

International Association of Chiefs of Police
Highway Safety Committee

Traffic Safety Strategies for Law Enforcement

**A Planning Guide for Law Enforcement Executives,
Administrators and Managers**

August 2003

This document was prepared to provide agencies with a means to develop operational tactics and innovative approaches in the reduction of the number and frequency of traffic collisions and serious injuries. Points of view or opinions in this document are those of the authors and do not necessarily represent the official position or policies of the Department of Transportation or the National Highway Traffic Safety Administration.



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Executive Summary

Traffic safety programs form an integral component of the effective, comprehensive law enforcement operation. Unfortunately, not all law enforcement executives recognize this important fact. Other law enforcement issues constantly compete with traffic safety for law enforcement's attention, and too often traffic safety initiatives take a "back seat" to what are perceived as more important programs. Violent crime, gang violence and the proliferation of illegal narcotics are matters that, to many police executives, far outweigh the need to dedicate time to proactive traffic safety. Nothing could be farther from the truth. Many successful traffic safety initiatives have resulted not only in reductions in collisions, but in additional positive results that benefit our communities in many areas.

As one might expect, there are many approaches to traffic safety presently taken by law enforcement in the United States. As we continue in the 21st century, emerging trends and new technology will be of the utmost importance. This document will serve as a guidebook for law enforcement executives and their organizations; it will catalog effective strategies and address promising practices for the future.

This document addresses elements and core components in, management and technology issues, with a focus on effective traffic safety strategies. These individual strategies discuss background information, possible actions, benefits, and other considerations. The information contained in this document deals with both proven strategies and promising initiatives for the future.

A safe and efficient transportation system will provide positive results to our society, and effective traffic safety programs and strategies will ensure success in this endeavor. This document will serve as a menu of effective programs and a roadmap for the journey into a safer future.

Several organizations provided much valuable information relating to this project. As a result, the sub-committee reviewed great amounts of data in order to produce this document. Many of the suggestions in this document might not work for every agency. The idea is to consider the words on these pages and then to create the concept that will work for your department. No one can implement every strategy contained in this document. The particular approach or theory is up to the individual agency with the goal of choosing strategies that work for you and, thus, benefit your community.

Lastly, this document should be "timeless" and serve as a living document. Attention has been given to the future throughout. Obviously, the future cannot be absolutely predicted. The information contained in these pages deals with sound, effective, goal-producing strategies, which will produce positive results both now and in the future. As a result, this document will be amended periodically in order to remain current.

Background

Presently, many different issues compete for attention from today's law enforcement executives. In turn, to be effective leaders, today's executives must not only manage present-day issues but must keep an eye towards the future. Effective traffic management systems which use dedicated, effective traffic safety strategies are critical to the overall success of any law enforcement organization.

In September 1996, the National Highway Traffic Safety Administration (NHTSA), in cooperation with the Police Executive Research Forum (PERF), sponsored a meeting of law enforcement executives in Reno, Nevada, to discuss the issue of police traffic services in the 21st century. As a product of that meeting, a manual was developed and distributed to law enforcement executives and organizations.

Following the PERF effort, NHTSA contacted the International Association of Chiefs of Police (IACP) for comments and possible follow-up discussion. It was determined that additional work on this important issue would be beneficial to all law enforcement and allied organizations, and, as a result, the IACP entered into a partnership with NHTSA to produce this document. The chairman of IACP's Highway Safety Committee (HSC) assumed responsibility for the project and appointed a subcommittee of HSC members and other law enforcement executives to produce the report. Subsequent to that first effort, the report was revised to reflect today's changing technologies and the growing challenges facing law enforcement agencies worldwide.

The report will continue to be revised and updated as the issues and challenges change. The HSC welcomes input from all law enforcement and allied agency professionals.

Mission

To provide law enforcement personnel with diverse strategies and promising practices that will enable them to effectively address traffic safety issues and emerging trends.

Vision

The future will bring law enforcement executives an opportunity to lead their organizations towards the goal of a safe and efficient highway transportation system. Such a system will produce varied benefits to our communities and have a positive impact on our way of life. Through a strong commitment to traffic safety, law enforcement organizations will help to ensure that these positive results occur in the present and well into the future.

Considerations for the Future

By Earl Sweeney

Traffic Policing in the World of the Future

It is not given to man to foretell the future. It was, therefore, with some trepidation that the IACP Highway Safety Committee undertook to build on the excellent spadework done by the Police Executive Research Forum and attempt to make recommendations that both the National Highway Traffic Safety Administration and the law enforcement community would find useful as they plot their respective courses toward an uncertain tomorrow.

This document should be thought of, at best, as a bridge - a bridge between today and tomorrow, a bridge between two centuries and even more significantly, between two millennia. It was begun in one century and completed in another, begun in one millennium and completed in another.

Our subcommittee that worked on this project heard from futurists, police administrators, traffic commanders, engineers, and others, but we cannot say for certain what the future holds - there are too many "ifs."

IF the economy remains stable, IF the world's oil supply lasts another four or five decades, IF we are able to develop new sources of energy, IF the problems of global warming are not understated, IF declining birth rates and death rates in the developed nations and rising birth rates and economies in the emerging nations continue at the same pace, IF the world remains free of major wars, and IF there is not a marked change in what many have described as a declining sense of morality worldwide, we know what we can expect.

We can expect more vehicles and more roads and highways, more traffic jams and more interruptions in the traffic flow due to construction and reconstruction. We can expect that vehicle operation will become more automated, as artificial intelligence is increasingly applied to vehicles and highway systems. We can expect a continued drive to produce more fuel-efficient motor vehicles that pollute the air less.

We can expect technology to help solve such problems as stopping high-speed pursuits and the enforcement of speed laws and traffic light violations. We can expect more elderly drivers on the roads, a new wave of teenagers raised on a culture of violence, impatient and prone to aggressive driving and road rage.

We can expect continued problems with drugs and alcohol, which were the bane of societies in the previous millennium, not to mention the previous century. We can expect deepening divisions between the world's "haves and have nots," major changes in the cultural composition of our population, and as both the police and criminals increase their use of leading-edge communications technology, fierce debates as to what checks and balances should exist on governmental intrusion into personal privacy on the one hand, and the need for the police to be able to monitor terrorists, drug cartels and other organized crime groups on the other.

These expectations could change dramatically overnight, however, with a war, a disruption in the Mideast oil supply, a global climate change, or some cosmic event such as a meteor strike. We live in uncertain times.

Because of these uncertainties, in focusing our discussions and crafting our recommendations, we have devoted this section of this report to some of the future trends that we feel must be taken into account by law enforcement agencies in developing their strategies over the next five to seven years. In the second section, we call attention to the most significant and successful strategies of the last few years, providing a checklist for police administrators to see if their current tactics and procedures represent current best practices.

Throughout it all, one thing will remain constant - that the business of policing is first and foremost a “people business.” People, with all their human frailties and flaws, are our profession. Some will serve with bravery and distinction as police officers, firefighters, medical professionals and public officials.

Some will live out their lives as good citizens and role models. Others will live their lives in such a careless and even criminal manner that others will be hurt by their activities. In the highly mobile society of today and the even more mobile society of tomorrow, the police will be depended upon to ensure that travel is safe, and that criminals are caught, whether on foot or in a vehicle. It is to those police officers of today and tomorrow that this document is dedicated.

Demographics and the Personality Changes

As the study of human populations, demographics can contribute greatly to our understanding of the economy, business, society, and our professions. It can predict business trends, school and college enrollments, demands on the social security system, electricity and fossil fuel use, markets for various products, and crime and crash trends.

By itself, demographics may cause people to make some misleading conclusions. It is not an exact science, and depends on such outside factors as wars, climate changes, and the impact of technology.

It is useful in planning for the future to look at birth cohorts. For example, people born in the U.S., Canada, or Australia between 1946 and 1964 are classified by demographers as baby boomers. The baby boom occurred after World War II when veterans returned home after postponing having children until after the war. A strong economy gave couples the confidence to start a family. By 1957, the average U.S. family had nearly four children. Many young immigrants, primarily from Europe, also entered the U.S.

Postwar prosperity, the Cold War that began in 1948, and the advent of television that changed the entire landscape of activities within the home helped to shape this generation. Television penetrated nearly every household and brought with it a greater understanding of what was happening around the world, from the Vietnam War to the Kennedy assassinations to the civil rights movement to Elvis Presley and the beginnings of rock and roll. This generation is now entering the ranks of senior citizens.

From 1965 to 1976 came a baby bust, with 15% fewer babies born than during the prior decade, and the number of families with children at home dropped by six percent, along

with fewer children per family. This group is often known as Generation X. They entered the labor force during a period of economic downturn with good educations, but looking forward to unemployment rates as high as 10.8% by 1982, and lower starting salaries. They were the first U.S. generation that felt they would have fewer opportunities than their parents. Now reaching middle age, this generation is very media-conscious and the first segment of the population to be prolific computer and Internet users.

From 1977 to 1997 came the Baby Boom Echo, as the baby boomers, who had postponed childbirth until their thirties and forties, began having children, when the economy turned around and their hopes and expectations along with it.

Currently, a cohort known to merchandisers as NexGen, called by Don Tapscott, author of *Growing Up Digital: The Rise of the Net Generation*, as NetGen, and by others as Generation Y, is entering the work force. Some 88,000,000 strong, between the ages of 3 and 23 as the new millennium began, they are now the biggest demographic group in North America. They have a different outlook on work, responsibility, teamwork, and desired reward than their parents. This cohort and their views will dominate the 21st century.

This is the first generation that knew more about some things than their parents did. Those “some things” are the computer and the Internet. Raised on video games and “wired” to computers at school, their parents have had to depend on them to advise them on matters ranging from how to buy a computer and peripherals to how to build a Web page. This generation has grown up surrounded by digital devices, from digital cameras to video games to CD-ROMs to downloadable music. Electronic devices are no more intimidating to them than a TV set was to the previous generation - they have grown up with them and assimilated them, rather than having to learn them anew. They play, work, and create communities and friends in cyberspace. The computer and the Internet are truly the single most powerful force shaping this generation.

Because of their experiences on-line, NexGenners do not regard their parents, or even their supervisors at work, who usually know less than they do about the new technology, as having more knowledge or wisdom. After all, the world’s collected knowledge lays just a mouse click away for them, on the World Wide Web. Because of the interactive nature of the devices they play and study with, they tend to want to be users, not just viewers or listeners as the baby boomers did with the advent of television. They see a shrinking world, and their experience with the Internet has exposed them to a media where there are very few rules and still fewer controls on people’s behavior. They use computers for entertainment, studying, shopping, and communicating, through chat rooms, computer use groups, and Web sites. Two-thirds of U.S. children now use the Internet from home, school, the library, or another location. They are part of a Web-based culture that includes many opportunities to be exposed to history’s collected wisdom and knowledge, but also to cynicism, unhealthy sexual fantasies, and nihilism. Their social skills may be limited in some ways by a lack of face-to-face contact and hours spent chatting or playing games on-line rather than directly with peers. At the same time, some experts feel the writing and critical thinking skills of this generation may be enhanced by evaluating the sometimes conflicting information at their fingertips, and by reading and writing many more messages than their parents and grandparents ever did.

There is also a concern that there will be a world of electronic haves and have-nots, a digital divide, and that children and nations that have little or no access to this digital world, or lack the money to constantly update to keep pace with changes in this technology, will be developmentally and economically disadvantaged. Recent evidence seems to show that rather than narrowing with new advances in technology, this digital divide is actually widening. There were one billion children born in the last decade of the 20th century, and 95% of them were in developing countries with primitive living conditions - in fact, more than one-half of the 1.2 billion children aged six to 11 have never placed a phone call!

Along with this technological gap has come a severe gap in wealth between segments of society, even in the U.S. The top 20% of households, with incomes of \$180,000 a year or more, command 80% of the collected wealth in the United States and 49% of the total income earned, and this figure has grown by one-fifth in the past decade, compared with only a 1% growth rate for all households combined. As the world's leading economy, the United States also leads in widening this internal gap. One out of four children under the age of six now live in poverty, making our child poverty rate the highest in the developed world.

If left to run its course, this gap in knowledge and wealth is expected to polarize nations and create dangers on the world stage, and polarize groups and cultures within our own country, boding ill for cross-cultural relations.

Already, members of this new generation seem to be exhibiting a different set of values than their predecessors. They know more and can access more knowledge than any previous birth cohort, care deeply about some social issues, and have strong beliefs about privacy and rights to information. They are optimistic, but freethinking and alienated from the formal political structure.

Because of the way they have been taught in school and their use of computers, they do well collaborating with others in small, cross-functional work groups, but tend to disdain close supervision and micro-management. They are innovators, and want things to move fast, having little patience for bureaucratic routines or deferred gratification. Because there has been little distinction in their lives between working, learning, and playing (they have done it all in cyberspace), they are hard workers but often prefer to be entrepreneurs or to work from their homes and telecommute.

If the U.S. economy continues to boom for knowledge workers, people who hire them should be prepared for the fact that they may have little attachment to a single employer or career, because so many opportunities are open to them. Employers may have to be prepared to make a number of concessions if they are to retain the "best and the brightest" on their payrolls. It may not be feasible to supervise them in the previously accepted sense. They are accustomed to working in non-hierarchical ways.

Demographics and the Highway Infrastructure

Transportation safety problems at the beginning of the 21st century are still numerous and raise some concerns about the safety of vehicles and the qualifications of drivers, despite much progress in recent years.

According to the U.S. Department of Transportation, breathtaking changes in transportation have brought about the globalization of the economy, changed the way the world does business with just-in-time delivery, opened economic development to previously remote parts of the United States, helped revitalize American cities, and become one of the engines for unprecedented economic expansion.

Transportation today represents 10% of the total U.S. economy. Twice as many passengers fly today as 25 years ago, vehicle miles traveled have doubled since 1975, and transit systems now carry 8.6 billion passengers annually. Air cargo shipments have tripled in recent years. Seat belts, air bags, child safety seats and other improvements to vehicles and highways have reduced highway fatalities by 3,000 lives a year. Safety belt usage now hovers at about 70% nationwide, with only one state currently without some form of mandatory seat belt law for adults, and all states requiring them for children. Economic deregulation of the transportation industry and the advent of NAFTA, the North American Free Trade Agreement, opening our borders to additional truck traffic from Canada and Mexico, have resulted in major structural changes.

The air traffic control system is in need of a complete modernization. More than 5,000 traffic deaths take place annually from crashes involving heavy commercial vehicles. Hundreds of rail crossing crashes still occur, especially in rural areas. High-speed trains sharing tracks with freight trains and high-speed rail using tracks not built for this purpose pose safety concerns.

Made possible by the interstate highway system, suburbia has become the dominant lifestyle in the United States. As more women have entered the workforce and their own automobile has been seen as a necessity for high school students, the number of vehicles per household, the number of licensed drivers, and the time and distance spent commuting has increased. Suburban sprawl has become a quality-of-life problem rivaling some inner city problems. The future will see legislative efforts to reduce congestion and increase mass transit ridership, including new roads, alternative transportation systems, “congestion pricing,” new land use restrictions, better congestion management systems, and the Intelligent Vehicle/Intelligent Highway infrastructure.

The growth of e-commerce over the Internet is expected to triple the value of air cargo by 2015, according to the U.S. Department of Transportation. This new method of procuring goods, along with telecommuting, may reduce the number of trips by vehicle and reduce some of the strain on the highway infrastructure, but it may lead to even more heavy truck traffic to support shifting demands of a “just in time” economy.

Global positioning systems from 2002 on, by virtue of NDGPS, the Nationwide Differential Global Positioning System, will provide drivers, trucking industry dispatchers, and emergency services personnel with an ability to provide real-time location information on vehicles, increasing the safety and efficiency of the system.

Suburbanization vs. Gentrification

Two countervailing trends have affected the growth and development of our cities. Suburbanization, or the flight of upper and middle class families from the inner cities to the suburbs began after World War II and has continued to the present day. The once all-white suburbs became much more culturally diverse as minorities improved their economic situation and overcame discrimination in the real estate market to join their

white counterparts in the suburbs. The result was some inner cities mostly populated with economically disadvantaged citizens, often newly arrived immigrants. Along with individuals, retail establishments moved out of the inner cities to shopping malls, and other businesses and manufacturing establishments relocated to the suburbs to provide shorter commuting times for their suburban workers and what was perceived as a better quality of life. The residents of inner cities were forced to depend more on social services, the quality of schools declined due to adverse impact on the tax base, and a deterioration of housing and lack of recreation and other services created a climate where crime, drugs, and gangs flourished, preying on inner city citizens.

In the last decade of the 20th century, however, violent crime in the cities recorded a precipitous drop - in some cases, double-digit decreases. Sociologists are unsure of the reasons for the drop - some attribute it to community policing strategies and more police on the streets due to federal anti-crime programs, others credit the low unemployment rate and strong economy, and still others feel that the drop in crime was due to the aging of the population and consequent reduction in the numbers of people in the most crime-prone ages.

As our cities became safer, upper-income families began to move back. Developers and individuals increasingly purchased old, historic buildings, renovating them for upscale housing. This process, known as “gentrification,” led to many improvements in the infrastructure of formerly deteriorated neighborhoods. It also resulted in an even greater shortage of low and moderate-cost housing for the poor, which has increased the number of homeless in some cities. Each of these demographic changes has affected traffic flow and patterns.

