

HOW WILL PUBLIC OPINION AFFECT THE USE OF LESS-LETHAL TECHNOLOGY
IN A LARGE LAW ENFORCEMENT AGENCY BY 2007?

A project presented to
California Commission on
Peace Officer Standards and Training

By

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This Command College project is a FUTURES study of a particular emerging issue in law enforcement. Its purpose is NOT to predict the future, but rather to project a number of possible scenarios for strategic planning considerations.

Defining the future differs from analyzing the past because the future has not yet happened. In this project, useful alternatives have been formulated systematically so the planner can respond to a range of possible future environments.

Managing the future means influencing the future: creating it, constraining it, and adapting to it. A FUTURES study points the way.

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SECTION I

DEVELOPMENT OF THE ISSUE

Introduction

The use of less-lethal technology and weapons has risen to a national level of interest as a result of recent terrorist attacks on America. Airlines, military, and national security interests have intensified research and testing of various technologies in response to the increased call for public safety and security. The airlines industry has been pressed to quickly implement much higher levels of safety, weapons, and technology than in the past. Those used by local law enforcement over the past several decades are being examined and tested for use in today's environments. As these weapons and tools are more broadly used, and the public becomes more aware of their capabilities, they wonder what will be the expectations of police agencies to use them instead of traditional weapons?

This project will focus on technological advances that have occurred with regard to less-lethal weapons and how police agencies may be able to apply this technology in the future. The relationship between the public's expectations of the use of less-lethal technology and the practical application by police officers will be examined. Factors that could affect the application of less-lethal weapons in law enforcement will be studied and discussed. Although the project's title is non-specific to a particular law enforcement agency, the City of Stockton Police Department will be used as the example of a large, urban police agency. The information presented may pertain to other law enforcement agencies as well.

Section I, Development of the Issue, provides a historical perspective on the development and use of less-lethal technology in law enforcement and future possibilities.

Section II, Forecasting the Future, provides information about a probable future by forecasting trends and possible events that could occur relative to the issue.

Section III, Strategic Plan and Transition Management, covers the use of a strategic plan to move the issue of using less-lethal technology from the present to a desired future state, with consideration to the dynamics of organizational change.

Section IV, Findings/Implications/Conclusions, describes the implications this issue has on leadership and provides recommendations and a conclusion.

Recent significant events, such as the Rodney King incident, motivated law enforcement to find ways to control physically combative individuals with a level of force that reduces potential for injuries to both officers and subjects.¹ In the Rodney King incident, Los Angeles police officers deployed a variety of less-lethal options against King, including physical force, impact weapons, pepper-spray, and a taser stun-gun; however, the options were relatively ineffective. The public's reaction resulted in massive riots, ousting of the Chief of Police, permanent damage to police and community relations, and major reforms within the Los Angeles Police Department (LAPD).

In 1998, police officers in Riverside, California responded to a report of an unresponsive woman sitting in a locked car, with the engine running and a gun on her lap. Four officers surrounded her car and attempted to break out a window to revive her. Reportedly, the woman reached for the gun on her lap, and was subsequently shot and killed by officers.² This event also ignited major unrest within the Riverside community, which ultimately led to termination of four officers, an investigation by the California Department of Justice, and a stipulated agreement between the City of Riverside and the California Attorney General's Office. Though the officers were eventually reinstated, the damage had been done – damage that included an erosion of trust between the department and the community of Riverside, the reputation of the department within the law enforcement community, and a deterioration of morale within the department.

In February 1997, Lorenzo Collins, a mental patient, fled from the University of Ohio Hospital, dressed in pajamas and armed with a brick. He was chased by Cincinnati and University police officers, and eventually surrounded by fifteen officers who repeatedly ordered him to drop the brick. Two officers fired four rounds, killing Collins, because they felt their lives were in danger. The officers used OC spray on Collins several times, with no effect. They requested a supervisor to respond to the scene with a taser stungun, as only supervisors were allowed to carry tasers. Collins was killed before a supervisor arrived on scene.³ This incident led to large and frequent citizen demonstrations and protests. The Cincinnati City Council requested that the United States Attorney General's Office investigate the shooting. This, and several other police

shootings in Cincinnati, led to large-scale riots and a widespread call for reform within the police department.

Terrorist attacks on America on September 11, 2001, have significantly accelerated an interest in less-lethal technology and weapons. As the country began to regroup following the attacks, an obvious major issue was to determine how airlines could be made more secure. The Airline Pilots Union demanded approval for airline pilots to be armed with firearms. The United States Legislature quickly assembled a bill that would, in fact, allow pilots to be armed; however, President Bush vetoed the Bill.⁴ During the debate, however, United Airlines chose to train and arm their 13,000 pilots with taser guns as a means of cockpit defense.⁵

There are three conditions developing within society that may accelerate the future use of less-lethal weapons by law enforcement. These include police-assisted suicides, assaults against police officers, and the number of unrestricted mental-health patients in society.

A police-assisted suicide incident, or “suicide by cop,” refers to an event in which a subject engages in behavior that poses an apparent risk of serious injury or death to others, with the intent of precipitating the use of deadly force by law enforcement personnel.⁶ A recent study suggests that nearly eleven percent of fatal shootings by officers of the Los Angeles Sheriff’s Department are provoked by suicidal subjects. The study examined 437 officer-involved shootings that occurred in Los Angeles County between 1987 and 1997. In twenty-four percent of the shootings, officers initially used less-lethal weapons that were

unsuccessful in preventing the subsequent shooting by a police officer. The study could not conclude how many incidents in which less-lethal methods were used were successfully ended. The study indicated less-lethal weapons were most effective when used as a diversionary device and followed by immediate apprehension efforts.⁷

On the average, police officers are not being assaulted more frequently than in the past. In California, approximately 6,849 assaults on police officers occur each year. Of those assaults, about five percent involve a firearm. The remaining assaults involve the use of knives (2.5%); other deadly weapons (13.6%); and hands, fists, and feet (79%).⁸ Although such assaults do not appear to be increasing, there is a strong perception among police officers that assaults against them continue to increase.

Mental health treatment issues will impact the future use of less-lethal weapons by law enforcement. Before 1967, many of the mentally ill were institutionalized and generally kept hidden from the public. In California, the Lanterman-Petris-Short Act was signed by then Governor Ronald Reagan and took effect in 1969. The legislation restricted the time a patient could be confined, and prohibited forced medication. This measure effectively emptied mental institutions and transferred previously incarcerated mental patients to community treatment facilities or other forms of housing within regular communities. These individuals generally responded well with intense supervision; but without such, they often stopped taking their medications and/or turned to using street drugs.⁹ The effects of this legislation spread to a national

level as the federal government eventually adopted standards similar to California. This condition has contributed significantly to a greater number of interactions between police and mentally-ill subjects, often ending in violent confrontations.

