and other hazardous moving violations.

Concerning anti-DUI enforcement, the Department provided monthly breakdowns of the citations issued from 1994-1999, and yearly totals for 1990-1993. Yearly totals for DUI citations were also calculated from the data provided by the California Department of Justice. A comparison of these data from both sources is displayed below in **Figure 8**. Both sets of data indicate a downward trend in the number of citations issued for DUI offenses. This coincides with the number of hours spent dealing with DWI-related arrests as was illustrated in **Figure 6**.

Figure 8: Comparison of DUI Citations - CHP / CA DOJ, 1990-1998

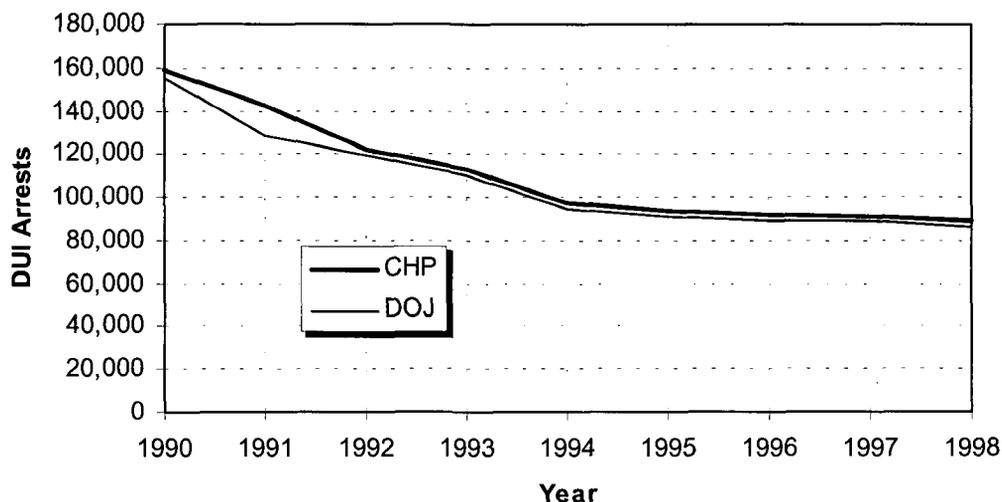
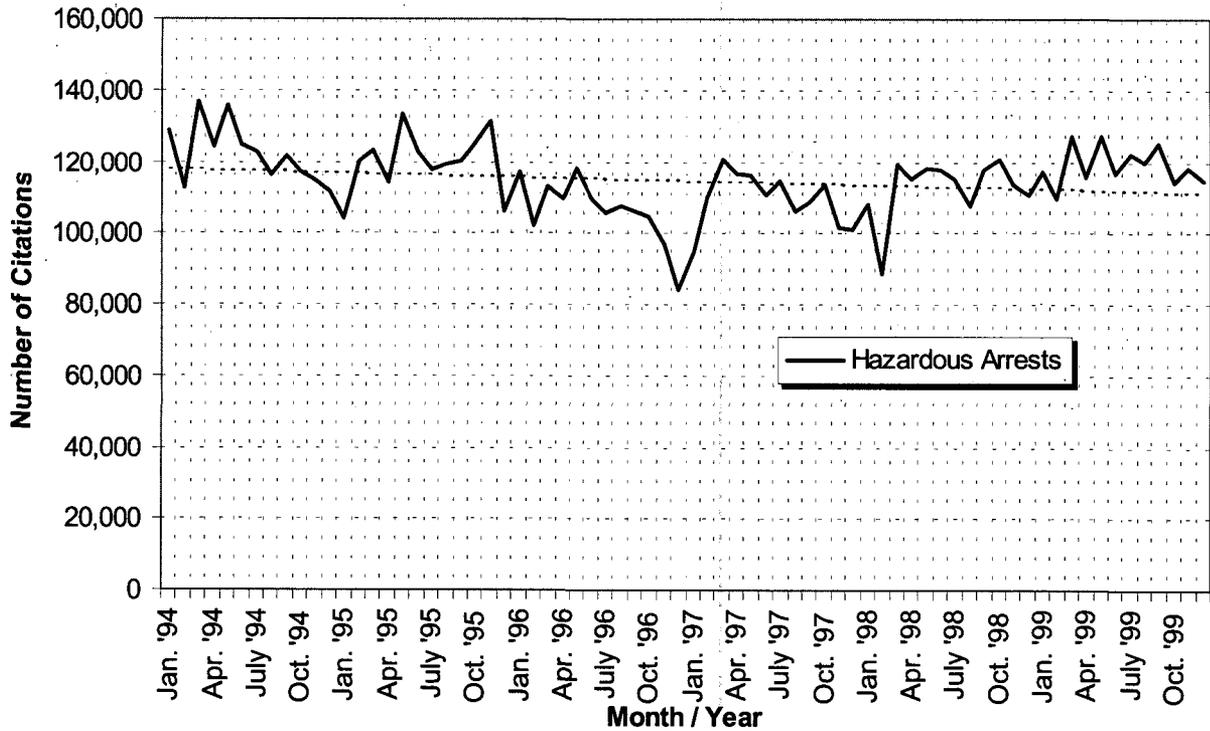
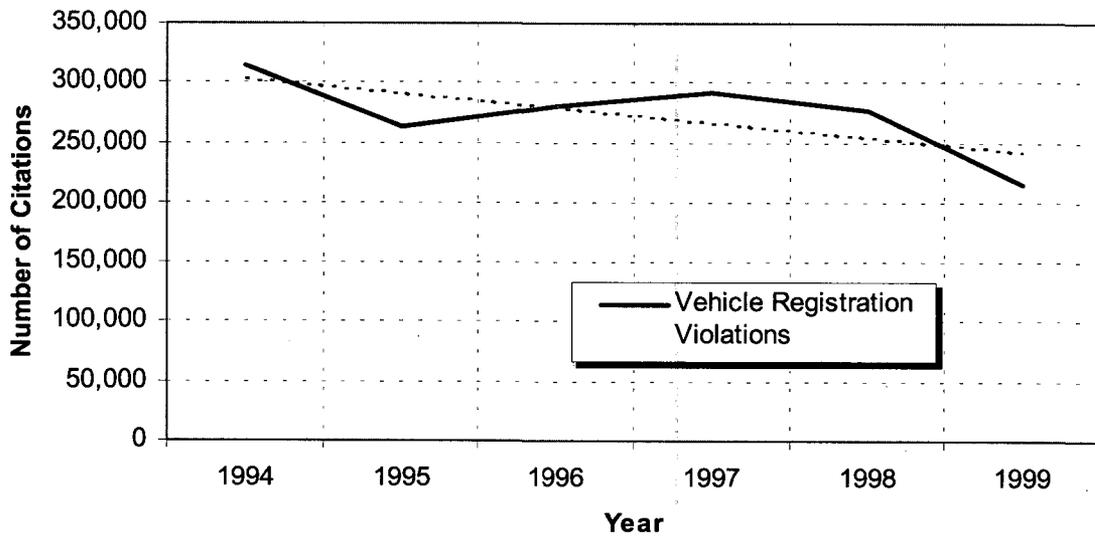


Figure 10: California Highway Patrol - Hazardous Arrests, 1994-1999



Finally, the number of citations written for vehicle registration violations have been declining (Figure 9).

Figure 9: California Highway Patrol - Registration Violations, 1994-1999



SUMMARY

The number of patrol hours and the number of traffic-related arrests made by officers of the California Highway Patrol have remained fairly flat for the past six years. While we were not able to separate citations by the various types of offenses (except for DUI), time spent on traffic control appears to have increased, and the number of traffic crashes have increased, demanding more investigative time by CHP officers. But combining all citations issued by the CHP for traffic-related offenses, the number of citations appears to have remained fairly constant.

Despite the consistent level of effort, the CHP appears to face a serious staffing shortage, which has, according to CHP's internal studies, worsened over nearly 30 years. Meanwhile, the population and the number of licensed drivers grew disproportionately within the State and still continues to grow. This predicament illustrates that, even if traffic-related enforcement activities remain constant or even if an LEA increases these activities, motorists and passengers may be at increased risk over a period of time, if the level of enforcement activities does not increase proportionately with the number of drivers and vehicle miles driven.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

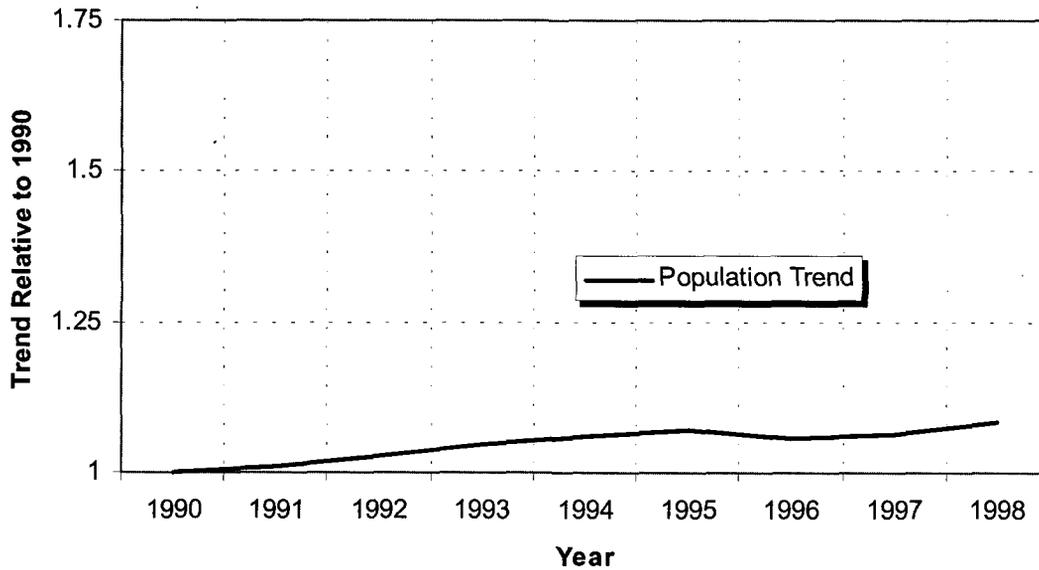
3 - SAN DIEGO POLICE DEPARTMENT - CALIFORNIA

SITE DESCRIPTION

San Diego County is located at the southernmost corner of California, and is the second largest county in the State. Covering approximately 2,727,040 acres (4,261 square miles), San Diego County is on the Pacific coast and also makes up part of the U.S. border with Mexico. It has a diverse population which the U.S. Census Bureau estimated was 2,766,123 in 1998, up from a 1990 total of 2,480,072. San Diego County ranks 16th in population of all metropolitan areas in the U.S.

Located in the center of the County, the city of San Diego boasts the sixth largest population of all cities in the United States. **Figure 11** shows the steady, gradual population growth in the city of San Diego since 1990. The median income for a family of four in San Diego County for 1995 was \$45,000.

Figure 11: City of San Diego, Population Trend Relative to 1990



LEA DESCRIPTION

The San Diego Police Department has approximately 2,000 sworn officers, along with more than 660 civilian employees. The Department has a designated traffic division which has 110 sworn officers assigned to it, including the motorcycle unit, the crash investigative unit, and the traffic investigators. The Department also has eight Area Command posts that house all of the patrol units. The traffic division is considered the main level of enforcement for traffic safety in the San Diego Police Department, writing roughly 65% of all the traffic citations. Traffic

enforcement is also a responsibility for the patrol officers from the area districts, but the level of that enforcement is a direct result of the command emphasis at each individual post.

The San Diego Police Department is very active in pursuing grant monies. There are currently a number of grant programs funded, and also a number of programs that began as grant-funded activities, but have since been assimilated into the regular operating procedure for the Department. These programs include anti-DWI enforcement, such as checkpoints run regularly throughout the year, as well as stepped up DWI patrols from the second week in November until the second week in January. The Department also has several smaller grants, such as the "Every 15 Minutes Program." This is an intense educational program implemented in local high schools which focuses on the fact that a death occurs as the result of a drunk driving crash every 15 minutes in this country. The traffic unit also has opened a child passenger safety seat clinic and fitting station that allows citizens to come in and have the child restraint properly fitted to their vehicle. The San Diego Traffic Offenders Program (STOP) is a program that once was funded by grants, but now is funded through the Department's budget. This program focuses on driver license checkpoints. Starting in 1997, the Department began participating in a Photo Red Light Program that allowed them to install 16 red light cameras at various intersections throughout San Diego. This program has been very successful and the Department plans to increase the total number of cameras from 16 to 32. There are currently six full-time officers working on this project out of the traffic division.

TRAFFIC ENFORCEMENT TRENDS

The San Diego County data were extracted from statewide citation data obtained from the California Department of Justice. We looked at three types of law enforcement agencies in San Diego County: the California Highway Patrol (CHP), the San Diego Police Department and the San Diego Sheriff's Department. **Figure 12** shows citations and arrests for DUI offenses within San Diego County, which appear to be declining for all three agencies.

Figure 12: San Diego County - DUI Arrests By LEA, 1989-1999

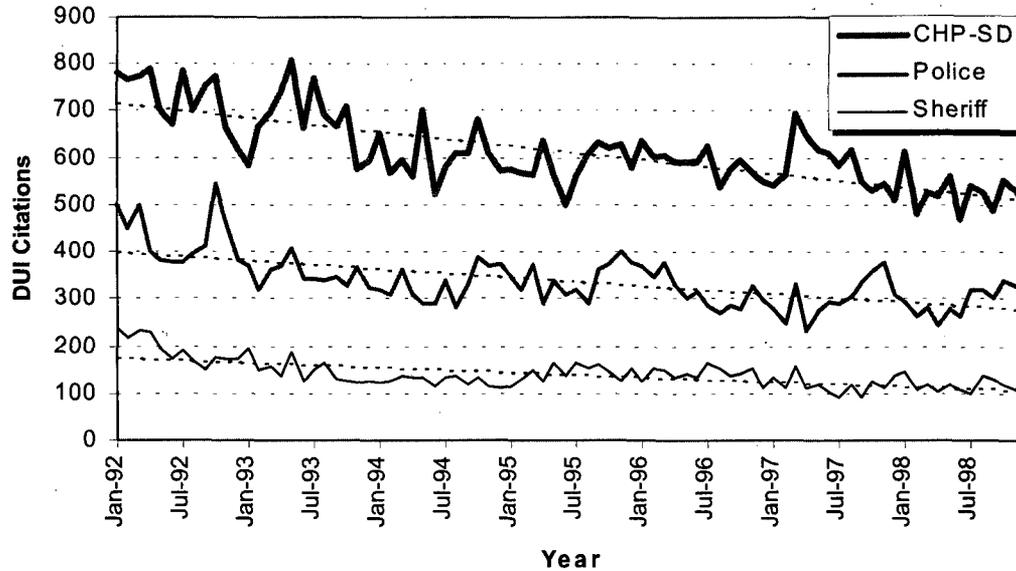
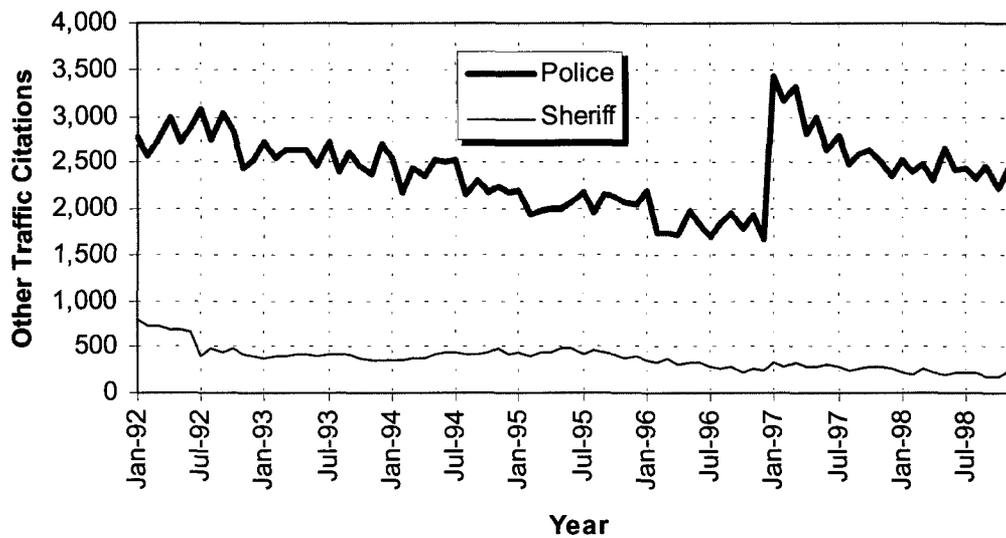


Figure 13 below shows other traffic arrests (not including DUI offenses) for the San Diego Police and the San Diego Sheriff's Department. (CHP is not depicted because of the extremely low numbers of arrests and citations - ranging from 10 to 98 per month- for other traffic violations handled by that LEA within San Diego County.)

Figure 13: San Diego Police / Sheriff - Traffic Citations, 1992-1998



A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

When our contact was asked about the sharp increase in 1997, he was uncertain of the reason, but attributed the increase to the Photo Red Light Program which uses cameras (discussed earlier in this section), and a change in higher management which may have caused greater activity during that year.

SUMMARY

There was a definite steady downward trend in the numbers of citations issued for all traffic-related offenses combined from 1992-1996. There was a sharp increase during 1997 attributed at least in part to the use of automated cameras and perhaps an emphasis in enforcing traffic laws, but a downward trend since that time.

4 - DOUGLAS COUNTY SHERIFF'S DEPARTMENT - COLORADO

SITE DESCRIPTION

Douglas County, covering 844 square miles, is centrally located within Colorado, lying between the State's two largest cities, Denver and Colorado Springs. As the centerpiece of the Denver/Colorado Springs Development Corridor, the County runs from the southern border of the Denver metro area to the northern edge of the Colorado Springs metro area. This strategic location has resulted in a rapid population increase. The U.S. Census Bureau reports a 1990 population of roughly 60,391 persons. It is estimated that the current population is 155,860 persons, an approximately 143% increase. The 540,000 acre County has had the fastest growing population in Colorado for the last ten years and has had one of the fastest growing county populations in the nation. The estimated median household income in Douglas County for 1995 was more than \$80,900. Approximately 80% of the resident workforce commutes to jobs in Denver or Colorado Springs. Castle Rock, the County seat, is located on Interstate 25, about 25 miles south of Denver. Miles of public roads within Douglas County are designated below by roadway type.

Table 3: Douglas County Roads

Roadway Type	Miles
Primary Roads	558
Secondary Roads	573

LEA DESCRIPTION

The Douglas County Sheriff's Office is responsible for general law enforcement activities throughout the County. Eighty-six percent (86%) of the total county population resides in unincorporated areas (up from 76% in 1997) and the Douglas County Sheriff's office is the primary law enforcement agency for these areas. As a result, the agency has steadily increased its involvement in traffic enforcement over the last ten years. Located in the newly built Robert Christensen Justice Center located at the north end of Castle Rock, the Sheriff's Office has expanded in recent years to keep up with the staggering growth of the County. As the county population has grown, the officer ratio has increased, rising from .75 (per 1,000 population) in 1993 to .80 in 1998.

Within the Sheriff's Office, there is a twelve person traffic unit headed by a sergeant. This designated traffic unit was created in 1989 in response to increasing public pressure. In 1994, a unique county ordinance was written to cover all major traffic issues. That ordinance allowed the agency to receive some funding for traffic law enforcement services that were not mandated. At this time, the Sheriff's Office also started to aggressively pursue federal funding through different grants. The department currently has the TWIST grant which targets seatbelt usage; the LEAF grant, a state-funded program which targets DUI offenders; and the CHILL grant, also a

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

state-funded program that targets aggressive drivers. Through these grants and others, the Douglas County Sheriff's Office has been able to focus on finding creative and effective solutions to major traffic problems.

This increase in funding and revenue has allowed this LEA to successfully grow and modernize as the county population demands. Grant money is used primarily to purchase new equipment, including video cameras for each patrol car and a mobile command post, as well as lasers, radars and PBTs. Specifically, the CHILL grant, which is designed to combat aggressive driving on county roads, has been used to purchase a state-of-the-art unmarked patrol car.

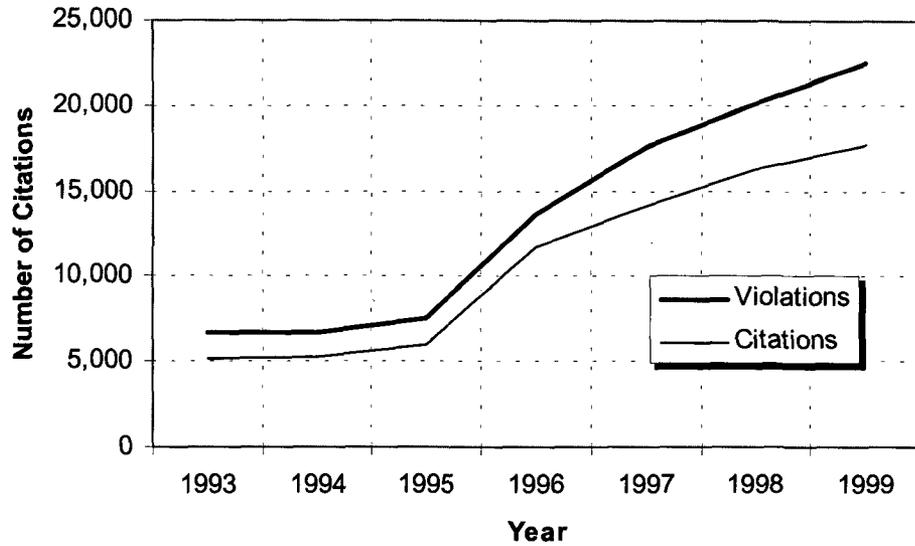
The CHILL grant also funds a deputy and a traffic clerk, along with the new patrol car, which has allowed the traffic unit to focus on dangerous driving patterns. In conjunction with the awarding of this grant, the Douglas County Sheriff's Office wrote an aggressive driving ordinance, allowing law enforcement to specifically target any driver who commits two or more moving violations in a short period of time within close proximity to other vehicles. This grant, and subsequently established ordinance, resulted in one of the many special traffic programs developed in Douglas County.

TRAFFIC ENFORCEMENT TRENDS

Citation information were provided by the Douglas County Sheriff's Office and were the source for the figures presented in this section. Staffing hours were not available.

The total yearly number of traffic citations issued versus the number of traffic violations are displayed in **Figure 14** below for the years 1993 through 1997. There are times when one citation could have cited more than one violation. (Note: these numbers do not include several towns within the County.)

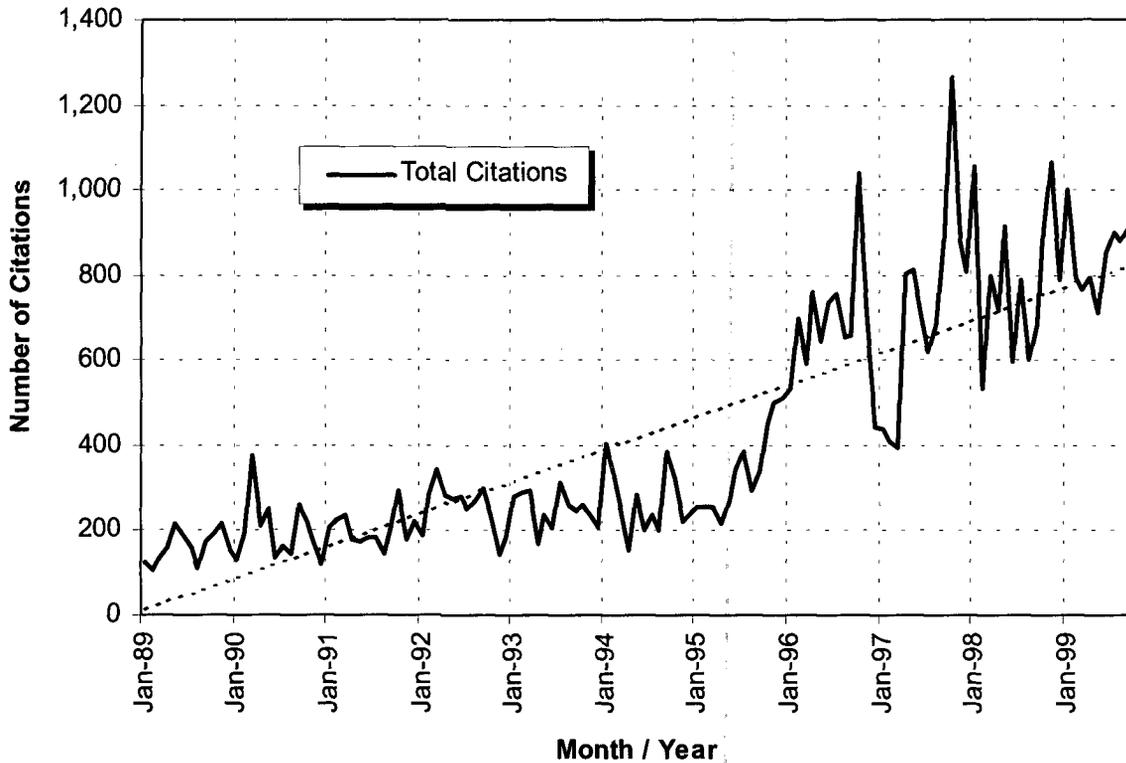
Figure 14: Douglas County Sheriff-Traffic Violations/Citations, 1993-1999



Both traffic citation and arrest totals have increased over the past ten years. In 1993, there were 5,098 traffic citations written, and 1,866 traffic-related arrests were made. In 1998, those numbers rose to 16,264 and 3,249, respectively.

The Douglas County Sheriff's Office provided research staff with a breakdown of traffic related citations written by violation, except for seatbelt and parking violations. The data span ten years and display the information by month. These data are represented in **Figure 15**.

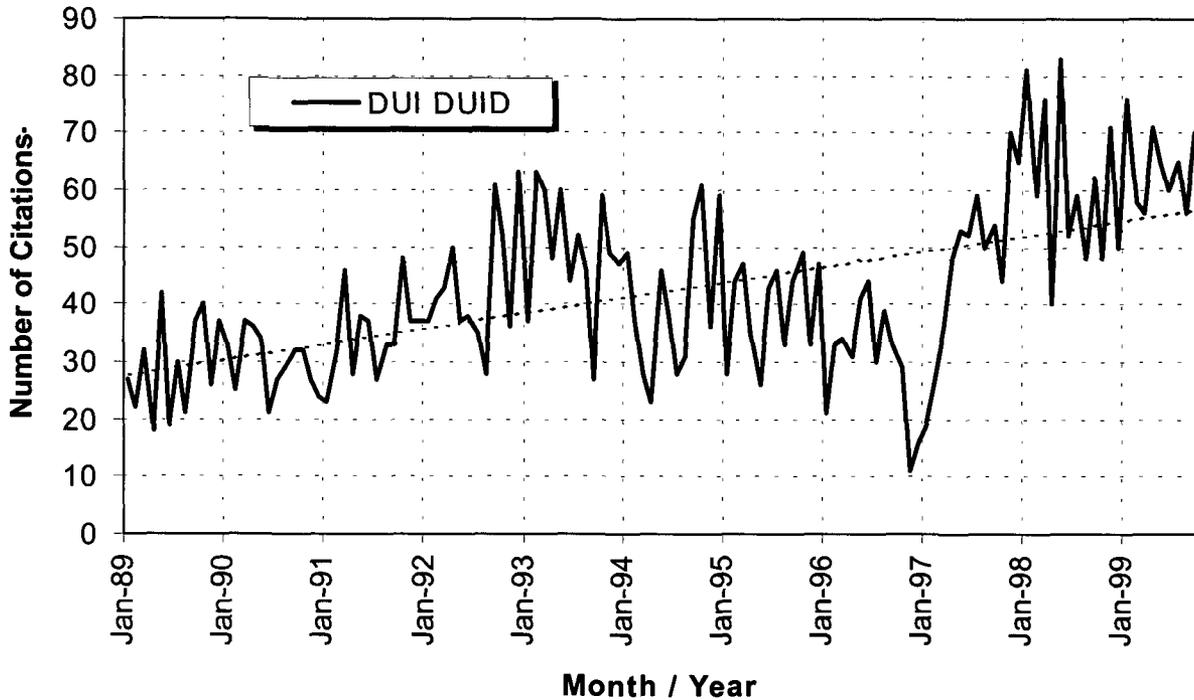
Figure 15: Douglas County Sheriff's Office-All Traffic Citations



The steady increase in traffic enforcement corresponds with departmental growth resulting from residential population growth within the County. The County is currently experiencing a 12-14% yearly increase in population which is expected to double over the next 10-15 years. The minor fluctuations in enforcement that occur along this growth curve were investigated, and it was found that most are a result of either personnel and scheduling changes or weather factors.