Urban Parking Problems

There is scarcely a U.S. city without a downtown-parking problem. Enforcement of parking regulations falls on the police in most communities and casts officers in an unpopular role. Developing the economy of many communities, and especially restoring the vibrancy of downtown business areas, depends on the willingness of city governments to provide ample and reasonably priced on-street and off-street parking. Urban parking areas lend themselves to certain crimes such as muggings and car-jackings and are a particular problem to police. Video camera surveillance of these areas, along with increased bicycle and foot patrols, will be increasingly important in order for people to feel safe as they park and retrieve their vehicles.

Interstate Rest Areas

It is not only in our cities and suburban shopping malls that motorists often feel unsafe. Some rest areas on our interstate highways are in a deteriorated condition, frequently are not staffed by attendants on a 24-hour basis, and have become havens for illicit drug transactions, public sex acts, assaults, and car-jackings. With the public fearful and reluctant to use these rest areas, an increasing number of fatigued drivers ply our highest-speed highways. Problem-solving community policing techniques involving Departments of Transportation working with state and local agencies must be applied to rid these locations of undesirable elements and increase the public’s confidence to use them.

Edge Cities and Telecommuting

As more knowledge-based workers work at least part of the week out of their homes and interact with their jobs via telephone and computer modem, there is more incentive for businesses to locate in concentric rings around major cities. This results in “edge cities” springing up, and heretofore suburban communities becoming bustling areas that offer a variety of new services, so that today’s telecommuter does not have to venture into the big city and fight traffic to obtain services and entertainment.

CPTED and “Created” Neighborhoods

As community policing becomes the standard way that many local and county police and sheriff’s departments operate, Crime Prevention Through Environmental Design (CPTED) is practiced by the police, often in partnership with urban planners. CPTED uses regulation of building and renovation projects and, through thoughtful designs of streets and public areas, enhances natural surveillance by both police and citizens. The more activities that are open to additional sets of “eyes and ears,” the less likely crime is to be committed in those areas. The more inviting streets are to average citizens, the less likely they are to be taken over by the criminal element. A sense of territoriality and of neighborhood coalesces citizens together to resist crime and cooperate with police neighborhood watches and other crime prevention efforts. In some high-crime areas with no distinct neighborhood characteristics or boundaries, police departments have artificially “created” neighborhoods with jersey barriers, cul-de-sacs, one-way streets and other design features that make it more difficult for drug dealers, gang members and others to move quickly into an area, commit a crime, and flee just as easily without being observed. Police departments must be alert to the possibility of using these same techniques to reduce the frequency of traffic crashes. Portable speed bumps are available from some police supply houses. Devices such as these and even mid-block stop signs to slow down traffic are examples of how problem-solving community policing techniques will apply to future traffic problems as well as crime problems.

Gated Communities

With the wealthy segment of the nation becoming wealthier in an improved economy in the late 1990s, many of the wealthiest families relocated to private communities patrolled by civilian guard forces, where people coming in and out must stop at a gatehouse and identify themselves.

This trend toward gated communities poses many potential problems for the police. Private security agencies hired by the residents of these communities may have various motives to cover up crimes that happen within their environs. The residents of these exclusive enclaves, because they are already paying for private security, may become less willing to support an adequate level of funding for local police and sheriff’s departments. The traditional reluctance of public law enforcement agencies to reach out to the private police sector has led to overlooking a valuable source of intelligence information.

There are already more private security employees than public police in the U.S., and this trend is continuing.

Deterioration and Reconstruction

Many of our streets and highways, including interstates and toll roads, were built shortly after World War II, and have deteriorated over the ensuing years. They are seeing traffic volumes far in excess of what they were designed to handle. Many of the nation's bridges are reportedly in critical need of repair. The result is an explosion of highway construction, which will continue into the foreseeable future. Motorists are increasingly impatient when faced with delays caused by construction, and work zone crashes are on the increase. As more road contractors rely on paid overtime details by state and in some cases local police to provide increased work zone safety, this in itself has created another set of problems. Many of today's officers value their leisure time more than the increased income that comes from working special details. This makes it difficult to fill all the construction details that are available. Fewer officers working these details mean an increased number of fatigue-related problems for officers. It also leads to abuses where some officers are making so much money working details, their supervisors say that they have come to regard their regular shifts as simply places to rest before the next detail. These are all problems that will increasingly confront the 21st century police manager.

Traffic Volumes

Traffic volumes have increased nearly everywhere. What once was a leisurely commute to work in a rural or suburban area has become a horn-honking and patience-trying battle with traffic that outstrips the design capacity of the road. As these traffic volumes increase, aggressive driving and incidents of violence behind the wheel have risen. It is increasingly difficult for police to single violators out, divert them from the traffic stream, and adequately enforce the traffic laws during commuter rush hours, which now last well into the early evening in some places.

Realistic Speed Limits

The 55-mph national maximum speed limit of the 1960s that was imposed more as a fuel-saving measure than a safety measure was extremely unpopular. It may have drained police resources away from the least safe roads to the interstates, which had the best safety record, and undermined selective enforcement. The NMSL was never accepted by the public, who mistrusted it and often regarded it as a revenue-raising device rather than a safety-enhancing device. Generations of fathers and mothers drove their children around with radar detectors on the dashboard of their cars, and many of today's generation of drivers are predisposed to regard speed limits with skepticism and contempt.

Speed limits on urban interstates are still arbitrarily based on the population of the surrounding area rather than highway conditions. The concept of "85th-percentile speeds," where engineers conducted traffic surveys and set speed limits at the speed that 85% of drivers drive at or under during good conditions, in fact, may no longer be valid because there has been no recent research to validate it. Many of today's impatient drivers routinely operate their vehicles at speeds greater than the laws of physics and the effectiveness of the safety devices in their vehicles permit, and thus the "85th percentile" in some locations may in fact be an unsafe speed.

Much research at the state and national level must go into how to set realistic, enforceable speed limits.

Variable Speed Limits

Much more practical than trying to set a single speed limit for some stretches of road, is the concept of variable speed limits indicated by signs controlled by a computer at police headquarters or a DOT facility. These signs can be programmed to reduce speeds during conditions of low visibility, slippery roads, heavy traffic, etc. We expect to see more widespread use of this concept in the future.

Highway Markings and Traffic Control Devices

Many improvements in these areas are on the horizon. “Smart” traffic signals with sensors can delay a green light, when the speed of an oncoming vehicle on a side street is too fast to permit it to stop, and delaying the green light can avert a collision. Larger sign markings and clearer, more understandable legends can accommodate elderly drivers and non-English speakers. Stop signs and yield signs that broadcast an alert tone over a motorist’s audio system can warn the driver that he or she is about to “run” the sign. Electronic rumble strips can warn fatigued, inattentive or otherwise impaired drivers to stay in their designated lane or prevent them from traveling the wrong way on off-ramps and thus avert serious and fatal crashes.

Fuel Prices

The United States currently imports more than half its petroleum supply, a higher percentage than during the 1970s, leaving us vulnerable to events in and policies of the oil-producing nations. As fossil fuels become scarcer and concerns over global warming due to depletion of the Earth’s ozone layer increase, fuel prices are bound to increase, causing pressure on vehicle manufacturers to make more fuel-efficient vehicles. The tide of SUVs, pickup trucks, and large luxury vehicles may then be abated. The danger for highway safety of more fuel-efficient vehicles is that frequently, manufacturers make their vehicles smaller and lighter so they will consume less fuel. When these vehicles mix with heavy commercial vehicles and other larger vehicles in the traffic flow, the laws of vehicle dynamics are such that the occupants of the smaller, lighter vehicles have decreased survivability in the event of a crash.

Mass Transit

Mass transit could solve many problems of congestion, including parking problems. However, America’s love affair with the car continues, and mass transit remains an unpopular option with many drivers, as witnessed by the overcapacity of most “ride share” parking lots and the under-utilization of HOV lanes.

Railroads

Attempts continue to restore passenger train service through high-speed rail initiatives. Freight trains, still prevalent in some parts of the nation, face stiff competition from ever-larger and heavier commercial trucks. With fewer trains around, motorists have become more careless about crossing railroad tracks. Efforts to educate motorists and police alike about trains and the importance of observing railroad crossings must continue.

Intelligent Vehicles and Highway Systems

Privacy Concerns and the Need for Police Input

Departments of Transportation are progressing rapidly in developing intelligent vehicles and intelligent highways. Soon, it will be possible in urban areas to virtually put a vehicle on “autopilot” during commuter rush hours. Built-in radar and other electronic devices will keep vehicles from following one another too closely and even control speeds to prevent the speed variation that is the cause of most speed-related crashes.

This new technology has the potential of halting dangerous high-speed pursuits, spotting stolen vehicles, and directing lost motorists. However, many privacy advocates fear police involvement in ITS, and the police community has not been given enough meaningful input into the design of these systems. Means must be developed to bring about a greater police input and participation into the development of this new technology.

Education and Highway Safety

Along with engineering and enforcement, education has always been, and must remain, a vital component of highway safety.

The Internet

Police departments in many communities now have Internet Web sites that the public can access. Resources such as IACP Net make tremendous volumes of research and information available to police planners and executives. However, we have scarcely scratched the surface of this powerful tool to spread the police message of traffic safety.

Police departments must increasingly use their Web sites to provide information to drivers on such topics as the purpose of traffic enforcement, how to behave when stopped by the police, how to pay or contest a ticket, the meaning of penalty points on driver’s licenses, safety messages, notification of safety checkpoints, etc.

School Resource Officers

With the increasing trend toward putting police officers on duty in our public schools, their value in spreading the traffic safety message cannot be overlooked. The traffic-related duties they can help with include guest appearances at driver education classes, safety lectures and bicycle rodeos for younger children, classes in child safety seats and seat belts at home economics classes, discussion of traffic offenses at “law day” and “youth and the law” classes, voluntary safety inspection of students’ cars, and prohibition of offending students from bringing their vehicles on school campuses if they are apprehended driving dangerously at or near the school grounds.

ESL Programs for Aliens

Community policing officers in inner cities have an opportunity to promote highway safety among new immigrants and assist in teaching persons for whom English is a second language how to survive in traffic in this country. Departments of Motor Vehicles

and Departments of Education must increasingly team with the police in the future, to improve the skills of non-English speaking drivers.

Vehicle Safety and Child Seat Clinics

With fewer states mandating periodic motor vehicle safety inspections, there is an opportunity for police, in cooperation with auto dealers and reputable repair shops, to provide voluntary low- or no-cost vehicle safety inspections along with existing clinics that teach people how to properly install and use child safety seats. These programs can be made available at roadside, at the police station, or at shopping malls and are an excellent way for the police to reach out to the public in a non-threatening manner.

Driver Education for Older Drivers

Using volunteers from the American Association of Retired Persons (AARP) and other similar groups, police can sponsor voluntary driver education for older drivers, to teach them how to cope with declining vision, hearing and reflexes.

Motor vehicle licensing authorities in the days and years ahead must make more frequent use of periodic driver re-examination of older drivers, and have greater utilization of medical review boards. It is difficult to get busy medical professionals to participate in these boards, and public safety personnel need to develop a closer liaison with these individuals in order to increase the level of mutual understanding and cooperation.

Remedial Driver Education

It takes skill to drive in today's congested, fast-moving traffic. Police and motor vehicle licensing authorities, along with the traffic courts, must team up to identify drivers who lack certain basic skills, and funnel them into remedial driver education courses.

Minorities and Safety Belts

Statistics indicate that certain ethnic group members are less likely to use safety belts and child safety seats. When these groups are targeted for selective enforcement, group members may mistake these efforts for "racial profiling." Still, minority group advocates have been proven in opinion polls to strongly support seat belt enforcement. Police departments must be sure that any enforcement efforts in the minority community are preceded by and accompanied with effective educational programs.

Police Strategies and Tactics

Community Policing and the Traffic Interface

With community policing the preferred policing tactic of the final decade of the 20th century, thoughtful police officials discovered that one important component of the police mission was being neglected - traffic enforcement. In community after community when citizens were surveyed by the police, they told their police departments that their number one or two quality of life concerns was traffic. More people are killed and injured and the economic loss to society is greater from traffic crashes than that from crime, and police departments that are proactive in traffic enforcement have lower crime rates as well as lower traffic crash statistics, because traffic enforcement leads to the discovery of

criminals and the recovery of drugs and weapons. Due to the efforts of the National Highway Traffic Safety Administration, the International Association of Chiefs of Police and others, police departments have developed operating strategies that recognize and integrate traffic enforcement as an important component of the community policing effort. These efforts must continue into the future.

Visibility - the “Storefront Police Station”

An effective policing tactic in many communities is to establish small, community police stations in shopping malls, storefronts and elsewhere, to bring police services into neighborhoods where they might otherwise be inaccessible.

Often overlooked, however, is the presence of a marked police cruiser parked in a strategic location in a neighborhood surveilling traffic. In fact, the police car serves as a “mobile substation.” With a marked unit staffed by a friendly officer, adults and children feel free to approach the officer and exchange information and discuss neighborhood problems. One of the objectives of community policing is not only to reduce crime, but also to reduce the fear of crime and provide the public with a greater sense of security and safety. Visible police presence in strategic locations observing stop signs and yield signs, watching solid center lines, running radar, or watching a school bus shelter, can enhance the public’s sense of security and well-being.

Targeted Enforcement - COMPSTAT, etc.

Modern developments have carried the concept of selective traffic enforcement to a new level through the use of computer technology and real-time availability of data. The New York City Police Department pioneered the COMPSTAT (computer comparison statistics) process. There, evolving crime patterns are tracked citywide on a week-by-week basis and district commanders held accountable for problem-solving strategies. The COMPSTAT process has since been used by other cities. Research and experimentation to adapt this process to communities of various sizes and include a strong traffic component will be important.

Multi-Jurisdictional Task Forces

Increased workloads and labor shortages in the ranks of law enforcement agencies sometimes make it difficult to mount intensive, targeted, traffic enforcement efforts that require permanent or temporary deployment of specialized units. Where an individual department or agency is unable to muster sufficient strength to address a problem that is shared by other jurisdictions, consideration should be given to forming a regional, multi-jurisdictional effort. Each agency then contributes one or two individuals to a team that operates across jurisdictional lines and addresses common problems.

Offender-Targeted Strategies

Analysis of crash data indicates that certain offenders account for a large proportion of traffic violations and crashes. Youthful drivers, inexperienced in both life and in driving, are involved in a disproportionate number of crashes, and have been found to benefit from graduated licensing systems. Drivers who continue to drive while their licenses are under suspension or revocation defeat the purpose of motor vehicle driver improvement programs. Intensive probation supervision and electronic monitoring such as is practiced

by the criminal courts should be adopted by traffic courts to reduce the incidence of driving after revocation and suspension.

Existing data indicates that certain age and occupational groups are more likely to be involved in driving-while-intoxicated offenses, while some ethnic groups have lower rates of compliance with safety belt laws. Educational messages from the law enforcement community can be designed and targeted to reach these groups. In developing offender-targeted strategies, police must be careful not to adopt practices that lead to racial or ethnic profiling as the basis for traffic stops.

Location-Oriented Strategies

The use of global positioning systems and crime mapping software should be expanded to better track the locations of traffic crashes and aggressive driving violations and match these with the locations where citations are issued. This will enable police supervisors to ensure that their officers are deployed in the most effective manner to intercept violations in progress and reduce crashes.

Alcohol Compliance Checks

The universal adoption of the 21-year-old drinking age in the U.S. has resulted in a substantial reduction in the number of alcohol-related crashes involving teenagers. The effectiveness of this law would be enhanced by reducing teenage access to alcohol. Compliance checks and “stings” to identify and act against licensed establishments that sell alcohol to teens have proven effective. Jurisdictions should look to refine and improve these tactics and remove any legal impediments against them.

Keg Identification

Widespread consumption of alcoholic beverages on college campuses, at house parties and at sporting events often involves persons of teen age obtaining kegs of beer. Through the efforts of the Century Council and others, keg identification systems are available and should be utilized to track the source of kegs that are detected through enforcement activities, to permit follow-up enforcement.

Internet Alcohol Sales

Alcoholic beverages are available through various Internet sites and persons below the legal drinking age can purchase them with a credit card and have them delivered to their homes. Some states have passed legislation that requires package delivery services to identify the nature of the product on the outside of the package and require the signature of an identified adult before making a delivery. These laws should become more widespread in the future.

Drug Interdiction and Identification Strategies

Racial and Ethnic Profiling Problems

The use of statistical probabilities and tactics utilized by the most successful officers in interdicting and seizing drugs in motor vehicles have proven to be efficient strategies in

stemming the flow of illegal drugs. However, the improper application of these strategies has led to concerns with racial and ethnic profiling in traffic stops.

In the future, more intensive training of officers in civil rights concerns, constitutional law, cultural diversity, and interpersonal communications in conjunction with data collection and analysis of the role of race and ethnicity in traffic stops and violations will alleviate many of these concerns.

DRE and SFST

The DEC (Drug Evaluation and Classification) program developed jointly by the International Association of Chiefs of Police and the National Highway Traffic Safety Administration has provided a powerful tool for the detection of drug-impaired drivers - the use of trained police Drug Recognition Experts (DREs).

Another program developed by the IACP and NHTSA, standardized field sobriety testing, enables officers at the roadside to turn reasonable suspicion for a stop into probable cause for a DWI arrest.

Unfortunately, some local courts still do not recognize and accept the scientific basis for this technology. Further, some law enforcement agencies do not refresh and update their officers in this training. In the years to come, much more effort must be put into educating judges and court personnel in this technology, and ensuring that officers have these skills refreshed on a regular basis.