Historical Perspective

Over the years, officers have been armed with a variety of less-lethal weapons. The most common have included batons, billy-clubs, and weapons designed to use kinetic energy to disable and subdue a suspect. Over the past thirty to forty years, chemical agents have become a popular alternative to blunt-force weapons; and most recently, electrical stimulation weapons have generated significant interest.

Law enforcement has experimented with less-lethal weapons developed by the military, and, over the years, has converted them to civilian use. An interesting event occurred during the United Nations peacekeeping effort in Somalia in 1993. The military was faced with hundreds of unarmed civilians and was unprepared for large-scale crowd control. Several Marine reserves, who were also Los Angeles police officers, introduced less-lethal weapons they were using in law enforcement to their military commanders. The commanders later acquired the less-lethal weapons; trained soldiers to use them; and effectively deployed a variety, including stingball grenades, plastic and rubber bullets, soap-foam barriers, and sticky-foam laced with irritants.¹⁰ The successful use of these weapons prompted the military to commission a Joint Non-Lethal Weapons Program (JNLWP).

The purpose of the JNLWP was to provide the most current and accurate information relative to non-lethal technologies, to the Joint Services and other government activities, which required the use of restraint measures in the performance of their mission. They also provided the Joint Chiefs of Staff and other responsible agencies with recommendations regarding the application of non-lethal technologies on a global basis through a lifecycle perspective, including research, development, production, and their deployment.¹¹

Research indicates there are three primary classifications of less-lethal weapons commonly used by law enforcement. A weapon's effect and/or the tactical advantage the device gives an officer are primary considerations. The three types include pain compliance and kinetic-energy devices, distraction weapons, and weapons that override a body's neurological system.¹²

Pain-compliance weapons, as their name implies, gain compliance through direct or perceived pain. They are normally deployed to control individuals and groups; and include batons, billy-clubs, beanbag rounds, and rubber and plastic bullets.

Distraction weapons are designed to incapacitate a subject through confusion, sensory impairment, and/or physical distraction. While a subject is temporarily distracted or entangled, officers can move in and physically control them. These weapons are often deployed for crowd control, and include chemical sprays, teargas, sticky-foams, flash-bang grenades, nets, net-guns, and other similar physically overpowering devices.

Weapons that override the body's neurological system include two varieties: 1) Chemicals and drugs, and 2) Electrical stimulation through conducted-energy (CE) weapons. Nerve agents, drugs, and chemical weapons are inherently unsafe and difficult to administer. For law enforcement use, CE weapons include stun-guns, hand-held stun devices, and a variety of devices currently being developed and tested. The taser is the most common existing CE weapon deployed for law enforcement use. Currently, two primary companies, Taser Technologies and Taser International, produce taser weapons.

History and Development of the Taser

In the mid-1960s, as a result of civil unrest in the United States, President Lyndon B. Johnson formed a Blue Ribbon Commission on Crime to review various ways of quelling increased violence in our country. The Commission recommended police evaluate possible non-lethal methods of controlling violent behavior. When the Commission presented its recommendations to national media, a gentleman named John Cover had read an article about a hiker who grabbed a high voltage wire, became frozen to it for several hours, and lived to tell his story. Cover began developing an idea of a high-voltage, low-amperage, pulsed weapon that could knock a person down without inflicting injury. In 1970, Cover built his first prototype electrical weapon, which he called the TASER, an acronym for the Thomas A. Swift Electrical Rifle, named after the Tom Swift fantasy stories of Cover's childhood.¹³

The taser, however, lacked popularity because it used gunpowder in its delivery system and was shaped like a flashlight, therefore classifying it as

a weapon similar to a machinegun. Also, the low wattage of the electrical pulse (five watts) was ineffective. Government regulations restricted the weapon's use to only military, law enforcement, and individuals who had special permits. In 1980, the LAPD purchased and deployed 700 tasers. Although this event boosted the popularity of the taser, it remained relatively obscure.¹⁴

In 1993, brothers Tom and Rick Smith, motivated by the shooting death of a close friend, founded Taser International and set out to develop an alternative weapon that could debilitate a subject without killing him/her. The brothers teamed up with Cover to redesign his original invention. They changed the cartridge propellant from gunpowder to a nitrogen gas system, which eliminated the classification of the weapon as a firearm. This new weapon had a high failure rate, primarily because of its seven-watt design. Because of a legal decision, it could not be sold to law enforcement until early 1998.

In December 1999, Taser International introduced the Advanced Air Taser M26. This new model was increased to twenty-six watts and shaped like a handgun, increasing its accuracy and appeal to law enforcement. The increased wattage significantly improved the weapon's incapacitating ability.¹⁵

Today's taser works simply by short-circuiting the body's electrochemical receptors. It sends an electrical current through the individual's body, which interferes and overrides the body's neuromuscular system, and voluntary muscle control is lost. As a result, the subject will usually fall to the ground or freeze in place.¹⁶ Low amperage prevents the electrical current from causing significant injury, with only a very small irritation/burn resulting from the electrical contacts

and removal of the darts from the body. The electrical summary of the Advanced Taser M26 is:

- High Voltage = 50,000 Volts
- Power = 26 Watts
- Low Amperage = .162 Amps
- Safe Energy = 1.76 Joules Per Pulse (Medical Defibrillators have more than 150 Joules Per Pulse).¹⁷

The Advanced Taser has several limitations. To be effective, the weapon must deliver an electrical charge through two thin wires to the weighted darts that must make contact with the target. Currently, the maximum range of the weapon is twenty-one feet. The most common reason for a failed deployment is lack of a good contact with the targeted subject.¹⁸ The taser was not developed or intended to replace deadly force, but there may be misperceptions among the public and law enforcement relative to its capabilities and applications.

There are misperceptions that tasers can:

- Ignite blasting caps or explosives
- Damage nerve tissue
- Cause serious burns
- Cause urination or defecation
- Harm a fetus
- Affect a pacemaker

These are all misperceptions and, furthermore, no deaths have been directly attributed to the use of a taser.

Although tasers may seem to be an ideal less-lethal weapon for law enforcement, some civil rights groups would like to see them banned. Following several in-custody deaths that have occurred after a taser weapon was used, Amnesty International and the Pennsylvania Chapter of the American Civil Liberties Union have called for a moratorium on the use of tasers as a less-lethal police weapon until their effects can be further studied.¹⁹ In each of the incidents investigated, the subjects who had been subdued with a taser later died due to some other cause; however, because a taser was deployed prior to the death, media and others have capitalized on negative public misperceptions.

In an interview with Patrick Smith, co-founder of Taser International, the historical development of less-lethal weapons, eventual development of the Advanced Taser M26, and future implications of taser-like weapons were explored.²⁰ The following is a synopsis of the facts and opinions expressed. The full interview is documented in Appendix A.