Between the months of November and April, traffic enforcement is limited by snow and storm conditions. The traffic unit then counters this drop-off with strong enforcement throughout the warmer months of May, June and July. The large decrease in enforcement in early 1997, as well as the smaller decreases that occur every January, are a result of personnel changes. Vacancies throughout the patrol division due to promotions, reassignments, retirements, etc. are temporarily filled by traffic deputies until new hires complete training and can fill the vacancies. Patrol functions must be given priority over traffic enforcement and, therefore, a noticeable change in traffic enforcement is seen in the data at these times. However, all deputies in the patrol division on day or swing shifts have a traffic enforcement quota of one ticket per shift. Deputies in the traffic unit on those same shifts are expected to write at least one ticket per hour. (Traffic citation quotas are publicized openly.) Traffic deputies on night shifts focus on DUI enforcement. **Figure 16** below depicts only DUI-related offenses, both alcohol (DUI) and other drugs (DUID). Except for a drop late in 1996, this chart also shows an upward trend.

Figure 16: Douglas County Sheriff's Office - DUI-DUID Citations, 1989-1999



Speed enforcement is a top priority with the Sheriff's Office and the numbers of citations issued closely mirror the total numbers of all citations issued (Figure 17).

Figure 17: Douglas County Sheriff's Office - Speeding / Total Citations, 1989-1999

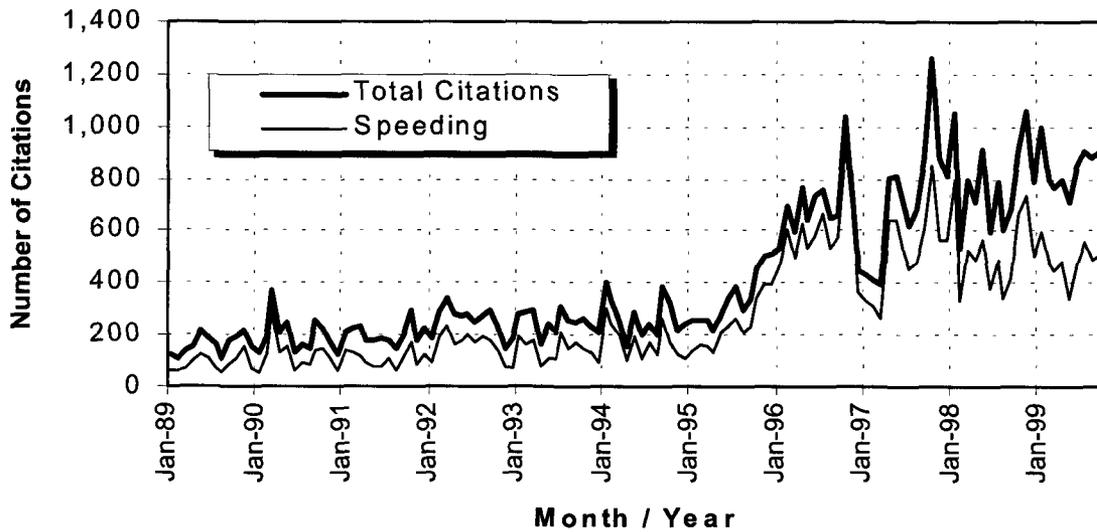
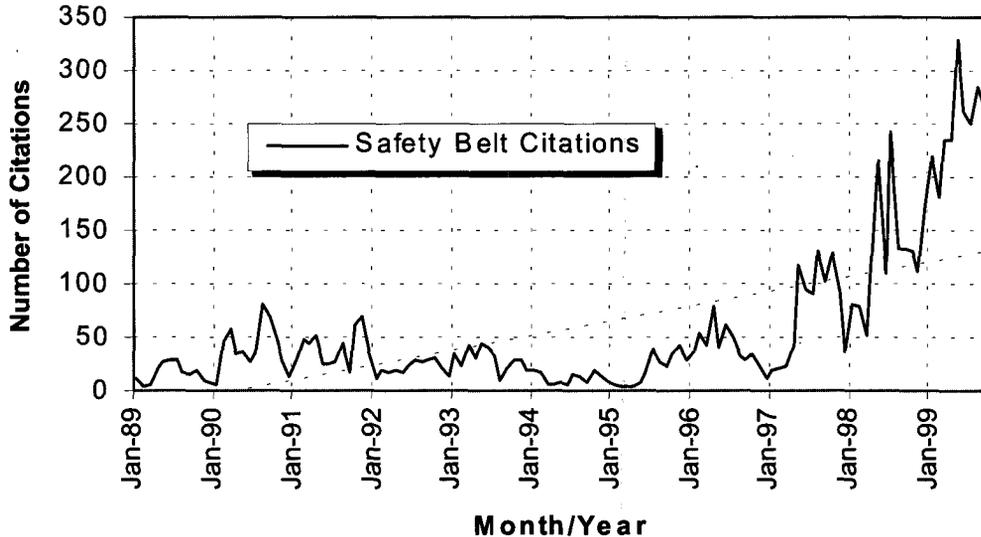


Figure 18 displays the numbers of safety belt citations written per month by the Sheriff's Office. There has been a dramatic increase in the number of citations written for safety belt violations.

Figure 18: Douglas County Sheriff's Office - Safety Belt Citations, 1989-1999



The Douglas County Sheriff's Office began recording aggressive driving violations (defined as two or more moving violations within close proximity to other vehicles) in January 1999. Although it is too soon to see any trends, they provided the number of citations issued monthly during 1999 and through June of 2000. There were a total of 637 aggressive driving citations issued during 1999 and a total of 201 as of July 1, 2000.

SUMMARY

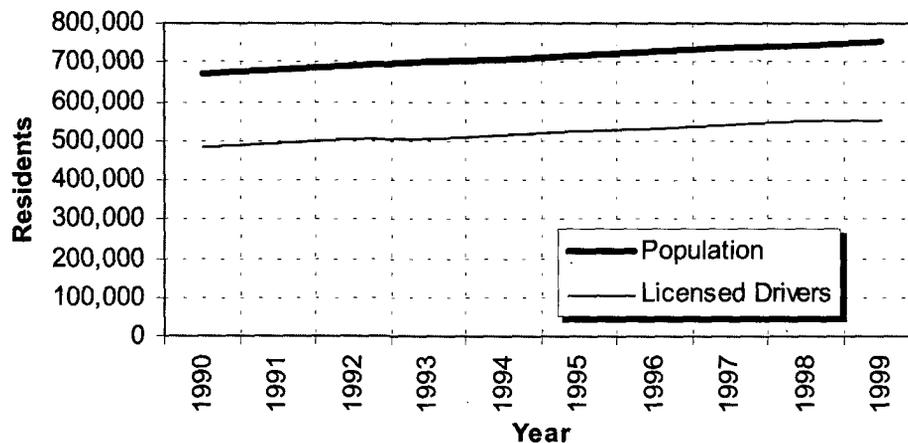
The Douglas County, Colorado Sheriff's Office is one of the few law enforcement agencies we found that has been steadily increasing traffic enforcement efforts at highly significant levels. The number of officers and the level of traffic enforcement efforts have been funded by a rapidly increasing county population and resultant tax base. While it's not unique for communities to have an increased tax base, it is commendable that in Douglas County, the increased revenue has been shared with the Sheriff's Office. The increased traffic safety concerns of the public helped to fuel the continuing increased response by the Sheriff's Office. It was also apparent that there has been a steady command emphasis on traffic enforcement within the Sheriff's Office. This support and guidance have helped to increase resources dedicated to traffic enforcement.

5 - DELAWARE STATE POLICE-DELAWARE

SITE DESCRIPTION

The State of Delaware is located on the eastern seaboard, bordered by the Atlantic Ocean and the Delaware Bay. New Jersey, Pennsylvania and Maryland create Delaware's land-side borders. Delaware is the second smallest state in the nation, with a total area of 1,982 square miles, and ranks 46th among states in population. In 1999, Delaware reported a population of 753,538 persons and 552,005 licensed drivers. **Figure 19** below shows the steady increase in population and licensed drivers in Delaware from 1990 to 1999.

Figure 19: Delaware Population / Licensed Drivers, 1990-1999



The chief industries in Delaware include agriculture, manufacturing, mining and the fishing industry. The state's median household income is \$37,345.

LEA DESCRIPTION

The Delaware State Police have approximately 585 sworn officers responsible for general law enforcement throughout the State. In 1940, the Bureau of Accident Prevention and Traffic Control was established. Responsible for accident investigation and other roadway safety issues, this department has evolved through the years and now exists as the Delaware State Police Traffic Section. This unit is comprised of eight sworn officers, six of whom are assigned to the special Truck Enforcement Unit (TEU) and the Motor Carrier Safety Assistance Program (MCSAP).

This Traffic Section works closely with the patrol units of each of eight Troops on all traffic enforcement. The Traffic Section coordinates information on crashes, arrests and citations,

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providing the pertinent data to each Troop. This information allows each Troop to focus on those areas of enforcement that need attention. The Delaware State Police currently use both radar and laser in their traffic enforcement and the department is currently trying to re-establish aircraft enforcement. Certain state police vehicles are equipped with video equipment.

The Traffic Section also is responsible for the allocation of grant funds to each Troop. Any Troop that designs or organizes a specific program to target one of their problem areas of traffic enforcement can approach the Traffic Section for supplemental funds. This unit also organizes overtime enforcement several times a year, at major holidays, including Memorial Day, 4th of July and Labor Day.

The Traffic Section is very active in the educational side of traffic enforcement and has been effective in helping legislation move through the Delaware State government. Within the past year, an aggressive driving law was passed, which brings harsher penalties to drivers who commit three or more dangerous moving violations within close proximity to other vehicles. This law is enforced by all Delaware law enforcement agencies, including all county and municipal departments. (Citation figures are not yet available.) Currently, the Traffic Section is assisting in seeking the passage of a primary safety belt law. At the present time, there is only a secondary safety belt law in Delaware, meaning law enforcement officers may cite drivers and passengers for not wearing safety belts only if the vehicle has been stopped for some other reason. The proposed primary safety belt law has been approved by the House, but is waiting for Committee approval in the Senate. Similarly, a bill supported by the Delaware State Police Traffic Section calling for a legal BAC limit of .08 for the DWI offense also is in a Senate Committee, after having passed through the House by a unanimous vote.

TRAFFIC ENFORCEMENT TRENDS

Project staff received monthly breakdowns by citation for 1996-1998 from the Delaware State Police. Yearly totals for all traffic-related citations without any breakdowns were received for 1988-1995. These numbers are displayed in figures later in this section.

The monthly breakdowns contained the number of citations issued for each of the following violations:

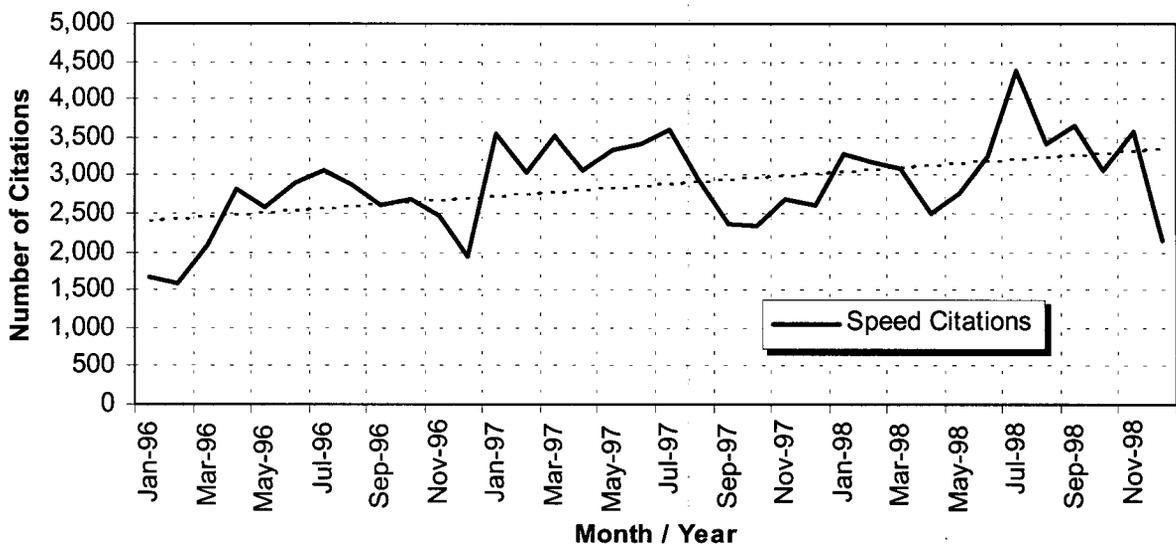
DELAWARE STATE POLICE, DELAWARE

Table 4: Types of Delaware Traffic Citations

Citation / Title, Section
Driving while license suspended/revoked <i>(Title 21, Section 2756)</i>
Driving too fast for conditions <i>(Title 21, Section 4168)</i>
Speeding <i>(Title 21, Section 4169)</i>
Reckless Driving <i>(Title 21, Section 4175)</i>
Driving under the influence <i>(Title 21, Section 4177)</i>
Leaving the scene of a traffic crash <i>(Title 21, Section 4201, 4202)</i>
Failure to stop at a stop sign <i>(Title 21, Section 4164a)</i>
Disregard traffic control device <i>(Title 21, Section 4107a)</i>
Limitations on turning around <i>(Title 21, Section 4153)</i>
Passing in opposite direction/ left & right shoulders / no passing zones <i>(Title 21, Section 4115-4120)</i>
Overtaking a school bus <i>(Title 21, Section 4166d)</i>
Failure to recognize flashing red control <i>(Title 21, Section 4110)</i>
Failure to yield at yield sign <i>(Title 21, Section 4164b)</i>
Right of way violations <i>(Title 21, Section 4130-4136 & Section 4165)</i>
Seat belt assessments - secondary violation <i>(Title 21, Section 4802)</i>
Child restraint <i>(Title 21, Section 4803)</i>

For the three years for which the number of monthly speeding citations were received, it appears there were seasonal variations with more citations issued for speeding violations during the warmer months (**Figure 20**). There was a larger number of speeding citations written in July of 1998 (4,381) than in any other month. Conversations with our contact at the Delaware State Police revealed that grant monies are used for stepped up enforcement during the summer months, particularly in July. He could not say, however, why there were so many more citations written during the month of July in 1998 than had been written during any July in previous years.

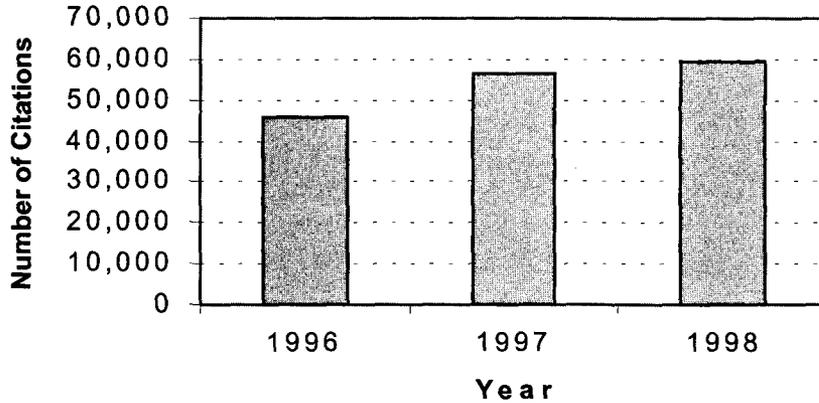
Figure 20: Delaware State Police - Monthly Speeding Citations, 1996-1998



DELAWARE STATE POLICE, DELAWARE

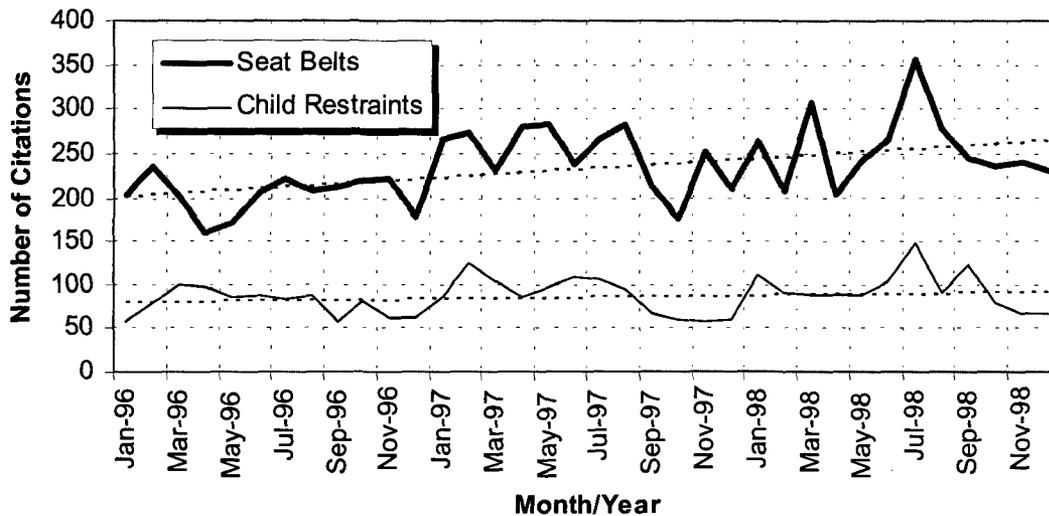
When we look at these same yearly totals, as seen in **Figure 21**, we see that the numbers of speeding citations issued increased from 1996 to 1998.

Figure 21: Delaware State Police - Yearly Speeding Citations Issued 1996-1998



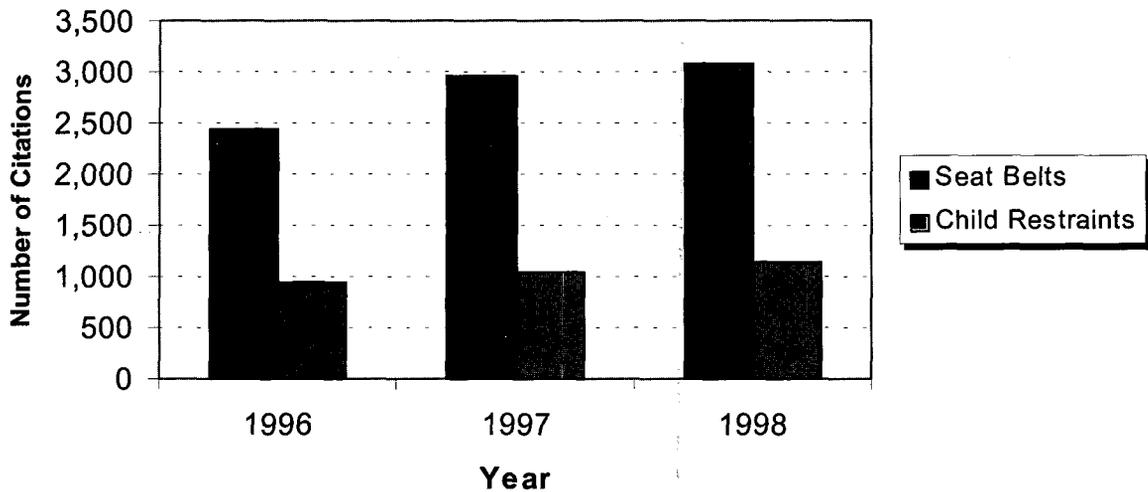
Although the monthly pattern of citations issued for safety belt violations (a secondary offense in Delaware) is not as clear, it appears this category of citations increased slightly from 1996 to 1998 (**Figure 22**).

Figure 22: Delaware State Police - Monthly Safety Belt Violations 1996-1998



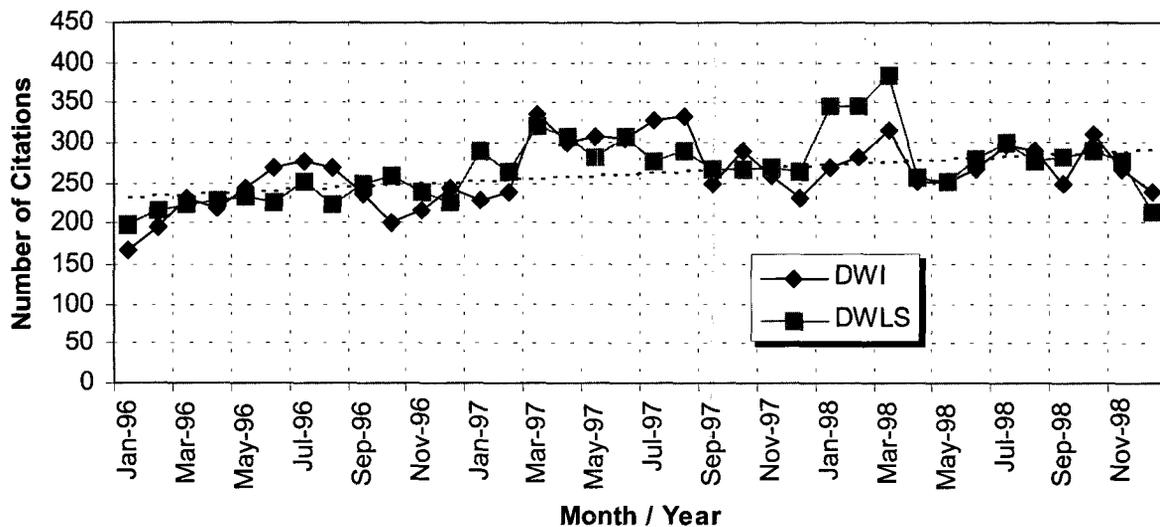
Again, there was a spike during July 1998 and again the increase in the number of citations issued is confirmed when we look at the yearly totals in **Figure 23**. The smaller number of child restraint citations showed a much smaller increase in both figures.

Figure 23: Delaware State Police - Yearly Safety Belt Violations 1996-1998



Next, we examined citations issued for violations relating to driving while impaired, and driving while license was suspended/revoked in **Figure 24**.

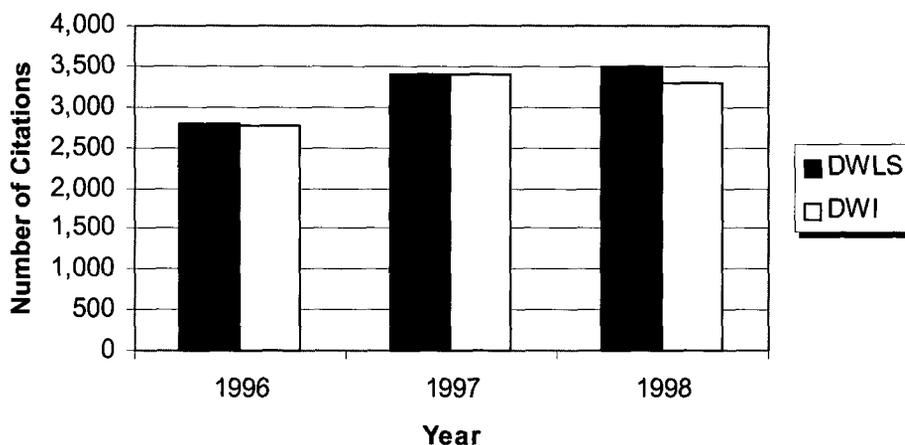
Figure 24: Delaware State Police - Monthly DWI/DWLS Citations, 1996-1998



DELAWARE STATE POLICE, DELAWARE

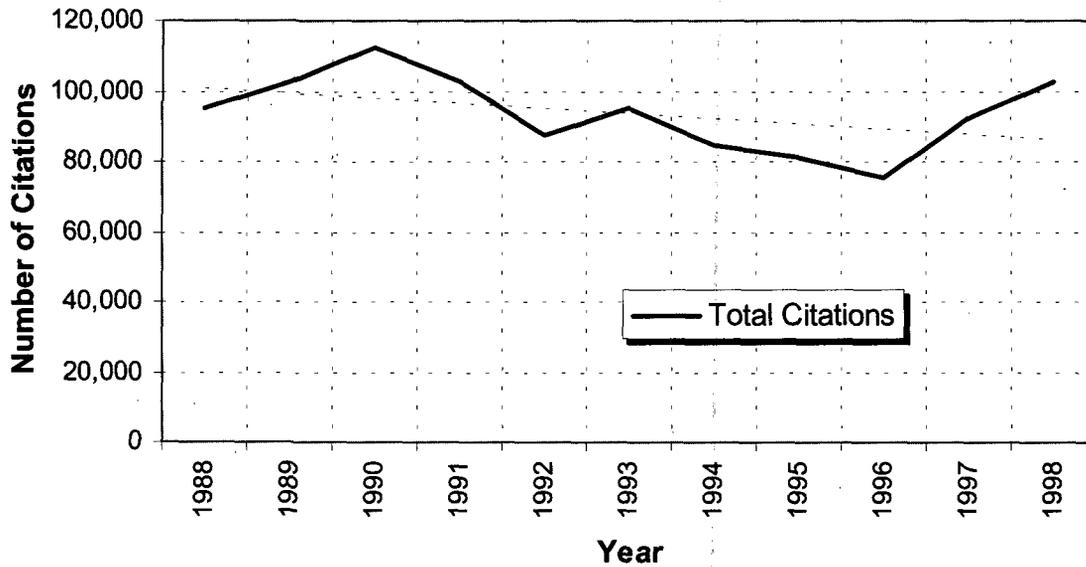
This time a spike appears for DWLS (driving while license suspended or revoked) violations, appearing earlier in the year and over a three-month period, during January through March 1998. When we look at the yearly totals below (**Figure 25**), we see the number of arrests for DWI fell slightly from 3,404 in 1997 to 3,288 in 1998, while DWLS arrests increased slightly.

Figure 25: Delaware State Police - Yearly DWI/DWLS Citations, 1996-1998



Finally, the figure below (**Figure 26**) depicts all traffic-related citations by year from 1988 through 1998. While there was a decline during the early 1990s, the total numbers of citations issued rebounded to the higher levels achieved during the late 1980s to 1990. Again, our contact at the Delaware State Police was not aware of any budgetary cuts or changes in policy which might have resulted in the decline.

Figure 26: Delaware State Police - Total Traffic Citations, 1988-1998



SUMMARY

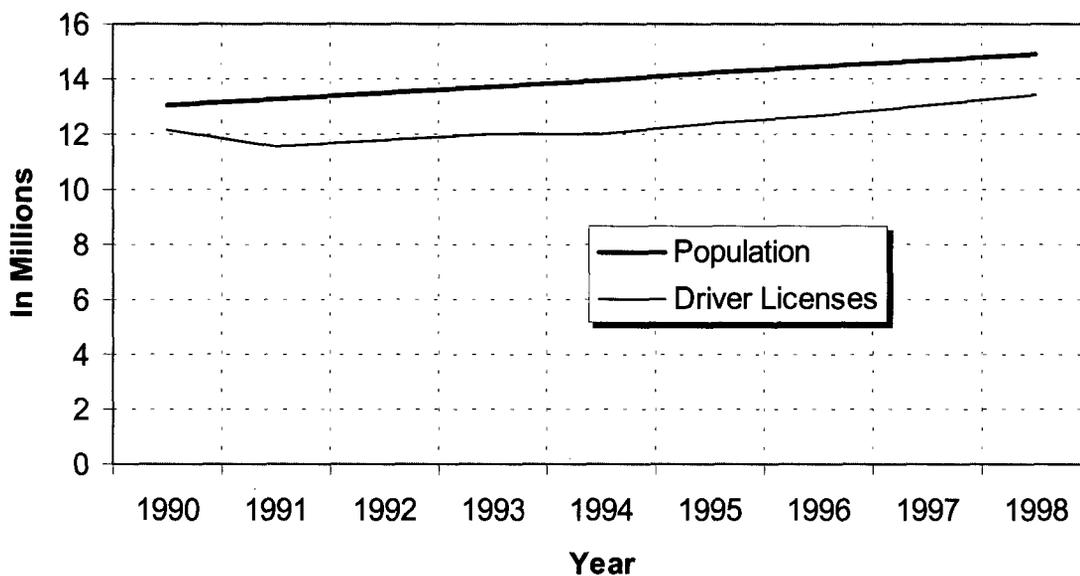
After a fairly steady decline in the numbers of traffic citations (all types combined) written by the Delaware State Police from 1990 to 1996, the total numbers increased during 1997 and 1998, to almost reach the 1990 level. Conversations with individuals from the Department conveyed a firm commitment to maintaining the upward trend which began in 1997. The number of licensed drivers has increased over that period of time, thus the citation rate per licensed driver was somewhat lower in 1998 than in 1990. State police personnel are not aware of any policy, funding, or personnel issues that are likely to explain the fluctuation in the citation volume or rate.