First Responder Training; Police as Part of the Health Care System

In many areas of the country, police officers are the first persons to arrive at the scenes of life-threatening medical emergencies. Automatic external defibrillators and other equipment and techniques if deployed within the first few minutes of a crisis can lead to saving more lives and preventing disabling injuries. Future cooperative relationships among police and health care professionals hold great promise for enhancing the effectiveness of both groups.

Emergency Driver Training

The involvement of police cars and other emergency response vehicles in traffic crashes that occur while proceeding to the scenes of emergencies and engaged in vehicular pursuits occasionally results in deaths and injuries to citizens, officers and violators.

It is impractical to ban police pursuits because violators including those who have committed serious criminal acts and who if allowed to remain at large would be a danger to society would know they need only flee from an officer to avoid capture. Rapid response of public safety vehicles to the scenes of emergencies is often vital to the preservation of life itself.

Although out-of-control motor vehicles cause more injuries than firearms, police officers typically qualify once or twice a year with their firearms but rarely are given additional driver training after they graduate from the basic police academy. Over the next decade, public safety agencies need widespread access to simulator technology and driver training vehicles and facilities.

The federal and various state governments should make highway trust funds available to support this effort.

Traffic Laws and Ordinances

Scofflaws

In every state and local jurisdiction, there is a significant amount of unpaid court fines, and drivers who continue to drive after their licenses are suspended or revoked. This leads to disrespect for the law, and unequal punishment because most people pay their fines and abide by restrictions on their licenses but a significant and growing number do not. Planning and research efforts to develop legal strategies to address this problem must be intensified.

ALS Procedures

The administrative license suspension system was envisioned as a system that would remove dangerous driver from the road more quickly and streamline the DWI adjudication process. However, in some jurisdictions it does not seem to be working. Hearings examiners sometimes apply the law in a hyper-technical sense that is inappropriate to administrative adjudication, and some motor vehicle hearings have become more cumbersome than criminal court trials, taking officers away from their patrol duties for inordinate amounts of time. Law enforcement agencies and prosecutors should proactively develop legislative strategies to address these problems.

Vehicle Seizures and Forfeitures

Jurisdictions have experienced varying degrees of success in providing for the forfeiture and sale of vehicles involved in certain offenses such as leaving the scene of a crash, driving while under the influence of liquor or drugs, transporting illegal weapons or controlled drugs, and driving after license revocation. Research should be conducted to determine the effectiveness of these laws, and in particular whether the passage of such statutes may encourage more persons to flee the police and result in an increased number of vehicular pursuits.

Fees for Causing an Emergency Response

Crashes caused by reckless or intoxicated drivers place an unnecessary strain on public safety resources and a burden on public budgets. Some jurisdictions have enacted statutes and ordinances that permit state and local governments to recover these costs from the driver whose illegal acts caused the problem.

Tomorrow's Police Executive

Changes in society now and in the future demand that we take a fresh look at our executive and mid-management training programs and reorient them to emerging issues. The police executive of tomorrow may need to reinvent him/herself to function more effectively in an atmosphere where supervisors and managers increase their coaching and mentoring roles and train their subordinate employees to make more decisions on their own.

Consensus-Building and Political Awareness

The community with which a police executive deals is no longer a single, homogeneous entity. In fact, the term “community” often consists of a chorus of voices, sometimes competing and sometimes agreeing, depending upon the issue. The successful police executive of the future will be the one who can build a consensus among these diverse groups, and who demonstrates an awareness of how to respond to sensitive issues in a manner that promotes unity rather than divisiveness.

Functioning in a Collegial Atmosphere

The emerging police executive can no longer view his or her agency as an independent island. Rather, the law enforcement agency must be viewed and operated as an important but interdependent component of the state or local government. The police executive will be working more closely with the heads of the public works department, the fire department, the building department, the schools, and a variety of private and non-profit agencies.

The skills required to function successfully in such a collegial atmosphere differ from those that have been required in the past to operate in a profession that in the past considered itself, partly because of its paramilitary nature, separate and apart from the rest of government.

The Flattened Organizational Pyramid

Beginning in the private sector, various emerging management strategies have been developed to “flatten the organizational pyramid” and make organizations more responsive by reducing the distance that issues and concerns must travel in order for decisions to be made. This has involved in some cases eliminating duplicative levels of command, clarifying the respective roles of staff and line positions, and facilitating horizontal communications between divisions, bureaus, and units through cross-functional, self-directed work teams and similar strategies.

Tomorrow’s police executives must be cognizant of these strategies and adept at functioning in this new milieu.

The Future of the Paramilitary Model

Some people have called into question the traditional paramilitary nature of police organizations. Efforts in the past to eliminate uniforms and visible trappings of rank have failed for various reasons.

It is generally agreed that certain aspects of the paramilitary model must be retained in the police service, in order to provide effective command and control in emergency situations and provide adequate discipline and oversight in a profession that is a frequent target of civil litigation. On the other hand, as with all organizations of the future, law enforcement agencies must be able to respond quickly and in an innovative, non-traditional manner to emerging problems and willing to take moderate risks to empower their employees at all levels to think creatively and operate with a minimum amount of supervisory oversight rather than under continual close observation.

Visible and Not Desk-Bound Executives

The executive of the future must be visible not only within but also outside the organization. This will require the maximal utilization of time management techniques.

Managers and supervisors must create opportunities to interact with their employees both formally and informally and become familiar with the pulse and problems of the agency and the individual capabilities of their subordinates. They must be willing to freely communicate and act as a sounding board for their own upper management. They must also be prepared to act as advocates for their agency to the community, and willing to listen to the community's concerns and recognize that the community has a role to play in making its concerns known to the police.

Committed to Using Information Wisely

As part of an information-based society, law enforcement agencies typically collect and store a vast amount of data concerning their operations. Unfortunately, this data in some agencies is simply stored and forgotten, rather than put to good use in detecting problems and trends and more effectively deploying resources.

Tomorrow's police executive must be committed to real-time use and analysis of data, and to communicating this information downward and sideways throughout the organization and insisting that others employ it in making strategic decisions.

Value-Centered Managers

Most modern organizations have developed mission statements that inform the community and their employees what the organization is all about. Some have gone beyond this and created a vision of their ultimate aims. With the perceived general decline in moral values, it is more incumbent than ever on each criminal justice organization to identify and commit to a formal set of values and beliefs that are not only advocated but modeled by members of the organization from the top on down, and to which its members are held. This is essential in order to prevent the erosion of public confidence in government.

Operating a value-centered organization involves numerous ongoing initiatives. Among the most important are addressing these values on a regular basis in the hiring and new employee orientation process, during recruit and in-service training, in policy development and implementation, in the disciplinary system, and in the organization's public pronouncements, everyday activities, and the behavior of its individual members.

Summary

The history of humankind has taught us that in trying to predict the future we are only "looking through a glass, darkly." There are too many variables that are out of the control of one organization, profession, nation, or even humankind itself that can affect the very status of life on earth to state with certainty what tomorrow holds in store for us, to say nothing of the next week, next decade, or next century. The best we can do is look at history and emerging trends and come up with probabilities.

That is what we have attempted to do in this section. In the section that follows, we present a series of strategies that have been effectively employed by the most effective law enforcement agencies in the country, along with a series of thoughtful challenges and other considerations designed to help you adapt them to emerging trends.

Epilogue

Delving Deeper Into the Looking Glass - A Second Look at the Future

By Earl Sweeney

The preceding article, “Considerations for the Future”, was written as the first edition of this publication went to press, a few short years ago.

That was before that fateful day of September 11, 2001, when the world stood still for a time and many Americans realized for the first time that we could no longer depend on two great oceans to insulate us from dangers on an international scale. Our world changed that day. The lives and even the aspirations and goals of the traveling public and the police officers, emergency medical technicians, firefighters and others whose job it is to protect them also changed. Therefore, it seems logical that we should re-examine our look at the future in light of the most recent past, and see if any re-calibration of our notions of the future is in order.

We had previously stated that there were many “ifs” in what the future might hold in store, and we mentioned a few of them – the stability of the economy, the continued availability of reasonably priced oil, and freedom from major wars. Terrorism received only a brief mention, however. We had already experienced a tragic bombing at the World Trade Center orchestrated by foreign terrorists and the deathly scene at the bombing of the James M. Murrah Federal Building in Oklahoma City, perpetrated by a home-grown terrorist, Timothy McVeigh, but the daily threat of terrorist attacks on our shores still seemed a remote possibility. In two short years, this has changed so radically that we now live in a society punctuated by color-coded terror alerts issued by the federal government. We have seen the merger of numerous federal agencies, the re-emergence of the Sky Marshals, a refocus of priorities for the FBI and the Justice Department, and the emergence of federal anti-terrorism grants to state and local agencies, all to help the nation prepare for and cope with expected future acts of terrorism. Thus, we see how a single big “if” can change the everyday lives of our citizens and the training, equipment, and tactical needs of our law enforcement agencies. The “if” of terrorism also led us to commit U.S. troops to Afghanistan and to a war in Iraq - with both ventures relying heavily on National Guard troops and Military Reservists, many of whom were police officers called to active duty, something which seriously stripped the personnel rosters of police and sheriff’s departments large and small.

As if this was not enough, the peace of the entire free world is also threatened by the proliferation of nuclear arsenals in unstable nations such as North Korea and Iran, the

continuing instability in the Holy Land, and saber-rattling between two known nuclear-armed nations, India and Pakistan.

Now, we must ask ourselves - how will the emergence of terrorism as a constantly looming threat on our soil, and the increasingly dangerous world order affect policing over the next decade? How will they affect the predictions we previously made in this publication?

For the answers, we must turn, as futurists do, to trends identified by persistent reports in the world's news media, to new scientific developments, and to what various "think tankers" are saying.

There is no question that our country's necessary preoccupation with terrorism has had, and will continue to have, a major impact on the style and focus of policing, including traffic policing, over the next decade. The main focus of federal, state, county and local law enforcement must be to prevent future terrorist attacks and to be ready to cope with them and their aftermath as they occur, which they almost certainly will. This is a large nation with open borders and a great deal of individual freedom. Try as we may, it will be impossible to keep us completely safe from incidents of terrorism. Indeed, it is not too far-fetched to imagine that before the end of the current decade we may see street bombings in some of our cities such as now occur in the Middle East. The challenges that lie ahead will include:

- Rethinking patrol tactics to identify critical infrastructure such as power plants, bridges, ports, national monuments, public buildings, athletic stadiums and other locations where large groups of people gather, and finding ways to increase the frequency and efficiency of routine police observation of these locations, as well as effective ways to police large public events from an anti-terrorism perspective.
- Training and equipping police officers on the street to protect them and enable them to handle evacuation, sheltering in place, and the mitigation of bombs, chemical, biological and radioactive agents.
- Improving street intelligence to spot suspicious persons and circumstances, and increasing cooperation and intelligence sharing among and between law enforcement agencies at the local, state and national levels.
- Developing active police reserve units that will train on a regular basis and be ready to step in and fill gaps left by police officers who serve in National Guard and Military Reserve units when they are called up to active duty, something that may be expected to happen with greater frequency in the years to come.
- Future terror attacks can have serious negative impacts on the nation's economy. A continued slump in the economy will make it ever more difficult for law enforcement agencies to obtain budgets to support the staffing and equipment that will be needed to meet these challenges.

Traffic policing and community policing tactics can help protect our nation against terrorism, just as they help to reduce street crime and prevent traffic crashes. Just as other criminals do, terrorists drive motor vehicles when they conduct surveillance of potential targets, when they transport weapons of mass destruction, and when they drive to and flee from their awful acts, as was so aptly demonstrated when bomber Timothy McVeigh was captured in a routine traffic stop. And officers who get to know their communities, neighborhood by neighborhood, encourage citizens to come forward with information, and who take the time to investigate suspicious persons and circumstances can be successful in rooting out sleeper cells of terrorists before they strike. Setting plans and policies and engaging in training for not only our officers, but other public safety services and public works and highways employees and officials will enable us to cope with mass casualty situations and evacuation routes in the event of major terror attacks.

In retrospect, most of the other predictions made in the preceding article remain valid. Having two years of hindsight under our belts, we can, however, now add the following:

- The predicted fierce debates over the issue of personal privacy in the cyber-age have accelerated with the passage of the *USA Patriot Act* by Congress. Additional questioning and opposition to government use of technology is certain to impact on law enforcement's efforts to develop more efficient, interconnected databases, capture DNA sample, and increase the use of automated enforcement with photo radar, photo red light running cameras and similar technologies.
- The emergence of SARS appears to be a harbinger of a number of difficult to cure and difficult to prevent contagious diseases that, due to rapid travel within our shrinking world, seem to be showing up with greater frequency all the time. Law enforcement can expect to be on the leading edge of the battle against these diseases, as we may be called upon to enforce quarantine regulations and track down persons suspected to be infected with these diseases.
- We can expect continued problems with recruitment of police officers. Increasingly, professions that provide 24/7 service such as law enforcement, firefighting, emergency medical services, nurses and the like, seem unattractive to today's *NetGen* pool of workers, who value their leisure time more than previous generations.
- Worker fatigue is becoming a major problem among police officers, many of whom are working significant amounts of overtime in order to supplement their salaries and in some cases because of high levels of personnel vacancies in their departments and the need to fill shifts. Some recent studies have indicated that some officers working shifts are so impacted by fatigue that their reactions are impaired to almost the same degree as an illegal blood alcohol level. The amount of overtime being worked is also having an impact on productivity on these officers' regular shifts, and leading to less enforcement at the street level, which is bound to adversely impact street crime levels and traffic crash rates.
- There will be an increased use of *Augmented Reality* and *Expert Systems* in police work. Examples of augmented reality will include equipping SWAT teams with helmets that include technology on which floor plans of the building they are

breaching or written instructions may appear on heads-up displays, or cameras mounted on their uniforms track what is going on behind them and to the sides, and are projected onto these displays. Such technology will also be used to create more realistic training scenarios. Expert systems will attempt to collect information from experienced individuals and teams of such individuals and use it to write computer programs that will serve as checklists for officers handling various situations. For example, an officer handling a hit and run fatal crash will be able to call up a checklist on his or her laptop or PDA that will include tips, suggestions amassed from years of experience of officers and trainers in handling similar situations, to be sure the officer does not overlook critical pieces of evidence or possible leads in the case.

- Concerns over the safety of police vehicles and the frequency with which they are being hit from behind at high speeds while parked along the roadside on a traffic stop or investigating a crash, will lead to new initiatives in three different areas - the safety of the vehicle itself and particularly the integrity of vehicle fuel systems in police cars; the development of new and better emergency lighting systems and reflectorized materials on police cars based on psychological and optometric studies of the behavior of motorists, including those impaired by alcohol, drugs and age as they approach stopped police vehicles; and the tactics employed by officers on traffic stops and while directing traffic.

The one thing that we can predict for certain is that policing will continue to grow in complexity and importance, and that police work will remain one of the most challenging and interesting occupations in society. Because of this, the Highway Safety Committee of the International Association of Chiefs of Police, in partnership with the National Highway Traffic Safety Administration, is dedicated to making this publication, along with our *Highway Safety Deskbook* and our *Model Policies* living documents that are updated on a regular basis.

Management Strategies

Preface

Good management practices can be applied to traffic safety as effectively as they can to other disciplines.

Some of these practices may seem familiar because they have often been used successfully. They are presented as a foundation to build upon as the executive leads the agency into the future.

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Strategy # 1

Organizational Commitment

Develop motivational alternatives to initiate, support and improve traffic safety measures.

Background

Law enforcement agencies can become preoccupied with general law enforcement measures at the expense and neglect of traffic safety programs. Traffic safety is a viable and important element of law enforcement and so, both programs and related employees should receive the executive's full support and attention.

Actions

- Make traffic safety a core value.
- Integrate traffic safety throughout all operations of the department. When feasible, a traffic safety unit should be established.
- Provide necessary training, equipment, and staff to properly fulfill the responsibility of providing traffic safety to the public.
- Emphasize the importance of traffic safety during training and presentations to all personnel.
- Include traffic-related items in all promotional processes.
- Seek agreement with labor on the importance of traffic safety to the organization's mission and goals.

Benefits

- Improves morale and motivation.
- Inclusion of traffic items in the promotional process will advance traffic safety priority within the agency.
- Provides important focus and support for traffic safety.
- Reduces vehicle collisions/ incidents and their related costs.
- Reduces vehicle collision injuries and fatalities and their related costs.
- Reduces criminal activity where active traffic enforcement takes place.
- Increases the efficiency of traffic systems.

Other Considerations

- Establishment of traffic safety units requires personnel resources, additional training and funding.
- Management support is essential.
- Specialized traffic units do not alleviate traffic responsibilities in other units.
- Traffic safety is sometimes relegated to a lesser priority, (or no priority), compared to other current issues, even though it is still an area in which law enforcement can make significant positive strides.
- Law enforcement personnel occasionally view traffic enforcement as a secondary assignment or one of a lesser stature, when in fact, it should remain or be elevated to a high priority.
- The interrelationship of traffic enforcement, traffic safety, and crime prevention or crime resolution, is often overlooked.

Strategy # 2

Changing Priorities: Strategic Planning

Incorporate a strategic planning process into the law enforcement organizational structure to proactively address anticipated changes in an agency's sphere of influence.

Background

Occasionally, law enforcement is seen as a reactive operation, applying resources to a problem after it arises. Rapid and continuing changes in environment, demographics, technology, and availability of resources are forcing both public and private sector organizations to pay attention to these trends and anticipate how they will affect their own operations.