Smith reported that approximately 25,000 Advanced Tasers M26 units are currently being used by over 1,500 law enforcement agencies, primarily in the United States and Canada. According to Smith, the taser is a new tool and opportunity that, in many cases, can avoid a situation where an officer must use deadly force to defend his or someone else's life. The first true generation of non-lethal weapons includes impact weapons and munitions. A baton and blunt physical force have been used as an alternative to a firearm. The second generation of weapons included chemical sprays that have come into use over

the past thirty to forty years. The third generation of weapons included the taser, which attacks the sensory nervous system.

The September 11 terrorist attacks brought recognition of tasers to a new level of awareness. United Airlines bought 1,300 units, which included two for every flight deck, and spent over \$16 million on training its pilots and crews on how to use the taser. This was much more economical than providing weeks of training and ongoing re-certification necessary to arm pilots with firearms. Prior to this event, law enforcement agencies have been quickly deploying M26 units in response to highly publicized police shootings and alleged beatings. The public outcry from these events has pushed law enforcement agencies to arm their officers with alternative weapons and tools for handling physically aggressive subjects. The baton and chemical sprays have their place, but there is a need for weapons that have the ability to quickly and effectively control subjects without the appearance of violence on the part of officers. The taser fits this need and is the most effective knockdown weapon currently available, short of deadly force.

Furthermore, Smith explained that though there are some experimental conducted energy weapons being developed, unless there is a quantum leap in technology, the taser will be the standard for several years to come. For the next five to ten years, wire conductors will continue to be the only viable delivery system. Future Taser weapons will include multiple shot capabilities, longer range, and better portability. Smith believes every officer should be equipped with a conducted energy weapon, but until the technology gets to the point where

a taser can fit on an officer's duty belt, like a radio or flashlight, field deployment will remain limited. This is unfortunate because of the spontaneous nature of police shootings. Taser weapons will not only reduce injuries to officers, but, more importantly, they will reduce the number of police shootings.

Use of Force Doctrines

There are two primary use-of-force doctrines common within the law enforcement environment. The most common doctrine is often referred to as the Use-of-Force Continuum. The more contemporary doctrine is referred to as the Use-of-Force Paradigm. A continuum is a stair-stepped approach to applying the proper amount of force to overcome resistant force. Essentially, a continuum requires officers to escalate progressively from one level to another until they have control of a suspect. Then, once the suspect decreases resistance, officers must deescalate their actions to an appropriate level.²¹

Unlike a continuum, which implies a successive progression through steps, the Use-of-Force Paradigm is a set of parameters which provide officers options to respond appropriately, including reasonable application of force. The officer must be able to evaluate and recognize the problem or potential threat, and then apply the appropriate tool for the situation, rather than the sliding scale of the Use-of-Force Continuum.²²

Regardless of which use-of-force doctrine a law enforcement agency subscribes to, the agency must determine where less-lethal weapons fall within the continuum and what are their parameters for use. In this regard, there is

much disparity. Some agencies have placed the use of tasers at a higher level than using a baton or kinetic-energy weapon. Most agencies tend to set parameters which place the use of a taser at a higher level than chemical sprays, yet lower than the use of a baton. Captain Sid Heal, a less-lethal weapons expert with the Los Angeles County Sheriff's Department, feels the use of tasers should be placed lower on the use-of-force scale than chemical sprays, if not for the minor injuries caused by the darts.²³

Summary

Numerous high-profile incidents of alleged police brutality have forced law enforcement to reexamine the types of tools, weapons, and use-of-force policies utilized in the past. Traditional less-lethal weapons, which include pain compliance and distraction weapons, still have a legitimate place in daily police operations. However, the technology of conducted-energy weapons has evolved rather rapidly over the past few years; and the idea of using electricity to overcome violent offenders is quickly proving to be a safe and effective alternative to traditional weapons and tools.

Though there is a high potential for mass deployment and success for these weapons, the weapons have serious limitations and misperception about their capabilities. Public perception of these tools is currently an unknown factor that could ultimately affect widespread acceptance. Though conducted-energy weapons can evolve to become the most versatile tools in a line-level peace officer's arsenal, public acceptance and law enforcement endorsement will dictate the future development and use of such weapons.

FORECASTING THE FUTURE

Nominal Group Technique

To determine what impact public opinion may have on the use of less-lethal technology by the year 2007, a Nominal Group Technique (NGT) panel was assembled. An NGT is a structured process that gathers a diverse panel of leaders who identify key issues related to a specific topic. It is designed to encourage equal participation and elicit ideas from each panel member without comment by other participants. Once all the ideas are displayed before the group, the participants openly discuss and analyze them. The NGT is not designed to predict the future; but by forecasting significant trends and events that might occur, a vision of a possible future can be identified with suggestions to make it happen. The next three parts of this section describe the preparation, process, and conclusion of the NGT exercise.

Preparation

Nine panel members were selected, representing a cross-section of professionals whose diverse backgrounds and experience brought a variety of perspectives to the discussion. Panel members (Appendix B) included:

- Vice Mayor, City of Stockton
- Deputy City Attorney, City of Stockton
- Newspaper Columnist, The Record
- Local Pastor and Police Chaplain, Stockton Police Department
- Lieutenant and SWAT Commander, Stockton Police Department

- Planning Manager, Stockton Police Department
- Lieutenant, Tracy Police Department
- Crisis Worker, San Joaquin County Mental Health Department
- Police Officer and Less-Lethal Weapons Instructor, Stockton Police Department.

Process

In addition to the panel members, two staff members of the Stockton Police Department were enlisted to assist with facilitation of the meeting. The NGT process began with an explanation of the issue statement. Documentation and supplemental technical information on a variety of less-lethal weaponry was provided; several less-lethal weapons were displayed; a video regarding less-lethal weapons was viewed; and a demonstration of the Advanced Air Taser was provided, with one panel member given an opportunity to deploy the weapon. A description of the NGT process and anticipated outcomes were also presented. Trends and events were defined, and flip charts on easels were used to record trends and events.

Trends

Prior to the NGT practice session, information was provided to panel members describing the NGT process, identifying the issues to be discussed, and requesting each of them come to the session prepared with at least ten trends and ten events related to the issue. During the NGT session, each member was asked to present the trends they identified. A trend is a series of events that are related, occur over time, and can be forecasted. The trends were

listed and placed around the room for all to view. From this process, thirty-nine trends were identified (Appendix C).