6 - FLORIDA HIGHWAY PATROL-FLORIDA

SITE DESCRIPTION

The State of Florida and the Florida Highway Patrol comprised the third state-wide site. The current population for the State of Florida is 15,111,244 (as estimated by the 1999 U.S. Census), ranking the State fourth in population in the United States. There are currently 13,142,253 drivers licensed by the State of Florida.

Figure 27: Florida Population Versus Licensed Drivers, 1990-1998



The total square mileage of the state is 58,677 miles, including 4,424 square miles of water. Florida also has nearly 1,200 miles of coastline along both the Atlantic Ocean and the Gulf of Mexico. The tourism industry continues to grow in Florida, bringing the total number of tourists visiting the state in 1998 to 48.7 million persons. This is an increase of 7.5 million people, just since 1995.

LEA DESCRIPTION

The Florida Highway Patrol (FHP) covers the 80,000 miles of roadways throughout the State. The enforcement priority of the Department is highway safety. The FHP focuses on impaired driving offenses, occupant restraint violations, unlawful speeding, faulty vehicle equipment and drug interdiction in order to create a safer driving environment. The Agency has 1,740 sworn officers and employs approximately 500 more civilian workers located in ten different districts.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

The FHP has successfully been modernized over the years and has an extensive artillery of equipment. This LEA has 12 airplanes, 5 helicopters, 4 mobile breath-alcohol testing units, 4 Speed Measuring Awareness Radar Trailers (SMART), 4 seatbelt "Convincers" used in public safety demonstrations, a mobile command post used in natural disasters and emergencies and several show cars also used in public safety demonstrations. The FHP also has 1,947 moving radar units and 431 VASCAR units to help the Department to enforce speeding laws. Much of this equipment was obtained via grant money, and the FHP works closely with each troop to determine what needs are most important. Each troop is asked for recommendations pertaining to the pursuit and expenditure of grant monies.

Each troop of the Florida Highway Patrol has created special enforcement programs targeting aggressive driving actions. While, there is no specific State-level aggressive driving legislation supporting these efforts, the FHP has worked closely with the judicial branch to use existing legislation to ensure effective penalties for those who drive aggressively. The FHP defines aggressive driving as two or more dangerous violations in rapid succession or simultaneously, and "aggressive driving" is noted in the comment area of each written ticket. These enforcement efforts are carried out by officers in unmarked vehicles that are not commonly associated with police work, such as Jeep Cherokees. All of these special, unmarked vehicles are equipped with video technology. These vehicles are not used as pursuit vehicles, but rather work in conjunction with other patrol cars to apprehend motorists who drive dangerously.

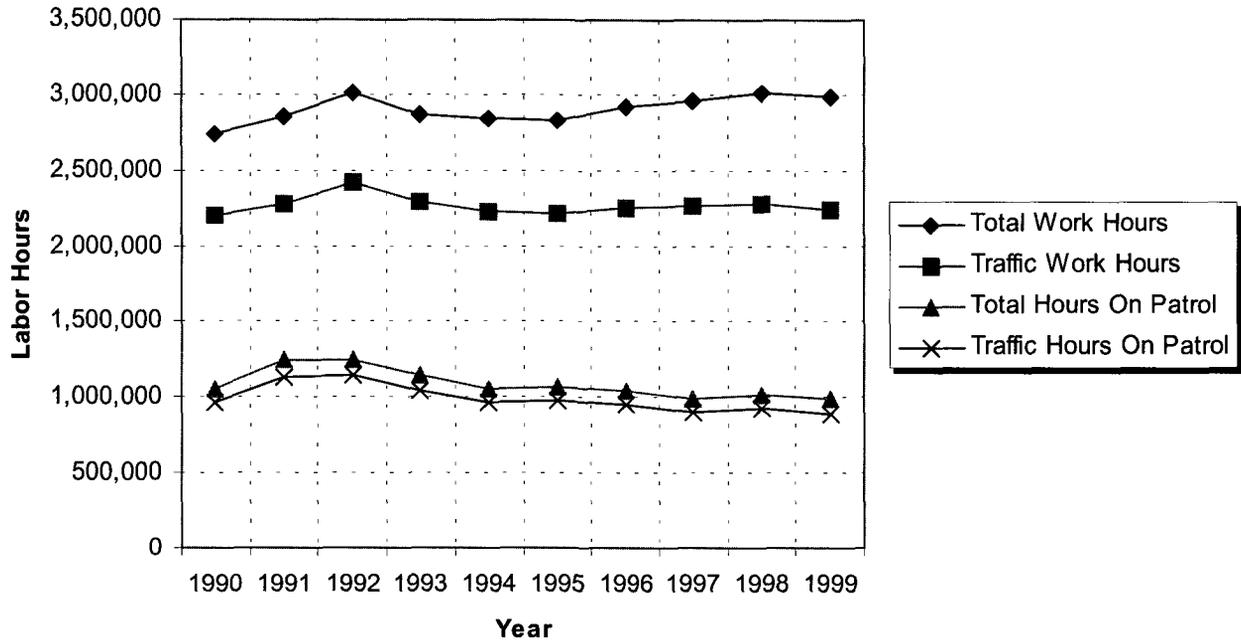
The FHP runs special enforcement programs on every holiday of the year including Christmas, Thanksgiving and New Year's Eve, with DUI prevention as the main focus. Each year, the Department recognizes the top 100 "DUI troopers" in conjunction with MADD. These officers are rewarded with the installation of video technology, mentioned above, in their patrol vehicles. The FHP is also researching the possibility of placing mobile data terminals in each patrol car. Trial programs currently are running in Jacksonville and Panama City with these mobile information systems.

TRAFFIC ENFORCEMENT TRENDS

The Florida Highway Patrol provided citation data in great detail by individual violation type, but with yearly (instead of monthly) totals for 1990-1998. Nevertheless, the data seem adequate to fulfill our needs for analysis purposes. The following chart (**Figure 28**) presents FHP labor hours. The top line represents the total combined work hours for all FHP officers and supervisors combined. The second line shows the total work hours for FHP officers expended on traffic law enforcement (without supervisors' time). Line three is the total hours spent patrolling (both officers and supervisors) and line four is the number of officers' patrol hours; again, the difference between lines three and four would be the number of hours that supervisors spent on patrol.

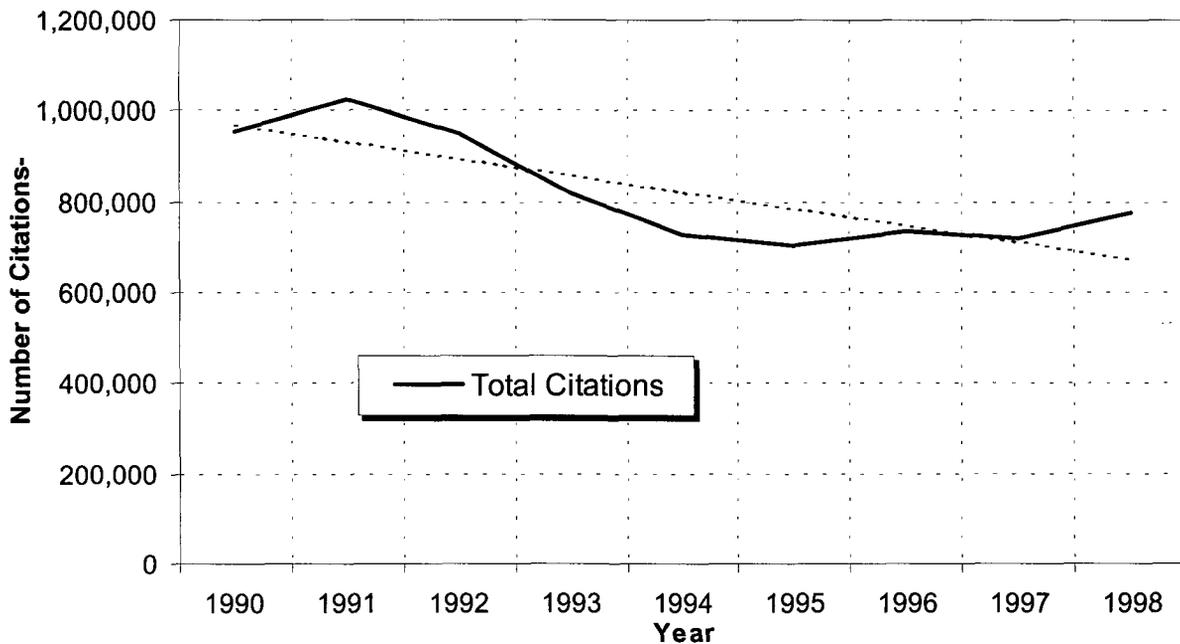
FLORIDA HIGHWAY PATROL- FLORIDA

Figure 29: Florida Highway Patrol - Total Work Hours, 1990-1999



The chart below shows that the numbers of traffic citations (all offenses combined) issued by FHP began to decline in 1992 and leveled off somewhat from 1994-1998. This parallels the trend for traffic hours on patrol.

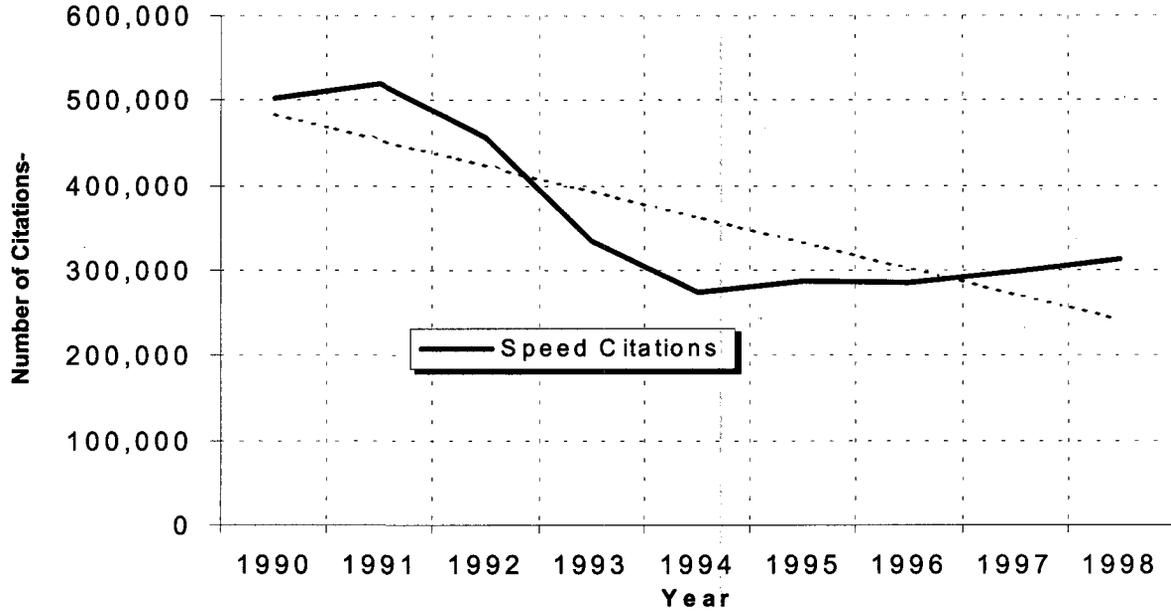
Figure 28: Florida Highway Patrol - Total Traffic Citations, 1990-1998



A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

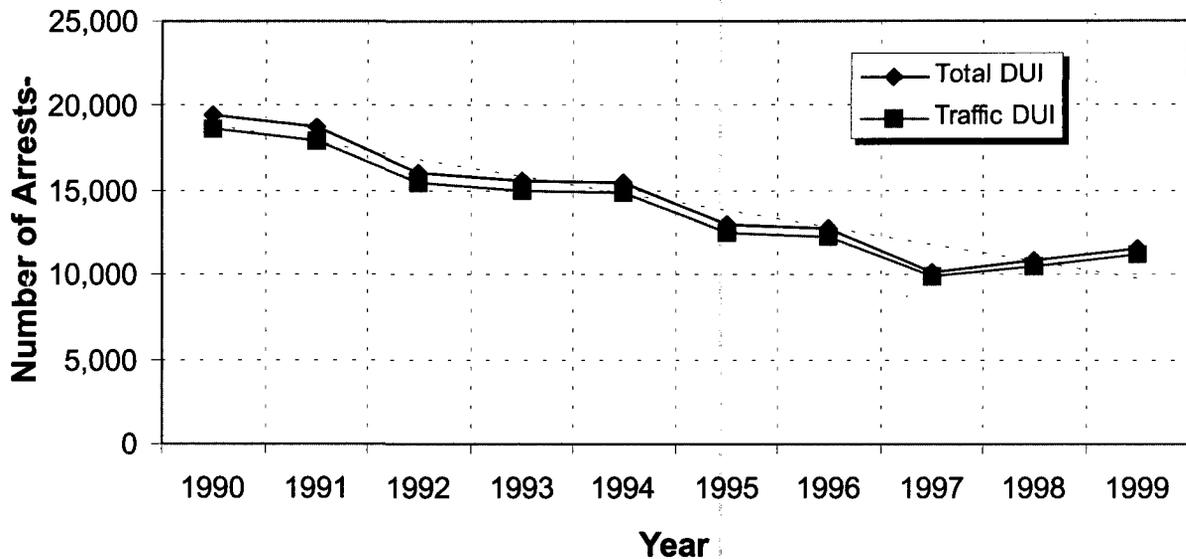
Breaking out speeding citations, we see that the number of citations for speeding issued by the FHP have declined (Figure 30).

Figure 30: Florida Highway Patrol - Total Speed Citations, 1990-1998



The number of arrests for DUI offenses are presented below and mirror the number of citations issued for that offense, as would be expected. The top line is the total DUI arrests (made by officers and supervisors), and the bottom line indicates the total arrests made by the officers.

Figure 31: Florida Highway Patrol - DUI Arrests, 1990-1999



FLORIDA HIGHWAY PATROL- FLORIDA

Arrests for DUI offenses also have declined, as indicated by the number of citations issued (Figure 32).

Figure 32: Florida Highway Patrol - Total DUI Citations, 1990-1998

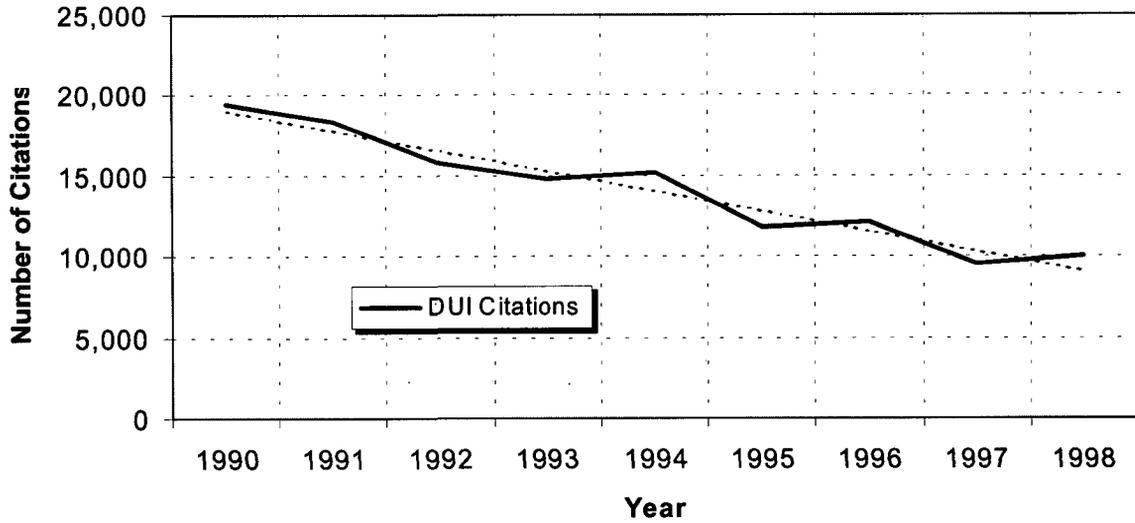
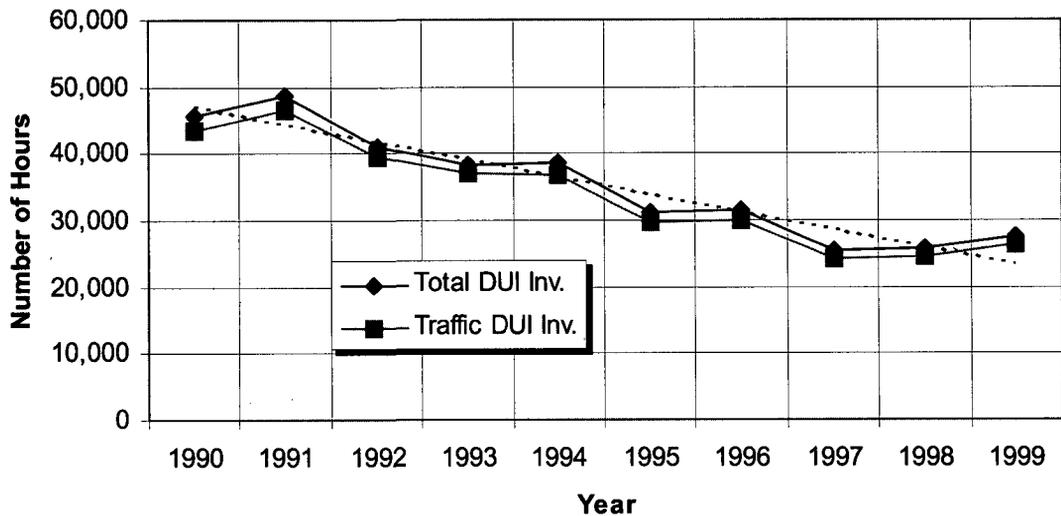


Figure 33 shows the amount of time spent by officers (bottom line) and both officers and supervisors combined (top line) on DUI investigations.

Figure 33: Florida Highway Patrol - DUI Investigations, 1990-1999



The number of safety belt citations issued has increased (Figure 34, top line). The bottom line indicates the number of safety belt citations issued by FHP officers for violations; the top line includes supervisors.

Figure 34: Florida Highway Patrol - Safety Belt Citations, 1990-1999

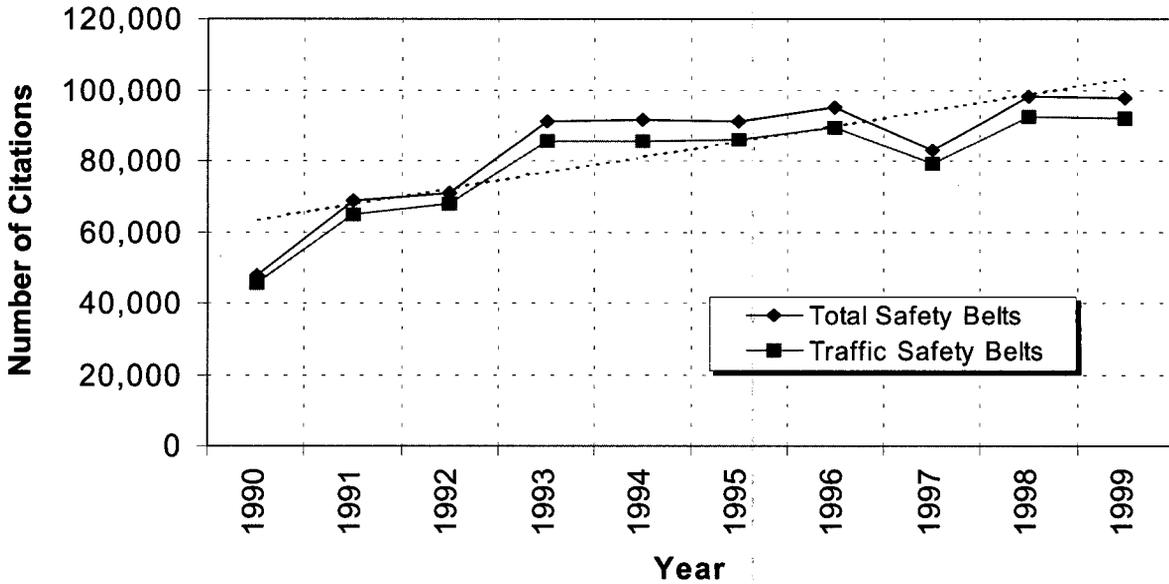
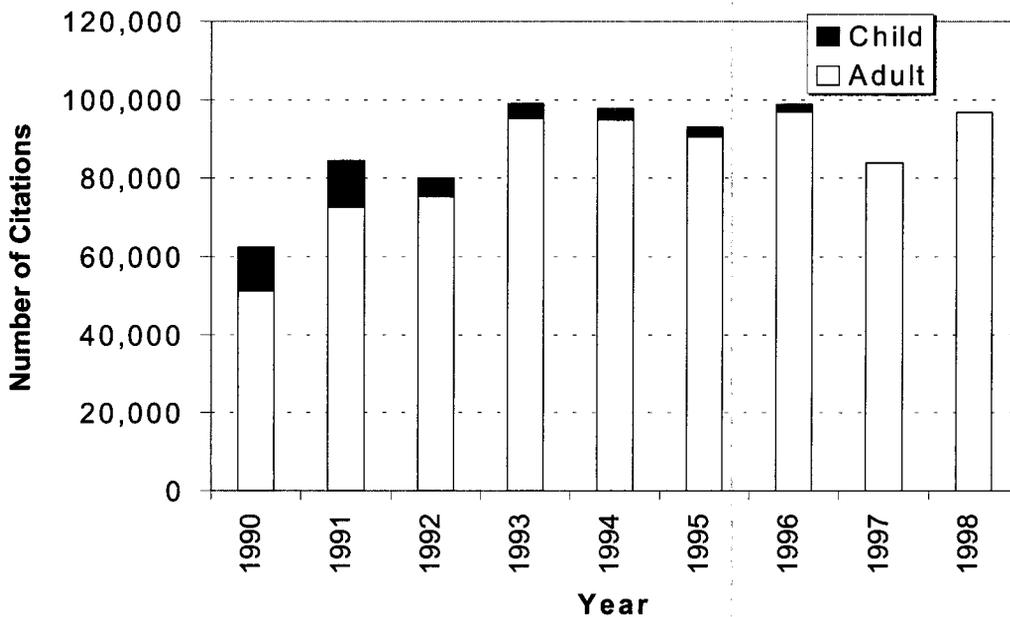


Figure 35 separates the number of child restraint violations from adult safety belt violations. The vast majority of safety belt citations were issued for adult violations. Beginning in 1997, child restraint citations were taken out of the category for safety belt violations (a non-moving

Figure 35: Florida Highway Patrol-Safety Belt Citations-By Type, 1990-1998



FLORIDA HIGHWAY PATROL- FLORIDA

traffic violation) and recorded as a more serious moving violation. Child restraint citations now appear under the category "other moving violations," for which we did not receive a breakdown.

SUMMARY

The number of patrol hours recorded by the FHP has gradually declined since 1992. This has been reflected in a decrease in overall traffic citation volume, although proportionately, the number of citations issued decreased more than the patrol hours. The yearly totals of arrests for DUI have declined sharply since 1990. Speeding citations also have been reduced, although there have been moderate increases in recent years. The one area where there has been an increase is safety belt violations; the number of citations issued have increased dramatically. Statewide population and the number of licensed drivers have maintained a steady increase.

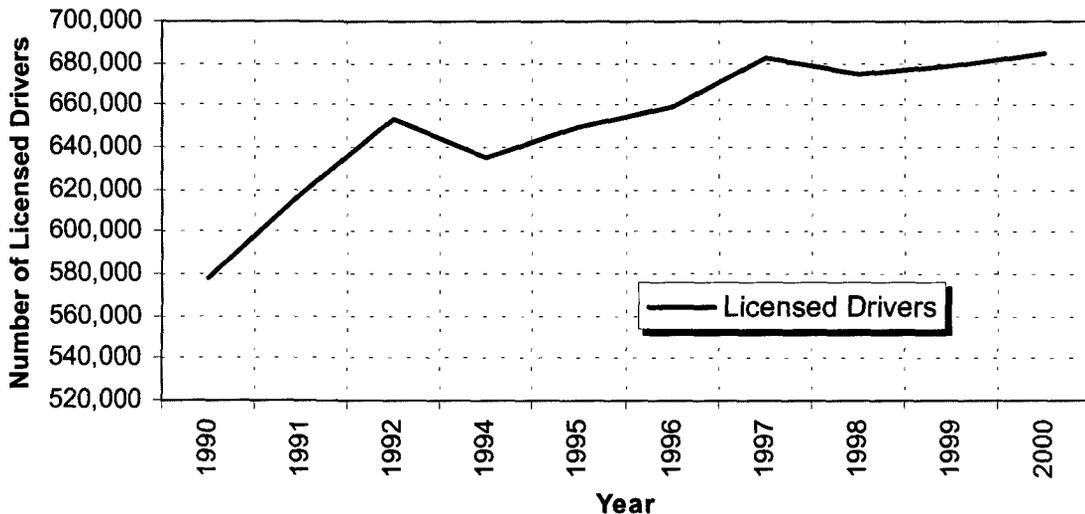
A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

7 - ORANGE COUNTY SHERIFF'S OFFICE - FLORIDA

SITE DESCRIPTION

Orange County sits in the approximate center of Florida, its location primarily associated with Orlando and the surrounding areas. The County's central location lies mid-way between Jacksonville and Miami and two of the state's major highways. Interstate 4 and the Florida Turnpike intersect through the center of the County. Tourism forms the core of Orange County's economy, with several of the nation's most popular theme parks lying partially within the County limits. The County is serviced by the Orlando International Airport, which handles more than 25 million travelers annually. In 1995, the population of Orange County was 757,897 persons. There are nearly 750 miles of roadways within Orange County. Of these roads, 425 miles are County maintained, while the remainder fall under the state of Florida's jurisdiction. The numbers of licensed drivers within the County as of January 1 of each year from 1990 through 2000 were provided by the Florida Department of Highway Safety and Motor Vehicles, Division of Driver Licenses. (Figures were not available for 1993.) As **Figure 36** below indicates, there has been a large increase in the number of licensed drivers within Orange County over the past decade.

Figure 36: Orange County Licensed Drivers, 1990-2000



LEA DESCRIPTION

The Orange County Sheriff's Office is a full-service sheriff's office, providing police enforcement throughout the County including the Orlando-metro area. There are more than 1,200 sworn officers currently employed by the Orange County Sheriff's Office and approximately 800 more civilian employees. The Department is split into the following six divisions: Operational Services, Court Services, Community Policing, Field Services, Special Investigations, and Criminal Investigations. The Field Services division works in conjunction with a specialized patrol unit as primary enforcers of traffic violations. The specialized patrol includes the motorcycle, DUI and K-9 units, which have approximately 18 officers each and will soon be expanded to 27 officers.

As with many sheriff departments, traffic traditionally has not been an enforcement priority. Changes have occurred over the last few years, though, that have prompted the Orange County Sheriff's Office to concentrate more fully on the traffic needs of their communities. The Sheriff has encountered strong public involvement in the traffic safety needs of several individual communities over the last 3 to 4 years. Traffic complaints have increased steadily, and it is reported that the top homeowner and property-owner complaints are all traffic-related issues. The Sheriff responded to these calls for greater police presence from the communities by allowing his traffic units to become more aggressive in their enforcement of traffic laws. Any complaint that is received by the Department is attended to within two weeks and is granted periodic follow-ups after that. The Sheriff's Office has worked in conjunction with the Orlando Police Department to try and curb the traffic safety problems that have been increasing throughout the county as a result of increased population and the continually growing number of motorists in the area.