These rapid changes make it imperative for law enforcement to be aware of future trends as areas of responsibility expand and available resources to meet those demands are limited or even reduced. Strategic planning is a method of planning and operating designed to anticipate future changes and implement strategies to address these issues. Strategic planning is designed to answer four basic questions: 1) Where are we now? 2) Where do we want to be in the future? 3) How do we get there? 4) How do we measure our progress?

Law enforcement should strive to affect its changing operating environment in positive ways. By strategically planning for the future, law enforcement can impact future trends so they can work cooperatively with an agency's mission of public safety and service, which should include traffic safety components.

Actions

- Research and study the process of strategic planning and how such a process can be incorporated into agency management operations.
- Incorporate a strategic planning process into agency management functions. Such a process should be designed to answer the four questions mentioned above and should include the following tasks:
 - Review pertinent demographic data impacting the agency, along with future projections.
 - Identify traffic safety trends and criminal activity in order to anticipate future resource needs.
 - Use community outreach efforts to help identify emerging issues that will affect the agency and begin planning for how best to address those issues.
 - Encourage the inclusion of new and unconventional approaches to issues that may not be effectively addressed by more conventional methods.

Benefits

- Strategic planning sets forth a direction for the agency during a changing operational environment.
- Plans allow the agency to become prepared for anticipated operational changes prior to occurrence.
- Strategic plans are flexible in nature, allowing the agency to change directions when needed without compromising its mission.

Other Considerations

- Organizational change can be difficult to accomplish. There needs to be “ownership” at all levels of the organization in order for strategic planning to be successful.
- Strategic planning can be frustrating for those involved. Change often does not happen as quickly as desired, particularly if employees are resistive to the change.
- Suggestions for change can be viewed by law enforcement executives as criticism of current policies or their administration, and therefore may not receive the needed support from top management levels.

Strategy # 3

Traffic Safety Management Functions

Agencies should have a strong commitment to traffic safety and related services and include such services in their mission. Management's role is to ensure the mission of the agency is carried out successfully.

Background

Traffic safety and services are vital components in the overall mission of an agency. Law enforcement executives should ensure they are included in the agency's stated mission, and emphasized in the overall management of the agency.

Actions

- Identify traffic concerns within the jurisdiction.
- Ensure the planning function of the agency includes traffic safety as an element in their area of responsibility.
- Develop goals, objectives and actions that address resolution of traffic safety issues, and include that information during training and/or traffic safety orientation.
- Adopt a systematic approach to addressing traffic safety issues that includes all levels of the department.
- Include input from the community relative to their traffic safety concerns.
- Evaluate success in attaining traffic safety goals on an ongoing, systematic basis. Adjust strategies to help ensure goal attainment, if necessary.
- Provide feedback to the community and to the governing body about traffic safety goals, efforts and results.
- Organize units and/or sections that specifically include the responsibility of traffic safety and the implementation of traffic enforcement programs.
- Direct management, supervisors, and field officers to address traffic safety issues as part of their daily and annual duties/goals.
- Staff the units/sections adequately to ensure that traffic safety can be addressed and traffic enforcement programs can be implemented.
- Coordinate the agency's traffic safety efforts both within the agency and with external partners and stakeholders.
- Budget to include necessary resources to adequately address traffic safety issues within the agency's jurisdiction.

Benefits

- A systematic approach to include traffic safety as an agency goal will help ensure success in reaching that goal.
- By using one of the management approaches, management may discover areas that may need the application of additional resources, e.g., grants, public-private partnerships, or volunteers.
- Utilizing management tools helps to institutionalize traffic safety within the agency as a means of reducing collisions, saving lives and reducing injuries.

Other Considerations

- Without utilizing management tools in its traffic safety programs as a priority, law enforcement personnel may not take this area of responsibility as seriously as the law enforcement executive may desire.
- Without using management tools to address traffic safety, the agency will not be able to keep it on a priority agenda.

Strategy # 4

Supervision

Allow employees to reach their full potential and take advantage of their initiative in the resolution of traffic safety issues by delegating more authority and presenting opportunities that would challenge their decision making process and strengthen their sense of judgment.

Background

The ability to understand, interpret and apply policies and procedures that are related to police traffic services and traffic safety issues is a necessary skill that a supervisor must possess. Without a sound understanding of set policies and procedures in these areas, the departmental mission, goals and objectives will not be met. Quality supervision is critical to mission success.

To ensure that departments continue to have qualified personnel at all levels, upward mobility programs need to be established which are designed to provide equitable access and departmental assistance to those with a demonstrated interest and ability to advance. Traffic safety should play an integral role in this process.

Actions

- Validate a selection process for supervisors, which includes traffic safety and services subject material, thereby helping to test and identify the best candidate for promotion
- Ensure supervisors receive adequate and ongoing training regarding departmental policies and procedures in traffic safety issues and police traffic services and are subsequently accountable for their application.
- Ensure that supervisors apply existing policies and procedures in the areas of traffic safety and police traffic services while evaluating subordinates.
- Encourage supervisors to develop and solicit from fellow employees, action plans that address traffic safety issues and report progress on the implementation of those plans.
- Ensure employees have equal access to upward mobility opportunities and develop law enforcement personnel to their fullest potential prior to participation.
- Facilitate career opportunities by exploring new avenues for upward mobility and making recommendations for improvement in existing career opportunities.
- Include traffic-related items in all promotional processes.

Benefits

- Provides more experienced and highly competent employees at all levels within a department.
- Supervisors are able to impart departmental policies and procedures concerning traffic safety while ensuring mission goals and objectives are met.
- Supervisors gain the knowledge and ability to advance to a higher level within a department.

Other Considerations

- Loss of personnel hours and the costs associated with career development training.
- There may be objective non-traditional processes that can be validated for the promotional procedures.
- Outside expertise may be needed to complete the process.

Strategy # 5

Ethics

Departments must continue to identify and improve their policies and procedures that promote sound ethical judgment, actions and decisions made by law enforcement personnel.

Background

Ethics is a standard by which individual and organizational performance can be judged. The profession of law enforcement has standards, as do individual agencies and their individual officers. Ethical standards that are incompatible will cause controversy at the agency level and eventually lead to disciplinary action. The more these standards are compatible, the more they will improve performance by all involved.

The public holds law enforcement personnel to a high standard of responsibility and demands that they remain true to their profession and oath. Law enforcement personnel are expected to protect and serve all in a fair and impartial manner. Therefore, law enforcement officers should abide by this trust and make a concerted effort to not abuse or misuse their authority and position. Additionally, unethical behavior can be costly to the department.

Actions

- Ensure that ethics is the foundation for departmental policies, procedures and training.
- Ensure a selection process that selects applicants with ethical standards that are the most compatible with agency standards.
- Ensure all contracts, licensing, or agreements entered into by a department are conducted in an equitable manner free from any type of “special” relationship.
- Create systems for training, supervision, evaluations, and other departmental procedures that will mold compatible ethical standards.
- Lead by example throughout the organization.
- During traffic safety orientation, review the policies and procedures to ensure they are all applied in a fair, equitable, ethical manner.
- Conduct ongoing training of personnel regarding acceptable and unacceptable behavior in the workplace.
- Develop and implement policy that ensures, and continues to emphasize, that all law enforcement contact is free of any type of ticket fixing, discrimination, harassment, racial profiling, and political incentives.
- Ensure all persons are treated in a fair, impartial and uniform manner through policy, procedure and ongoing training.

- Investigate all allegations of unethical behavior thoroughly, completely, impartially, and in a timely manner.
- Focus traffic safety and law enforcement policies on saving lives and reducing injury and property damage.

Benefits

- Once a department and its personnel acquire a reputation for high ethical standards, they may be subjected to fewer citizen complaints and criminal and civil lawsuits.
- When an agency successfully establishes a culture of moral and ethical behavior, close supervision of employees may not be necessary, thus allowing for more time to be spent on other issues.
- Employee morale and productivity improve and there is less stress and tension in the workplace.

Other Considerations

- Additional costs associated with training.
- Traffic enforcement may require a review of policies and procedures to ensure that they are applied in a fair and equitable manner.
 - * Refer to the IACP guiding principles for law enforcement.

Strategy # 6

Departmental Accountability

Develop a proactive accountability system, which includes traffic safety and police traffic services components, for use in the promotion process as well as with governing bodies and the community.

Background

Agencies are sometimes called to answer for actions or lack of actions in the communities they serve. Most often this accounting is for an event or series of events focusing criticism on the agency; and it is often in the area of traffic safety and/or the delivery of police services. Agencies are asked to respond to these criticisms on very short notice with detailed information.

Actions

- Develop and keep current a departmental accountability system.
- Include traffic safety and the delivery of police services in the accountability system.
- Identify and establish critical tasks assigned to specific job classifications and locations on the basis of the outcomes expected, including collision and injury reduction, congestion management and other traffic safety issues.
- Include individual performance goals as part of the accountability system.
- Keep a current and accessible database suitable for use in the accountability system.
- Establish a reporting system to provide pertinent data to the accountability system.
- Use the system and regularly collected data for planning, training and for mitigation of traffic safety problems, for the delivery of police services, for performance evaluation, as well as in the promotional process.
- Take a proactive stance and publicize overall, successful efforts.
- Consider instituting an award program relative to highly successful unit and/or individual efforts.

Benefits

- Provides the availability of a rapid creditable response to inquiries and criticisms.
- Detects problems early on.
- Develops employees by identifying their strengths and weaknesses.

- Provides the ability to address problems as they occur, subsequently resulting in fewer problems.
- Improves agency effectiveness.
- Reduces liability for the agency and governing body.
- Provides an effective supervisory tool to bring about efficient operation of an organization.
- Serves as a motivational tool for officers.

Other Considerations

- Possible additional costs to start up and maintain the system.
- Personnel may not submit data as required.
- Resistance by agency personnel to preparing new or additional reports.
- Suspicions about the agency's motives for implementing the system.
- Outside expertise may be needed to develop the system.

Strategy # 7

Development of Proper Policies

Without policies to serve as guidelines for the agency, members of that agency may not know the direction or intent of the agency's executives.

Background

Policies should be broad-based, but still directional in nature, reflecting the administration's intent. Without policy, each officer may conduct his/her daily affairs in a manner inconsistent with the agency's mission and goals.

Actions

- Train agency personnel in the preparation of meaningful, purposeful policy.
- Identify the agency's value statement and goals, inclusive of traffic safety.
- Specify, in policy, the priority ascribed to traffic safety and its direct correlation to the agency's mission of saving lives and protecting property.
- Assess the need for policy development.

Benefits

- Identification of traffic safety as a mainstay of the agency's foundation will help clarify its importance, and ensure it remains a principle factor in the agency's multiple priorities.
- Agency members will recognize they have administrative support for traffic safety activities.
- By acting as a role model, the public will recognize the agency is committed to traffic safety.

Other Considerations

- The interrelationship of traffic enforcement, traffic safety, and crime prevention or crime resolution is often overlooked.
 - * The Highway Safety Desk Book and The Police Traffic Services Policies and Procedures Manual, both developed by the IACP Highway Safety Committee, provide a ready reference for law enforcement executives on policy and procedure recommendations.

Strategy # 8

Stakeholders and Partners

Evaluate public policy discussion to determine the effectiveness of public education efforts surrounding a particular policy and the public's overall impression of the agency. Take the necessary steps to present more effectively the agency's perspective on a given issue, improve its performance and image overall, and gain additional public trust.

Background

Public opinion and policy prescribe that government institutions, including law enforcement agencies, be inclusive and reasonably representative of the communities they serve. Agencies are more effective when members understand and are able to respond to the ethnic and cultural diversities of their communities.

A powerful indicator of the public's perception of a particular law enforcement issue, or a law enforcement agency in general, often surfaces in public discussion. This discussion may take place in the legislature, at community meetings, in newspaper editorial pages, letters to the editor, radio talk shows, and elsewhere. It is important to evaluate this public policy discussion. Such an evaluation can tell an agency where it is succeeding in its public education and awareness efforts and where those efforts need to be strengthened. In addition, the discussion can indicate the agency's strengths and weaknesses in the public's perception. Responding appropriately to such an assessment is an essential part of gaining greater public trust.

Everyone is affected by traffic safety. Such a broad basis of interest allows tremendous opportunity for proactive public education efforts, and for responding to specific concerns or complaints within a given community. Proactive action with positive results is one of the most effective ways to sway public opinion.

Actions

- Identify media outlets and other venues of public discussion. Then establish a means for tracking the discussion, such as using clipping services, monitoring the Internet, or logging and following up on discussion that may occur on the radio or in other public forums.
- Establish a plan for contributing to the discussion. Appear as a guest on radio or television talk shows; write articles for publication in the editorial section of local newspapers; write a letter to the editor if the agency's perspective was misrepresented or not represented in an article or in another letter to the editor.
- Identify organizations that share an interest in attaining the agency's goals of traffic safety.
- Establish and maintain positive relationships with city council members, boards of supervisors, and state legislators. These relationships will allow the agency

access to present their perspective on many important topics, including those involving traffic safety.

- Provide training for key spokespersons of the agency. Their knowing how to respond to questions openly and honestly, even in heated or controversial situations, will maintain the agency's reputation for integrity.
- Develop a Web page and solicit public response to activities and programs. Provide links to and from other organizations working in the field of traffic safety.
- Determine if the agency can approach an action in another way if the public responds negatively.
- Always be honest and as forthcoming as possible in the public policy debate.
- Maintain a current and projected demographic picture of the community.

Benefits

- Assessing and responding to public policy debates provides an excellent opportunity for the agency to present its perspective on issues, including those associated with traffic safety.
- Positive, honest responses to questions from reporters or the public can increase an agency's reputation for integrity. This reputation can help the department in both present and future debates.
- Constructive public policy debate is an excellent venue to educate the public about traffic safety issues and gain compliance to rules of the road.
- When the public understands and accepts a policy, law, or program, individuals will become its proponents within their own communities.
- The input of the stakeholders and partners will help the agency prioritize its goals and apply its resources.
- Partners and stakeholders may be able to carry a traffic safety agenda forward when the agency finds itself in the position that it cannot adequately promote that agenda.
- Enhanced credibility within the community.

Other Considerations

- There are times when a law enforcement agency cannot enter into public debate (e.g., lawsuits, personnel actions). In these cases, it is important to explain to the reporter or public why no comment can be made.
- Agencies may want to budget or plan for special training of key spokespersons. These people may then be able to provide training to others who interact with the public or the media.

- Stakeholders may make demands of the agency, setting forth their own agenda instead of working in a cooperative manner.
- Public suspicions over the use of demographic information.
- Possible political repercussions for the governing body.

Strategy # 9

Community Involvement

Become involved in the community to understand and serve it better.

Background

Law enforcement exists to serve the community by preserving the peace, saving lives, protecting property, and improving the quality of life. To effectively accomplish these responsibilities, agencies must interact with the communities they serve. Traffic safety makes a positive contribution towards achieving these goals. While law enforcement agencies generally recognize the importance of community involvement and implement programs such as community policing, barriers continue to exist between some communities and law enforcement.

Although many communities express concern over criminal activity, they may not consider the positive effects traffic safety efforts have on crime or how they save lives and reduce injuries to members of the community. Community liaison provides an excellent opportunity to conduct significant public education about the importance of traffic safety initiatives.

Demographic data may reveal an aging population, a population that is changing ethnically, or one that is stratified by economics. Additionally, continued urbanization and the decline of rural populations will be a factor. An aging population may commit fewer violent crimes, but the denser urban populations may offset this decrease. Aging populations require more services in relation to traffic and pedestrian issues, while urban density may increase collision rates. As community make-up changes, so should the department.

Actions

- Identify the diverse communities within the agency's jurisdiction on a continuous basis. These communities are more apt to be distinguished by economic status, language, ethnicity, race, or other commonalities, than by older, geographic names or districts.
- Update or develop policy that ensures liaison and involvement with various communities within the agency's jurisdiction. This involvement will provide the respective communities and the agency the opportunity to discuss local needs from a variety of perspectives.
- Review policies to ensure that they are responsive to the needs and demands of the various communities within the agency's jurisdiction.
- Ensure full commitment and involvement of the agency by providing leadership and support for all programs, including traffic safety, developed to address community issues.

- Evaluate traffic programs to determine the effectiveness of each one. Enhance if possible those programs that have shown a level of success, and reconfigure or eliminate those programs that have been ineffective.
- Identify key people and organizations within the community who can assist the agency in forming a relationship with the community. See resource list provided below.
- Consider using all avenues of outreach, such as hospitals, pediatricians, trauma centers, safety coalitions, schools, neighborhood watch groups, and churches, to broaden the community outreach approach. Use these contacts to identify problems and implement solutions for effective traffic safety programs.
- Customize solutions to the individual community, and strive for community ownership.
- Share the results of community-oriented programs with the community.
- Establish multidisciplinary task forces to address traffic safety from a variety of perspectives, including: enforcement; judiciary; signing, striping, and engineering; emergency response; and public education and awareness. Encourage the task force members to identify problems, then recommend and implement solutions.