The panel discussed the trends, clarifying each, and consolidating some into one general trend. The panel was enthusiastic during this process, providing valuable insight and perspective on the topic. The panel members were asked to select what they believed to be the top ten trends that would impact how public opinion might affect the use of less-lethal technology in a large city by the year 2007. The selection process narrowed the original list of thirty-nine trends to the following ten:

1. Number of mental-illness patients in society
2. Level of community partnerships between law enforcement and social service agencies
3. Level of public awareness due to media exposure
4. Level of violent crime committed by youthful and female offenders
5. Level of funding for police services
6. Amount of law enforcement training in the handling of mentally ill and/or violent individuals
7. Level of socio-economic change in the community
8. Level of use of designer drugs
9. Amount of community events requiring crowd control
10. Level of assaults on police officers

Discussion of trends included:

1) Number of mental-illness patients in society - The panel felt the number of mental-health patients commingled into society would have a significant impact on the future use of less-lethal weapons. More mental health patients create more opportunities for police officers to encounter individuals who exhibit abnormal, and often violent, behavior. There will be a need for more specialized weapons and tools to assist officers in handling such subjects.

2) Level of community partnerships between law enforcement and social service agencies - More partnerships with social service agencies will broaden the scope of police officers' duties and make them more aware of resources available in their community. An increase in community and police partnerships will increase the public's awareness of police powers and limitations. With many government services facing tighter budgets, it is believed such partnerships, if properly and honestly arranged, will maximize the effectiveness of each agency committed to such partnerships.

3) Level of public awareness due to media exposure - As more less-lethal weapons are deployed and incidents arise where such weapons could or should have been used, media scrutiny will increase, thereby raising the public's awareness. Furthermore, the terrorist attacks of September 11, 2001, will continue to raise the public's awareness of less-lethal weapons as the country's security forces examine and experiment with new weapons, tools, and security devices.

4) Level of violent crime committed by youthful and female offenders - There is an inherent non-acceptance of police officers using deadly force

against women and youthful offenders. The panel felt that generally, only under extreme circumstances, would the public accept the use of deadly force against women and youthful offenders. The panel also felt the incidence of violent crimes committed by youthful offenders and women is on the rise; and because of the general public's sentiments, there will be much interest in officers using less-lethal weapons when confronted by such offenders.

5) Level of funding for police services - Economic trends will have a significant effect on the amount of funds available for new equipment. If budgets are decreased, there will most likely be an emphasis on making do with existing technology and equipment. Likewise, as economic conditions improve, there may be an emphasis to fund police officer positions instead of improving technology and equipment.

6) Law enforcement training in the handling of mentally-ill and/or violent individuals - The panel discussed the ongoing need to provide an increased level of police officer training to deal with the changing environment; specifically, mentally- and emotionally-disturbed individuals in society. Most agencies do not provide much training in the handling of mentally-disturbed persons, beyond basic POST training. This type of training should be increased to annual/routine refresher courses and "roll call" setting training.

7) Socio-economic level of the community - The panel felt the lower the economic health of a community, the less involved the public is engaged with law enforcement. They also felt the key to any community's overall quality of life is the level of socio-economics the community enjoys. The Stockton

Metropolitan Area, like many other communities, is struggling with energizing its downtown core in an attempt to attract higher-paying companies and employers. Historically, in an agricultural-based region, the overall socio-economic level of the area is relatively low. An increase in the area's socio-economic level would likely lead to more police and community interaction and involvement.

8) Use of designer and prescription drugs - The development and use of designer drugs could lead to many more people self-medicating themselves for depression and other forms of mental illness. The panel discussed how numerous legal drugs are being prescribed for specific mental-health-related maladies, and how patients are being coerced and/or convinced to sell these drugs on the street for a profit. The end result is that illegal street use creates a wide variety of reactions in non-patients, including violent and/or schizophrenic behavior.

9) Amount of community events requiring crowd control - There is strong local support for the promotion of community events intended to bring large and diverse groups together for cultural and entertainment events, particularly in the Downtown Revitalization Area. From past experience, citizens can expect a higher level of security for events that may draw a younger crowd or provide a possible interest for various gangs or groups with intentions of staging a public demonstration. These conditions could set the stage for large-scale confrontations between police and citizens, potentially having both positive and/or negative effects on the use of less-lethal weapons.

10) Level of assaults on police officers – Most officer assaults occur when a suspect is being taken into custody. The panel felt that many more offenders are likely to resist officers attempting to take them into custody than in the past. They attributed this to several social conditions, such as the maturation of drug babies, single-parent homes, gang and drug influences, and generational differences. Additionally, implementation of the three strikes law has potentially created a condition where an offender would be more likely to resist a police officer for a lower-level felony crime in order to avoid returning to prison. If the level of assaults on police officers increases, society can expect to see an increase in less-lethal technology used as a defensive weapon.

Using a Trend Summary Sheet, each nominal group member was asked to independently project a direction for each trend. The group was told to assume that 100 represents the status of each of the top trends today. The panel was asked to assign a numeric value to the status of each trend five years ago, within five years, and within ten years. They were then asked to place a value, using a scale of 1-10, with 10 being highest, on the level of concern for each individual trend. The Trend Summary, Table 1, indicates the average scores assigned to each trend, with the level-of-concern score rounded to the nearest solid number.

TABLE 1
TREND SUMMARY

Trend Statement	Impact on Issue				Level of Concern 1-10 Scale
	-5 Years	Today	+5 Years	+10 Years	
1. Number of mental health patients in society	59	100	124	166	9
2. Level of community partnerships between law enforcement and social service agencies	75	100	115	134	8
3. Level of public awareness due to media exposure	79	100	145	174	9
4. Level of violent crime committed by youthful and female offenders	74	100	137	189	9
5. Level of funding for police services	87	100	116	145	8
6. Law enforcement training in the handling of mentally-ill and/or violent individuals	75	100	123	159	8
7. Socio-economic level of the community	77	100	132	180	8
8. Use of designer and prescription drugs	74	100	83	179	9
9. Amount of community events requiring crowd control	51	100	135	140	7
10. Level of assaults on police officers	78	100	147	187	9

As indicated in Table 1, the level of concern for all ten trends was seven or higher. Five of the trends had a very high ranking of nine, which included: 1) Number of mental-health patients in society; 3) Level of public awareness due to media exposure; 4) Level of violent crimes committed by youthful and female offenders; 8) Number of people using designer and prescription drugs illegally; and 10) Level of assaults on police officers.

All trends were projected to increase over time, except Trend 8. Several trends were projected to significantly increase by the end of the ten-year projection period. With regard to Trend 8, the panel felt the illegal use of designer and prescription drugs would taper off somewhat in the near future, but that eventually, a new drug would come along and be widely used illicitly. The panel felt there is currently a downward cycle of drug use, but the pendulum will swing the opposite direction within the ten-year period.

The panel also considered the values, morals, and cultural and social influences on today's youth. Overall, the panel felt the children of today are being numbed by the increase in violence depicted in the media and music industries. Also, increasing family dysfunction will contribute to future juvenile and young adult offenders who will be more likely to commit violent crimes, assault police officers, and use drugs. This condition, alone, will impact the identified trends more than anything else.