The two main concerns for this Department are school-zone speed enforcement and DUI. The Sheriff's Office heavily patrols school areas through the months classes are in session and, reportedly, officers are successful in their enforcement efforts. Most school years start off with approximately 1,000 tickets issued per month; but after many months of police presence in these areas, the number of tickets drops to approximately 200 per month. In the summer months, when school-zone enforcement is not as much of a priority, the Department focuses on special enforcement needs such as railroad crossings, child restraint checkpoints and red traffic light patrols. Many of these special initiatives are conducted in conjunction with other police agencies within the County or with the Florida Highway Patrol. The Orange County Sheriff's Office pursues a limited amount of grant money. These grants are focused primarily on child restraint enforcement and training needs.

Most equipment for the specialized patrol unit is budget funded, rather than purchased with outside funds. Currently, the Department uses radar, laser and VASCAR (time/distance measurement equipment) technology. All DUI vehicles are equipped with video capabilities.

The Department recognizes aggressive driving as a growing traffic safety concern, but has not yet fully explored the possibilities of enforcement against aggressive driving actions. At this point, the department has had only informal anti-aggressive driving programs, but hopes to look at this issue more closely within the year.

TRAFFIC ENFORCEMENT TRENDS

The following data were retrieved from the Florida Uniform Traffic Citation Statistics for the Sheriff's Office in Orange County. **Figure 35** shows the numbers of total traffic-related violations for 1989 through 1997. There has been a downward trend in traffic enforcement by the Sheriff's Office in Orange County, as measured by citation volume. Most of the categories and types of traffic citations show a sharp decline in 1992. When asked about this decrease, our contact could not be certain of the cause. Factors that were discussed as possible hindrances to traffic enforcement included many things, from weather concerns, to parades, to political motorcades. Orange County's location obviously makes them susceptible to hurricanes and other weather concerns. These acts of nature place a burden on the Department's ability to focus on traffic enforcement. Similarly, the Department is responsible for any political travel in the area. Reportedly, the Orange County Sheriff's Office is one of only three Departments in the country certified to escort the presidential motorcade and, therefore, officers are utilized when any politician is traveling within the State. Escort work is very labor intensive and will pull many officers off traffic details, therefore creating a lull in all traffic enforcement activities. However, we also compared the number of total traffic violations recorded by the Florida Highway Patrol and handled by that agency within Orange County. The trends of the two agencies mirrored each other as illustrated in **Figure 37**.

Figure 37: Orange County Sheriff and Florida Highway Patrol (Orange County) - Total Traffic Violations, 1989-1997

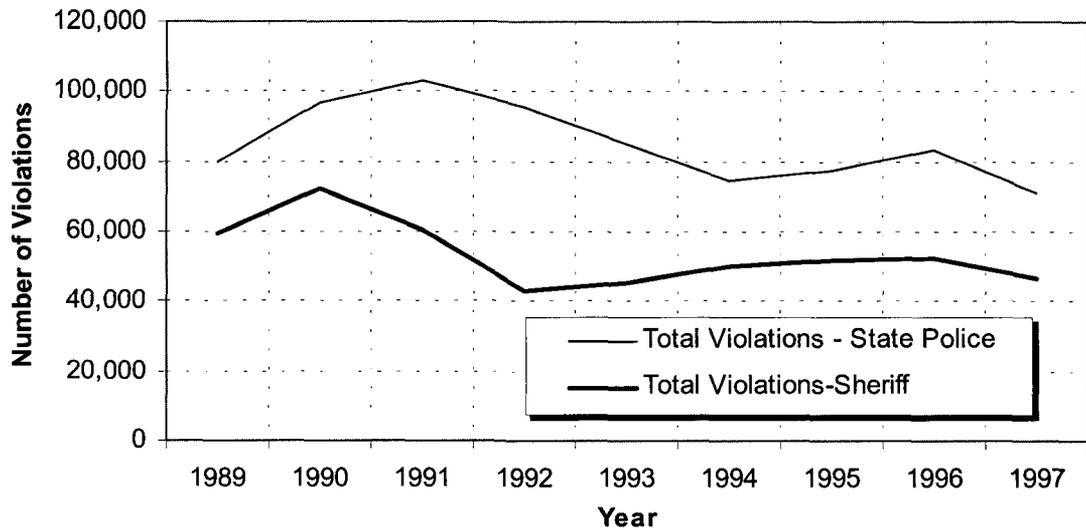
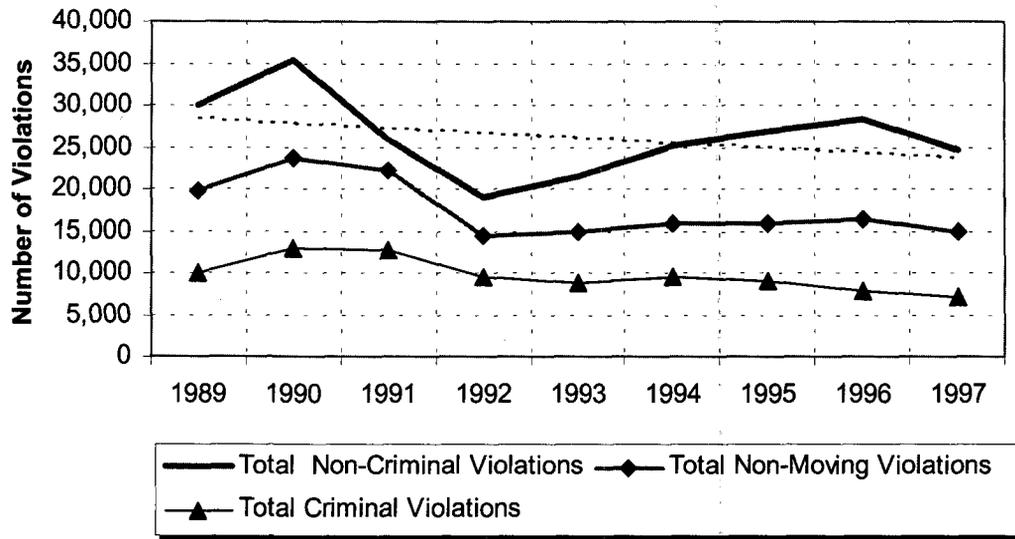


Figure 38 shows the total traffic violations split into criminal, non-criminal and non-moving violations. The non-criminal violations category includes speeding, careless driving, and all moving infractions (e.g., improper turning, following too closely, running a red light). The criminal violations category includes DUI, reckless, fleeing, leaving a crash scene, and various driver licensing violations. The non-moving violations category includes safety belt violations, unsafe equipment, and no proof of insurance, along with bicycle and pedestrian infractions.

Figure 38: Orange County Sheriff's Office - Violation Categories, 1989-1997



Next, we separated violations with the largest numbers of citations. Figure 39 shows speeding violations recorded by the Sheriff's Office and by the Florida Highway Patrol operating within Orange County. It reflects a slight increase in speeding violations since 1992, but current levels do not reflect the peak observed in 1990.

Figure 39: Orange County Sheriff's Office and Florida Highway Patrol - Speeding Violations, 1989-1997

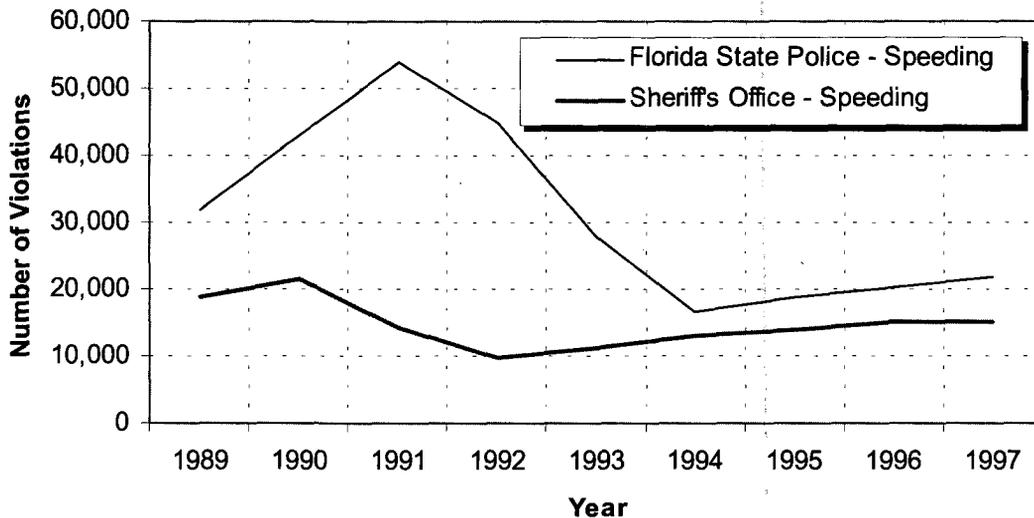


Figure 40 shows the combined violations concerning driver licenses (e.g., expired, suspended, revoked).

Figure 40: Orange County Sheriff's Office - Driver License Violations, 1989-1997

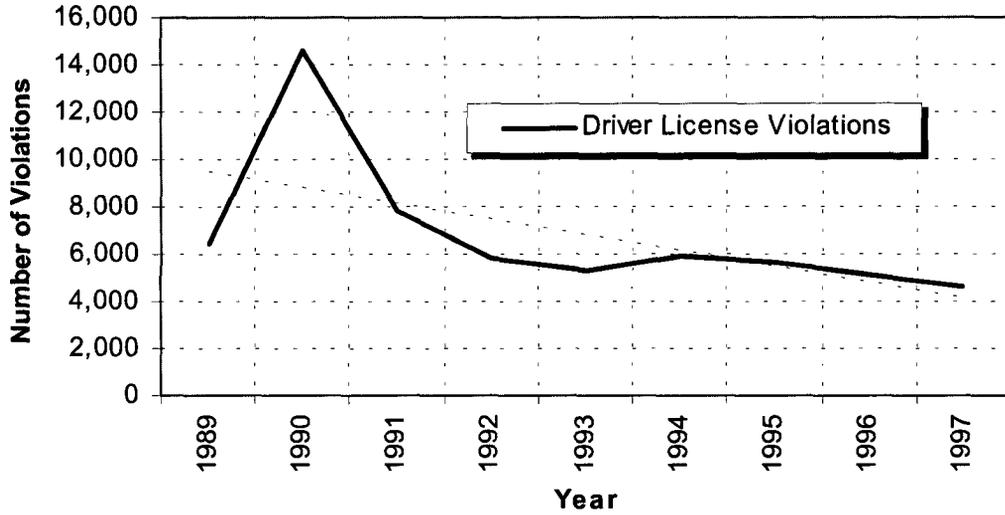


Figure 41 shows the number of DUI violations in Orange County from 1989-1997 which were handled by the Sheriff's Office and the Florida Highway Patrol. Similar numbers of cases were handled by both LEAs and the trends are similar. While there is a distinctive downward trend, the sharp decline in 1992 which is apparent in other types of violations is not evident here. The decline actually began in 1991 as it had for driver license violations, often a related offense.

Figure 41: Orange County Sheriff and Florida Highway Patrol (Orange County) - DUI Violations, 1989-1997

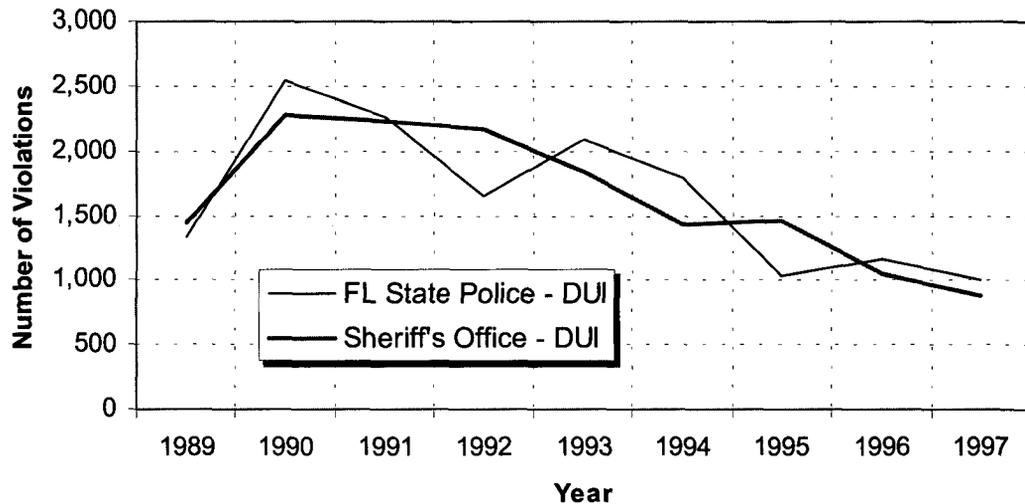


Figure 42 and Figure 43 depict safety belt citations.

Figure 42: Orange County Sheriff's Office - Total Safety Belt Violations, 1989-1997

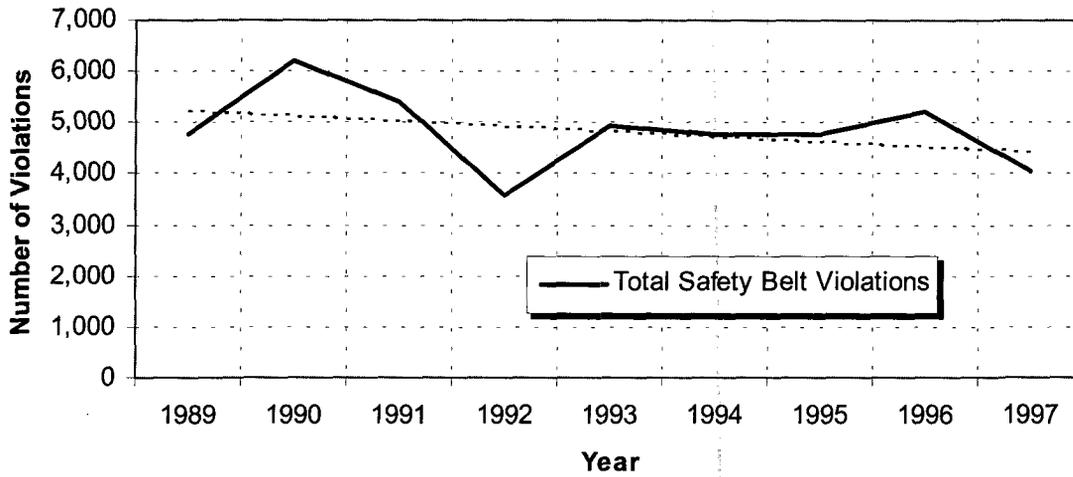
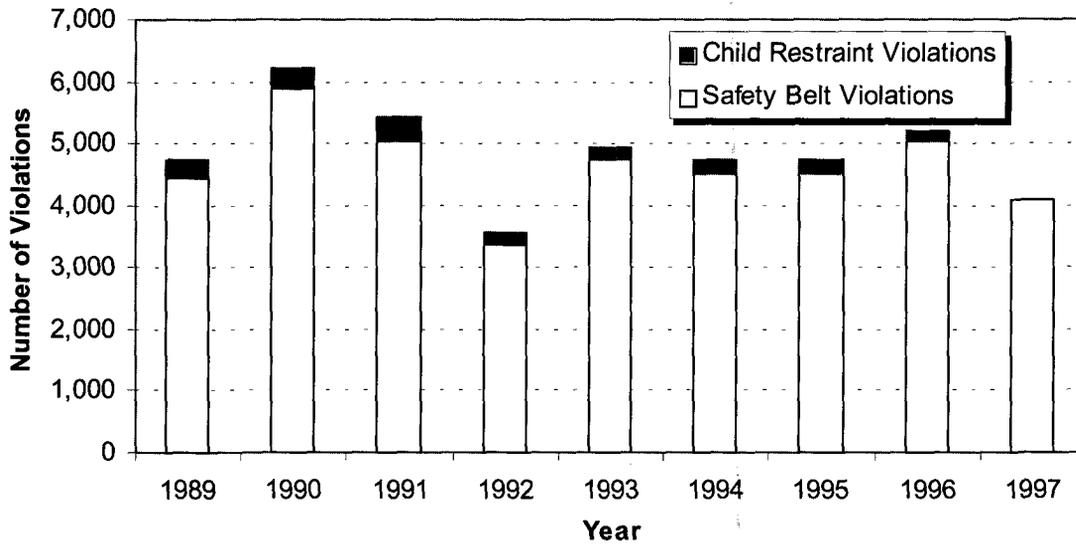


Figure 43 shows the number of adult safety belt violations versus child restraint violations.

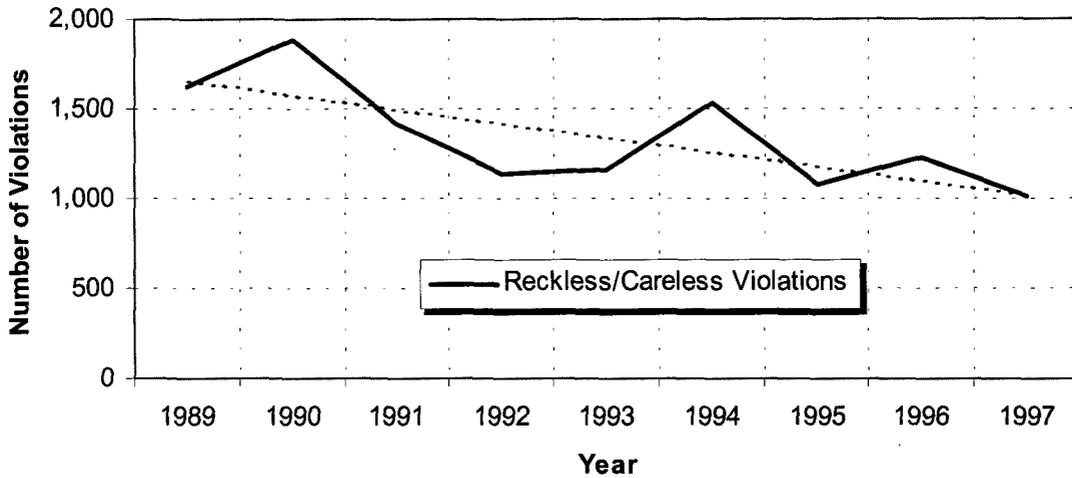
Figure 43: Orange County Sheriff's Office - Safety Belt Violations-By Type, 1989-1997



ORANGE COUNTY SHERIFF'S OFFICE, FLORIDA

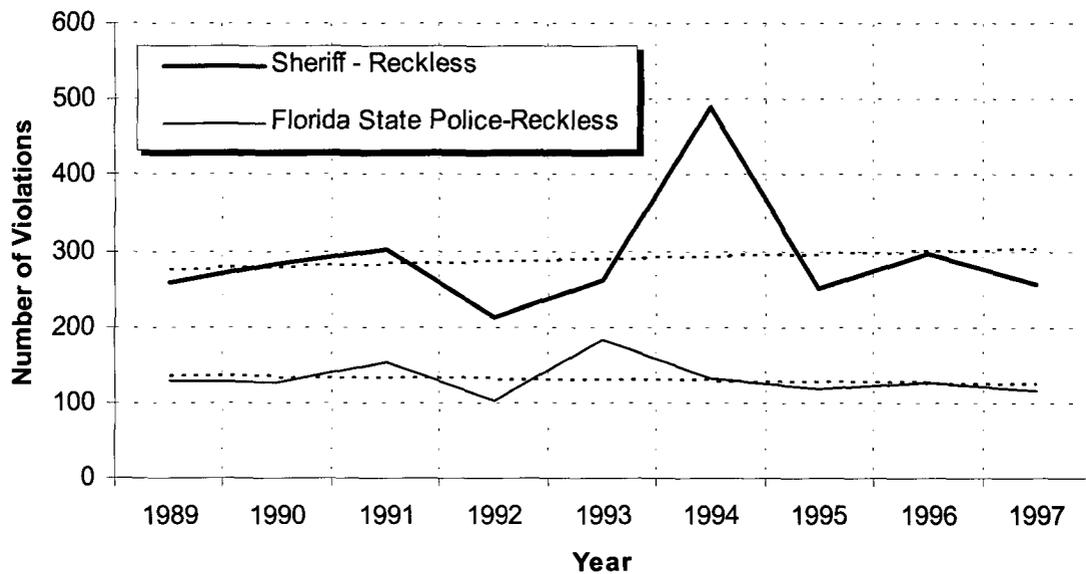
Figure 44 shows the number of citations issued for reckless and careless driving combined. Reckless driving in Florida is a criminal violation resulting in arrest, and careless driving is handled as moving violation with a citation.

Figure 44: Orange County Sheriff's Office - Reckless/Careless Violations, 1989-1997



Finally, Figure 45 shows the number of reckless driving violations handled by the Orange County Sheriff's Office and the Florida Highway Patrol in Orange County. More violations are handled by the Sheriff's Office and, despite a peak in 1993, both trend lines are relatively flat.

Figure 45: Orange County Sheriff and Florida Highway Patrol (Orange County) - Reckless Violations, 1989-1997



SUMMARY

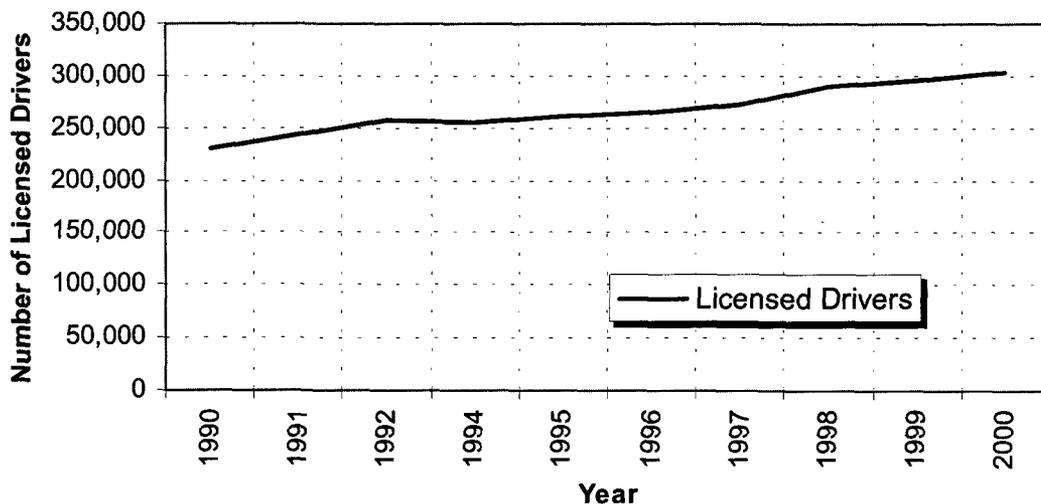
While the Orange County Sheriff's Office reports it is becoming more heavily involved in traffic law enforcement, and despite an increase in the number of licensed drivers, the actual numbers of citations issued for traffic violations combined have decreased. However, citations for speeding offenses have increased, and this is the area which was reported to have been the target of the most complaints by residents. The Orange County Sheriff's officers have responded to their concerns by stepping up enforcement of speed laws. The pattern of DUI arrests has paralleled the decline since 1991 seen with FHP, even though it is reported by the Sheriff's Office to be an emphasis area.

8 - SEMINOLE COUNTY SHERIFF'S DEPARTMENT - FLORIDA

SITE DESCRIPTION

Seminole County is a centrally located Florida county with more than 354,000 residents. The County lies to the northeast of Orlando and Orange County, and recently has been one of the fastest growing areas in the State. Seminole County, geographically, is rather small with only 298 square miles of land, but due to its increasing population, the County now ranks as the third most densely populated county in Florida. Traditionally, the County's economy has been driven by agriculture, but within the last 30 years the tourism industry has grown, as a number of popular tourist attractions have been established both in and around Seminole County. The numbers of licensed drivers within the County, as of January 1 of each year from 1990 through 2000, were provided by the Florida Department of Highway Safety and Motor Vehicles, Division of Driver Licenses. (Figures were not available for 1993.) As **Figure 46** below indicates, there has been a steady increase in the number of licensed drivers within Seminole County over the past decade.

Figure 46: Seminole County Licensed Drivers, 1990-2000



LEA DESCRIPTION

The Seminole County Sheriff's Office provides law enforcement services and community support throughout the County. The LEA is divided into four specifically organized units, which include corrections, neighborhood policing, metro services, and staff services. The neighborhood policing unit houses the general patrol and, therefore, handles most traffic enforcement.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

The Department considers traffic safety one of its largest problems and encounters more feedback from the public concerning traffic issues than in any other aspect of its police work. Speeding generally is the top complaint received from neighborhoods and communities above all other types of criminal behavior. The Sheriff is responsive to these public needs and, reportedly, supports an aggressive approach to traffic enforcement. The neighborhood general patrol regularly responds to citizen complaints, which may identify traffic safety issues which need to be addressed. The Sheriff's Office researches traffic trends throughout the County. Furthermore, the Sheriff's Office takes part in the City/County/State Traffic Unit, which is a group of agency representatives from all of the LEAs within Seminole County, including the Florida Highway Patrol and the Department of Motor-Carrier Compliance. This group meets monthly and conducts special operations focused on DUI, truck enforcement issues, and speeding, among other traffic-related problems. The Department's work with this unit creates a multi-faceted approach by the Sheriff's Office toward enforcement of traffic laws.

The Seminole County Sheriff's Office regularly utilizes radar and laser equipment for speed enforcement, as well as speed monitoring trailers (SMART cars) which are used daily throughout the County. Further equipment for anti-DUI enforcement, such as portable breath-testing devices also are utilized by the Department. Much of the Agency's anti-DUI enforcement work is grant funded and allows for the Department to employ a full-time grant writer on staff to further pursue funding opportunities. Currently, the Seminole County Sheriff's Office has federal funds from the Department of Transportation and also grants from other funding sources.

TRAFFIC ENFORCEMENT TRENDS

The following data were retrieved from the Florida Uniform Traffic Citation Statistics for the Sheriff's Office in Seminole County and for the Florida Highway Patrol operating in Seminole County. **Figure 47** shows the numbers of total traffic-related violations for 1989 through 1997 for these two LEAs. There has been a strong upward trend in traffic enforcement by the Sheriff's Office in Seminole County, with large increases in the total numbers of citations issued during 1992 and 1993. However, during discussions with the Agency, no specific reasons could be given for the increased activity during those years. The reverse is true for the Florida Highway Patrol operating within Seminole County, with a declining trend over the same period of time.