Benefits

- Community members who are recognized as individuals, rather than as an invisible part of the jurisdiction, are apt to be more willing to participate in problem identification and resolution.
- Community participation in policy-making decisions will assist law enforcement agencies in gaining community support, and will help inspire community understanding, acceptance, and compliance.
- Involvement with the community will result in continual refinement of policies and programs to better address their issues.
- Using all available resources will enhance access to the community. People with diverse backgrounds can assist both the community and the agency in understanding various issues.
- Multidisciplinary task forces can accomplish far more by working together than an agency or organization can accomplish on its own.
- Provides an important basis for proactive planning and projections by the agency and governing body.
- Reduces complaints and related problems based upon cultural and ethnic issues.
- Improves relations within the agency, decreases stress and enhances accomplishment of objectives.

Other Considerations

- A commitment to the various communities within an agency's jurisdiction can be time-consuming and may not produce immediate results.
- Officers may need training to recognize and be sensitive to the unique factors and customs of a particular community. They may also need training in coalition building and the dynamics of group leadership
- The agency and its officers may receive criticism and challenges from the community.
- "Territorial" issues may arise when a task force assesses traffic safety from a variety of perspectives. Resistance to one person's making suggestions about another's area of expertise can usually be overcome if a cooperative, rather than adversarial, atmosphere can be established.
- When seeking funding for traffic safety programs, agencies should collaborate with their governor's highway safety office or through other federal, state, and private grant sources.
- Public concern over law enforcement collection of demographic data.
- Possible complaints of favoritism.
- Integrate a community and agency demographic picture into training for all personnel.

Strategy # 10

Selective Traffic Enforcement Programs

Develop and use a regular and ongoing evaluation system, using both quantitative and qualitative criteria to measure the desired outcomes of existing programs and aid in the development of future programs.

Background

Law enforcement programs often utilize quantitative measures of effectiveness that have little relationship to the intent of the program or the needs of the community. The numbers of citations, fines collected, or arrests made, taken in isolation as outcomes of a program have little value in evaluating the effectiveness of the effort in improving safety or reducing collisions. Useful data, such as mileage death rate, injury collision rate, as well as geographic or temporal comparison data do provide valuable information about the effectiveness of programs.

Actions

- Include community members, elected officials and other stakeholders in the establishment of a performance evaluation system.
- Publish program objectives, evaluation criteria, and results.
- Utilize qualitative information in conjunction with quantitative measure to improve and direct program(s).

Benefits

- More efficient use of resources.
- Safer communities.
- Improved effectiveness of programs.
- Enhanced community understanding and support for programs.

Other Considerations

- Program expectations may exceed available agency resources.
- Conflict may exist among evaluation criteria systems used between federal, state, and local jurisdictions.

Strategy # 11

The Need to Assess Your Community

Develop and implement a process that regularly evaluates both internally and externally a law enforcement agency's operating environment and determines the pertinent "communities" the agency interacts with in achieving its mission.

Background

Law enforcement does not operate in a vacuum. Its programs, namely traffic safety operations, have an impact on many "customer groups." Motorists, local schools, emergency services groups and organizations, automobile and commercial vehicle associations, and elected officials are but a few of the customers whose goals and needs are affected by law enforcement operations. Customers also include internal entities. Identifying and working cooperatively with these varied groups to determine how best to serve their needs will, in turn, win their support for an agency's mission, goals, and objectives. Feedback and change are essential steps in the process of self-examination.

Actions

- Identify pertinent community groups and develop an action plan for establishing a credible and visible presence among them.
- Instill accountability among law enforcement managers by tracking the success of community assessment efforts developed by those managers.
- Develop feedback mechanisms (e.g. surveys, focus groups, and community meetings).
- Institute a "key contact" program that encourages frequent contact with local, state, and national representatives, community leaders, and other stakeholders.

Benefits

- Through positive community involvement, a wide base of support is generated for the agency's mission, goals and objectives.
- A deeper understanding of communities served will allow managers to make more effective use of limited resources.
- Effective cooperation among client groups will allow the agency to utilize resources of client groups to "publicize" and help law enforcement achieve its public safety mission.
- Valuable feedback from respondents who know the operation well.
- Consensus-building prior to organizational changes.

- Elimination of some employee frustrations.
- The input of the stakeholders and partners will help the agency prioritize its goals and apply its resources
- Inclusive actions will help the agency better serve all of its constituents

Other Considerations

- Focused attention on the needs of other groups may spread other agency resources too thin.
- Competition among client groups for limited law enforcement resources could lead to discord between customer groups and the agency.
- Adequate resources are essential to properly conduct assessments and evaluations.
- Without management's commitment to change, surveying the public may be of little value.
- Surveying is part of a process of feedback, change, and reassessment that is ongoing.
- Even more than with surveys of external customers, the organization will lose credibility if it does not address issues identified by an internal survey.
- Employees may believe they are voting when they participate in an internal survey and expect any management decisions to support the popular survey result.

Strategy # 12

Budgeting

Identify effective and responsible budgeting methods that provide funding for traffic safety and other critical services and personnel. Also, identify alternative sources of funding that can augment the agency's budget.

Background

Budgeting often seems to be the bane of many executives. However, it is the budgeting process that ensures the agency can fulfill its critical missions. The brunt of unanticipated fiscal emergencies must not be borne on the back of the traffic safety budget.

There is an ongoing demand for agencies to provide selective traffic enforcement on roadways that experience a high number of collisions. Although these efforts should be properly budgeted, at times a department's budget may not adequately support required enforcement programs, making external sources of funding necessary.

Actions

- Ensure all personnel tasked with budgeting responsibilities are thoroughly knowledgeable in the department's budgeting process, and committed to fulfilling those obligations.
- Identify, justify, and prioritize the services currently provided and those desired, ensuring traffic safety programs are appropriately represented.
- Identify costs associated with services.
- Stress the importance of sound financial decisions and fiscal accountability through ongoing training.
- Consider alternative funding sources for traffic safety projects that cannot be supported by the operating budget. These include the private sector, public foundations, and any other source of public income.
- Solicit grants, many of which provide for the hiring of officers for traffic-related and community-oriented policing positions. A program should be encouraged that funds the officers and the recruitment activities to fill those positions. This type of program should include traffic safety positions.

Benefits

- Traffic safety is institutionalized within the organization.
- Additional traffic safety projects can be developed and implemented, reducing traffic collisions, injuries, and fatalities.

- Properly prepared and utilized budgets project public confidence and support for the agency and its executive(s).

Other Considerations

- There are often overlooked ancillary costs associated with instituting new programs. These can include administrative fees, equipment/maintenance costs, and overhead expenses.
- Oftentimes, catastrophic, unplanned, or unscheduled events may deplete budgeted funds necessitating a redirection of a department's monetary resources.

Strategy # 13

Identifying and Sharing Resources

Law enforcement agencies can accomplish their mission in new and cooperative ways by sharing resources with allied agencies, and participating in various coalitions. At times, outside expertise may have to be obtained.

Background

The public's concern for safety, especially since the advent of international and domestic terrorism, has generated a need for improved coordination, cooperation, training and sharing of resources, and information between numerous public safety, transportation, emergency management, homeland security, and other related organizations. Citizens are demanding greater accountability from all public agencies. With few exceptions, agencies have limited tax funds to support a wide range of responsibilities and mandates. These funds should not be spent for repetitive purchases of similar equipment (or facilities) for different agencies. Agencies should integrate systems that will allow them to share their limited resources and information towards achieving the common goal of improving safety and services for their customers.

Many agencies share staff resources with other related agencies through mutual aid pacts, but have not seriously considered sharing programs, technology and information. Current and planned investments in incompatible technologies and systems by local, state, and federal agencies continue to exacerbate the problem. Adding to the problem is the fact that agencies cannot stop implementation of systems in mid-deployment and, therefore, will continue spending funds for new systems and technology and updating communications equipment without focusing on resource sharing opportunities. New technology and systems can be costly, but through partnerships and resource sharing, each agency can potentially save money over the long term and provide enhanced services.

Consequently, training should be developed with the cooperation and partnership of other law enforcement agencies, educational facilities, community colleges and other institutions whenever appropriate resources are available and standards can be met.

Actions

- Ensure the department mission and broad policy directives encourage the cost-effective sharing of resources and information with allied and non-traditional agencies who have similar goals, including traffic safety, intelligence gathering/dissemination, emergency response, etc.
- Identify department goals, as well as strengths and weaknesses (in terms of personnel, equipment, and facilities); use this as a guide for partnering efforts.
- Consider the resources of other governmental agencies, both within and without the boundaries of your jurisdiction, which could be potential partners. Successful

partnerships have included public works, departments of transportation, health, welfare, corrections, probation, and the courts. Emergency Management Agencies and Homeland Security Agencies should also be included as partners. Consider communications, computers, jails, administration functions, institutions of higher learning, etc. Information technology issues include connectivity, autonomy, systems integration, and maintenance.

- Consider agencies at other levels of government (local, state, and federal), and entities they have created which can be a resource or partner.
- Create a resource list of experts, categorized by discipline.
- Form, join, and work with coalitions to help identify and resolve problems, whether it is as a regional selective traffic enforcement program or a coordinated response plan. This can be particularly effective if done under the auspices of a regional, state, or national law enforcement organizations (such as police chiefs/ sheriffs associations, or the International Association of Chiefs of Police). Partnerships with the private sector should also be considered when appropriate.
- Establish a “key contact” program with elected officials to ensure the officials think of your department as an information resource and know your perspective on major issues.
- Encourage agency and individual membership and participation in local, regional, state, national, and international law enforcement associations. Doing so serves to help maximize the knowledge and influence (including political), of the profession and the agency, and promotes traffic and public safety.
- Become involved in municipal, metropolitan and regional planning bodies to help address congestion management, incident management, traffic collision prevention, and intelligent transportation systems.
- Whenever possible, establish reciprocal agreements to decrease training costs.
- Identify institutional barriers that may impede the ability to share resources.

Benefits

- Taxpayer funds are used in a more effective and efficient manner.
- Expertise and potential funding sources are identified for additional programs and projects.
- Law enforcement serves as a model for other governmental agencies.
- Traffic and public safety are improved.
- Public trust improves.
- Allows small law enforcement agencies to provide training that would otherwise be too expensive if they were to hire their own instructors and acquire equipment and training sites.

- Allows agencies to share technology, experience and expertise.
- Proper communication between participating agencies is imperative for success.

Other Considerations

- Issues of autonomy, jurisdiction and other institutional barriers are often difficult to overcome. There must be a spirit of cooperation and willingness to share as agencies attempt to go forward. The emphasis must be placed on the positive outcomes of safety.
- A long-range technology systems plan may be necessary to help ensure inter-connectivity and compatibility of systems, devices and equipment.
- The cost of outside contractors may be a consideration.
- Proper communication between participating agencies is imperative for success.

Strategy # 14

Data Driven Traffic Management Programs

Develop collision reduction programs based on statistical information, including crash and violation data to direct enforcement and education efforts.

Background

Information about the location, time and causation provide valuable information to managers that can be used to direct enforcement and education efforts, and ultimately reduce traffic collisions and enhance the safety of the community.

Actions

- Identify the best sources of data through partnerships with other agencies, such as state and local transportation agencies and emergency medical services. Ensure the data is current and applicable.
- Develop a rapid and strategic response plan based on the analysis of data. Include stakeholders, and utilize effective tactics of intensive patrol, enforcement activities and education efforts.
- Establish performance measures to ensure the efforts accomplish stated program goals.
- Publicize the intent of the programs, continuing enforcement efforts, and the outcomes of the programs once concluded.

Benefits

- Reduction of fatalities, injuries, and property damage resulting from traffic collisions.
- Reduction in criminal activity.
- Focusing efforts on community safety is a strong public relations message.
- Will assist in generating community support for traffic enforcement and increasing voluntary compliance with traffic laws.

Other Considerations

- May require intensive use of personnel resources.

- Some collision patterns may be resistant to established tactics of enforcement and education.
 - Programs may be misconstrued as a means to generate revenue from traffic citations and receive a negative reaction from the public.
 - Guidelines for establishing selective traffic enforcement programs are available through state highway safety office.
- * Refer to the IACP guiding principles for law enforcement.

Strategy #15

Media Relations

Foster continuing and positive relationships with all media and use their extensive outreach capabilities to publicize agency efforts to enhance traffic safety and the overall law enforcement mission.

Background

The media can be effective in disseminating the message of how important traffic safety is to citizens and law enforcement. Positive relationships with all types of media (print, radio, television, and online) helps to lend credibility to the agency, its personnel, its mission, and the importance of maintaining an effective traffic safety program.

Actions

- Develop a policy and implement training programs for officers that focus on working with all types of media.
- Ensure the information provided to media outlets is timely, correct, credible, and reinforces the agency's public safety image.
- Establish a primary media contact resource within each organizational level while making all officers "media" officers in their day-to-day performance of duties.
- Seek honesty and truthfulness.

Benefits

- Positive media relations will help ensure agency credibility among the public, and help ensure that public safety messages reach their intended target audiences.
- Effective media relations will assist the officer in the performance of his/her job duties.

Other Considerations

- Media representatives can become over-zealous in their coverage of departmental activities.

Strategy #16

Managing On-Highway Incidents

Rapid and competent response to roadway incidents is a key function of law enforcement.

Background

Regardless of the size of the roadway, an incident can have a significant impact on: those involved in the incident, first responders, other motorists, and nearby residents. Incidents can be defined as collisions, spills, roadblocks, disasters, or other acts that impair, or adversely impact a roadway transportation system. Insuring a coordinated and rapid response to incidents not only expedites the clearing of roadways, but serves to minimize the chance of further mishaps.

Actions

- Establish relationships with governmental agencies, private-sector entities, and the media in an effort to utilize warning devices such as changeable message signs and Highway Advisory Radio (HAR) to provide motorists with advance warning of roadway incidents or conditions.
- Establish a plan protocol for response to incidents, outlining the responsibilities of each responding agency at the scene, while identifying equipment needs for scene safety and security.
- Establish diversion routes and diversion strategies for major roadways, complete with maps and signage needed to effectively divert motorists around roadway incidents.
- Expedite detection, response, and clearing of roadway incidents.
- Schedule regular incident management meetings to insure a coordinated effort.
- Establish “debriefings” or after-action reviews to assist in the learning process and to ensure a better response to future incidents.

Benefits

- Training in effective incident management techniques/principles will promote greater efficiency.
- Effective response to incidents reduces damages, deaths, and injuries associated with collisions that occur from resultant traffic tie-ups.
- Motorist delay and roadway congestion can be minimized.

- Properly trained personnel increases operational effectiveness.

Other Considerations

- Scheduling conflicts may occur when attempting to coordinate meetings.
- Some agencies may be reluctant to relinquish scene control.

Strategy #17

Pursuit Management

Actively support research and development of new technologies that will deter, prevent, or terminate pursuits.

Background

In recent years, there has been increasing interest in technological solutions for the problem of motorists attempting to evade apprehension by fleeing from law enforcement authorities. Public disapproval is at an all time high, particularly in light of recent injury and/or death to innocent motorists/bystanders by fleeing suspects.

Actions

- Develop defined policies on the conduct of pursuits.
- Train personnel in the application of policy/procedures.
- Work with other entities in the development of technology intended to eliminate or reduce the number and severity of pursuits. This includes identifying pursuit intervention techniques such as use of manual and remote control tire deflation devices, impact-engaged braking systems, remote engine disabling devices, etc.
- Work with governing bodies and the private sector to secure funding to support the development and procurement of technologies.
- Train all employees in the use of the technology.

Benefits

- Reduced liability for the department.
- Fewer, shorter, and less severe pursuits.
- Fewer collisions, injuries, and deaths.
- Reduced cost in property damage.

Other Considerations

- Limited information available concerning damage to uninvolved vehicles when remote engine disabling devices are activated.
- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Departmental policy must be considered as technology advances.

* Refer to the IACP guiding principles for law enforcement.

Strategy #18

Special Training in Traffic Safety Education

Increase public awareness of law enforcement educational opportunities; improve depth and diversity of current administrative and criminal justice curricula, specifically including more traffic safety focus.

Background

Complexity of duties and advancing technology will continue to increase the need for more educational preparation. The more educated “white collar” criminal will require a well-trained investigator. As traffic management becomes more complex and technical, the educational focus must be adjusted accordingly. Most community colleges currently have associate’s degree programs in administration of justice or criminal justice programs, and many award certificates of achievement with options in police and correctional services. (Transfer of credits to a four-year college or university can lead to a bachelor’s degree in the criminal justice field.) Although POST (Police Standards and Training) certification is required nationwide, the standards vary from state to state. Therefore, consistency and standardization in law enforcement training should be considered as a priority in law enforcement education.

Increased training requirements and operational complexities mean that the interests of the public and the department are best served by continuity in the personnel assigned to more technically complex duties.

Actions

- Knowledge and performance standards (including physical fitness) need to be established statewide, then nationwide.
- Use experienced sworn and non-sworn law enforcement employees and qualified civilians as instructors.
- Broaden the base of law enforcement curricula at the college level to include traffic safety and related subjects in this battery of courses. Such courses should cover crash investigation, emergency medical response, basic computer skills, problem solving, leadership, interpersonal communications, cultural diversity, and public speaking. When possible, other practical courses might be made available, including DUI detection, SFST’s, breath analysis, and commercial motor vehicle enforcement.
- Establish consistent written and performance tests to prove that the student has achieved mastery of the information and tasks.
- Increase available technical curricula to teach the investigative techniques necessary to solve more complex crimes.