Events

The same format used to identify trends was followed to identify significant events. An event is a single incident that can have a significant impact on an issue. The initial round produced thirty-seven events (Appendix D). By vote, the list was reduced to the top ten. It must be noted that though many of the identified events may have already occurred, such an occurrence or recurrence could affect local, state and even national perception toward the use of less-lethal weapons. Significant events identified through this process were:

1. Another Rodney King-type incident

2. A subject dies due to use of a taser
3. A police officer abuses a prisoner with a taser
4. A suspect incapacitates an officer with a taser
5. A medical report details the harmful effects of a taser
6. A suspect hijacks an airplane using a taser
7. Negligent or accidental discharge of a taser by an officer
8. A large crowd-control event where less-lethal weapons are deployed
9. "Sixty Minutes" conducts an expose on television regarding tasers
10. A police officer is killed or injured due to choosing less-lethal weapons instead of a handgun

The panel discussed events, as follows:

1) A Rodney King-type incident - The panel felt that if an incident of this nature were to occur, large numbers of less-lethal weapons which were not previously available could be deployed. How effectively and humanely they are used would significantly affect future use of such weapons.

2) A subject dies due to use of a taser - Although there have been no deaths directly attributed to the use of a taser to date, the panel felt the potential exists and such an event would have a very detrimental effect on the use of less-lethal weapons, particularly tasers and similar weapons. Even though it is unlikely that a taser-like device would actually cause a death, it is possible for a suspect to die while being subdued after a taser has been deployed.

3) A police officer abuses a prisoner with a taser - The panel discussed situations where an officer might misuse a taser weapon for the

purpose of eliciting a confession, retaliation, or other physical abuse. If this was to happen and the incident publicized, there could be public pressure to ban tasers and other less-lethal weapons.

4) A suspect incapacitates an officer with a taser - This event dealt with the possibility of an offender disarming an officer of a taser, then using it on the officer, incapacitating him/her. An event like this could make officers less accepting of these weapons. There was a discussion regarding police unions potentially responding and calling for the non-use of such weapons due to safety reasons. This could quickly spread throughout the law enforcement community and generate misconceptions of such weapons, ultimately diminishing their use.

5) A medical report details the harmful effects of a taser - The panel felt a medical report of this nature would severely hinder current and future use of tasers and other less-lethal weapons of this nature. Very few, if any, law enforcement agencies would be willing to accept the liability associated with such weapons. At the very least, the weapons would be temporarily recalled until extensive testing and rebuttal reports could be evaluated. Regardless, the public image of such weapons would be tarnished significantly.

6) A suspect hijacks an airplane using a taser - An incident of this nature would bring significant public attention to the weapon and its availability. By design, there are very few metal parts in a taser. As such, the perception may be that these weapons are easily concealed and smuggled through security checkpoints at airports and transportation terminals. An event like this could lead manufacturers to modify the weapons (e.g., incorporate more metal). Public

sentiment might lead to laws banning them for public ownership and limiting police use.

7) Negligent or accidental discharge of a taser by an officer - This event included situations where an officer incapacitates him/herself and/or his or her partner. An example might be an accidental discharge of a taser while driving a patrol car and causing a serious collision. The public embarrassment could lead to tighter restrictions on how such weapons are carried, used, and stored; ultimately, weapons would be made less accessible to officers.

8) A large crowd control event where less-lethal weapons are deployed - The panel felt a large crowd control situation where less-lethal weapons such as tasers, stingballs, and pepper-spray were deployed could have a significant impact on public perception and acceptance of less-lethal weapons. The panel discussed how the overall effectiveness, particularly in regards to the safety of officers and citizens, and the degree of property damage incurred, would determine the level of public and political support for further use. An example was expressed related to the 1960s, in Mississippi, where police officers turned high-powered water hoses (less-lethal weapons) on demonstrators, and how offensive the television images were at that time and remain today.

9) "Sixty Minutes" conducts an expose on television regarding tasers - This event is similar to Event Five, except that the impact of such an event would occur much faster due to media exposure. The panel felt that if a world-recognized television program like "Sixty Minutes" were to present interviews of perceived victims of police abuse of tasers, the story might shock the public,

which in turn, might create an overwhelming sentiment for the recall of tasers and similar weapons from police use. This could accelerate development of safe and more effective weapons, but most likely would significantly minimize any use of these weapons and lead to a rejection by the law enforcement community.

10) A police officer is killed or injured due to choosing less-lethal weapons instead of a handgun - An event of this nature could lead to a rush to point blame on the weapon itself, instead of how it was used, carried, or deployed, and the totality of the circumstances of such an event. Both line-officers and police managers would likely pursue having the weapons set aside until a more extensive examination of the weapon's effectiveness, safety, and training required in order to prevent another tragedy of this nature could be completed. On the other hand, such an event could, once again, lead manufacturers to develop weapons with more complicated safety features, which could prevent a similar event.

Table 2 indicates the scores the NGT Panel assigned to this instrument. Using an Event Summary Sheet, each panel member was asked to indicate, in Column Two, the first year in which they thought the event could occur. For Columns Three and Four, the members were asked to place a probability percentage of the event occurring within five and ten years. In Column Five, the panel was asked to place a value representing the impact the event would have on the issue if it occurred, using a 1-10 scale, with 10 having the most impact. The members were then asked to indicate whether the impact would be positive or negative to the issue in Column Six. The median score was used for the first

four columns. The average score, rather than the median, was used regarding the positive or negative impact.

TABLE 2
EVENT SUMMARY

Event Statement	Years Until Probability Exceeds Zero	Probability		Impact on Issue Area if Event Occurred	
		+5 Years	+10 Years %	Impact on Issue 1-10 Scale	Positive or Negative Impact +/-
1. A Rodney King-type incident.	5	44%	48%	9	-
2. A subject dies due to use of a taser.	3	34%	46%	8	-
3. A police officer abuses a prisoner with a taser.	3	60%	79%	9	-
4. A suspect incapacitates an officer with a taser.	4	48%	71%	6	-
5. A medical report details the harmful effects of a taser.	5	31%	55%	7	-
6. Suspect hijacks an airplane using a taser.	4	43%	57%	9	+
7. Negligent or accidental discharge of a taser by an officer.	4	38%	52%	7	-
8. A large crowd-control event where less-lethal weapons are deployed.	5	48%	64%	7	+
9. "Sixty Minutes" conducts an expose' on tasers.	5	65%	74%	8	-
10. A police officer is killed or injured due to choosing less-lethal weapons instead of a handgun.	2	43%	57%	7	-

Cross-Impact Analysis

Two panel members and a researcher participated in a Cross-Impact Analysis exercise. During this part of the process, the individuals were asked to assess the positive and negative impact that events have on trends. This was done by asking the question, “If Event 1 occurs, what impact will it have on Trend 1?” They assigned a value of 1-5 to the events and trends, with 5 having the most impact and an indication of the value being positive or negative toward the issue on a Cross-Impact Analysis Sheet. This process was then repeated for the other nine events and trends. Table 3 depicts the results of the Cross-Impact Analysis, using the median scores of the three participants and illustrating the impact that events have on trends. The potential for creating the future rests on understanding how events can influence trends and by encouraging or discouraging event occurrence.