SEMINOLE COUNTY SHERIFF'S OFFICE, FLORIDA

Figure 47: Seminole County Sheriff and Florida Highway Patrol (Seminole County) - Total Violations, 1989-1997

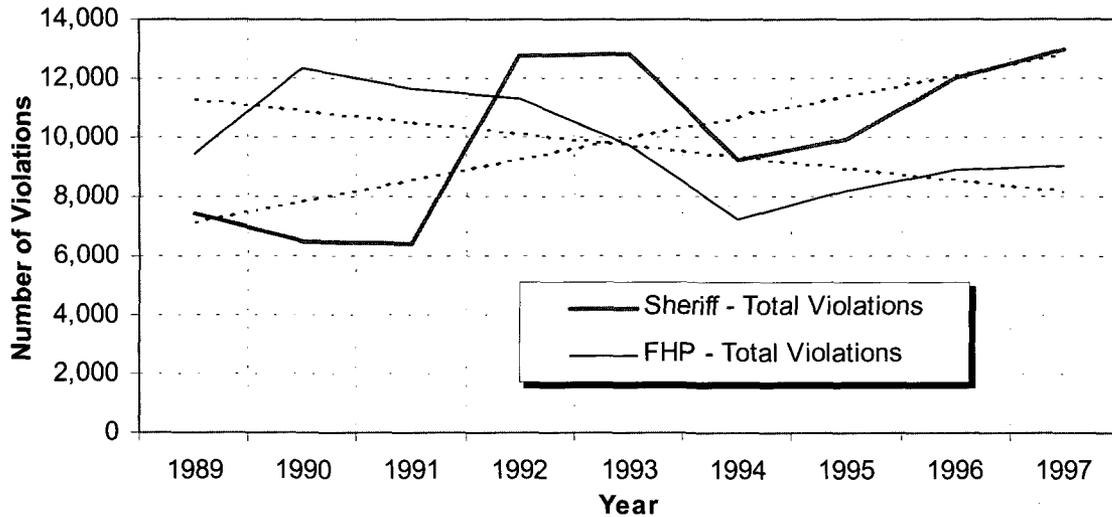
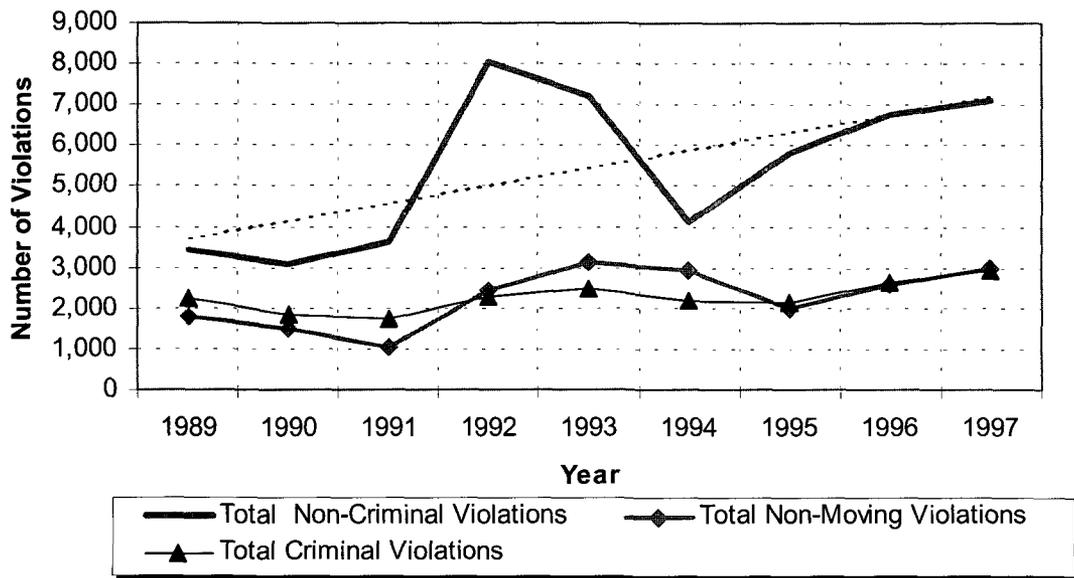


Figure 48 shows the total traffic citations split into criminal, non-criminal and non-moving violations. The non-criminal violations category includes speeding, careless driving, and all moving infractions (e.g., improper turning, following too closely, running a red light). The criminal violations category includes DUI, reckless, fleeing, leaving a crash scene, and various driver licensing violations. The non-moving violations category includes safety belt violations, unsafe equipment, and no proof of insurance, along with bicycle and pedestrian infractions.

Figure 48: Seminole County Sheriff's Office - Violation Categories, 1989-1997



Next, we extracted those violations with the largest number of citations. **Figure 49** shows speeding violations for 1989-1997, which have declined for both LEAs.

Figure 49: Seminole County Sheriff and Florida Highway Patrol (Seminole County) - Speeding, 1989-1997

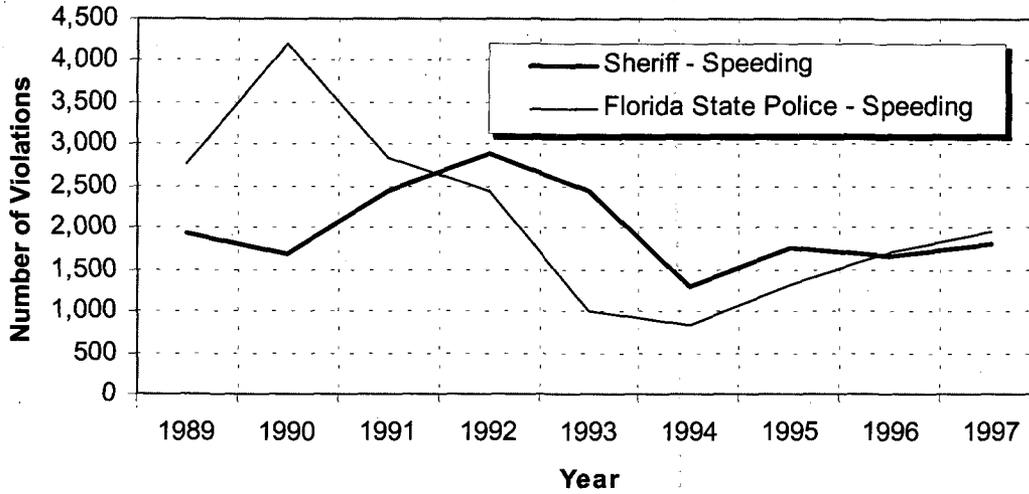
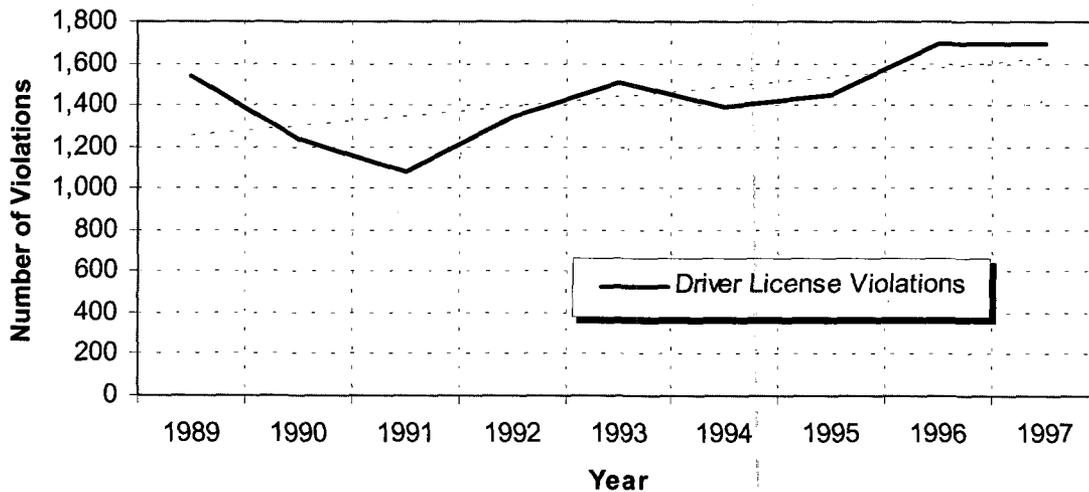


Figure 50 shows the combined violations concerning driver licenses for the Sheriff's Office (e.g., expired, suspended, revoked).

Figure 50: Seminole County Sheriff's Office - Driver License Violations, 1989-1997



SEMINOLE COUNTY SHERIFF'S OFFICE, FLORIDA

Figure 51 shows the number of DUI violations from 1989-1997. For the Seminole County Sheriff's Office, there were large increases in the numbers of violators apprehended in 1992. And beginning in 1996, a trend began upward again. For the FHP, there was a steady decline.

Figure 51: Seminole County Sheriff and Florida Highway Patrol (Seminole County) - DUI Violations, 1989-1997

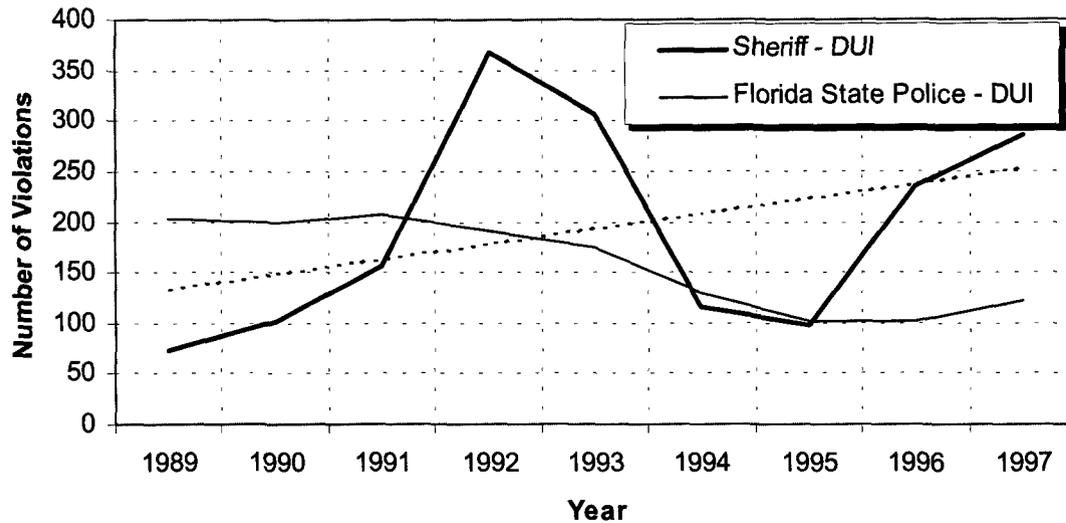
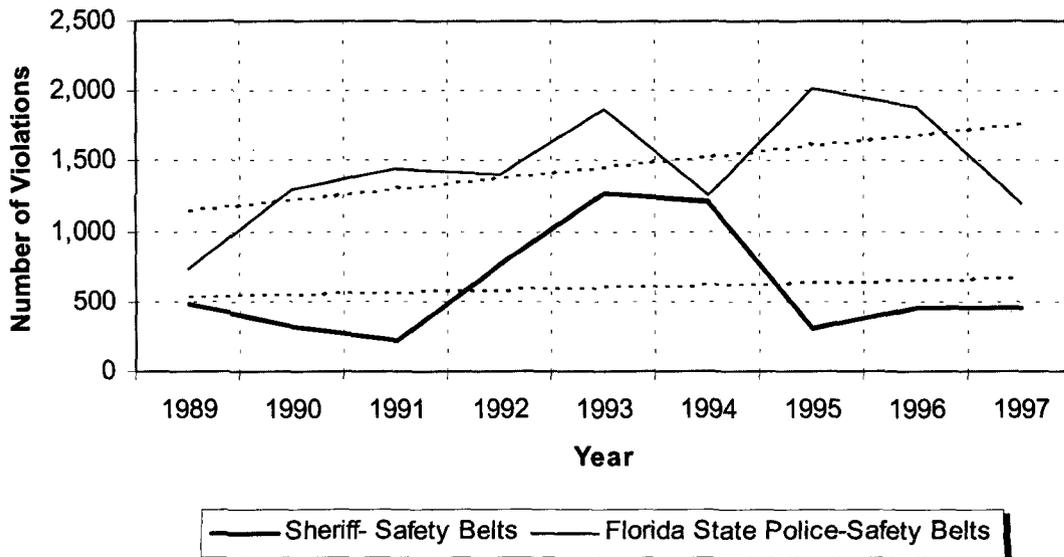


Figure 52 depicts safety belt citations from 1989-1997 issued by the Seminole County Sheriff's Office and the Florida Highway Patrol. As Figure 52 shows, there was a large increase in the number of citations written for safety belt violations handled by the Sheriff's Office

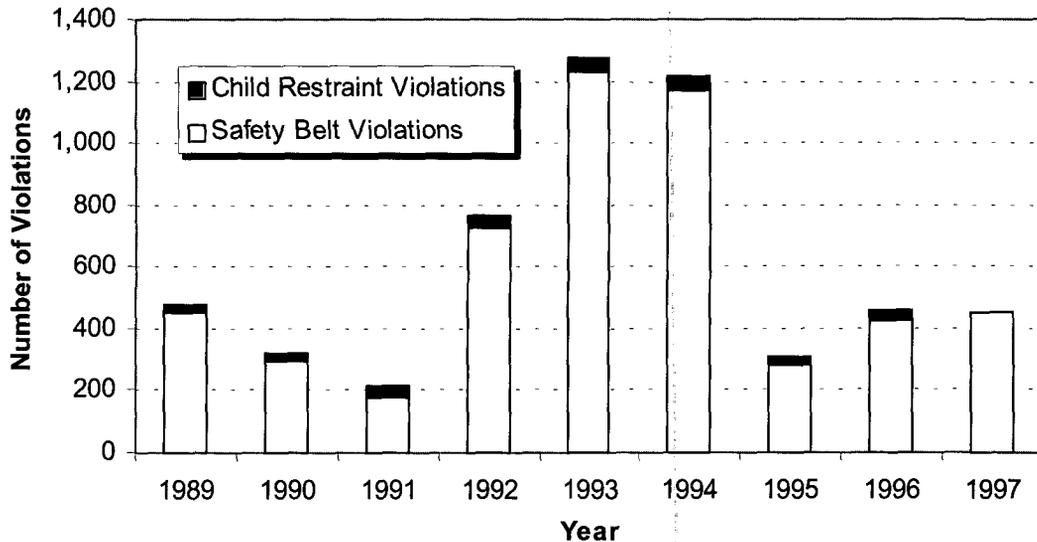
Figure 52: Seminole County Sheriff and Florida Highway Patrol (Seminole County) - Safety Belt Violations, 1989-1997



beginning in 1992 through 1994. However, our contact could not recall the reason for the increased number of citations. Both LEAs show increasing trends in the number of citations issued for safety belt violations, with the Highway Patrol writing more citations for these types of violations.

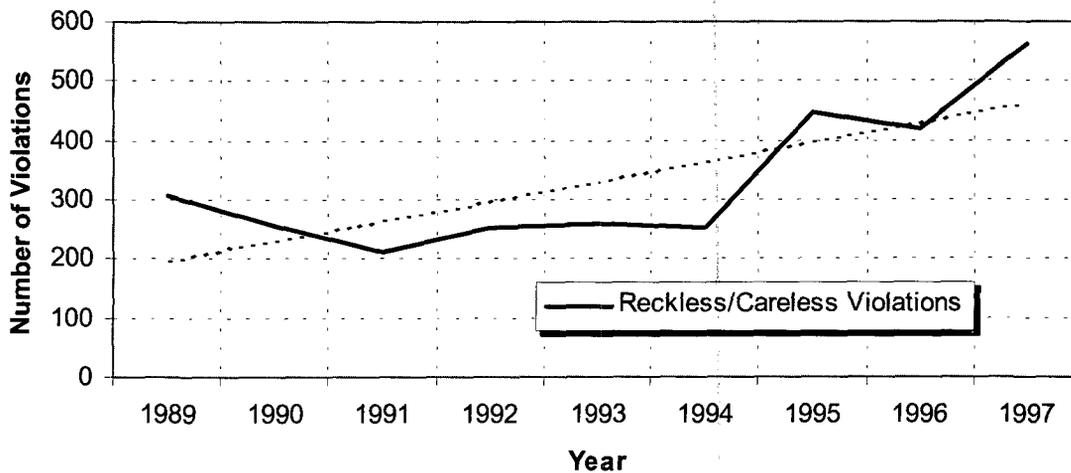
Figure 53 shows the numbers of adult safety belt citations written versus child restraint citations by the Seminole County Sheriff's Office.

Figure 53: Seminole County Sheriff's Office - Safety Belt Violations-By Type, 1989-1997



And, finally, Figure 54 shows the combined number of citations issued by the Seminole County Sheriff's Office for reckless (defined as a criminal violation resulting in arrest) and careless (defined as a moving violation) driving. There is a definite upward trend for these types of aggressive driving violations.

Figure 54: Seminole County Sheriff's Office - Reckless/Careless Violations, 1989-1997



SEMINOLE COUNTY SHERIFF'S OFFICE, FLORIDA

SUMMARY

The numbers of licensed drivers within Seminole County have been increasing steadily over the past decade. Citizen complaints, especially regarding speeding, have resulted in increased traffic law enforcement by the Seminole County Sheriff's Office. The data suggest that the State Police operating within Seminole County have decreased overall traffic law enforcement activity as measured by citations. This reflects the statewide trends as well. Thus, the increase in citation volume by the Sheriff's Office has likely not depressed the FHP activity, but rather may reflect an increase in overall traffic enforcement activity in the County.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

9 - PALOS HEIGHTS POLICE DEPARTMENT-ILLINOIS

SITE DESCRIPTION

Palos Heights is a small community, located to the southwest of Chicago in Cook County, Illinois. The community has a population of approximately 12,000 persons and covers only four square miles of land. The town encompasses the Lake Katherine Nature Preserve and lies adjacent to the Cook County Forest Preserve. Lake Katherine is a 90-acre area of land designed and built in 1985 to restore and beautify an unsightly area along the Calumet-Sag Channel.

LEA DESCRIPTION

The Palos Heights Police Department employs 29 full-time and three part-time sworn officers. The patrol division has 18 assigned officers and is primarily responsible for traffic enforcement. The town boasts one of the lowest crime rates in Cook County, which the Department believes is linked directly to their strong enforcement of traffic laws. We received traffic citation data (DUI, safety belt, and speed citations) for nine years, 1991-1999. At the beginning of this nine year period, staffing levels within the department were at full capacity, but these levels declined over a subsequent three to four year period. Low morale within the Department was reportedly a problem, which was remedied in part by the appointment of a new Chief in 1997. A renewed commitment to traffic enforcement resulted in 1997 and is continuing at this point in time.

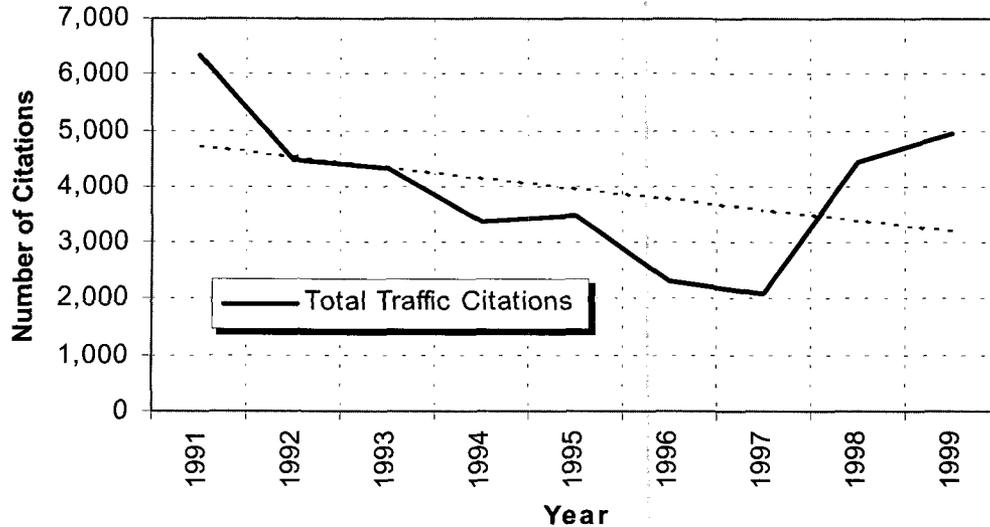
In 1999, the Department created the Selective Traffic Enforcement Program in order to create a more comprehensive traffic enforcement program. This team consists of four officers and one sergeant and is responsible for preparing a pro-active selective traffic enforcement schedule for the community. This program determines areas throughout the city that have specific traffic needs and designs enforcement solutions in response to those needs. The goal is to increase voluntary compliance to local and state traffic laws via saturated patrols in these areas.

Illinois has a state-wide secondary safety belt law, meaning law enforcement officers may cite drivers and passengers for not wearing safety belts only when the vehicle has been stopped for some other reason (e.g., speeding, equipment violation). But in October 1998, Palos Heights passed a local safety belt ordinance that allowed for primary enforcement of safety belt violations within the community (i.e., vehicles could be stopped solely because drivers and/or passengers were not wearing safety belts and those individuals could be cited; no other cause was needed). Palos Heights was one of 30 communities throughout Illinois to pass this ordinance as part of an ongoing movement which is attempting to enact a statewide primary enforcement law for safety belts. The Palos Heights Police Department vigorously enforces this ordinance.

TRAFFIC ENFORCEMENT TRENDS

The combined total of all traffic citations from 1991 through 1999 shows a declining trend as indicated in **Figure 55** below.

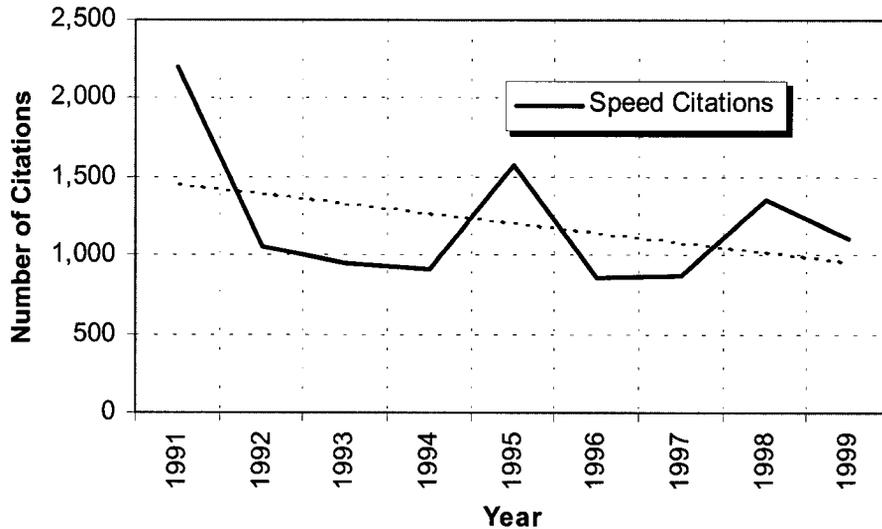
Figure 55: Palos Heights Police Department - Total Traffic Citations, 1991-1999



However, it is important to note that the Department was at maximum staffing levels during 1991 and 1992, which the Chief reported then steadily declined over the next few years. In 1997, command emphasis became more focused on traffic law enforcement with the appointment of a new Chief. Reportedly, low morale among the officers had affected the level of law enforcement directly. Traffic law enforcement in all categories is seen to steadily increase since 1997.

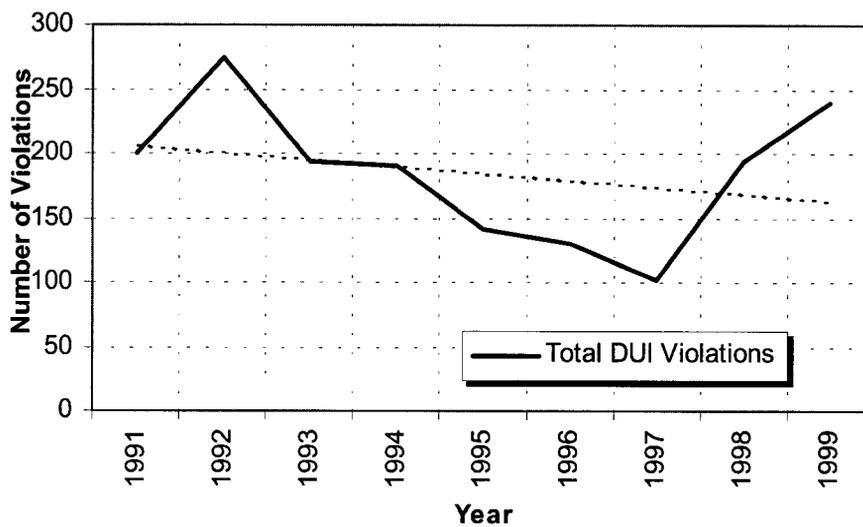
As shown in **Figure 56**, in 1991, more than 2,000 speeding citations were issued by the Palos Heights Police Department. At that time, the community was very vocal about the need for speed enforcement along a specific stretch of road entering the town. The four-lane roadway carries traffic entering Palos Heights from an unincorporated area of the County. The speed limit drops from 55 mph to 35 mph in a short distance, and there are no guard rails along the road. Motorists were known to travel this road at very high speeds and the public became increasingly outspoken about the need for greater police presence in the area. For a period of six months, the Department heavily increased its enforcement as can be seen by the high number of citations issued that year. Enforcement is seen to spike again in 1995 with over 1,500 speeding citations issued. This was attributed to another increased enforcement effort along the same stretch of roadway.

Figure 56: Palos Heights Police Department - Speed Citations, 1991-1999



DUI violations increased between 1991 and 1992, which could be attributable to the increased speed enforcement discussed earlier. The Department reports that when speed enforcement efforts increase, the numbers of DUI arrests also typically increase. DUI arrests also increased in 1998 and 1999.

Figure 57: Palos Heights Police Department - DUI Violations, 1991-1999



As reported earlier, in October 1998, Palos Heights passed a local safety belt ordinance that allowed for primary enforcement of safety belt violations within the community. As indicated in **Figure 58** below, after the passage of the ordinance, the number of citations issued for safety belt violations shot up.

Figure 58: Palos Heights Police Department - Total Safety Belt Citations, 1991-1999

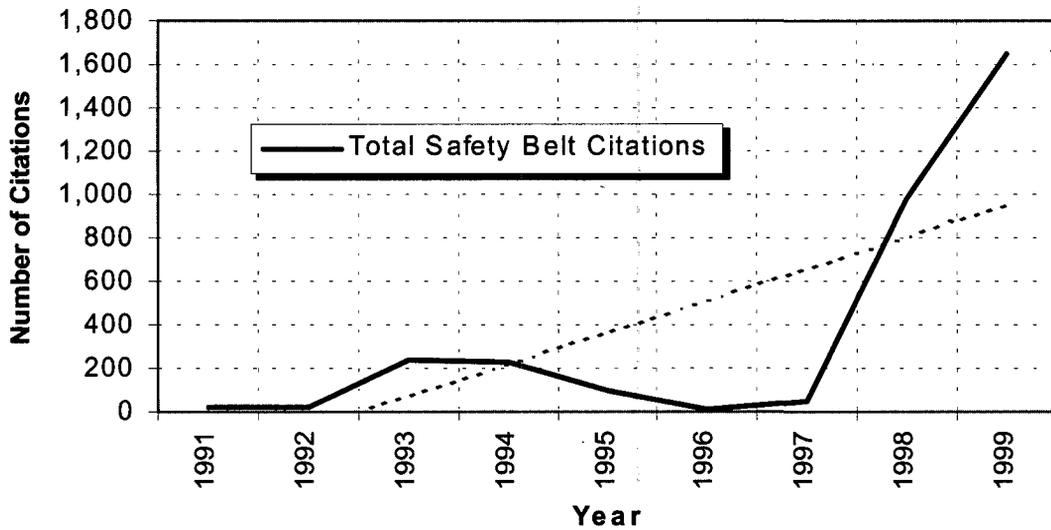
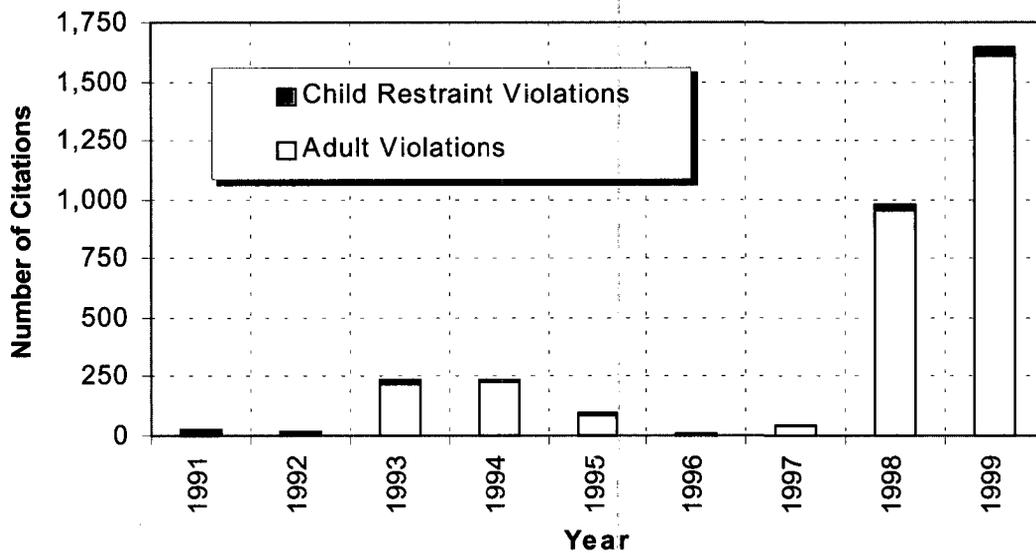


Figure 59 shows the number of citations issued for adult and child restraint safety belt violations. As in other jurisdictions, almost all citations were written for adult violations.