- Create an exchange program for high tech expertise.
- Create internship programs for students in the specified study areas to increase exposure to and experience in law enforcement activities.
- Split the Academy into halves - basic classroom instruction in the first half and advanced enforcement activities in the second. Allow those with an associate's degree or POST certification from an approved educational institution to enter the academy at the advanced portion of the class.
- Promote law enforcement as a career in educational institutions and provide assistance when possible.
- Provide incentive programs (financial and otherwise) which encourage higher education for personnel.
- Have classes available online or on CD-ROM for distance learning.
- Increase Law Enforcement Explorers program visibility and availability, emphasizing traffic safety and training.
- Provide advanced supervision and management courses to enhance career development opportunities for in-house personnel.

Benefits

- Broader area of contact for recruiting.
- Better prepared entry level and promotional candidates with a higher probability for success.
- Enhances the public perception that traffic enforcement reduces crime.
- Less cost to the agency by allowing the candidate to "pre-train," therefore shortening agency paid training time.
- Less cost to the agency by shortening agency paid training time.
- Improved public and community relations.
- With standardized POST requirements and an accepted degree, study could be done at any approved institution and employment sought anywhere nationwide.
- Improved morale for employees eligible for promotion.
- Improved performance by employees.
- Improved implementation of rapidly changing and complex technologies, resulting in improved program effectiveness.
- Improved inter-agency working relationships when dealing with other disciplines such as traffic engineers and information systems specialists.

Other Considerations

- Difficult to obtain standardized curricula.
- Difficult to create standardized, semester-type academy.
- Difficult to maintain the quality of candidates.
- Several issues complicate instructor availability. It is expensive to train the trainer. It might be difficult to find enough qualified employees in the area to teach. It is also difficult to obtain additional funding to pay instructors. Agencies may need to pay overtime to teach or reduce “on-duty” time to accommodate teaching time.
- Some items may increase cost.
- Curriculum changes may require outside approval.
- It is essential that training be recognized and validated.
- Opposition from employee organizations.
- Labor and management issues.
- Promotion opportunities for specialists may not be equal to those of the traditional uniformed officer.

Strategy #19

Civilianization/Privatization

In any law enforcement agency, the uniformed officer is very expensive to recruit, train, and retain. Efforts should be undertaken to move non-uniformed personnel into positions that do not require powers of arrest, but will support the agency's public safety, traffic safety, and service goals. Privatization is another option to be considered in the effort to return more uniform personnel to field service.

Background

Law enforcement agencies are complex organizations with multiple task levels and responsibilities. Traditionally, the uniformed officer performs many functions beyond the primary enforcement activities. Non-uniformed (civilian) employees can perform some of these tasks, and some may be privatized. Civilians already hold many of the administrative and most of the support positions (e.g., clerical, janitorial, and mechanical positions) in law enforcement agencies. There are a number of job classifications and tasks that are currently performed by uniformed personnel that might be transferred to non-uniformed members or be privatized, thereby enhancing the agency's ability to provide service and support to the community.

Actions

- Identify positions for possible civilianization such as technical, administrative, or support functions.
- Establish career paths for civilian professional employees.
- Utilize civilian professional employees to enhance contact and service to the community, e.g., for follow-up customer service calls and training.
- Evaluate recruitment and selection processes for applicants and modify appropriately for civilian personnel.
- Consider proposals for privatization as a means of enhancing the level of service, efficiency or cost of providing the service to the community.

Benefits

- Allows sworn officers to focus on crime and traffic-related problems and enforcement activities.
- May provide a better quality of service at a reduced cost to the taxpayers.
- May relieve officer's time, which can then be focused on enforcement activities.
- More effective use of training and personnel.

- Civilianization/privatization of certain positions may make additional personnel available for traffic safety efforts..

Other Considerations

- Labor or contractual issues may prevent civilianization or privatization of functions.
- Could result in reduction of authorized sworn positions.
- Costs associated with training and reassignment.
- Reduction of sworn officers available for deployment in the event of a critical incident.
- Privatization of services may require a vote of the public and/or approval of elected officials.
- There may be labor union or contractual issues requiring clarification or negotiation.
- Replacement positions versus additional duties or personnel can be difficult to reach agreement on.
- Civilian/privatized employees do not possess law enforcement skills and/or authority and thus the ability to apprehend criminals is lost in some positions.

Strategy #20

Develop an Active and Strong Reserve/Volunteer Program

Volunteer based programs in an agency not only provide assistance to employees in routine and special tasks, but offer the opportunity to include members of the community to contribute to public-safety efforts.

Background

Since the horrific events of September 11, 2001, our nation has refocused greatly on issues of community policing and Homeland Security.

Enlisting the support and assistance of citizens through volunteer programs is widely beneficial to the law enforcement agency, the individual participants and the community as a whole.

Citizens want to help. More than ever before, the value of the volunteer is a benefit to any agency.

Actions

- Commit to the objective of allowing members of the community into the organization.
- Define qualifications and background requirements for participants.
- Identify roles and responsibilities for reserve and volunteer positions.
- Establish citizen guidelines of conduct policy.
- Review confidentiality issues/policies.
- Assign the responsibility for recruitment, selection and retention of reserves and volunteers to a particular function or functions within the organization.
- Consider volunteer opportunities for all members of the community including seniors, youth and limited mobility individuals.
- Recruit individuals from existing programs such as BlockWatch, Citizen Corp., or Citizen Police Academy Alumni as potential reserve or volunteer candidates.
- Determine methods for continued evaluation of programs/participants.

Benefits

- Using volunteers to assist with routine tasks affords a law enforcement agency the opportunity to focus limited personnel resources on pressing problems and allows the agency to enhance its commitment to public service.
- Volunteer programs (such as the Explorer Program administered in cooperation with the Boy Scouts of America) can be used to recruit those who may be considering a career in law enforcement and establish positive mentoring relationships.
- Volunteer programs provide an opportunity for an agency to reach out to their community and allow the public to learn firsthand of the day-to-day activities of their local law enforcement agency.
- Volunteer programs will instill an understanding and appreciation of the justice system, human relations, traffic safety, and the ethics of law enforcement.
- Reserve officers can provide additional staffing when and where needed, allowing deployment of regular staff for more critical needs.
- The ability to demonstrate creativity.
- Enhanced neighborhood watch groups and homeland security issues.

Other Considerations

- Staff may be required to develop and maintain volunteer or reserve programs.
- Organizational liability issues should be thoroughly identified prior to establishment of a program.
- Recognition of individual volunteer efforts is essential to retention and job satisfaction.
- Commissioned reserves are difficult to recruit and train due to law enforcement training standards and other requirements. Efforts should be made to make reserve training less burdensome so that it will become more attractive to those willing to serve.
- Labor issues may arise within an organization.
- Funding for staffing may be affected with the creation of reserve/volunteer programs.

Strategy #21

Legislative Advocacy Program

An established Legislative Advocacy Program will allow representation regarding legislation which could impact departmental operations.

Background

On-going communication with applicable legislative bodies and their staff, state and federal agencies, and allied law enforcement agencies can have a positive impact on departmental operations.

Actions

- Personnel should represent their agency on local matters.
- Develop local alternatives and/or improvements – constituent community issues (e.g., municipal, state legislators/federal representatives).
- Maintain availability to legislative bodies to assist in legislative development.
- Create an avenue to seek local, state, federal legislative sponsorship of departmental programs.
- Apprise elected officials of major local incidents.
- Provide elected officials and their staff with emergency procedures and precautions.
- *Develop patrol/welfare checks on elected officials and their offices.*
- Investigate organizations (e.g., IACP, SAWP) that have legislative programs.
- Invite state, federal and local officials to attend or participate in events such as:
 - DUI checkpoints
 - Ride-alongs
 - Staff meetings
 - Shift briefings
 - Training days
 - Academy graduations
 - Memorial services
 - Various ceremonies and events

Benefits

- Provides an avenue to distribute favorable information regarding the agency.
- Provides the agency with real time challenges and/or concerns of the local community.
- Allows the agency to demonstrate accomplishments, range of public services and commitment to public safety and service.
- Allows agencies to foster meaningful working relationships with elected officials.

Other Considerations

- Cost of the service.
- Increased skills, expertise and training for personnel.
- Potential increase in support staff requirements, which may cause a reduction in existing personnel levels.
- Long term designated legislative liaisons may lose their objectivity.

Strategy #22

Homeland Security

Improve and maintain Homeland Security by the continual monitoring, gathering, and evaluating of intelligence information.

Background

The threat of nuclear, biological, and chemical attacks remains a concern. Adding to that threat is the potential for detonation of various types of conventional explosive devices. Any terrorist attack or incident associated with current events may not be confined to just one agency or city. Based upon past incidents, there are groups willing to travel anywhere throughout the country to engage in and support unlawful activity in the form of protest or civil disturbance. The patrol officer engaging in traffic enforcement is often the best tool to gain intelligence and [interdict threats to homeland security](#).

Actions

- Action plans/policies should be developed and training implemented which lay out an agency's mission during any incident/elevated alert status.
- Plans should be developed addressing infrastructure protection.
- The plan should be designed to minimize loss of life, personal injury, and property damage resulting from disruptions caused by acts of terrorism or other factors.
- Emergency incident guides should be utilized to minimize exposure of the public to unsafe conditions resulting from acts of terrorism, other emergency incidents, or impediments.
- A well-developed operational plan will provide a framework of deployment for any incident occurring within an agency's jurisdiction. In the event of maximum personnel deployment, or in response to significant requests for mutual aid, having pre-designated procedures in place will serve to facilitate organized and orderly deployment, community evacuations, and emergency response.
- Plans should also be developed addressing the movement of regulated material on public highways.
- Law enforcement intelligence should be widely shared in the law enforcement community in accordance with established guidelines.
- Non-sensitive, law enforcement intelligence information should be shared with the community as appropriate.

Benefits

- Deployment of uniformed personnel will maximize service to the public in need of aid or information.
- Agencies gain public trust.
- In the event of an incident, agency personnel will be pre-assigned specific duties and/or phases of deployment based upon ongoing threat assessments and intelligence.
- Assistance to other public agencies in accordance with law enforcement mutual aid plans can be provided in a smooth and efficient manner.

Other Considerations

- Budgetary constraints occur with prolonged or on-going threats.
- Fatigue becomes a factor when working extended shifts.
- On-going training may be difficult to fund or organize.

Strategy #23

Officer Safety / Risk Management

To develop procedures that will enable officers to perform their duties in a safe and professional manner, and eliminate conditions and work practices that could result in injury to employees.

Background

It is becoming increasingly clear that safe working practices can only be obtained when employees have a clear understanding of how to incorporate safe working procedures and proper policies into the performance of their daily duties. On-the-job injuries often result in economic losses to both a department and its employee. Without proper monitoring and proactive involvement, the cost of workers' compensation benefits can represent a significant figure of a department's overall budget.

Actions

- Develop a philosophy that articulates a strong commitment to the management of employee injuries.
- Develop programs that provide a framework for establishing and maintaining safe work practices and healthy conditions in the workplace, to minimize employee exposure to all forms of hazardous conditions.
- Establish a clear and definitive means of conveying safety programs and expectations to all personnel.
- Review all injuries in an effort to identify specific injury causing trends.
- Train employees in the performance of their assigned duties to minimize potential hazards in the workplace. For example, provide defensive driver training to non-uniformed employees who may be required to drive routinely on official business.
- Ensure personal protective equipment is readily available and marked for employees when unsafe conditions cannot be corrected through engineering or administrative controls. Personal equipment could include vehicles, weapons, etc.
- Evaluate existing workplace environments to use the agency's budgetary process to provide safe, ergonomically correct equipment for office personnel.
- Critique employee job performance/policies/procedures to identify potential injury causing actions or preventable/improper equipment operation.
- Develop a comprehensive fleet management program which includes vehicles, equipment, and proper usage e.g., tactics.

Benefits

- Injuries and injury claims are minimized or eliminated.
- Reduced costs associated with employee injuries/death or absences.
- Reduced costs for equipment replacements due to unsafe operation.
- Employee morale is improved as they recognize the agency's concern for their well being.
- Reduced agency liability.

Other Considerations

- Increased training costs.
- Increased costs to replace outdated, non-ergonomic or officer safety equipment.
- Loss of personnel during training sessions.

Strategy #24

Public Information and Education

Effective public information and education programs allow for enhanced public awareness and garner support for law enforcement efforts within the community.

Background

The public perception of any organization is directly affected by the very image it portrays. This is especially true for law enforcement agencies. To accomplish their objectives, police departments must provide a positive climate for relations between the police and the public. A positive climate should be established and maintained by successful media relations through effective public information and education (PI&E) programs.

Public information and education programs can be implemented in a law enforcement agency by variety of methods, depending on the agency's size and organizational structure.

It is possible to incorporate quality public information and education programs simply by using effective strategies and having a person, or persons, responsible for their implementation.

Actions

- Demonstrated commitment by the chief law enforcement executive to strong public information programs.
- Obtain support of both officers and staff.
- External public information/education should include, but are not limited to:
 - Informing the public of departmental activities (enforcement and other activities of interest to the community).
 - Traffic safety education and community services.
 - Legislative and judicial information.
- Internal public information/education includes, but are not limited to, the following activities:
 - Dissemination on information on internal activities to members (both sworn and civilian).
 - Recognition of employee achievements.
- Develop public information/education programs that serve a demonstrated need within a particular area or community, for example:

- Neighborhood Watch (burglary prevention).
 - Operation Identification (marking of personal property).
 - Security Surveys (business and residential).
 - Robbery Survival/Prevention.
 - Rape/Assault Prevention.
 - Traffic Safety Education Programs (occupant protection, STOP-D.W.I., pedestrian/bicycle safety, etc.).
 - Child Fingerprinting
- Consider using the media in an effort to develop an effective public information/education project.

Benefits

- Both police officers and the media can work together to develop relationships that benefit everyone involved.
- Public trust efforts will be enhanced.
- The use of traffic enforcement public information/education to deter crime is an effective police strategy as well as saves lives through traffic safety.

Other Considerations

- Implementation is not always easy to accomplish.
- Officer training is critical to support enhancement strategies.
- Law enforcement personnel must be familiar with freedom of information laws.
- Refer to IACP guiding principles for law enforcement.

Technology Strategies

Preface

Technology is advancing at such a pace that what is new today has a newer version tomorrow. However, “newer” does not necessarily mean more cost effective or that the older is obsolete. There are also factors within agencies and in the private sector, which should inhibit the acquisition of new technology (e.g., employee relations, community acceptance, ongoing training, maintenance, etc.). Also, technology decisions by large agencies may not be appropriate for smaller agencies because of cost ramifications, difficulty of coordination, etc. Law enforcement agencies must partner with other public safety and transportation agencies to develop integrated networks that enable an authorized user to use data and resources no matter the location in federal, state, or local databases. Technology is expensive but through partnerships small agencies as well as large agencies can take advantage of the latest advances.

Many of the technologies mentioned in this section do not lend themselves to direct application, development, or operations by a law enforcement agency per se. A number of the strategies throughout this section apply not only to police but to other public safety agencies, which have an impact of traffic safety. Law enforcement should be knowledgeable about the potential application of the technologies identified in this section, and support their adoption.

- [Strategy #25: Technology Management Issues](#)
- [Strategy #26: Intelligent Transportation Systems \(ITS\)](#)
- [Strategy #27: Roadway Safety Design](#)
- [Strategy #28: Variable Speed](#)
- [Strategy #29: Work Zone Safety](#)
- [Strategy #30: Automated Highways/Vehicles](#)
- [Strategy #31: Vehicle Simulators](#)
- [Strategy #32: Emergency Vehicle Operation/Coordination/Response](#)
- [Strategy #33: Collision Analysis](#)
- [Strategy #34: Collision Notification](#)
- [Strategy #35: Commercial Vehicle Communications](#)

- [Strategy #36: Provide Real-time Information](#)
- [Strategy #37: Fatigue Detection](#)
- [Strategy #38: Technologies Related to Driving Under the Influence of Alcohol and/or Drugs](#)
- [Strategy #39: Establishing Identification of Individuals with Commercial Driver's Licenses](#)
- [Strategy #40: Electronic Citations](#)
- [Strategy #41: Automated Enforcement](#)
- [Strategy #42: In-Car Video Camera](#)
- [Strategy #43: Automated Traffic Collision Reports](#)
- [Strategy #44 Identification and Management of Hazardous Material Incidents](#)
- [Strategy #45: Commercial Vehicle Automated Inspections](#)
- [Strategy #46: Develop Geographic Information Systems](#)

Strategy # 25

Technology Management Issues

With the fast-paced development of technology, law enforcement executives will need to anticipate and plan for constant change in this field and the effect it will have on their agency's traffic safety programs.

Background

Technology has advanced at such a rate that it is often out-dated soon after its delivery. Compatibility with older technology is easy to promise and difficult to ensure. Without adequate planning and supportive policies and requirements, law enforcement will be forced to continually play "catch up."

Advanced technology has the potential to either improve the delivery of service to the public, or to complicate law enforcement operations. Increasingly, the operations of public works agencies and departments of transportation affect daily law enforcement operations. A current example is Intelligent Transportation Systems (ITS), which include a number of technologies intended to move people and goods more safely and quickly. Law enforcement agencies should play an integral role in the development of ITS technologies and strategic plans.

Actions

- Organize, or participate in, a technology-oriented committee for the agency or governing body, which addresses the acquisition of equipment, instrumentation, or software for the agency and/or body.
- Ensure full evaluation of technology for compatibility and require the vendor to provide a suitable warranty. Strongly consider inter-connectivity with related systems and other agencies.
- Make budget requests flexible to accommodate technology changes that will occur during the budget approval process.
- Develop in-house expertise, or form coalitions with other agencies, so that technology needs may be accurately assessed and existing technology may be used most effectively.
- Participate in ITS committees, task forces, and related organizations. Ensure that highway safety is given serious consideration, and that enforcement needs are addressed.
- Address technology and training as part of the agency's strategic plan.
- Develop, or participate in, a standing committee that functions within professional law enforcement organizations whose responsibility is to evaluate traffic safety technologies and make recommendations for action.