TABLE 3
CROSS-IMPACT ANALYSIS

<u>EVENTS</u>	<u>TRENDS</u>									
	# Mental Health	Partner-ships	Media Exposure	Youth/ Female Offenders	Funding	Training	Socio-Economic	Drugs	Events	Assaults on Police
	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
E1 Rodney King	0	-5	+3	0	-2	+5	0	0	-1	-2
E2 Subject Dies	0	+2	-5	0	-3	+4	0	0	0	-1
E3 Police Abuse	0	0	-5	-3	-4	+5	0	0	-1	-3
E4 Officer Incapacitated	0	+1	-2	-1	+1	+4	0	0	0	-4
E5 Medical Report	-1	+1	-5	-1	-1	+4	0	0	0	-2
E6 Hijack	0	0	+4	0	+2	0	0	0	0	+1
E7 Negligence	0	+1	-2	0	-1	+2	0	0	-2	-1
E8 Large Crowd	0	+1	+5	0	+3	+1	0	0	+2	+2
E9 "60 Minutes"	0	-2	-4	0	-3	+1	0	0	-2	-2
E10 Officer Killed	0	0	-5	-1	-1	0	0	0	0	-1

From the Cross-Impact Analysis, several significant and desired trends became evident. Likewise, it is easy to see that what may be considered a desirable trend could be negatively impacted by a single or series of events. Finally, it became evident that even an event that most people would consider negative could have a positive effect on the future use of less-lethal weapons in law enforcement.

The NGT panel identified three trends that would likely effect the use of less-lethal technology, but the identified events had little or no effect on the trend. These included a number of mental illness patients in society, a level of socio-economic change, and a level of illegal use of designer and prescription drugs. In the case of these trends, the significance of each would justify and promote the expanded use of less-lethal weapons by law enforcement.

Nearly every event had a positive impact on Trend 6, Law enforcement training in the handling of mentally ill and/or violent individuals. Of particular note is that even negative events had a positive effect on this trend. For example, another Rodney King-type incident, Trend 1, would have a very negative impact on police and community relations, but could be the impetus for more extensive training in handling non-compliant subjects without resorting to the use of weapons like batons and/or firearms. It could also create a groundswell of support for weapons and tools that are subtle, yet effective, in taking non-compliant subjects into custody.

Event 8, a large crowd-control event where less-lethal weapons are deployed, could have a significant positive effect on six out of ten trends, if the use of such weapons were successfully deployed with minimal injuries and little or no property damage. Conversely, if an event of this nature were to go awry, it would negate nearly any positive effects on the identified trends.

Eight out of ten events had a significant impact, either negatively or positively, on Trend 3, the level of public awareness due to media exposure. It is

apparent the media will have a huge impact on how the public perceives the use of less-lethal weapons.

From the Cross-Impact Analysis, it became apparent that many events would likely have a negative effect on the future use of less-lethal technology, and could impair their development and use in a large police department. It also became apparent that even negative events could have positive, long-term effects on the use of less-lethal technology in law enforcement, primarily because of public and political demands for safer, more-effective training, and use of such technologies. The key for law enforcement leaders is to bring about such public expectation without experiencing traumatic events, such as the death of a police officer or a Rodney King-type incident.

Future Scenarios

Based on the literature reviewed and the scanning process, as well as the trends, events, and Cross-Impact Analysis compiled as part of the NGT process, three alternative future scenarios were developed. These scenarios depict an optimistic and desired future, a pessimistic and disastrous future, and a surprise-free and status quo future. The scenarios illustrate the need to influence and create a positive future through strategic planning, not only to achieve the desired state, but also to avoid the serious consequences of inaction and lack of foresight.

Scenario One – Optimistic

June, 2007

For all outward appearances, David Graham seemed to be a normal man. He earned a modest living owning and operating a small convenience store located in a middle-class neighborhood. Over the past five years, business had not done well. Approximately one-half mile away, the city had allowed the building of a large shopping center that included a twenty-four-hour convenience store, part of a national chain. Graham opposed the development of the center and made a presentation at the city's Planning Commission meeting; however, the development was passed and has slowly pushed him out of business to the point of filing bankruptcy.

Graham did not have any children, but had been married to his wife, Rose, for nearly sixteen years. Their relationship had become rocky in recent years, and Graham blamed it primarily on financial problems. More recently, Graham had been drinking heavily, and Rose had moved out because of her husband's frequent episodes of rage and violence. Rose told Graham she wanted a divorce.

Officer Larry Dean reported for duty at 1700 hours, his normal shift. Dean was a three-year member of the Stockton Police Department and had career dreams of becoming a detective and possibly a SWAT member. Dean and his partner Bob Lewis cleared the station after briefing; within minutes, they heard a call dispatched of a man armed with a gun, threatening to shoot himself. Making

this situation even graver was the fact the man was perched on a busy overpass that spans Interstate 5. The officers responded Code Three to the incident.

Both Dean and Lewis, along with the whole patrol force, had recently attended twenty hours of training on dealing with mentally-disabled persons. During the course, many aspects of dealing with people under extreme situations were discussed. Of special note was the instruction on making initial contact with potential suicidal individuals. Without deliberately thinking about it, both officers took inventory of the weapons and tools they had on their person and in their vehicle and felt confident.

As the officers arrived at the scene, several other officers and a sergeant were getting into position and surrounded Graham in a loose semi-circle. The closest officer was approximately seventy-five feet from Graham. Graham paced back and forth, a distance of about ten feet, and held a small revolver to his head and occasionally to his neck. He appeared to be talking to himself, but would not respond to the officers who were telling him to drop the gun. Making this situation extremely dangerous and confusing was a massive rush-hour traffic jam caused by the incident. Two news station helicopters hovered overhead in a circular pattern and beamed live shots to their respective news stations.

Dean and Lewis immediately took up a position behind their car and armed themselves. Lewis instinctively took up a cover position and aimed his .40 caliber pistol at Graham, keeping as low a profile as possible. Dean retrieved the newest tool in their arsenal, the Taser M99 long-range, neuromuscular debilitator, more commonly referred to as the 99. The 99 looked very much like a

shoulder-aimed gun and fired a small self-contained cartridge which imbedded itself in the target and delivered three five-second bursts of electrical shock. From their training, the officers knew the weapon had an effective range of fifteen meters and, if accurately deployed, could override Graham's nervous system, rendering him incapacitated for fifteen seconds. This would be plenty of time for surrounding officers to physically take Graham under control.