Figure 59: Palos Heights Police Department - Safety Belt Citations By Type, 1991-1999



PALOS HEIGHTS POLICE DEPARTMENT, ILLINOIS

SUMMARY

While Palos Heights was the smallest community participating in this project, the Police Department there illustrates the importance of command emphasis on traffic law enforcement efforts. Without the support at the highest levels within a Department, large or small, the level of effort can dwindle. The current Chief has reiterated his enthusiastic support for enforcement of traffic laws and the Department has responded with highly significant increases in the number of citations issued for traffic law violations. Thus, this Department appears to have reversed direction and may be at the beginning of an upward trend in the enforcement of traffic laws within the community. This can be seen by examining **Figure 55**. Prior to 1997, all traffic citations issued showed a declining trend. This was reversed by the change in command emphasis and citations are now on an upward trend.

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

10-GUILFORD COUNTY SHERIFF'S DEPT. - NORTH CAROLINA

SITE DESCRIPTION

Guilford County, North Carolina is positioned in the northern center of the State, not far from the Virginia border. The County had a population of 393,419 persons in 1999 (up from 344,503 in 1989) and the county seat, Greensboro had a population of 205,000, ranking them as the third largest county and the third largest city, respectively, in the State. Guilford County is the 22nd largest county in North Carolina (out of 100), with a 657.7 square mile area. Guilford County is part of the eleven-county Piedmont Triad Region with a population of more than 1.2 million stretching from Raleigh to Charlotte.

The County's central location along the Piedmont industrial crescent has made it a major distribution and transportation center in the Southeast. Employment is centered mostly on the textile, apparel and furniture industries, as well as some corporate industry. Federal Express is constructing a \$300 million mid-Atlantic cargo hub adjacent to the Piedmont Triad International Airport. The hub will employ some 1,500 people and will operate upwards of 25 flights daily. This industry expansion is a product of an excellent transportation infrastructure located in the County, as well as surrounding areas. This expansion has resulted in a steady increase in household incomes, rising from \$30,148 in 1989 to \$51,000 in 2000, according to the U.S. Census Bureau.

There were 333,534 vehicle registrations and 298,732 licensed drivers recorded in the County in 1999. Miles of public roads within the County are designated below by roadway type.

Table 5: Guilford County Roads

State Maintained Roadway Type	Miles
Primary Roads	257.23
Secondary Roads	1,450.7
Total Roads - Guilford County	1,707.93

LEA DESCRIPTION

The Guilford County Sheriff's Department is a full-service sheriff's department with almost 300 sworn officers. These officers are responsible for enforcing all the laws of the County. While traffic law enforcement is not necessarily a priority of the Department, traffic safety within the jurisdiction is a responsibility and, therefore, is one of their many duties. The Sheriff's Department generally does not investigate traffic crashes, although if a situation requires it, some investigations are conducted. Traffic incidents in rural areas of the County fall under the jurisdiction of the North Carolina State Highway Patrol, and do not tend to involve the Sheriff's Department. Due to the County's increasing population, though, the State Patrol has had

difficulty meeting the demands of the area. This has led to a more focused approach in recent years by the Sheriff's Department in the enforcement of traffic safety laws.

Approximately ten years ago, the Guilford County Sheriff's Crime Repression Team (CRT) was established. This unit was designed to handle a variety of special enforcement needs, primarily canine-aided investigation. At the time of its inception, the unit was assigned several radar units to be used as needed in high-volume problem areas throughout the County. The unit continued to pursue traffic enforcement needs as public pressure mounted on the issue. In 1995, the department split into three district units in order to make patrol and detective functions more responsive to the communities. This change again prompted the public to demand more traffic enforcement. Individual communities began raising funds for radar equipment in exchange for increased enforcement in certain areas. While traffic enforcement is still kept to a minimum, each district now has 5 or more radar units which allows officers to bring some traffic patrol presence into these communities.

The Department has slowly been increasing its inventory of equipment over the last few years. As mentioned above, equipment often is purchased with funds donated by local communities. The Sheriff also maintains a very successful working relationship with the Governor's administration due to the Department's work on the Governor's Crime Commission. This close relationship allows the Department access to state-level grants and funding. Each district has been able to install radar units in many cars, as well as some video cameras in some patrol vehicles. Recently, grant money was used to train officers in the use of "Stop Sticks"--small, spiked strips used to deflate the tires of a fleeing vehicle.

The only major legislative change within the last ten years, regarding traffic safety, was lowering the legal blood alcohol level in 1993 from .10 to .08 per se. The Sheriff's Department acknowledges that DWI enforcement is one of their main concerns within traffic safety, and some officers within the Department were particularly vocal in support of this law change.

TRAFFIC ENFORCEMENT TRENDS

The Guilford County Sheriff's Department supplied traffic citation data (1994-1999). The following figure depicts total traffic-related citations issued by the Guilford Sheriff's Department during those years. This includes all speeding citations, safety belt violations for both adults and children, citations for DWI offenses, operating a vehicle when the driver's license has been revoked, and operating a motor vehicle without a driver's license. As indicated in the previous section, enforcement of traffic laws has steadily increased, and this is supported by **Figure 60**. However, there is a decrease in the 1999 total.

Figure 60: Guilford Sheriff's Dept. - Total Traffic Citations, 1995-1999

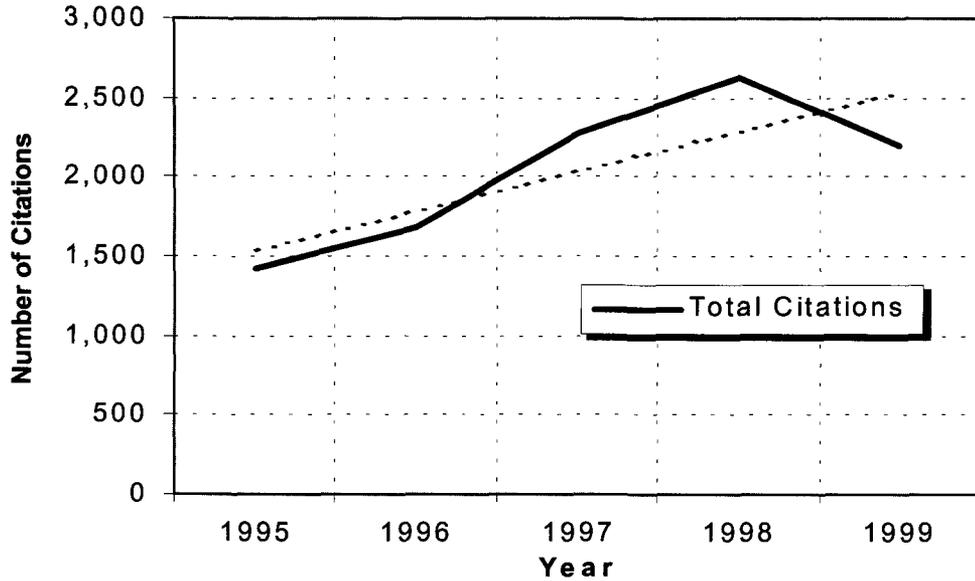
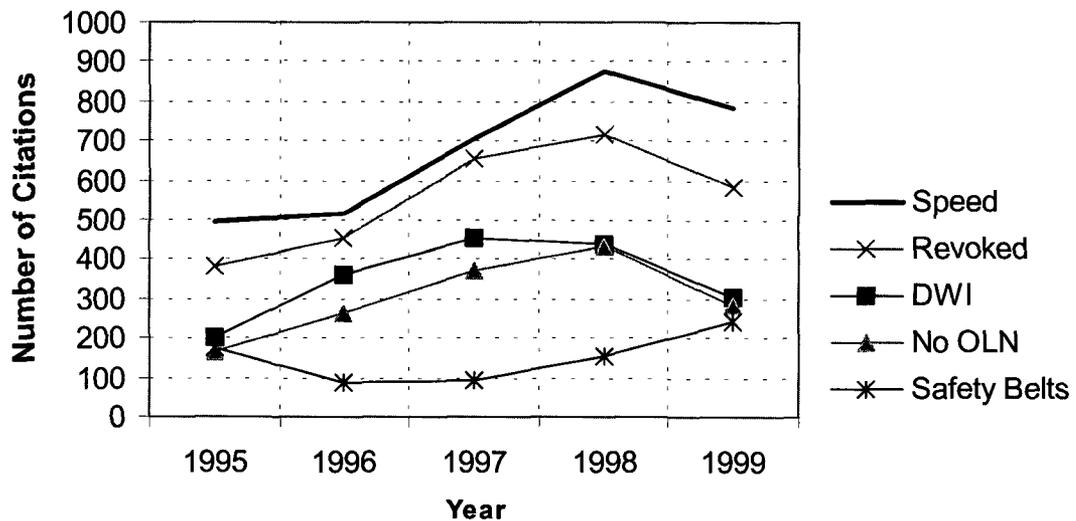


Figure 61 below shows totals for each type of citation by year. Our contact noted that while traffic safety laws are not always aggressively enforced, if a vehicle is stopped for one violation (e.g., speeding), then often other violations are written also (e.g., no operator's license and/or no seat belt). We were able to display all types of violations in one figure, because of the relatively uniform numbers of citations issued.

Figure 61: Guilford Sheriff's Dept.-Traffic Citations By Type, 1995-1999



A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

More citations were issued for speeding than for any other offense, followed by citations for revoked driver licenses. Close to the same number of citations were issued for DWI offenses as for individuals operating a vehicle without a current driver's license. In 1995 and again in 1999, there were also similar numbers of citations issued for safety belt violations. The numbers of these violations dipped in 1996 and 1997, but increased in 1998 and 1999.

SUMMARY

In the past, traffic law enforcement had not been considered a high priority for the Guilford County Sheriff's Department. However, this function has grown because this LEA has responded to requests from the public to fulfill a need, which was not being adequately met due to population growth with the County. Public support has resulted in public funds being allocated for equipment purchases. The Guilford County Sheriff's Department is now playing an increasingly important role in enforcing traffic laws within the County, one which will likely continue.

11 - AUSTIN POLICE-TEXAS

SITE DESCRIPTION

Austin is the capital of Texas and is one of the fastest growing cities in the country. Centrally located between San Antonio, Dallas and Houston, Austin ranks as the 27th largest city in the United States. With 225 square miles inside the city limits, the 1999 population was estimated at 567,566. The Austin metropolitan area encompasses 2,705 square miles and approximately 1,057,000 people. Currently, Austin is one of the top-rated cities in the United States for business, housing more than 800 high-tech firms. The wide-range of restaurants, attractions, and ethnic backgrounds in Austin attest to its great diversity.

LEA DESCRIPTION

As with many other LEAs, the Austin Police Department has, in recent decades, been confronted with increasing demands created by a growing population, which has not been matched by a corresponding growth in the number of sworn officers. According to our LEA contacts, the sworn force was at a fairly level 600-700 officers from the mid-1980s and grew to 950 by 1993, although the population was growing more rapidly. In recent years, an emphasis has been placed on increasing the force and, driven by annexations and increased budget allocations by the city council, the sworn complement has grown to about 1,100 officers with a long-term goal of having 1.8 officers per 100,000 population.

Though there has been no dramatic diminution in command emphasis on traffic enforcement, the general culture of enforcement has changed over the years. Whereas, in the years leading up to the mid-1980s, officers usually were given general patrol assignments, in recent years more specialized enforcement units (such as a warrants unit) have been created. Thus, a smaller fraction of the force now is assigned to general patrol duties. In the past, general patrol officers would be instructed to enforce traffic laws when not responding to calls for service. In more recent years the instructions have remained the same, but with fewer officers on a population basis and more officers on specialized teams, the volume of calls for service per officer has gone up, with a corresponding decrease in time available to take traffic enforcement actions. Thus, the vast majority of patrol officers now have not had great experience in traffic enforcement, and it is less a part of the culture. In the last half-decade, as the force has grown, there also has been a call for increased attention to traffic issues from the public and from police management.

Within the department there is a traffic unit. It currently consists of a lieutenant and other administrative and supervisory staff, twenty officers in a weights and measures unit, eight on a DWI task force, and ten in a collision investigation unit. Previously, there were also twenty-five motorcycle officers assigned to the division. In the late 1990s these officers were dispersed and placed under the supervision of the area commanders.

Over the past two to three years, the traffic unit has marshaled its resources to increase the traffic enforcement effort in the City. One effort has been the creation of the eight officer DWI task force, specializing in anti-DWI enforcement, which was constituted in early 1998. This task

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

force initially employed a strategy where general patrol officers were encouraged to make DWI stops and then pass the suspects off to DWI Task force officers for processing. In the initial stages of the task force's existence, with a combination of the task force-initiated arrests and the hand-off arrests, the task force was accounting for approximately one-half of the department's DWI arrests. However, recently, the traffic commander believes that as general patrol officers have become more familiar with the DWI arrest process, they have become more comfortable with it and are handling more of their cases all the way through the process. Consequently, general patrol now accounts for approximately three-quarters of the Department's DWI arrests.

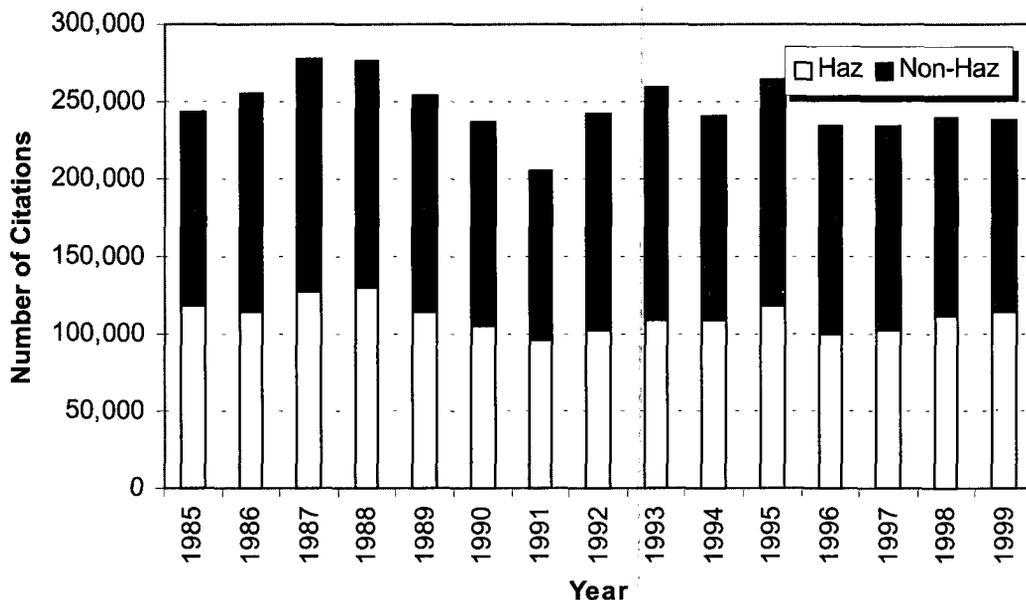
Additionally, the weights and measures enforcement officers have been assigned to conduct more general traffic enforcement activities during both morning and evening rush hour periods to both improve traffic flow and cite violators. Also, supplemental Selective Traffic Enforcement Programs (STEP) for overtime enforcement efforts have become more focused, and officers assigned to that duty are monitored for performance.

Through the increased emphasis on DWI enforcement and the assignment of weights and measures officers to more general traffic enforcement, the Department seems to have counterbalanced the reassignment of motorcycle officers from traffic enforcement to more general area patrol assignments and other specialized duties.

TRAFFIC ENFORCEMENT TRENDS

Monthly citation data were received from the Austin Police Department for 1985 through 1999. The figure below depicts all citations written for non-hazardous and for hazardous traffic-related offenses.

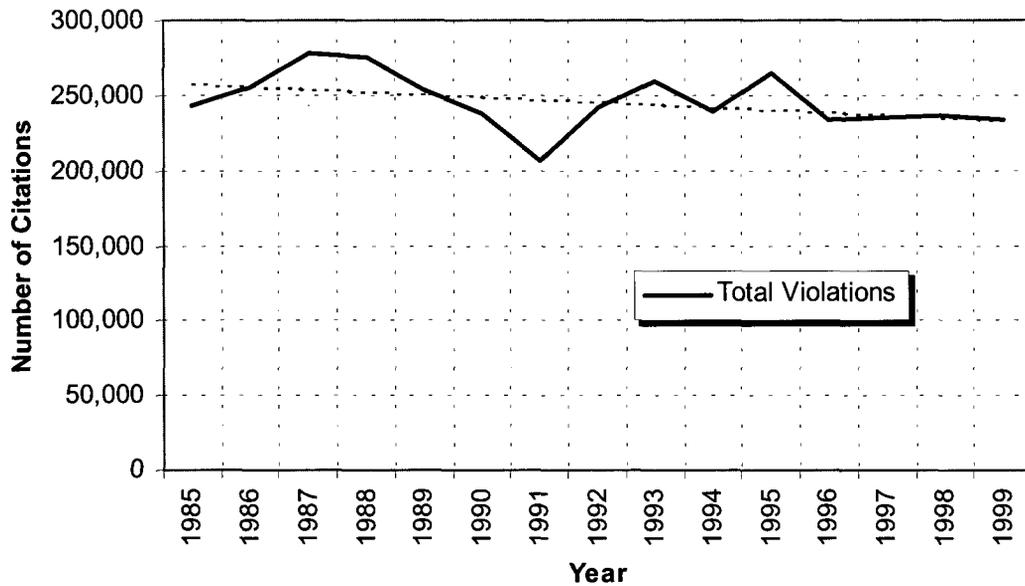
Figure 62: Austin Police Department - Hazardous/Non-Hazardous Citations, 1985-1999



AUSTIN POLICE DEPARTMENT, TEXAS

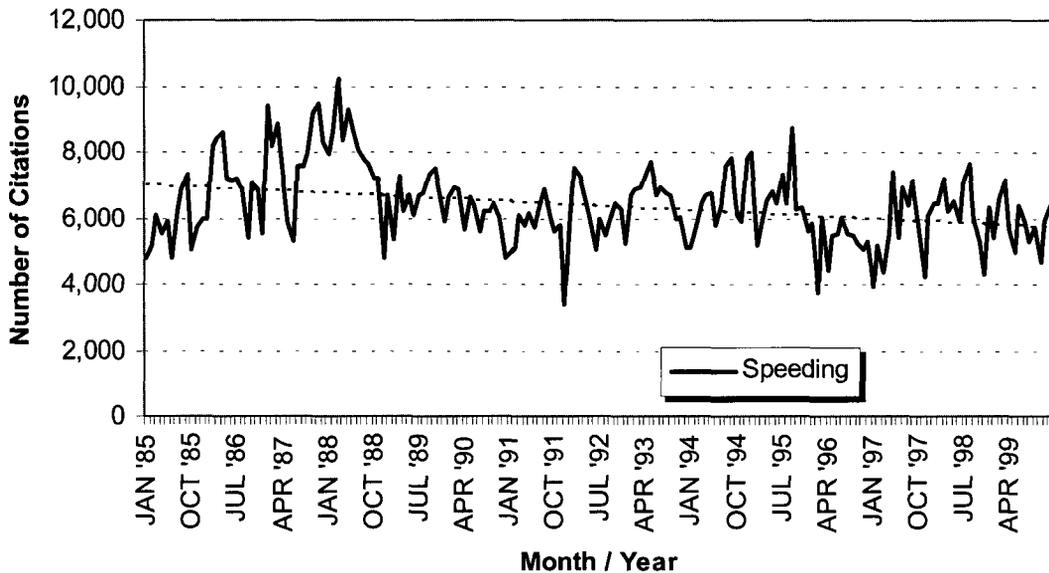
The trend line in **Figure 63** indicates a slight downward trend of all traffic-related citations combined.

Figure 63: Austin Police Department-All Traffic Citations, 1985-1999



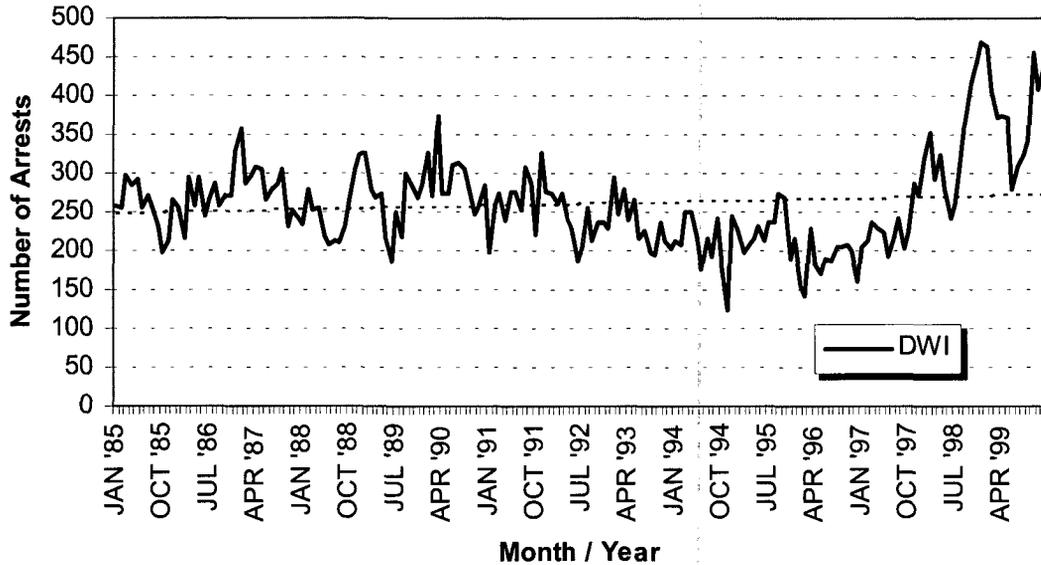
Looking at citations issued for speeding violations, by month, we also see a downward trend.

Figure 64: Austin Police Department - Speeding Citations, 1985-1999



However, DWI arrests increased sharply in 1998 and continued to rise during 1999 (Figure 65). This would be attributed to the creation of the DWI task force.

Figure 65: Austin Police Department - DWI Arrests, 1985-1999



SUMMARY

With the introduction of a DWI task force in recent years, DWI arrests have risen dramatically in the past two years. Encouragingly, this increased emphasis on DWI seems to have started an educational process with the general patrol officers, resulting in an increasing number of DWI arrests being made by officers assigned to general patrol, as opposed to the DWI task force officers.

However, even with a growing police force and an increasing population, the overall volume of traffic citations has remained level to slightly declining for the past few years. This is attributed to an increasing demand on officers assigned to general patrol to respond to calls for service. The current level seemingly is being maintained by diverting some specialized traffic enforcement efforts (weights and measures) to more general traffic enforcement duties.

12 - FAIRFAX COUNTY POLICE-VIRGINIA

SITE DESCRIPTION

Fairfax County is located in the northeastern corner of Virginia and is part of the greater Washington, D.C. metropolitan area. Situated just 10 miles to the west of the nation's Capital, Fairfax County has grown from a population of more than 818,000 residents in 1990 to a current population of over 966,000 persons, making it the most populous county in the Commonwealth. The County is also the most populous jurisdiction of the greater metropolitan area, which has more than 4 million persons. Fairfax County covers 399 square miles, with Arlington County and the Potomac River creating its eastern and northern boundaries. The County has experienced tremendous growth due to expanding business and industrial activity. Fairfax County is a center of activity for the ever-growing telecommunications industry, as well as housing Mobil Oil and Mars Candy Corporation headquarters. The County is serviced by Washington Dulles International Airport, the metro transit system, the Capital Beltway and Interstate 95. The median household income for Fairfax County in 1997 was \$72,000. A total of 2,632 miles of public roads, comprised of 51 miles of interstate highway, 157 miles of primary roadways, and 2,424 miles of secondary roadways, are within Fairfax County.

LEA DESCRIPTION

The Fairfax County Police Department currently employs 1,050 sworn officers and more than 400 civilians, making it the largest local law enforcement agency in Virginia. Due to the high number of commuters that travel through the County daily, traffic safety is a high priority for the Department. As a result, the Fairfax County Police have created the Traffic Information Center (TIC) to coordinate the Department's resources during hours of peak traffic activity. TIC officers direct the Department's fleet of patrol cars, motorcycles and helicopters, thereby minimizing the time required to clear crashes and to respond to problems that delay traffic movement. All patrol officers participate in traffic law enforcement throughout the County. The Department uses radar for speed enforcement in areas designated to be safety hazards due to high speeds. The Department also is active in public information and education campaigns targeting safety belt use, drunk driving and other traffic violations.

Over the last 10 years, the Commonwealth of Virginia, as well as Fairfax County, have experienced many legislative changes in the area of traffic enforcement. More than 40 changes have been made recently to existing traffic laws, including mandatory sentencing for certain offenses. Now, DUI offenses are associated with more jail time and administrative impoundment. A second DUI offense now carries a mandatory five days in jail, as opposed to the previous sentence of two days. After two or more violations, certain moving violations, including reckless driving, now result in a license suspension which no longer can be reduced by taking a driving safety class.

Similarly, there are a number of programs run by the Fairfax County Police that focus on driving behavior, including the "Road Shark Program." This program sends officers out in unmarked patrol cars to focus on aggressive driving behavior. The vehicles used in this program are atypical police cruisers, such as Nissan Maximas or Chevrolet Malibus, that have very few markings which would reveal them to be police cars (i.e. special mirrors, spotlights, etc.). This program is conducted in waves every three months, with an average of 30 to 40 officers participating over a one-week period. While there are no "specifically termed" anti-aggressive driving legislative statutes, the Department does work closely with the judicial system to ensure existing statutes are utilized to their fullest potential to provide harsher penalties for these violators. These violations are categorized under reckless driving offenses. Reckless driving is defined in Virginia to mean any violation or combination of violations that puts others in danger of life or limb; essentially any violation where the vehicle does not appear to be in complete control.

The Fairfax County Police Department is very active in seeking out and competing for grant money. Currently the Department receives money from a number of different sources including VDOT (Virginia Department of Transportation), NHTSA, MADD, SADD and private corporations. These grant monies are used primarily for equipment, although some also are used to fund different programs such as child-seat use seminars and deer collision reduction programs.

Within Fairfax County, the deer population is higher than the human population per capita; as a result, in certain areas, deer-related crashes are a very serious problem. Programs funded through different grants are designed to either relocate or cull the populations. Special deer reflectors also have been installed on roads in heavily deer populated areas that discourage the deer from crossing the roadways. Reportedly, these programs have been effective in reducing deer-related crashes.

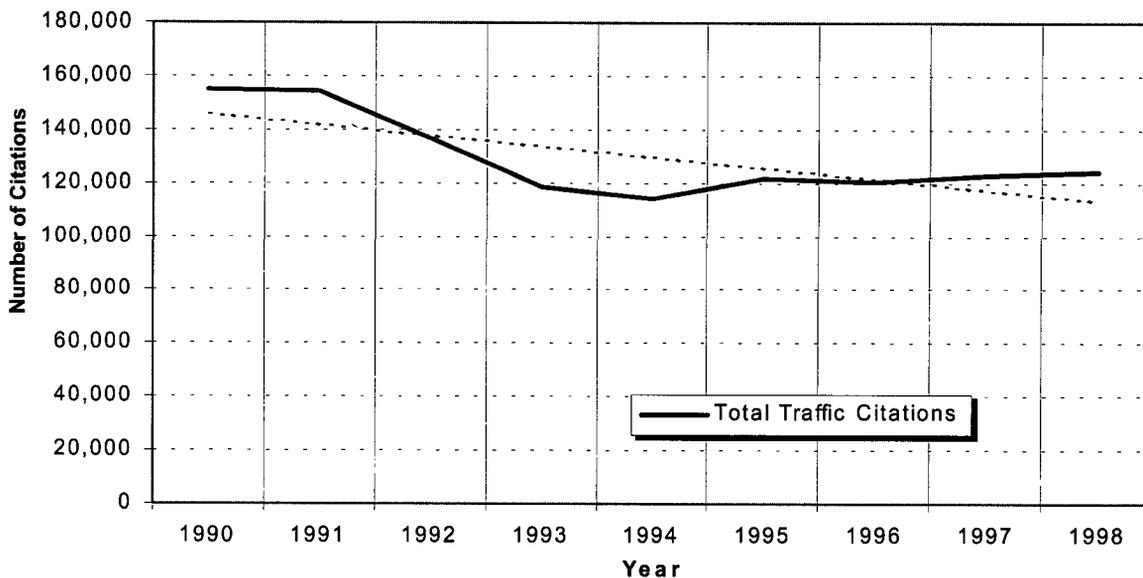
New equipment purchased recently by the Department include a crash reconstruction station, a trailer for sobriety checkpoints, mobile sign trailers and passive alcohol flashlights. Some municipalities within Fairfax County have installed "photo red lights." These camera-equipped traffic signals photograph the license plate of any vehicle that runs a red light, and the owner of the vehicle then receives a ticket in the mail. The Fairfax County Police Department reports that the photo red lights have resulted in a high reduction of red light violations.