- Encourage the private sector to respond to law enforcement needs (examples include pursuit termination technologies and technologies to make officers more efficient - computerized citations, collision reports, video cameras, laser measuring devices, and so forth).

Benefits

- Properly applied technology expenditures will provide better results.
- Interoperability with other agencies better accommodates law enforcement needs.
- There is time for legislative or other actions to address the development and implementation of technologies that alleviate those factors that complicate traffic safety or law enforcement operations.

Other Considerations

- Cost-benefit analyses may show that some new technologies afford minimal benefits and serve narrow interests.
- Private sector expertise is often self-serving in order to sell a vendor's product(s).
- There may be initial reluctance to educate law enforcement representatives about ITS or other technologies, but the value of inclusion will be more obvious after some experience.
- Whenever technology replaces face-to-face interaction between law enforcement personnel and the public, opportunities for detection of other criminal activities are eliminated.

Strategy #26

Intelligent Transportation Systems (ITS)

Identification and application of ITS technology which is intended to improve and assist in traffic management functions such as: traffic congestion management, incident response and roadway system management.

Background

It is important to manage the highway system to maximize the safe and efficient movement of vehicles, and to respond to incidents in an expeditious manner. To assist responsible agencies in managing the highway system, the use of various ITS technology systems is imperative. Law enforcement's role in transportation management includes being involved in the design, development and operation of those technologies.

Actions

- Develop, operate, or participate in Traffic/Transportation Management Centers (TMCs). TMCs are used to monitor, regulate, and respond to traffic-related operations and incidents.
- Install transportation operation systems technology in TMCs to integrate the technology with all law enforcement agencies. The technology would include traffic loop detectors, closed circuit television cameras (CCTVs), ramp metering devices, changeable message signs (CMSs), highway advisory radio alerts, adverse weather detection equipment, etc.
- Install and/or convert telephone call boxes into "smart" call boxes that can then also be used as a platform to integrate loop detectors, adverse weather detection equipment, CCTVs, etc. with the TMC.
- Use technology to detect adverse/inclement weather and/or changing roadway conditions. Electronically inform vehicle operators of the changes via CMSs, highway advisory radio alerts, etc. Additional traffic advisory information can also be disseminated in the same manner.
- Provide and promote public access to transportation management information.

Benefits

- TMCs provide an inter-modal and integrated transportation system management capability.
- Improved highway safety and mobility.
- Increased emergency detection and improved response time.
- Improved air quality.

- Improved identification of needed emergency response equipment and/or resources.
- Maximizes the transportation system management capability of the TMC.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Potential increased support staff requirements, which may cause a reduction in existing personnel levels.
- Interoperability and privacy/proprietary issues of using shared systems.
- Level of involvement depends on size of agency.

Strategy #27

Roadway Safety Design

Use technology to improve roadway/infrastructure safety.

Background

Outmoded road design, or roads that are carrying traffic volumes greater than those they were originally designed for, contribute to a significant number of all fatal traffic collisions. Targeted improvements to road design is one critical element of highway safety offering the greatest promise for reducing future collisions, injuries, property damage, and fatalities.

Actions

- Encourage and support the installation of wider highway traffic lanes; rumble strips; roadway enforcement areas; improved medians and shoulders.
- Encourage and support the use of illuminated warning devices equipped with vehicle sensing activation technology.
- Encourage and support pavement marking and signage improvements.
- Be involved in roadway safety design in collaboration with public works/transportation entities.

Benefits

- Reduced vehicle collisions and incidents.
- Reduced motorist fatalities and injuries.
- Reduced property damage.
- Increased officer safety.
- Better enforcement traffic management capabilities.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased construction/maintenance costs.
- Use of technology should conform to appropriate industry standards.

Strategy #28

Variable Speed

Identify and apply variable speed advisory technology to improve highway/roadway operations and safety.

Background

Speed continues to jeopardize motorist safety and is a significant contributing factor to crashes on the highways and roadways in the United States. To curtail unsafe vehicle speeds, variable speed advisory signs should be used at strategic roadway locations to advise motorists of their unsafe speed and/or to alert the motorist to a safe speed for the prevailing weather or roadway conditions.

Actions

- Install advisory signs with recommended speeds near areas that frequently experience vehicle incidents (for instance, a super-elevated ramp with a restrictive radius where trucks often run off or roll over).
- Rotate the use of mobile speed advisory trailers to locations where excessive vehicle speeds are apparent.
- Use electronically variable speed limit systems where motorists need supplementary signage that reflects limited visibility, snow/ice, or other weather or road conditions. Justify these speed limits with engineering and traffic surveys.
- Promote the use of highway safety messages via variable messages signs.

Benefits

- Reduced vehicle collisions, motorist fatalities, injuries, and property damage.
- Improved highway and roadway traffic flow (mobility).
- Reduced traffic congestion.
- Expands the “reach” of traffic safety messages.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Possible liability issues if equipment is not maintained properly.
- Need for statutory changes to support variable speed limits.

Strategy #29

Work Zone Safety

Use technology to improve highway/roadway work zones for construction and maintenance employees as well as the motoring public that shares the roadway.

Background

Each year in the United States, maintenance and construction employees are injured or killed by collisions in and around highway/roadway work zones. Technology is available to alert and warn employees of imminent danger from possible collisions.

Actions

- Use technology to alert and warn roadway and highway workers of imminent danger from errant vehicles (for example, pneumatic and laser devices that sense a vehicle and sound a warning beeper worn by the worker or a centrally located horn).
- Use enforcement activity in work zone.
- Use outreach technology such as the Internet to alert the public about work areas.
- Use traffic routing to keep oversized loads from entering construction areas.
- Promote work zone awareness utilizing local networks, e-mail, radio, pager, cellular telephone notification, etc. Ensure advisory information is disseminated in advance of work start times.
- Promote use of reflectorized vests for construction workers, and portable concrete barriers (K-Rails) at job locations.
- Use speed enforcement trailers in construction zones for safety enforcement.

Benefits

- Reduced highway work zone congestion, traffic collisions, insurance claims, worker injuries and fatalities.
- Improved employee relations.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Use of technology in work zones should conform to appropriate industry standards.

Strategy #30

Automated Highway/Vehicles

Seek involvement to ensure that safety, security, and enforcement issues are adequately addressed in the development of automated highway systems.

Background

For at least the past three decades, traffic and roadway engineers have dreamed of an automated highway environment where vehicle speed, lane position, and following distance are controlled automatically. The implementation of such a system may now be within technological reach.

Actions

- Seek involvement in the development of automated highways.
- Allow system testing to occur on law enforcement driver training facilities, if available.

Benefits

- A higher level of safety and security for the motoring public.
- Improved functioning of highway systems.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise and training for personnel to support the technology and to operate the system(s).
- Interoperability and privacy/proprietary issues of using shared systems.

Strategy #31

Vehicle Simulators

Improve driving abilities by simulating driving conditions that are too dangerous or costly to try in real life.

Background

Driving simulators are complex and expensive when designed to give the user visual, audible, and motion feedback. In recent years, dramatic improvements in computing power have led to many visual enhancements. Today's market now has several dependable, flexible, realistic and affordable simulators. Lower cost "part task" simulators have also been developed to teach a specific portion of the driving task (e.g. handling the microphone, steering wheel, lights and siren all at once).

Actions

- Develop regional alternatives to overcome the lack of access to driving simulators.
- Determine the most common types of vehicle incidents and match with available part-task simulators.
- This type of training can provide police officers with improved driving skills, situation awareness, tactics, and decision making skills.
- Introduce this technology into traffic safety education programs, such as those offered through the Department of Motor Vehicles.

Benefits

- Vehicle simulators, through training and testing, can reduce accidents.
- Training costs can be reduced.
- Insurance rates can be lowered.
- When used for collision simulations, simulators provide an invaluable resource during remedial training and litigation.
- Less property damage.
- Reduced liability.
- Improved public image.

Other Considerations

- Cost of the technology.
- Increased skills, expertise and training for personnel to support and operate.
- Accuracy and reliability of technology.
- Potential increase in support staff requirements, which may cause a reduction in existing personnel levels.

Strategy #32

Emergency Vehicle

Operation/Coordination/Response

Use technology to improve and maximize the safe operation and efficiency of emergency vehicle coordination and response.

Background

Technology continues to be developed which improves the efficiency and safety of emergency vehicle operations for the benefit of both law enforcement agencies and the motoring public. This evolving vehicle technology includes, but is not limited to, infrared vision enhancement, crash avoidance systems, and use of navigational equipment.

Actions

- Utilize night vision enhancement devices, such as infrared equipment.
- Utilize crash avoidance technology.
- Encourage the use of the latest display technology in vehicles to include hands-free, eye-activated, heads-up displays.
- Install touch screens and/or voice activated equipment in emergency response vehicles and at respective communications centers.
- Examine the use of automatic vehicle locators (AVLs) on emergency response vehicles.
- Consider the use of audio vehicle navigation systems in emergency response vehicles.
- Explore computer-aided dispatch technology.
- Examine/ensure interoperability with other emergency response agencies.

Benefits

- Reduction in response times.
- Improved communications between the officer and dispatch.
- Night vision enhancement devices will improve the officers' driving visibility for officer safety and afford them the ability to scan terrain for suspects and/or search and rescue individuals thereby reducing search and/or apprehension time.
- Crash avoidance technology will serve to alert and warn the vehicle operator of an imminent collision thereby reducing their severity and number.

- Navigational devices which depict the current location(s) of road patrol officers will enable dispatch personnel to quickly respond assist units in the event of an emergency or other “officer needs help” situation.

Other Considerations

- Added requirement of multitasking, which can cause driver distraction and inattention, affecting safe vehicle operation.
- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Potential increased support staff requirements, which may cause a reduction in existing personnel levels.
- Interoperability and privacy/proprietary issues of using shared systems.

* Refer to the IACP guiding principles of law enforcement.

Strategy #33

Collision Analysis

Take advantage of the computerization of vehicles to improve the analysis and reporting of collisions.

Background

On average, someone dies in a motor vehicle accident each minute worldwide. With computers controlling an increasing array of motor vehicle functions and software-based diagnostics, motor vehicle manufacturers are adding event data recorder capability (black boxes) to many vehicles.

Actions

- Establish partnership agreements with automobile manufacturers to establish standards for the manufacture and development of minimum performance protocol for the use of onboard tamper and crash-proof memory devices for all types and classes of highway and roadway vehicles.
- Use the technology as part of training.
- Define the type of data to be captured, i.e., date, time, location, velocity, heading, number of occupants, and seat belt usage, etc.
- Use the results to supplement the analysis of investigators in major collisions.
- Use collision analysis results to better understand the dynamics of collisions.

Benefits

- Reduce the devastating effects of collisions and provide better information on collision dynamics.
- Reduced on-scene officer workload in determining speed from skid marks and other crash variables.
- Reduced litigation and court-related work.

Other Considerations

- Privacy and other constitutional issues may become a factor.
- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- There are costs associated with the different technologies used by competing manufacturers.

Strategy #34

Collision Notification

Actively support the development, implementation, and operation of vehicle-based technologies that can accurately detect a collision, notify appropriate authorities, and provide the location of the collision along with other useful information.

Background

One of the emerging ITS success stories is the development and mass marketing of Mayday and similar devices. These are multi-purpose devices with a number of vehicle-based sensors and controls, a global positioning satellite (GPS) antenna to identify the vehicle's location, and a communications system (typically cellular) for relay of information to responding emergency personnel.

Actions

- Ensure that governmental and private service providers have updated law enforcement contact information to facilitate the transfer of accurate collision-related information to the responding agency.
- Encourage local cellular service providers to improve coverage in rural or other areas with weak coverage, and to develop and provide enhanced cellular 911 information, such as cell site information, latitude and longitude, etc.
- Procure Computer-Aided Dispatch (CAD) systems and include specifications that will allow for interface with service providers or with the vehicle itself.
- Work with IACP, the National Emergency Number Association (NENA), and other interested groups to develop standards and specifications for Mayday devices and other related communication links.

Benefits

- Decreased response time to vehicle collisions and potential reductions in the number of injuries/fatalities.
- Reduced emergency detection time.
- Rapid notification of emergency incidents.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).

- Potential increased support staff requirements, which may cause a reduction in existing personnel levels.
- Interoperability and privacy/proprietary issues of using shared systems.

Strategy #35

Commercial Vehicle Communications

Improve communication between governmental emergency response and transportation communication centers, commercial vehicle dispatch centers, and private transportation information services providers to encourage the exchange of transportation information.

Background

With the advances in communications technology, many commercial carriers have sophisticated long-distance communication systems and/or satellite-based Global Positioning Satellite (GPS) systems for location determination.

Actions

- Form partnerships with commercial vehicle carriers to lessen response time to highway collisions and other incidents.
- Establish contacts with major commercial carrier dispatch centers to automate the dissemination and receipt of timely information concerning highway incidents/conditions.
- Ensure that private service providers have accurate law enforcement contact information to ensure that alerts concerning cargo thefts, hijackings, terrorism, and/or stolen vehicles are directed to the appropriate agency.

Benefits

- Reduces incident notification and response times.
- Improves the security of commercial vehicle operations.
- Improves homeland security.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Reliability of the information.

Strategy #36

Provide Real-time Information

Technology is in place to provide real-time information concerning collisions, construction, inclement weather, or other conditions that contribute to traffic congestion, lost productivity, and air pollution.

Background

Millions of drivers take to the highways each day. All too often, they find themselves in traffic jams, which contribute to traffic congestion, lost productivity, and air pollution. When drivers obtain real-time information on existing conditions on their intended route(s) of travel, they are better able to adjust their travel plans.

Actions

- Investigate and support public/private partnerships that provide travel advisories which make use of the Internet, changeable message signs, cellular telephones, and media outlets to provide up-to-the-minute travel information to drivers before they leave home and during their daily commutes.
- Explore the possibility of making up-to-the-minute information available to commercial carriers via computer message signs at truck stops and inspection (weigh) stations.
- Support the Transportation Management Centers concept to ensure the agency is providing real-time information.

Benefits

- Drivers can plan their trips to avoid congestion.
- Reduced collisions, injuries, and fatalities.
- Improved air quality.
- Productivity improvement.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Reliability of the information.

Strategy #37

Fatigue Detection

Encourage the use of technology/devices to detect fatigued drivers, thereby reducing the risk of traffic collisions/injuries.

Background

All drivers experience fatigue and sleep deprivation at one time or another. Boredom has also been associated with driver inattention and fatigue. While the identification of fatigue as a contributing factor in traffic collisions cannot always be determined directly from police investigation reports, certain circumstances certainly suggest the involvement of fatigue as a factor. This would include situations such as when a vehicle traveled on the incorrect side of a straight road, a vehicle traveled off a straight road or off the road to the outside of a curve, etc.

Exhaustion has been identified as a particular problem, especially for shift workers in law enforcement agencies. When officers work long, stressful and varied shift hours their susceptibility to driving while fatigued significantly increases.

Action

- Track the development of self-contained in-car fatigue detection devices and consider testing in police agency vehicles. If the devices prove effective, encourage their use and installation in both passenger/commercial and law enforcement vehicles.
- Develop and distribute information about driver fatigue and strategies to avoid fatigue. Stress to the public the importance of safety, not travel time reduction, in arriving at their destination(s).
- Provide a network of roadside signs, including changeable message signs, on long travel weekends reminding drivers of the need to stop and rest frequently.
- Provide rest areas on new and existing roads where appropriate. Seek stakeholders and/or sponsors to assist with funding if needed.
- In areas where compatible, and operating within environmental considerations, provide tree clearance and “clear zones” on roadsides that have been identified as fatigue zones.
- Work with state and local highway departments to ensure construction zone signage offers drivers adequate time to alert even bored or fatigued drivers of impending changes in roadbeds, lane restrictions, and other construction necessities which impact the fatigued driver’s ability to safely navigate the construction zone.
- Encourage the networking of ideas developed by other agencies that have minimized driver fatigue within their fleet operations.

Benefits

- Alerts drivers of the need to take a break or a nap when feeling the least bit fatigued.
- Reduces the number of collisions, fatalities, and injuries.
- May be helpful in reducing all fatigue-induced vehicle collisions.

Other Considerations

- Cost of public awareness campaigns and roadway improvement projects.
- Reliability of the technology.
- Public acceptance.

Strategy #38

Technologies Relating to Driving Under the Influence of Alcohol and/or Drugs

Actively support the development and implementation of technologies that accurately reveal the level of alcohol and/or drugs in an individual's system without violating his or her civil liberties.

Background

Driving under the influence is a factor in tens of thousands of traffic collisions every year. Although the general public's reduced acceptance of mixing drinking and driving and the lowered statutory threshold for blood alcohol concentration in some states has reduced the number of alcohol-involved collisions, much still remains to be done in this area.

Repeat offenders still represent a major challenge. In many jurisdictions, they now face the possibility of court-required installation of ignition interlocks on their vehicles. The technological sophistication of interlocks continues to improve and decreases the potential for defeating the device.