Dean moved to the corner of his patrol car, with Lewis at his side. Both officers were relatively shielded. Sergeant Ross attempted to talk with Graham via a loudspeaker; but Graham would only respond by waving his free hand and yelling that he didn't want to hurt anyone else, but would if police tried to rush him. Sgt. Ross repeatedly assured him that the officers would not pressure him, and he repeated demands to put down the gun. As Graham continued pacing, he turned his back and was instantly hit in the back by a 99. Before he realized what had happened, Graham was on the ground and could not control his own hands and legs. Graham did not even know what happened to the gun he had in his hand less than a second ago. Almost just as instantly, three officers surrounded him and placed him in handcuffs.

Graham was transported to San Joaquin County Mental Health for a psychiatric evaluation and kept for a seventy-two-hour observation. He was also cited and released for a misdemeanor violation of brandishing a firearm. Graham received expert psychiatric care and was diagnosed as depressive. He was prescribed medication, which, along with ongoing counseling, helped him deal with the stress in his life. One month after his suicide attempt, the local

newspaper published a letter to the editor, written by Graham. Graham publicly thanked the officers for saving his life. He added that he had every intention of killing himself; but because of the officers' quick and decisive response, he has a new lease on life.

Scenario Two - Surprise-Free

July, 2007

Deputy Chief James Mackie set a report down and smiled to himself. The annual report on police officers injured in the line of duty revealed another ten percent decrease compared to the previous year. In fact, on-duty officer injuries had steadily decreased since the department first deployed Taser M26 less-lethal weapons five years ago. Although only one of four patrol officers was assigned a taser, deployments had increased commensurate with the decrease in officer injuries. It was obvious the fifty tasers the department purchased and implemented had more than paid for themselves. Also of interest was the fact that citizen injuries by officers had also steadily decreased during the same time period. The number of police shootings had remained relatively constant.

Deputy Chief Mackie collected his thoughts, wrote down a few notes, and highlighted key elements of the report in preparation for a presentation he would be giving to the city council later that night. Several community action group members had recently complained that officers were not taking enough time to allow someone to submit to an arrest before being "zapped by the cops." A few subjects had even claimed that police officers did not even let them surrender without first being shocked with a taser. Although these specific incidents were

investigated and the officers were exonerated (the incident occurred, but was justified and within policy), the individuals and community members wanted the use of tasers discontinued by the department. They claimed this was a case in which technology had contributed to officers becoming distant from the public and the citizens' feeling that the officers would just as soon "zap first and ask questions later."

Deputy Chief Mackie had heard these claims before, but the facts were clear. The increased use of tasers by officers confronting arrestees had led to decreased injuries to officers as well as citizens.

At the city council meeting, Deputy Chief Mackie made a logical and factual presentation. He pointed out that fifty taser units were still being used in Patrol, the same number originally purchased five years ago. Each officer was required to receive five hours' training before being assigned a taser. Policy was explained with regard to how most officers carry tasers in a low-slung holster, opposite their gun side, so it would not be confused as their firearm. Although it may look offensive, this is a small concession to make in comparison to their effectiveness. Several council members nodded appreciatively throughout the presentation.

After Deputy Chief Mackie's presentation, several citizens made brief, individual presentations to the council. They discussed various incidents in which they had been struck with a taser, and, in some cases, as they were merely pleading their case to officers. Many stated they had not been acting aggressively toward officers, but were just being animated, as this was common

in their respective cultures. A common theme expressed was that officers did not take enough time to listen and sort things out before using a taser to take control of the situation.

After hearing from each of the citizens, council members asked questions of Deputy Chief Mackie. They were primarily interested in knowing what degree of cultural training had been incorporated with taser training; whether the department had investigated less-lethal weapons; and if additional tasers, as well as other less-lethal weapons, would be deployed to more officers in the future.

Mackie advised the council that officers are periodically provided cultural-diversity training; however, it is not incorporated into specific taser training. He explained there are no current plans to increase the number of taser units at the department, primarily because of budget constraints. Finally, Mackie summarized his presentation by reiterating that the department had investigated several other less-lethal weapons; however, none had been as successful at reducing officer and citizen injuries as the taser. He closed by stating, "What we have been doing seems to be working, so why would we want to change?"

Scenario Three - Pessimistic

August, 2007

Chief of Police "Jake" Jacobs slowly opened the daily paper and spread it across his desk. He anticipated bad press on this one. Jacobs never felt comfortable with the media, and in fact, he distrusted the media, choosing to delegate most media contacts to his subordinates. He frankly had become tired

of local media neophytes trying to make a name for themselves at his department's expense. This time would be no different.

As frequent as these events had become, Jacobs could never gauge how the media would paint the picture. As he unrolled the newspaper, he read aloud the headlines, "Police shoot and kill unarmed man, and claim the suspect assaulted them with a knife." Chief Jacobs continued to read that several witnesses reported that David Williams, a mentally disturbed African-American homeless suspect, was trying to surrender when officers shot him. The article went on to describe how this was the fourth police shooting of an unarmed suspect within the past year. It also indicated that over the past two years, police officers have been involved in three additional shootings. Of the seven overall shootings, six so-called victims were of an ethnic minority group, and one subject was Caucasian. The article added that the newspaper planned to carry an expose on this topic over the course of the next three days, exposing police indifference and possible abuse.

Chief Jacobs set down his coffee cup and collected his thoughts in preparation of his daily meeting with his command staff. An hour later, he addressed the department's captains and lieutenants. He asked whether there was something they should be doing differently, relative to the number of recent police shootings. After a deadly quiet pause and some prodding by the chief, several managers began to express what they felt had contributed to the shootings and subsequent poor relations with the public. Chief Jacobs pointed

out that all of the shootings had been thoroughly investigated, determined justified, and within department policy.

A captain pointed out that although the department's budget had steadily increased approximately five percent per year over the past four years, the additional funds had been used for employee salary increases. Additionally, significantly less money had been available for training and new equipment. In fact, due to severe cuts in the training budget, officers were only receiving the POST-mandated Advanced Officer Training of twenty-four hours per officer, per year. The training addressed perishable skills such as driving, firearms, and baton/defensive tactics. Other than impromptu roll call training by sergeants, there had been minimal formal training over the past several years.

A patrol lieutenant expressed that she felt morale was very low in patrol. She explained how she had heard several complaints and grumbling by officers about many things, including a lack of specialized work opportunities, poor equipment, and managers who could care less about them. Of particular note, the lieutenant pointed out a prevalent them versus us mentality emerging between officers and the public. Several officers felt the department would not back them up and would bow to political pressure as a result of the recent shootings.

The Records Division captain addressed the issue of less-lethal weapons, particularly with regard to purchasing a variety of weapons, including tasers, sage weapons, beanbag rounds, and net-guns. He also discussed deployment of these tools throughout the patrol force, putting them at the disposal of the

average police officer. This generated a lengthy discussion on the amount and types of training that would be needed before the weapons could be deployed. Costs were estimated to be approximately \$50 thousand per year. The general consensus was that the initial capital outlay would be too expensive, and the amount of training needed to effectively deploy the weapons was prohibitive. One manager questioned whether management could trust line officers with such “fancy” weapons, especially at a time when many members of the public were calling for the disarming of officers.