The Department reported an increased number of crashes in recent years. Although it was not certain why these crash statistics have been on the rise, road conditions and an increasing population were offered as possible explanations by the Fairfax County Police Department. Also mentioned was the impact of cellular phones, not on driving behavior, but on reporting behavior. It is thought that minor crashes, in years past, would not have been reported, but now are called-in due to the ease of cellular communication. This change in technology and communication patterns, therefore, may result in more crashes being reported, without necessarily indicating more crashes occurring.

TRAFFIC ENFORCEMENT TRENDS

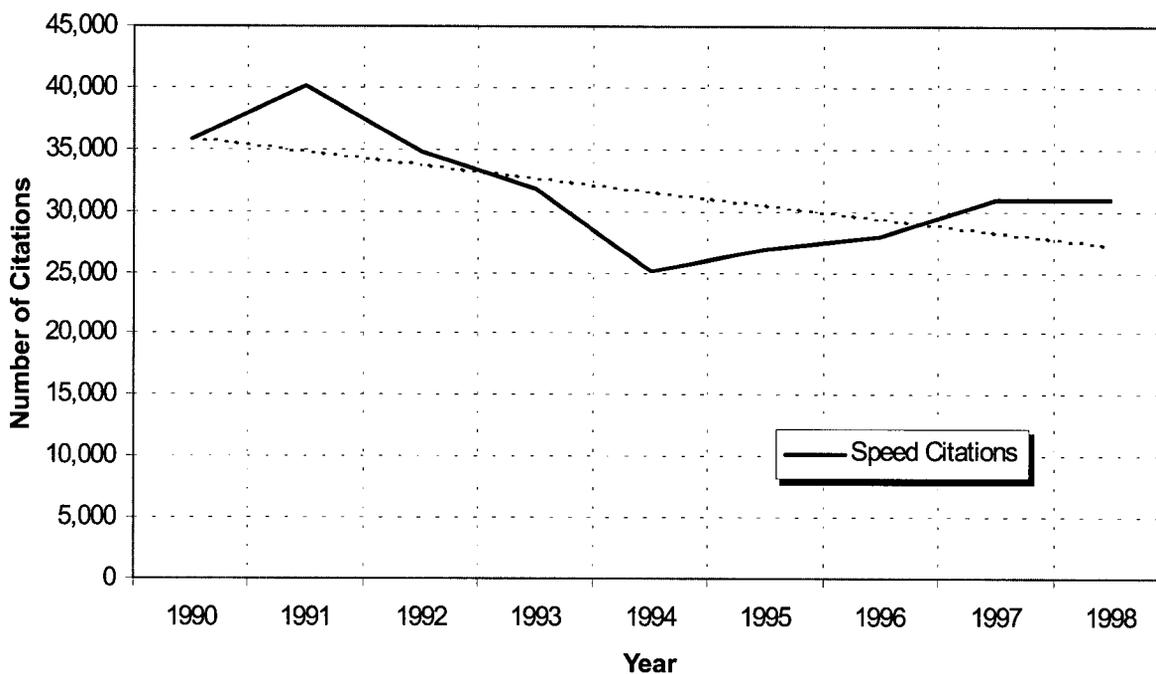
Figure 66 shows the numbers of total traffic-related citations issued by the Fairfax County Police Department, beginning in 1989 until 1998.

Figure 66: Fairfax County Police - Total Traffic Citations, 1990-1998



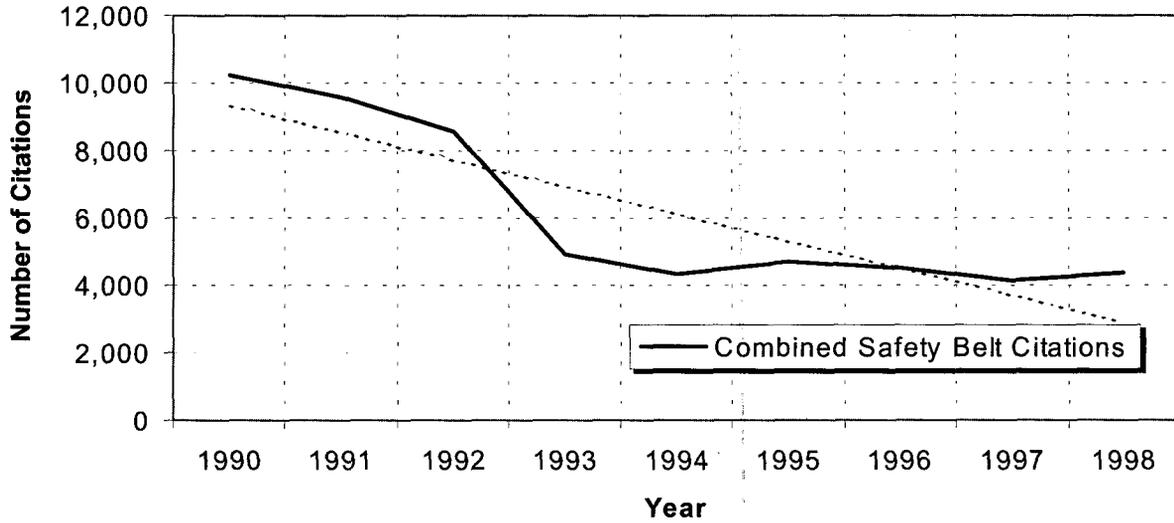
The largest proportion of traffic-related citations issued are for speeding. Figure 67 below also shows that the numbers of citations issued for speeding offenses have decreased.

Figure 67: Fairfax County Police - Speed Citations, 1990-1998



The numbers of safety belt citations issued for both adult and child restraint violations have declined as shown in **Figure 68**.

Figure 68: Fairfax County Police - Combined Safety Belt Citations, 1990-1998



Likewise, the numbers of citations issued for DWI offenses, including refusal to submit to BAC testing, declined as shown in **Figure 69** and **Figure 70**.

Figure 69: Fairfax County Police - DWI Refusals, 1990-1998

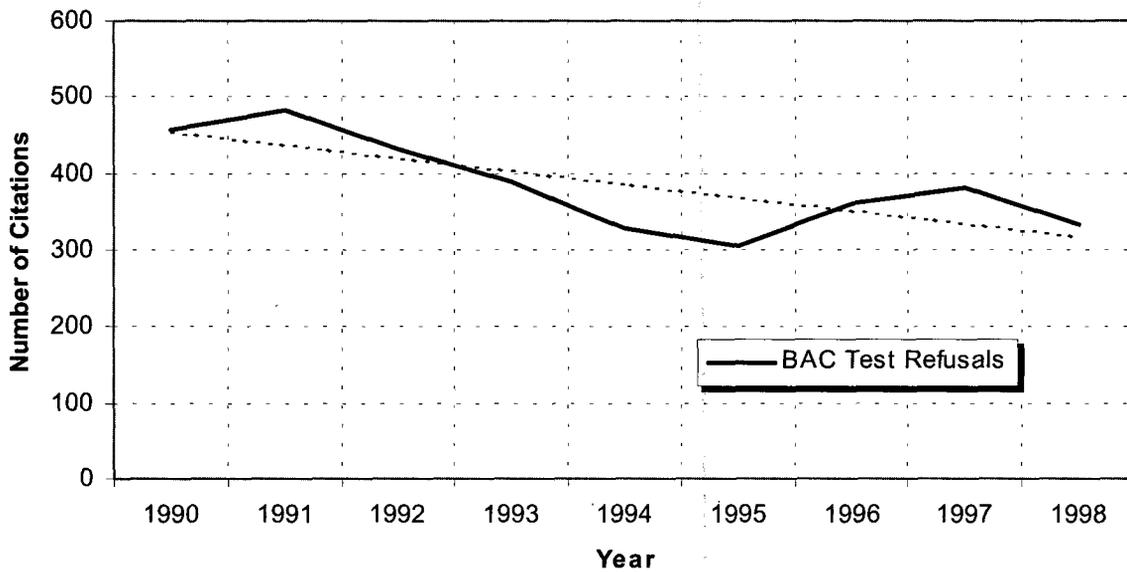
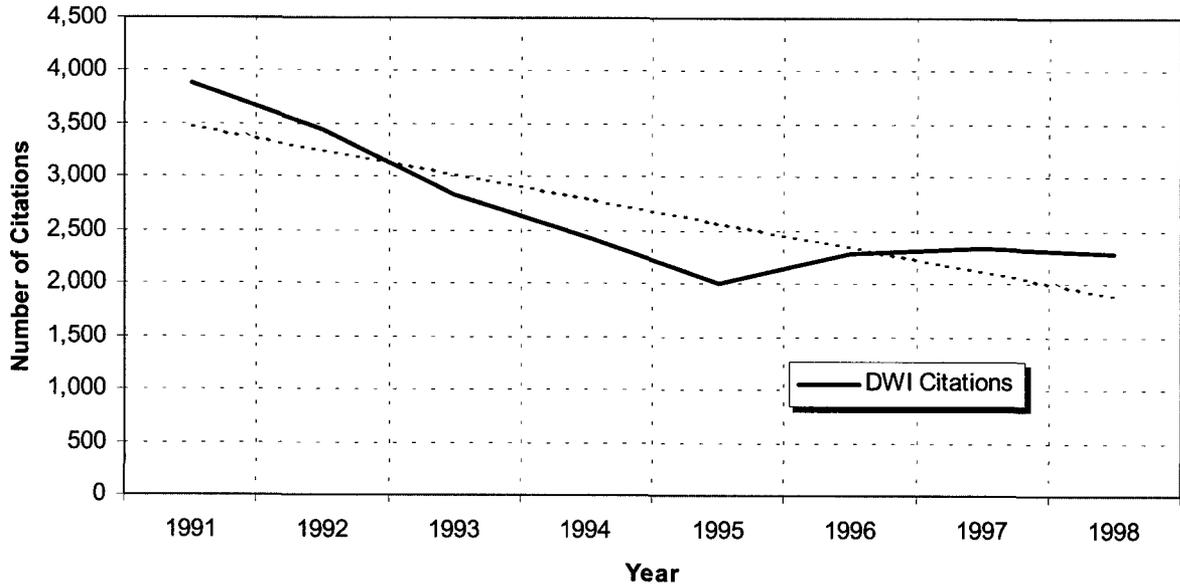
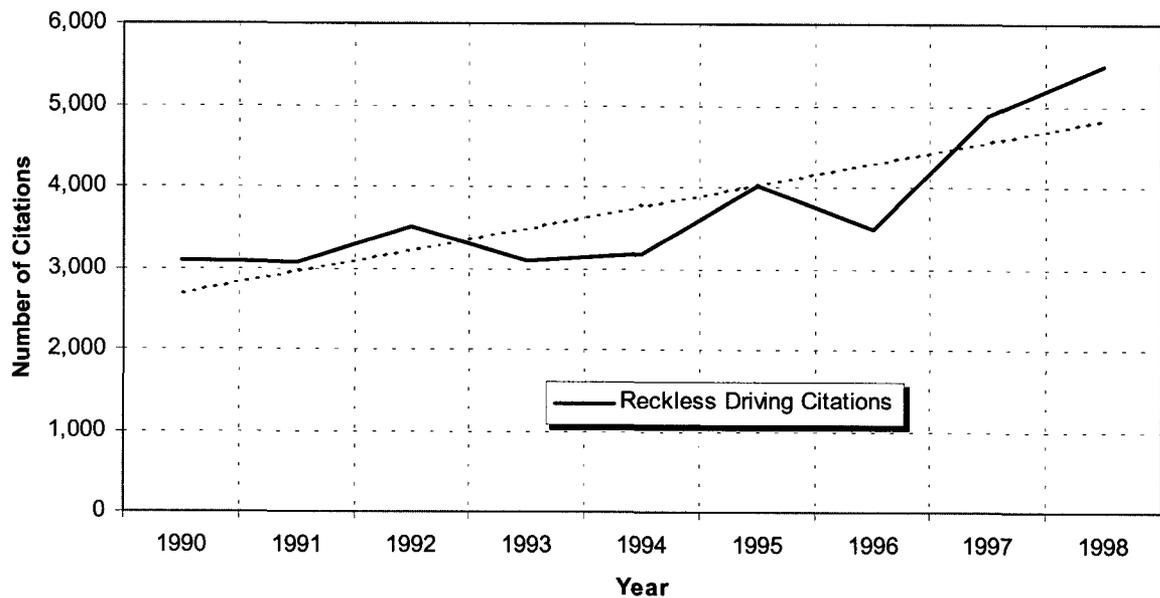


Figure 70: Fairfax County Police - Total DWI Citations, 1991-1998



However, the numbers of citations issued for reckless driving increased (Figure 71).

Figure 71: Fairfax County Police - Reckless Driving Citations, 1990-1998



A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

SUMMARY

All indications are that traffic enforcement levels have been declining, but have leveled off in recent years, except for reckless driving, which has been increasing dramatically in response to a growing problem and increased emphasis on aggressive driving enforcement. It is possible that the increased number of crashes being investigated and reported by this Agency, and the reported increase in traffic volume, have tapped into departmental resources.

13 - DISCUSSION AND COMPARISON OF FINDINGS

This chapter provides comparisons between similar types of law enforcement agencies. First, where possible, comparisons were made for the statewide agencies. Then, the sheriff and county agencies were combined for examination, followed by the city LEAs. Finally, overall comparisons among all the law enforcement agencies are provided.

STATEWIDE LAW ENFORCEMENT AGENCIES

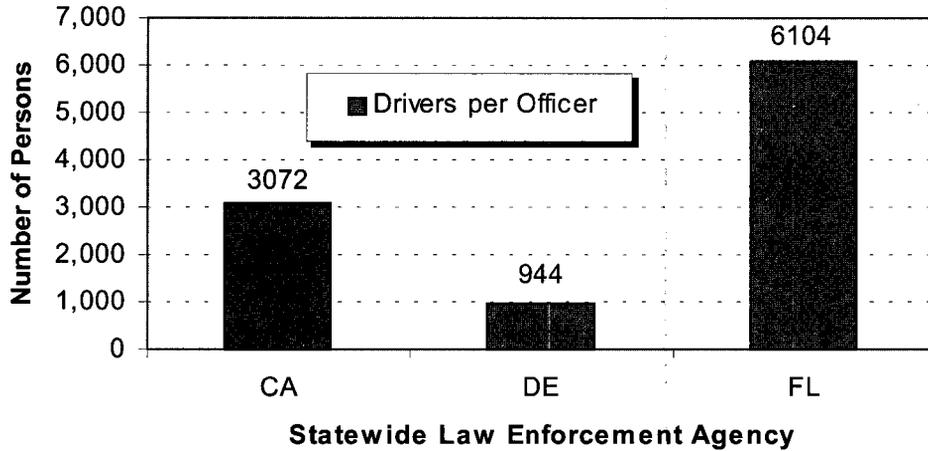
Population estimates (from the U.S. Census Bureau) for the three states in which the statewide law enforcement agencies were examined are listed below along with the number of licensed drivers in those states (provided by the state DMVs). Florida is known to have a large population of retirees, many whom do not live in the state year-round. But in all three states, a large percentage of the population are licensed drivers.

Table 6: State Driving Populations

Site	Year	Population Estimate	Number of Licensed Drivers	Percent of Population w/ Driver Licenses
California	1998	33,494,000	20,735,500	62%
Delaware	1999	753,538	552,005	74%
Florida	1999	15,111,244	13,142,253	87%

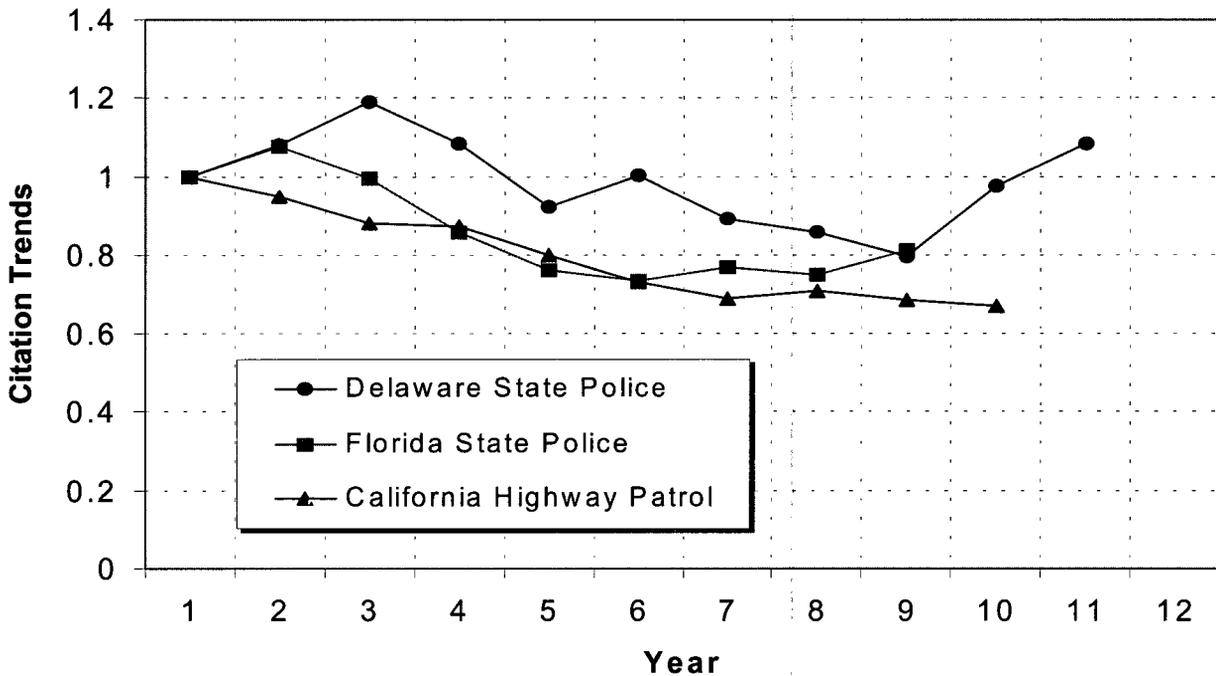
The following figure (**Figure 72**) shows the recent ratio of licensed drivers per officer at each of the three statewide law enforcement agencies (California Highway Patrol, Delaware State Police, and Florida Highway Patrol). The agencies in California and Florida show extremely large ratios of drivers in proportion to uniformed officers.

Figure 72: Statewide LEAs - Ratio of Licensed Drivers to Officers, 1998-1999



The Florida Highway Patrol was the only statewide agency from which we received detailed information regarding traffic violations for specific offenses for all ten years. Therefore, we were not able to make any comparisons of trends by specific offense for the statewide LEAs. However, all three of the statewide LEAs, which were examined as a part of this project, experienced declines in overall traffic law enforcement (all offenses combined) over a recent nine-year period, as depicted in Figure 73.

Figure 73: Statewide LEAs - Traffic Enforcement Trends, All Citations Combined



DISCUSSION AND COMPARISON OF FINDINGS

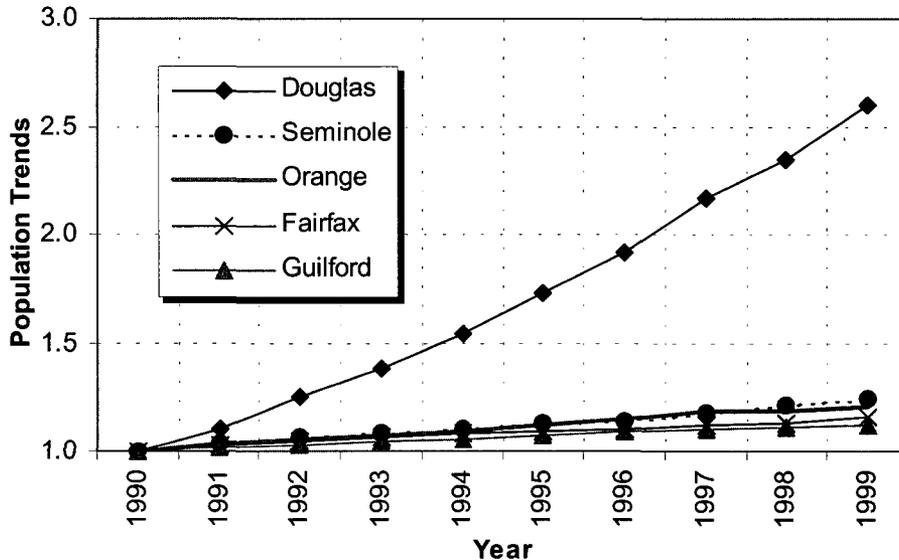
All three curves were indexed to their value at Year 1 to normalize the records⁵. It is possible the Delaware State Police are reversing this trend based on conversations with that agency and data for the two most recent years.

The statewide LEAs we contacted appear to be facing increasing pressures due to rising populations and numbers of licensed drivers and have been unable to keep pace, despite the fact that traffic law enforcement has always been a priority for these agencies. Interestingly, training requirements which have been legislated to better prepare officers to safely perform their duties (a necessary and worthwhile cost) also have resulted in less time spent patrolling the roads and enforcing traffic laws. Without the necessary patrol and support staff, it is difficult for the statewide law enforcement agencies to adequately patrol and provide public safety protection on the roadways within their states.

SHERIFF AND COUNTY LAW ENFORCEMENT AGENCIES

The five counties served by the Sheriff and County law enforcement agencies studied during this project all showed increasing population growth, but Douglas County grew at a phenomenal rate. The rate of population growth (indexed to Year 1) for each county is shown in Figure 74.

Figure 74: County Trends In Population Growth



⁵Since LEAs have different types of citations for similar offenses, different methods of recording, and difference years of information available, comparisons of LEA data are difficult. To compensate, we examined the first full year of data that each agency could supply; this is depicted as 1. Then we compared data for all the years afterward for that agency with that first year of data. So, for example, in Figure 73, Year 3 for the Delaware State Police is 20% higher than Year 1.

We presume a similar rate of growth in numbers of licensed drivers, although we were not able to obtain figures for all five counties. **Figure 75**, shows the ratio of persons per officer in 1999.

Figure 75: Ratio of Population/Drivers Per Officer, Sheriff/County LEAs, 1999

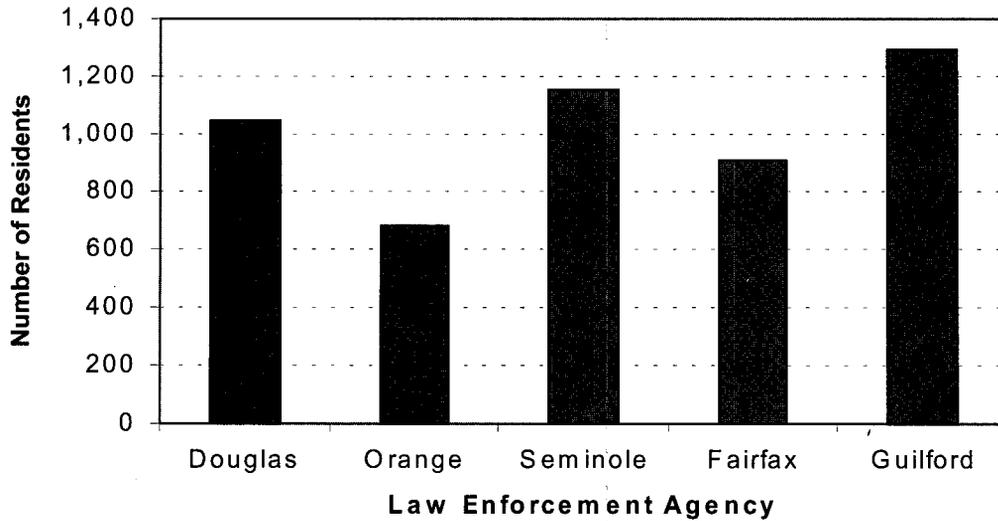
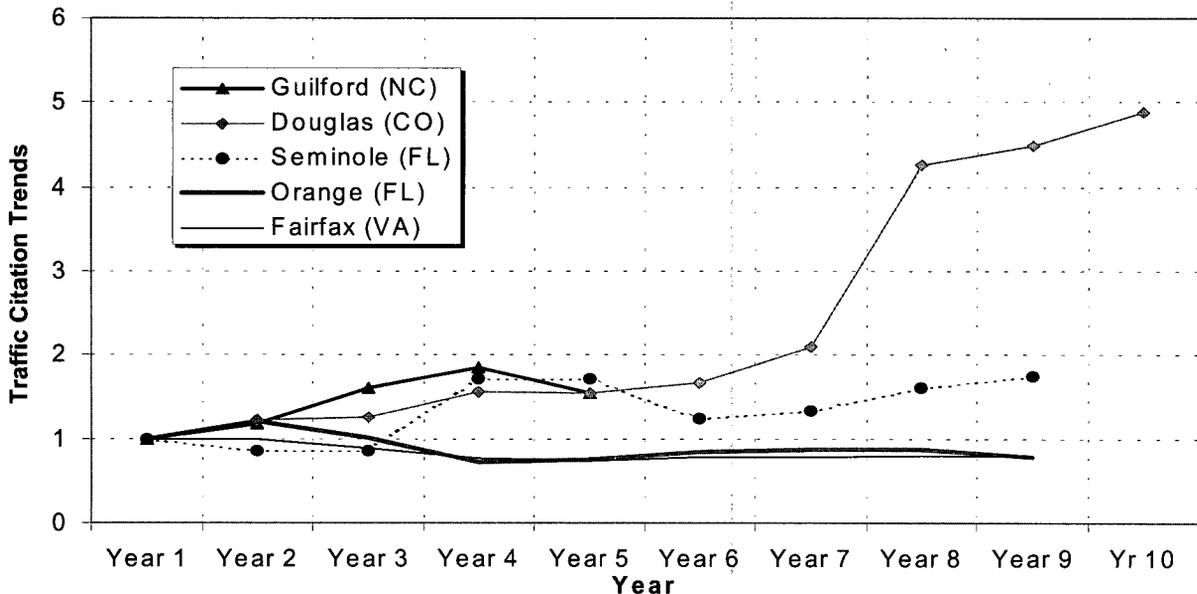


Figure 76 shows the trend of all combined traffic law enforcement activities for each Sheriff and County LEA. Again, all the curves are indexed to Year 1. The first three agencies (Guilford, Douglas and Seminole Sheriff Organizations) have shown increasing trends. (Douglas County has increased activity significantly due to a rapidly increasing population, resulting in increased funding and local support of traffic law enforcement.) The Orange County Sheriff's Office and the Fairfax County Police have shown small declines in traffic law enforcement citation activity.

Figure 76: Sheriff and County LEA - Traffic Enforcement Trends, All Citations Combined



DISCUSSION AND COMPARISON OF FINDINGS

We also were able to separate out several types of offenses for comparison. The following figure (Figure 77) shows the trend for each of these agencies for speeding citations. Since more citations are written for speeding violations than any other traffic-related offense, the trends mirror those for total traffic citations combined.