Actions

- Consider using preliminary alcohol screening (PAS) devices for both screening and evidence.
- Monitor the development of technology that uses saliva swabs and hair samples to simultaneously detect commonly used drugs, including cannabinoids, ecstasy, cocaine, opiates, and benzodiazepines.
- Establish procedures to meet the legal criteria for evidentiary use of both technologies.
- Support legislation to require usage of interlocks by all court ordered restricted and DUI drivers.
- Encourage the development of technology that ensures that interlock devices cannot be overridden or bypassed.
- Collect data on affected restricted drivers.

Benefits

- Allows samples to be taken at the time of the DUI stop, which will reduce the likelihood of a "rising blood alcohol" and degree of impairment defense.
- Sample collection can be closely observed.

- Is less invasive than taking urine or blood samples.
- Identifies drugs actually present in the blood at the time the person is stopped.
- Fewer collisions/property damage.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Constitutional requirements.
- Potential increase in support staff requirements, which may cause a reduction in existing personnel levels.
- Inter-connectivity with other systems and privacy issues of shared systems.

Strategy #39

Establishing Identification of Individuals with Commercial Drivers' Licenses

Use technology to achieve consistency for establishing one license, one record, one identity for individuals who hold a commercial driver's license; and to enhance officer safety and minimize the amount of time citizens are delayed by traffic stops.

Background

Currently, commercial and other drivers who are either unlicensed or who have lost their licenses can purchase fraudulent or duplicate driver's licenses. Additionally, some commercial drivers in good standing are selling their "identities" and good records to drivers who do not meet commercial driver's license requirements. Fraudulent licenses or documents misrepresenting a driver from another country as being licensed/permitted to drive internationally are also easily obtained through the internet. These practices circumvent the intent of establishing standards for commercial and other drivers.

Actions

- Support the development of technology that would facilitate capturing and sharing viable information, such as fingerprints, and allow the digital transfer of such data for database verification.
- Support sharing this information among states.
- Support enabling legislation, if necessary.
- Consult with other law enforcement agencies that have conducted pilot projects or that are now using technology allowing them to read and process "mag-stripped," bar-coded driver's licenses.
- Develop and implement pilot projects utilizing technology to read and process "mag-stripped" driver's licenses.
- Explore the use of electronic fingerprinting or other biometric identifiers.
- Seek standardization for automated licensing protocols.
- Configure systems with open architecture permitting multiple license protocols.

Benefits

- Reduce or eliminate the possibility of drivers whose licenses have been suspended or revoked in one state from acquiring a license in another.
- Reduce or eliminate the practice of selling "identities" to drivers who do not meet criteria to obtain a commercial driver's license.

- Reduce or eliminate the number of drivers who hold multiple valid commercial drivers' licenses to use in various states/situations.
- Reduce or eliminate the number of fraudulent drivers' licenses and/or misrepresenting documents that indicate a driver from another country has authorization to drive on an international permit.
- Improve safety by removing drivers who are not qualified to drive commercial vehicles.
- Verify that a licensed presenter is indeed the authorized license holder.
- Enhance officer safety.
- Minimize the time necessary to complete a traffic stop.

Other Considerations

- Cost of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Accuracy and reliability of technology.
- Constitutional requirements.
- Additional costs associated with technological advancements.
- Reliability of the information.

Strategy #40

Electronic Citations

Streamline the issuance of citations and the subsequent judicial process through the use of electronic citation devices and accompanying computer technology.

Background

The physical process of writing and issuing traffic citations demands a significant amount of time and effort. This is true for the patrol officer and his/her office's limited personnel resources, as well as for the court office staff. Various pilot projects using electronic citation devices have been evaluated and have demonstrated a significant reduction in officer and office staff time devoted to the processing of traffic citation information.

Actions

- Consult with other law enforcement agencies that have conducted or are conducting pilot projects and obtain feedback on the pros and cons of using electronic citation devices.
- Consult with local judicial councils regarding the feasibility of using electronic citations.
- Develop and implement pilot projects utilizing electronic citation devices where feasible.
- Seek legislation to allow process in courts.
- Seek standardization of the citation data elements, system design, and interface protocols.

Benefits

- Increases patrol time and enforcement activity by reducing the time needed for the writing of citations and associated paperwork.
- Increases clerical staff productivity.
- Enhanced and more efficient adjudication process by working with computerized and electronic citation records. Significantly reduces the need for paper filing, mailing, and manual record keeping.
- Enhanced accountability for citations during issuance and processing.
- Improves the reliability of the information and makes the citation more legible for the violator.
- Increases officer safety by reducing officer exposure during traffic enforcement stops through speeding up of the citation issuance process.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).

* Refer to the IACP guiding principles for law enforcement.

Strategy #41

Automated Enforcement

Implement the use of automated enforcement technology to improve traffic safety.

Background

The majority of motor vehicle collisions are attributed to motorists who run red lights, speed, and illegally maneuver through railroad crossings. Properly executed photo and/or other automated enforcement technology could be used to supplement law enforcement presence, assist in motorist compliance with vehicle laws, and improve transportation system operations.

Actions

- Pursue automated enforcement enabling legislation.
- Work with courts for judicial support and acceptance.
- Install and use enforcement cameras and automated systems for traffic signals, railroad grade crossings, speed control, high vehicle occupancy lanes, and commercial vehicle applications.
- Ensure that vendors providing the technology shall not derive personal gain and/or profit from the use of their operating system(s).

Benefits

- Reduced vehicle collisions and incidents.
- Reduced motorist fatalities, injuries, and property damage.
- Improved highway and roadway traffic flow (mobility).
- Reduced traffic congestion.

Other Considerations

- Loss of sight enforcement (physical presence) by an officer.
- Potential loss of staff positions.
- Loss of criminal activity detection gained by traditional enforcement.
- Perceived as a revenue generator and/or as a vehicle for enhanced profiteering by private vendors.
- Reduction in personnel complaints resulting from the loss of one-on-one contact. There may be an increase in the number of “general” complaints depending on the public’s perception of the technology system.

- Constitutional and privacy issues.
 - * Refer to the IACP guiding principles for law enforcement.

Strategy #42

In-Car Video Cameras

Installing video cameras in law enforcement vehicles to record various activities performed by officer while on patrol.

Background

Officers performing patrol duties are conducting enforcement operations or providing services to the public on a daily basis. In many cases, the officers are performing these activities alone without benefit of an independent (unbiased) means of recording the services provided or the actions taken by the officer. The use of video cameras in patrol vehicles would address this need and provide additional evidentiary documentation for court and personnel complaints.

These cameras should be mounted within the vehicle in such a manner as to visually record the officer and the citizen involved in the contact. The system should also be configured to capture audio material.

Actions

- Monitor the development of digital camera technology to determine if it would be advantageous for use in patrol vehicles.
- Explore the installation of camera technology in patrol vehicles.
- Seek support from the bargaining unit, the public sector, and the government to install this technology.
- Develop a policy and procedures covering the use of in-car camera systems. This policy should include use, tape storage, evidence procedures, and related issues.
- Consider the tape storage and retention requirements in facility design and management.
- Design the camera system to activate automatically under certain situations.

Benefits

- The recordings will provide an unbiased and accurate version of the traffic enforcement action/public contact.
- Assist in the investigation of alleged conduct violations/personnel complaints.
- Promotes compliance with departmental policy and procedures.
- Promotes positive citizen response during contacts with the officer.

- Can be used for evidentiary purposes in both civil and criminal proceedings. This evidence may ultimately provide supportive documentation in lawsuits and protect the agency from liability.
- Assists in the apprehension of suspects when the officer is injured and disabled.
- Aids the agency in evaluating performance and the effectiveness of policies and procedures.
- It is an effective tool in officer training.

Other Considerations

- Costs associated with initiating and maintaining the program.
- Labor and management issues regarding constant scrutiny of officers' actions.
- Tape retention and storage issues.
- Costs may limit the number of vehicles equipped with this technology.

Strategy #43

Automated Traffic Collision Reports

Streamline report writing and improve data collection for traffic collisions through the use of electronic technology at the scene.

Background

The substantial volume of paperwork that must be completed for traffic collision reports consumes a significant amount of a patrol officer's time with a resultant loss of proactive enforcement and in-view patrol. Historically, all forms and reports prepared by the patrol officer have been completed manually, an inefficient and error-prone method. Automating the patrol officer's environment to allow point-of-origin information gathering and reporting, will improve officer efficiency, service to the public, and the reliability and timeliness of the information.

Actions

- Acquire and install traffic data collection devices (laptops, etc.) into patrol vehicles.
- Improve network transmission capability.
- Reengineer traffic data collection systems.
- Seek support and funding from available sources to promote this technology.

Benefits

- Minimizes report preparation and review time.
- Improves report quality.
- Reduces the time needed to make data available to the public or for traffic analysis.
- Increases the time officers will have for patrol and enforcement.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).

Strategy #44

Identification and Management of Hazardous Material Incidents

Utilize technology advancements to identify and manage hazardous material incidents.

Background

Enforcement of hazardous material shipment regulations and hazardous material incident management is an ongoing and increasingly complex responsibility for public safety agencies. It is especially of consideration in homeland security issues. Hazardous material identification depends on a system which uses visual recognition of placards and inspection of shipping documents that are not always available or decipherable. Through the development of other technological systems, emergency responders can quickly and accurately identify and appropriately respond to incidents involving hazardous materials.

Actions

- Use transponders or similar technology to identify the material, quantity, and other pertinent information on hazardous material shipments, and to make that information readily available to the responsible public safety or first responder agency.
- Work with media representatives to provide timely dissemination of information concerning the incident and suggested alternate routing to the motoring public.

Benefits

- Improved public and officer safety with shorter incident response times.
- Safer routing of hazardous material shipments with greater accountability being placed on both the shipper and on the carrier.
- Reduction in travel delays due to hazardous material incidents.
- This information may have a positive impact on homeland security.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Reliability of the information.

Strategy #45

Commercial Vehicle Automated Inspections

Use automated inspection technology to ensure compliance with regulatory and safety requirements at inspection facilities and ports-of-entry.

Background

Commercial vehicle traffic continues to increase while inspection agency personnel resources have not. Using technology, rather than people, to identify those commercial vehicles that comply with all pertinent safety regulations, and who carry proper credentials will allow law enforcement agencies to focus their resources on non-compliant vehicles or carriers.

Action

- Utilize a nationwide system to ensure commercial vehicles receive routine safety inspections.
- Explore the possibility of using gamma ray imaging devices, diagnostic mechanical equipment malfunction technologies, and directional traffic lighting systems during safety inspections in every commercial vehicle scales, inspection facilities, and ports-of-entry.

Benefits

- Improves motorist safety.
- Focuses enforcement on commercial vehicles that are out of compliance or who have a history of safety violations.
- Reduces traffic congestion at commercial vehicle inspection facilities and ports-of-entry.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).
- Potential increased support staff requirements, which may cause a reduction in existing personnel levels.

Strategy #46

Develop Geographic Information Systems

Use currently available and rapidly emerging technology to implement geographic information systems (GIS).

Background

Many departments currently collect information in computer databases. GIS integrates this data and translates it immediately into a spatial or map-based environment. Viewing, analyzing, and manipulating this data in a spatial environment allows the data to take on a new dimension. While the ability to translate data from paper to a map, drawing, or schematic plan has always been available, that process has been so time-consuming with past methods that it was prohibitive to do on a regular basis. GIS allows for data transfer to occur instantaneously.

Actions

- Develop an integrated GIS plan that will support numerous layers of information and application, including collisions, traffic flow patterns, schools, hospitals, and hazardous materials supplier locations, etc.
- Ensure information contained in GIS databases is accurate.
- Consider using global positioning satellite (GPS) coordinates for location identification, e.g., incident reporting systems.

Benefits

- GIS allows available data to be efficiently queried for in-depth analysis.
- Analysis results can be printed on maps, which can reveal additional information.
- Topographical photographs can be imported into the maps to further reveal highway configurations or terrain.
- Enhanced computer memory and processing allows the user to query the data, focus on specific areas, project eventualities, change scenarios, and perform analysis in minutes that, in the past, would have taken days or weeks to complete.
- Data obtained will assist with deployment and enforcement strategies.

Other Considerations

- Cost, accuracy, and reliability of the technology.
- Increased skills, expertise, and training for personnel to support the technology and to operate the system(s).

- Potential increased support staff requirements, which may cause a reduction in existing personnel levels.
- Interoperability and privacy/proprietary issues of using shared systems.
- Reliability of the information.

* Refer to the IACP guiding principles for law enforcement.

Resource Organizations

These organizations may be of further assistance in the implementation of strategies contained in this document.

- ***Airbag & Seat Belt Safety Campaign***
1025 Connecticut Avenue, NW, Suite 1200
Washington DC 20036
(202) 625-2570
(202) 625-2570
www.nsc.org/airbag.htm
- ***American Association of Motor Vehicle Administrators***
4301 Wilson Blvd., Suite 400
Arlington, VA 22203
Phone (703) 522-4200
www.aamva.org
- ***American Association of Retired Persons***
610 E Street, NW
Washington, DC 22049
(800) 424-3410
www.arp.org
- ***American Association of State Highway and Transportation Officials***
444 North Capitol Street N.W., Suite 249
Washington, DC 20001
(202) 624-5800
www.transportation.org/aashto
- ***AAA Foundation for Traffic Safety***
1440 New York Avenue, NW, Suite 201
Washington, DC 20005
(202) 638-5944
www.aafts.org
- ***American Trucking Associations***
2200 Mill Road
Alexandria, VA 22314-4677
(703) 838-1700
www.trucking.org
- ***The Century Council ****
1310 G Street, NW Suite 600
Washington, DC 20005
(202) 637-0077
www.centurycouncil.org

- ***Commercial Vehicle Safety Alliance***
5430 Grosvenor Lane, Suite 130
Bethesda, MD 20814
(301) 564-1623
www.cvsa.org
- ***Commission on Accreditation for Law Enforcement Agencies, Inc.***
10306 Eaton Place, Suite 320
Fairfax, VA 22030-2201
(703) 591-2206.
www.calea.org
- ***Federal Highway Administration ****
400 7th Street, SW
Washington, DC 20590
(202) 366-0408
www.fhwa.dot.gov
- ***Federal Motor Carrier Safety Administration***
400 7th Street, SW
Washington, DC 20590
(202) 366-0650
www.fmcsa.dot.gov
- ***Governors Highway Safety Association***
750 First Street, NE, Suite 720
Washington, DC 20002
(202) 789-0942
www.naghsr.org
- ***Institute of Police Technology and Management ****
University of North Florida
12000 Alumni Drive
Jacksonville, FL 32224
(904) 620-4786
www.iptm.org
- ***Insurance Institute for Highway Safety***
1005 N. Glebe Road, Suite 800
Arlington, VA 22201
(703) 247-1500
www.hwysafety.org
- ***International Association of Chiefs of Police ****
515 North Washington Street
Alexandria, VA 22314
(703) 836-6767
www.theiacp.org

- ***International Association of Directors of Law Enforcement Standards and Training***
2521 Country Club Way
Albion, MI 49224
(517) 857-3828
www.iadlest.org
- ***ITS America***
400 Virginia Avenue, SW, Suite 800
Washington, DC 20024-2730
(202) 484-4847
www.itsa.org
- ***Mothers Against Drunk Driving***
511 E. John Carpenter Freeway, Suite 700
Irving, TX 75062
800-GET-MADD
www.madd.org
- ***National Highway Traffic Safety Administration ****
400 7th Street, SW
Washington, DC 20590
(202) 366-0123
www.nhtsa.dot.gov
- ***National Institute of Justice***
810 Seventh Street, NW
Washington, DC 20531
(202) 307-2942
www.ojp.usdoj.gov/nij
- ***National Safe Kids Coalition***
1301 Pennsylvania Avenue, NW, Suite 1000
Washington, DC 20004-1707
(202) 662-0600
www.safekids.org
- ***National Safety Belt Coalition***
1025 Connecticut Avenue, NW, Suite 1200
Washington, DC 20036
(202) 296-6263
www.nsc.org/traf/sbc.htm
- ***National Safety Council***
1121 Spring Lake Drive
Itasca, IL 60143-3201
(630) 285-1121
www.nsc.org/index.htm

- ***National Sheriffs' Association ****
 1450 Duke Street
 Alexandria, VA 22314-3490
 (703) 836-7827
www.sheriffs.org

- ***National Traffic Law Center American Prosecutors Research Institute***
 99 Canal Center Plaza, Suite 510
 Alexandria, VA 22314
 (703) 549-9222
www.ndaa-apri.org

- ***Northwestern University Traffic Institute at Northwestern University ****
 405 Church Street
 Evanston, IL 60204
 (847) 491-5476
www.northwestern.edu/nucps

- ***Police Executive Research Forum***
 1120 Connecticut Avenue, NW, Suite 930
 Washington, DC 20036
 (202) 466-7820
www.policeforum.org

- ***U.S. Census Bureau***
 4700 Silver Hill Road
 Suitland, MD 20746
 (301) 457-4608
www.census.gov/

- ***U.S. Department of Justice***
 950 Pennsylvania Avenue, NW
 Washington, DC 20530-0001
 (202) 353-1555
www.usdoj.gov

- ***World Future Society ****
 7910 Woodmont Avenue, Suite 450
 Bethesda, MD 20814
 (301) 656-8274
www.wfs.org/wfs/

Reference Publications

These publications may be of further assistance in the implementation of strategies contained in this document.

- *IACP Guiding Principles for Law Enforcement*
- *Highway Safety Desk Book*
- *Jim Andie Index*