Figure 77: Sheriff and County LEA Trends - Speeding Citations

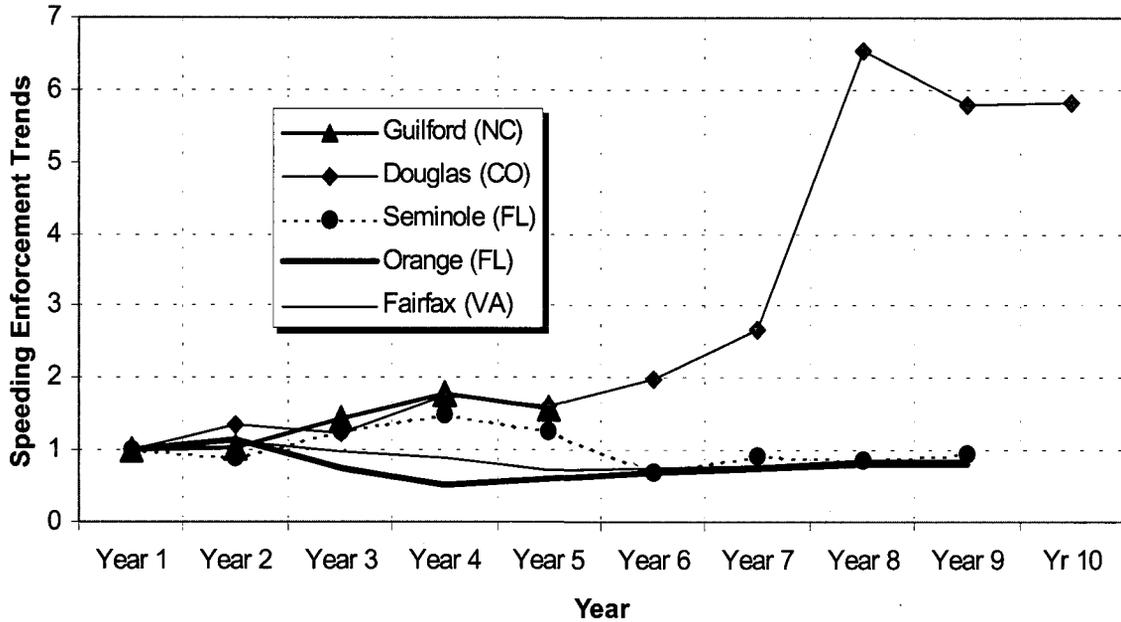
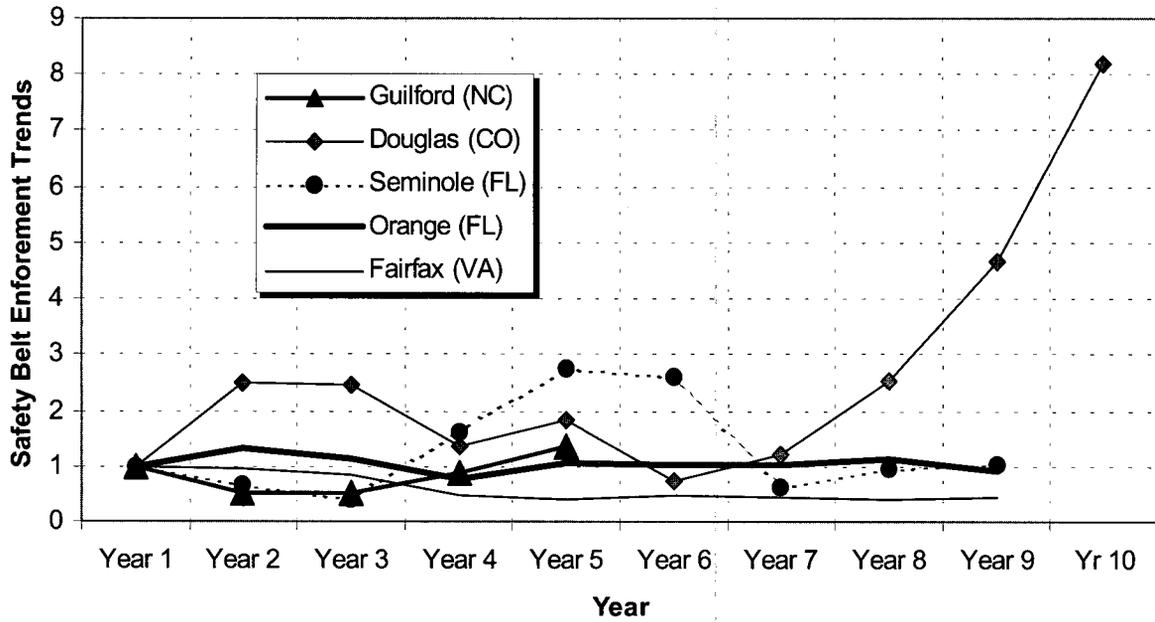


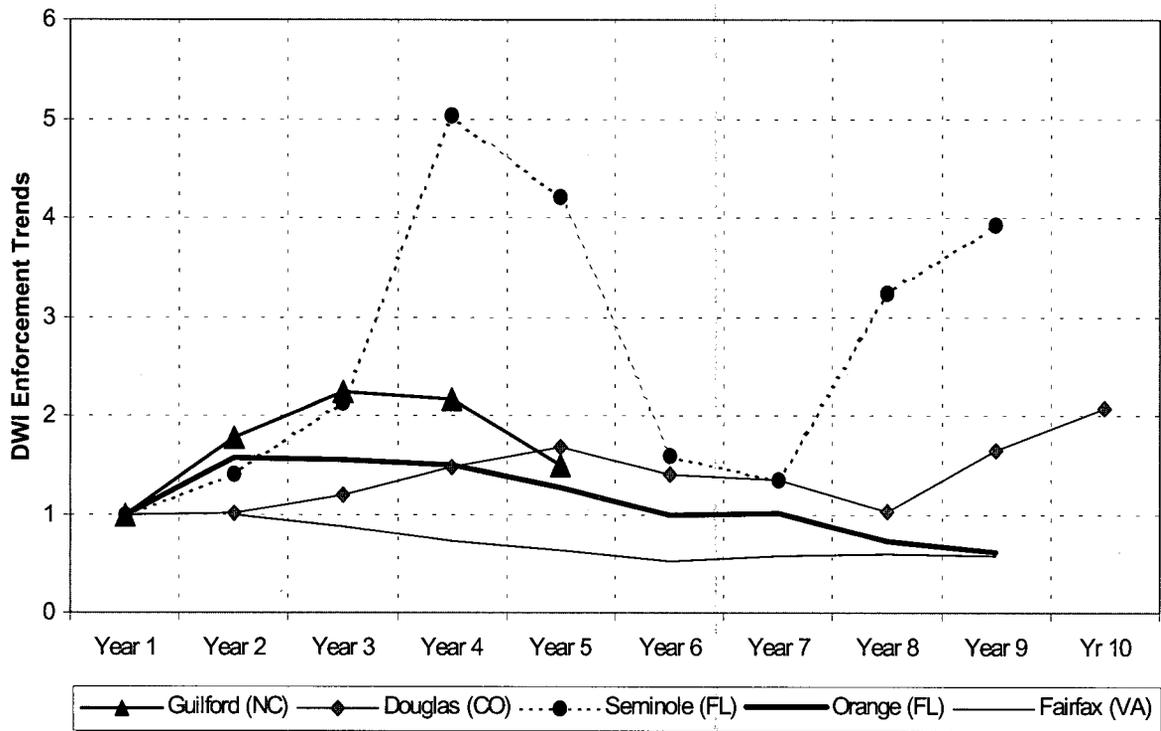
Figure 78 shows the comparison of the trends for each referenced agency regarding safety belt citations (adult and child restraint categories have been combined). Douglas County is the only agency with significantly increasing numbers of safety belt citations. Seminole County, despite the three year increase in citations issued for safety belt violations from years four through six, showed only a slight upward trend line pattern. The other three agencies showed flat or slightly decreasing trends.

Figure 79: Sheriff and County LEA Trends - Safety Belt Citations



And finally, the trends by LEA for DWI-related citations are depicted in **Figure 79**.

Figure 78: Sheriff and County LEA Trends - DWI Citations



DISCUSSION AND COMPARISON OF FINDINGS

Seminole and Douglas County Sheriff’s Offices show significantly increasing trends in this category. The Guilford County Sheriff’s Department also has an upward trend, although the number of years for which we have information is low and the most recent year showed a decrease in the number of DWI-related citations issued by the Department. Both the Orange and Fairfax County LEAs show a declining trend in the number of citations issued for DWI-related offenses, with the number of citations issued by the Fairfax County Police having leveled off over the past couple of years.

To summarize, the charts in this section depict that the overall trend of all traffic citations combined, issued for each LEA, generally holds true for the individual types of offenses. This is shown in the table below which provides a very broad indication of trend by category, and for all citations combined, for each of the four sheriff and one county law enforcement agencies.

Table 7: Sheriff / County LEA Trend Indications

	Douglas County	Orange County	Seminole County	Guilford County	Fairfax County
Speeding	↑	↓	↓	↑	↓
DWI	↑	↓	↑	↑	↓
Safety Belt	↑	↓	↑	↑	↓
License	↑	↓	↑	↑	↓
Aggressive*	↑	↓	↑	N/A	↑
TOTAL	↑	↓	↑	↑	↓

*Aggressive = Careless, Reckless & Aggressive Citation Categories
N/A = not available

Again, please note that while an upward (↑) or downward (↓) trend is indicated for each category and for total citations for each LEA referenced above, degrees are not indicated, and some trend lines are actually fairly “flat;” that is, the degree of the upward or downward trend is slight and not statistically significant. But the purpose of the table is to provide an illustration of a great deal of condensed information.

Concerns surrounding aggressive driving behavior are mounting among the LEAs. Douglas County has legally defined aggressive driving as two or more moving violations within close proximity to other vehicles. Beginning in 1998, they began a special program with an unmarked car and an officer dedicated to detecting and citing motorists driving aggressively. Fairfax County has begun a “road shark” program utilizing unmarked patrol vehicles. Most of the LEAs which are targeting aggressive drivers have not been doing so long enough for us to report on

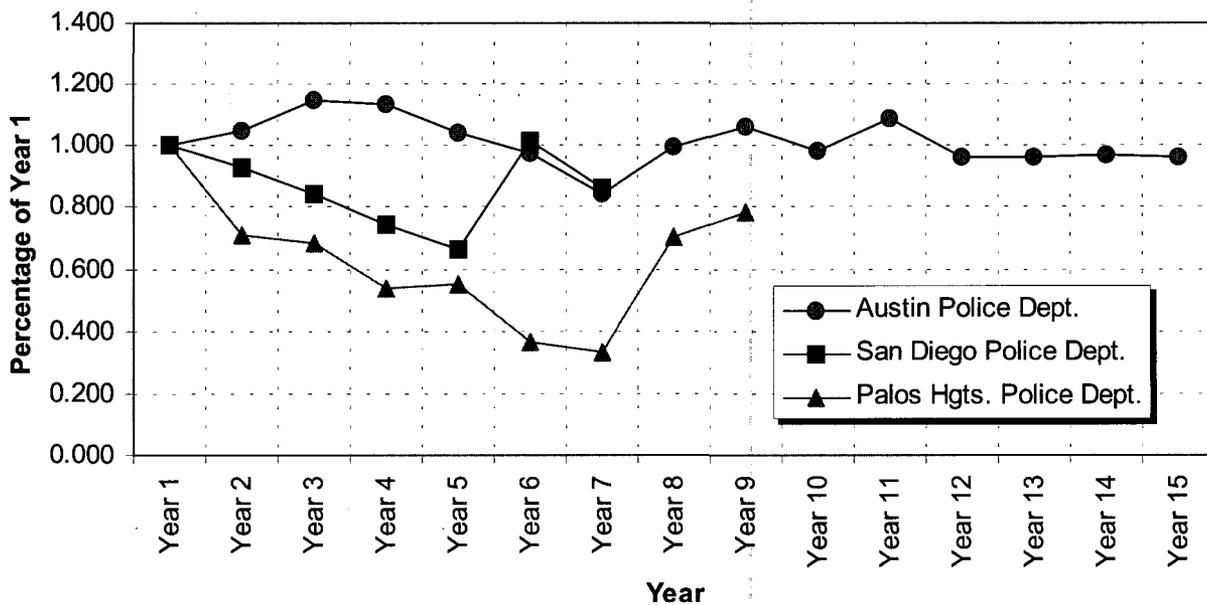
trends. For the purposes of this study, careless and reckless driving citations were included under the aggressive driving category.

Four of these five law enforcement organizations recounted that the public requested in recent years that their agencies become increasingly more involved with enforcing traffic laws. Speeding motorists were most often cited as a concern by the public and, in fact, speed-related citations are issued more frequently by the sheriff and county law enforcement agencies (as well as the statewide LEAs) than any other type of traffic citation. Persons we spoke with at the LEAs often found it difficult to recollect the reasons for “peaks” in the number of citations issued for other offenses (e.g., DWI, safety belt violations). Special programs and enforcement efforts, which were at least partially funded by grants and sometimes conducted with other LEAs, often were believed to be the source. It appears that the Sheriff and County LEAs, which participated in this project, are filling some of the gaps in traffic law enforcement left by other types of LEAs, such as statewide agencies which have been beleaguered with staffing and training issues, and city LEAs which increasingly have had to deal with non-traffic issues (e.g., gang violence and illegal drug activity as well as community policing demands).

CITY LAW ENFORCEMENT AGENCIES

Figure 80 shows the trend of all combined traffic law enforcement citations for each city LEA. San Diego and Palos Heights have declining trends in traffic law enforcement citation activity. Austin has a fairly flat trend line when all types of traffic citations are combined.

Figure 80: City LEAs - Traffic Enforcement Trends, All Citations Combined



DISCUSSION AND COMPARISON OF FINDINGS

We were able to separate the numbers of citations for speeding for two of the agencies. Both showed declining trends, from their index year, which are illustrated in **Figure 81**.

Figure 81: City LEAs - Traffic Enforcement Trends, Speeding Citations

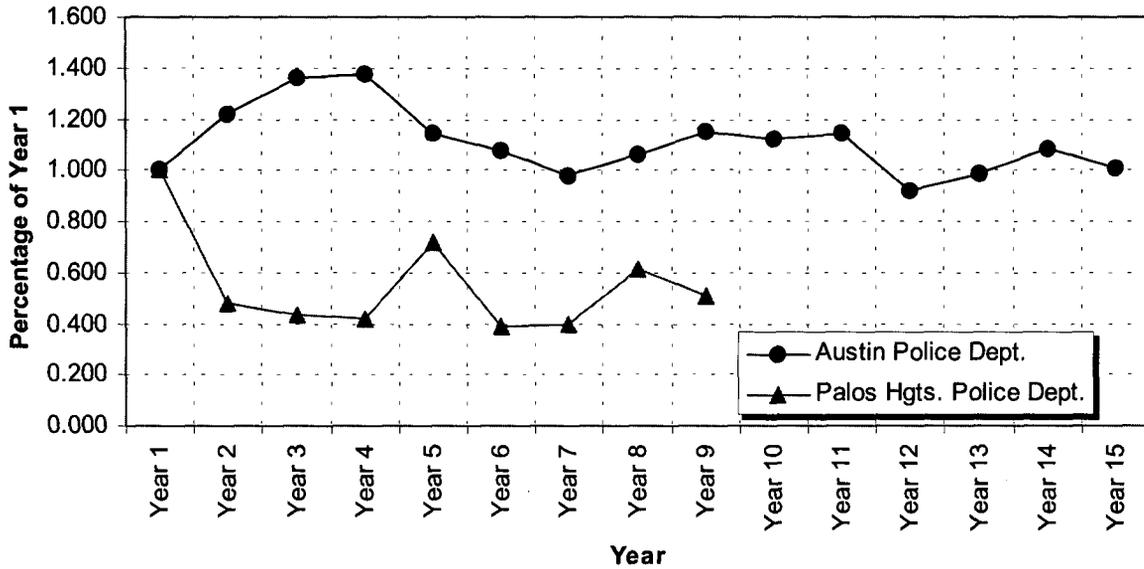
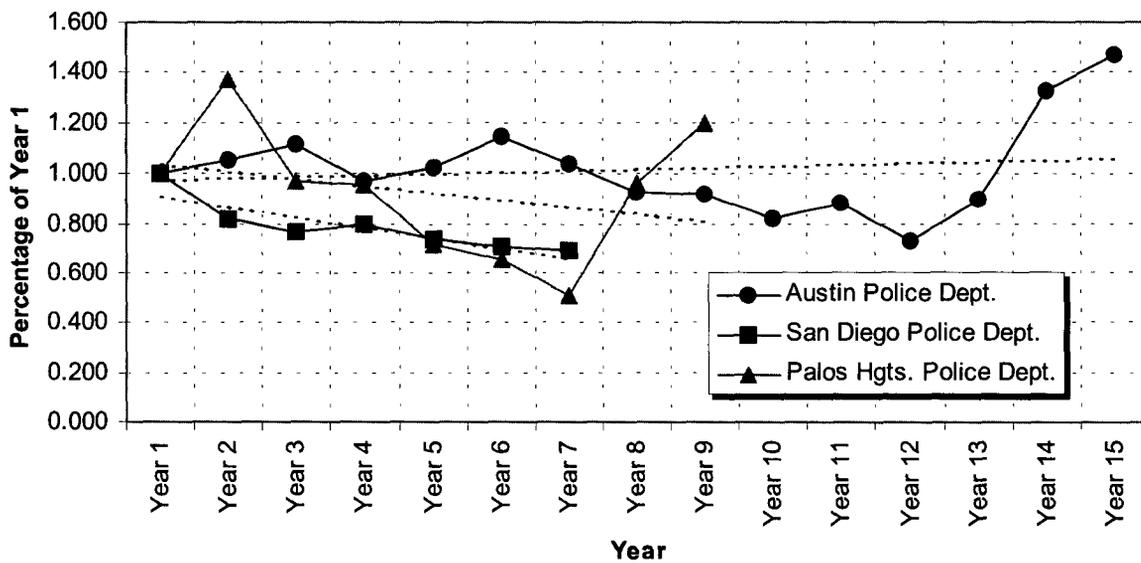


Figure 82 shows the three city law enforcement agencies' trends for DWI citations. Due to the erratic nature of the charted percentages, the trend lines have been added to the figure.

Figure 82: City LEAs - Traffic Enforcement Trends - DWI Citations



As shown, the number of citations issued by the Austin Police Department for DWI offenses has a slight upward trend. The other agencies show declining trend lines. Based on conversations with both the Austin and Palos Heights Police Departments, we have learned both agencies are committed to continuing the upward trend indicated by the performance during the past three years.

To summarize, the city LEAs illustrate the importance of command emphasis on traffic law enforcement efforts, but this must be accomplished through innovation as well. The city agencies have many demands placed on their departments with community policing efforts and the creation of specialized enforcement units. Additionally, most city police departments have not experienced growth in staffing levels that are commensurate with their population growth. They always must respond to calls for service, which are to a large extent a function of population size. This translates into fewer resources for traffic enforcement.

City police departments traditionally have considered traffic enforcement to be one of their charges, whereas county enforcement agencies (particularly sheriff's departments) generally have only recently embraced traffic enforcement. Thus city police agencies often have had a history of obtaining grants for traffic enforcement and historically have relied on them. Subsequently, they are less likely to be able to use that mechanism to offset other recent pressure to divert precious enforcement resources in response to increased calls for service or other specialized assignments.

Thus, city police administrators may have to find innovative solutions to this quandary. In one jurisdiction we studied, a new law (a primary enforcement safety belt law) served to provide an impetus to increase traffic safety enforcement. In another, an innovative hands-off procedure for DWI arrests seemingly stimulated general patrol officers to initiate more arrests of that nature. Automated speed and red light enforcement also have been used to supplement traditional traffic enforcement. Changes such as these, as well as efforts to encourage general patrol officers to continue to perform traffic enforcement when possible, are necessary to reverse the trend of decreasing volume of traffic enforcement actions in municipal areas.

COMPARISON OF FINDINGS

The following table indicates which law enforcement agencies have trends showing that traffic law enforcement overall (that is, the total of all traffic-related citations combined) increased or decreased over the past decade. Since all traffic-related violations were combined, this is a rough estimate, because certain agencies include different violations, or more types of violations than do other agencies. This table is only meant to provide a rough picture; no indications are made as to the degree of increase or decrease.

DISCUSSION AND COMPARISON OF FINDINGS

Table 8: Total Traffic Law Enforcement Trends

	Increase	Decrease
Statewide LEAs		
California		↓
Delaware		↓*
Florida		↓
Sheriff LEAs		
Douglas County, CO	↑	
Orange County, FL		↓
Seminole County, FL	↑	
Guilford County, NC	↑	
City LEAs		
San Diego, CA		↓
Palos Heights, IL		↓*
Austin, TX		↓
County LEAs		
Fairfax County, VA		↓

*currently on an upward trend

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

14 - CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

This study should be viewed as a broad, general measure of *activity* relating to traffic law enforcement by the participating law enforcement agencies. It should *not* be read as a measure of effectiveness of any particular law enforcement agency in protecting public safety on the roadways, nor is it meant to address the effectiveness of any traffic safety laws. Crash and injury data were not collected, nor was any information gathered on public education efforts regarding traffic safety issues. Types of data collected during this project included numbers of citations and/or violations for traffic-related offenses, labor expended, budgetary information, funding information and general policies and special programs dealing with traffic enforcement issues.

Any comparisons between the project sites are difficult due to the differences in:

- roles played by each type of LEA regarding traffic safety issues;
- sizes of law enforcement agencies and dedicated traffic units;
- various internal policies within each LEA;
- traffic safety laws among the states and community ordinances;
- definitions of traffic violations;
- categories of traffic violations;
- recording methods and historical record keeping practices; and
- sources and completeness of the provided data.

Due to the relatively small number of LEAs reviewed, the findings should be viewed as trends which *might* be representative among similar types of law enforcement agencies across the country.

When examining citation rates as a measure of traffic law enforcement effort, one must be careful to examine the contributing categories of citations whenever possible. Total citations may not be an accurate metric of enforcement emphasis. In most agencies, speeding citations are issued more frequently than other citations. These violations are relatively easy for the officer to detect and write-up and seldom involve court time. Conversely, DWI arrests are among the most time consuming of arrests to make, as well as frequently requiring court appearances. Where the data have permitted, we have broken down traffic citations by category so that the reader may gain more insight into the overall traffic enforcement effort.

Traffic law enforcement is still considered a top priority by most law enforcement agencies. However, generally there is an overall declining trend in the number of citations being issued for all types of traffic violations combined. Demands on budgets and personnel have taken a toll on the amount of resources which can be expended for traffic safety. The shortfall in resources has been magnified in recent years. In addition to dealing with increasingly complex criminal issues which law enforcement agencies face today, in most of the jurisdictions studied, enforcement resources have remained stagnant in the face of an increasing population and number of licensed drivers. Generally, with increased driver exposure there are greater numbers of crashes and the

ensuing investigations. These can impact the resources available for other aspects of traffic enforcement.

Within the context of this study, the only category of law enforcement agency which exhibited increases in traffic law enforcement activity as measured by citation volume were sheriff's departments. Three of the four such agencies contacted demonstrated increasing trends of traffic citations. Most agencies of all categories reported that emphasis on traffic enforcement was stimulated by citizen input, rather than other reasons, such as the public good, or reducing the toll in injury and deaths due to traffic crashes. However, it is interesting to note that the only agencies actually exhibiting increasing activity were those where the top administrator was an elected official, possibly feeling a more immediately compelling impetus to respond to public sentiment.

Command emphasis is obviously essential to sustaining traffic law enforcement levels. During times of budget shortfalls or a public safety problem, traffic enforcement is one of the first areas to be cut back. Without the support of senior staff and officials, efforts may decline. And, while dedicated traffic departments and units within an agency may provide a certain enforcement level and continuity to traffic law enforcement efforts, agencies which promote traffic law enforcement duties agency-wide (and among supervisory personnel as well as officers), also can maintain a fairly high enforcement level, as well as endorse the importance of highway safety within the agency.

Many of the jurisdictions we studied used grants to supplement local resources for traffic law enforcement. However, some indicated that the grant process was burdensome and that some grant requirements directed enforcement resources away from direct enforcement.

RECOMMENDATIONS

While the rates of traffic-related injuries and fatalities have been declining across the country in recent years, this decline can be attributed to a number of factors: safer vehicles and roads, stronger laws, better public information and education campaigns, as well as law enforcement efforts. However, this decline may have been greater had law enforcement efforts remained steady or had been able to increase to keep pace with the increased number of drivers and miles driven on our nation's roadways. *Traffic law enforcement efforts on the roadways must be increased, but not at the expense of other worthwhile system components.* In order to accomplish this and based on the conclusions drawn from this project, we offer the following recommendations.

- *Garner Command Emphasis.* Traffic safety experts and official agencies must stress the importance of traffic law enforcement to those in command of law enforcement agencies who direct the use of available resources and decide on how to fund efforts, perhaps by pointing out other enforcement benefits emanating from traffic stops (e.g., felony arrests, reduced burglaries, etc.). Another argument for increased emphasis on traffic enforcement, particularly with elected law enforcement commanders, is that the voting public considers this a primary concern.
- *Combat personnel shortage by hiring non-sworn staff members.* As stated above, in most of the jurisdictions studied, enforcement resources have remained stagnant in the face of

CONCLUSIONS AND RECOMMENDATIONS

an increasing population and number of licensed drivers. Generally, with more licensed drivers on roadways driving more miles, there are greater numbers of crashes and the ensuing investigations. These can impact the resources available for other aspects of traffic enforcement. Where feasible, jurisdictions should consider the use of less expensive non-sworn personnel for the investigation of non-injury producing crashes. This could free precious enforcement resources for the direct enforcement of traffic laws.

- *Value and Promote Officers Working in Traffic Law Enforcement.* While many police officers do not consider it to be the most exciting or fulfilling work in their field, traffic law enforcement is essential, and one way in which officers are certain to make a positive impact on public safety. Some agencies which have endorsed the importance of officers handling traffic duties have accomplished this morale boost by: establishing special uniforms or patches designating traffic officers, mandating that all officers and supervisors within an agency perform traffic work from time to time, providing new special enforcement vehicles (unmarked vehicles) and/or equipment (e.g., video cameras) to traffic divisions first, and offering extra time-off for those individuals issuing the most citations.
- *Gather public support.* In many areas, public support for traffic law enforcement is there and can be tapped to garner public funds and demand increased enforcement efforts.
- *Encourage routine data collection efforts and use of those data.* Virtually all law enforcement agencies encountered during this and many other projects are routinely collecting data. However, many are not summarizing and using this data to its fullest potential to identify areas which could be improved and identifying successes. When examining citation rates as a measure of traffic law enforcement effort, considerations should be made as to the categories of citations issued.
- *Promote grant funding for traffic-related labor, programs and equipment.* Grants are an important source of funding for most law enforcement organizations. While some argue about the complexities surrounding the awarding of grant monies, no one disputes the value of the grants. Some also argue for greater flexibility in the use of the funds, claiming that “middle agencies” become involved in dictating how the monies must be spent. Separate from these issues, the authors would mention that data collection of labor hours expended and numbers of citations issued during funded programs, or after purchasing grant-funded equipment, should be compared to the same data collected prior to the granting of the funds to insure obligations have been met. However, overall, consideration should be given to streamlining grant processes wherever practical and directing as many of the resources into enforcement through mechanisms such as overtime, targeted training, or traffic enforcement-related equipment.
- *Promote accountability.* To some extent, law enforcement agencies should be held accountable for public safety on roadways passing through their jurisdictions. While assistance and support from civic, professional and governmental agencies are imperative, law enforcement agencies are the only means of enforcing traffic laws.

While motorists are responsible for driving safely, law enforcement agencies are the only means of ensuring that traffic laws are obeyed. Their dedication to promoting safe driving and apprehending dangerous drivers assures safer roads. Falling enforcement levels will ultimately

A TREND ANALYSIS OF TRAFFIC LAW ENFORCEMENT IN THE UNITED STATES

threaten public safety. Therefore, it is important that the prevailing downward trend be reversed. For its part, NHTSA intends to share the findings of this and other reports with members of law enforcement, as a part of the agency's ongoing dialogue with LEAs to encourage the agencies to enforce traffic safety.

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