Chief Jacobs felt the meeting was beginning to degrade, so he thanked his staff and concluded the meeting. He felt they had not accomplished anything and that no new ideas had been presented. Jacobs knew, however, that as in the past, this crisis would also eventually blow over.....or would it?

SECTION III

STRATEGIC PLAN AND TRANSITION MANAGEMENT

Overview

To create and manage the desired state portrayed in Scenario One, The Optimistic Future, strategic planning and transition management are necessary. This Section will discuss components necessary to develop a strategic plan based on Scenario One. It will include an understanding of the present state, organizational analysis, stakeholder identification, and development of alternative strategies. Transition management and the dynamics of organizational change will also be discussed. Additionally, a discussion will be included with regard to moving a department to a future state where less-lethal weapons, particularly conducted-energy weapons, are in widespread use. The strategic plan will help prepare an organization for change and mitigate many adverse effects. The Stockton Police Department will be used as an example in this portion of the project.

Strategic Plan

The issues of public acceptance and police deployment of less-lethal weapons have been identified and explored through scanning, literature review, NGT, and three scenarios. For the Stockton Police Department to move to a desired future state of widespread deployment of less-lethal weapons, specifically, conducted-energy weapons, it must have a thorough understanding of the present state of the organization as it relates to the stated issue.

Present State

The Stockton Police Department is a large agency serving a population of approximately 250,000 people. The city's ethnic composition is approximately 43.6% Caucasian, 25% Hispanic, 21.4% Asian, 9.1% African-American, 0.7% Native-American, and 0.2% other. It covers approximately 60 square miles.²⁴ With a City Manager/City Council form of government, the city of Stockton has an annual budget of \$252 thousand for Fiscal Year 2002-2003. Of that amount, approximately \$64 million is allocated to the police department. The police department has an authorized strength of 384 sworn, and approximately 200 civilian, employees. It is strongly committed to community-oriented policing and a problem-solving style of operations. The Department's mission statement exemplifies this philosophy.

Stockton Police Department Mission Statement

Our mission is to promote quality of life in the city of Stockton by working in partnership with the community to provide a safe and secure environment, recognizing and respecting the diversity and uniqueness of the citizens of our community, being sensitive and responsive to the public without bias or prejudice, utilizing personnel and financial resources in an efficient and effective manner, and responding to the ever-changing needs of our community.

In addition to the Department's mission statement, the Stockton Police Department has a set of values and ethics, which include integrity, professionalism, sensitivity, cooperation, and innovation.²⁵

Recognizing the need to explore the use of conducted-energy weapons, the Department made an initial purchase of twenty-six Advanced Taser M26 weapons in May 2002. These weapons were initially deployed to patrol

supervisors and SWAT members. In October 2002, twenty additional Taser M26 weapons were purchased with asset seizure funds, and another ten were purchased with a private donation to the Department. The thirty additional weapons were distributed to field training officers and other field supervisors. Currently, fifty-six Taser M26 weapons are in distribution within the Department. The Department's Use of Force Policy was revised, and a sub-policy for the use of tasers was implemented. The policy addresses the collection of data relative to the deployment of a taser weapon. Since May 15, 2002, the Department has had twenty-three documented cases where the taser was deployed and suspects were subdued. Of that amount, eight occurred within the past two-month period, indicating an increased acceptance of the use of the taser among line-officers. Though, this initial deployment of conducted energy weapons has been encouraging, there are far more instances where these weapons could have been used but were not, because of availability. There has also been little or no media reporting of their use.

In 2002, the Department participated in a Total Quality Management Culture/Organizational Character Index Survey, conducted by the Professional School of Psychology. In this survey, over fifty Department employees voluntarily participated, in an effort to identify specific traits of the organization relative to management.²⁶

Using a Meyers-Briggs Trait Index, the survey identified several positive and negative traits characterizing the management of the Department, as follows:

- Outward-looking and self-confident

- Operates as one big family, regardless of size
- Has a strong sense of order and tradition
- Believes that providing quality products for people is everything
- Helping hands are always available
- May prematurely push toward decisions
- Comfortable and stimulated by externally-driven changes
- Vision-driven toward change
- Sees stability as the norm, and change as the exception
- Innovates incrementally by making improvements
- May have trouble recognizing that change is happening, and is not very comfortable in a rapidly-changing environment
- Expects people to subordinate their personal needs to the greater good, and act as one of us. Those who don't are mistrusted, creating an us versus them mentality.
- Works at efficiently delivering products and services on time
- Excels in producing anything that requires a high degree of quality and consistency over time
- Excels at consulting, system-building, implementing, producing, anchoring, stabilizing, and regulating
- Works in traditional ways, and relies on experience

It is important to recognize these traits, as they can be barriers to effective change, as well as subtle conditions that may facilitate and expedite change within the organization.

To further analyze the department's capacity for change and prepare a strategic plan for organizational change, a particular methodical assessment must be used. The SWOT model has been selected for this purpose. The SWOT model examines the organization's strengths, weaknesses, opportunities, and threats affecting the issue. The opportunities and threats represent environmental or external impacts on an organization, while strengths and weaknesses represent organizational or internal impacts on an organization.

Internal Weaknesses

- Staffing shortages of sworn officers inhibit the ability to fully implement and staff new units and programs.
- Management personnel may not be accepting of new technologies, in particular, with regard to arming officers with new weapons.
- Line officers may be resistant to new technologies.
- The Department does not maintain a liaison with military and/or research institutions.
- There are no funds allocated for researching less-lethal technologies.
- There is no systematic review of less-lethal technologies by a Department-authorized group.

External Opportunities

- There is widespread public interest in less-lethal technology.
- There is political support for arming officers with less-lethal weapons and technology.

- There is strong support of officers to deploy new tactics and technologies for dealing with mentally-disturbed individuals.
- The Department is seen by outside agencies as innovative, resourceful, and ready to participate when needed, encouraging collaboration.
- Partnerships can bring new technology and grant funding sources.

External Threats

- State and federal technology grants have diminished.
- Local funding sources for equipment and new weapons are minimal.
- Civil Rights groups (e.g., ACLU) may file an injunction banning the use of conducted-energy weapons.
- Local and state legislators may impose regulations on use of conducted-energy weapons.

Internal Strengths

- There is a shared vision among managers with regard to the Department's mission, values, and ethics.
- There are strong, long-standing partnerships between the Department and community groups.
- The Department has a strong training capacity and tradition.
- The relative youthfulness of Department employees creates an atmosphere where new technologies are readily accepted and easily implemented.
- The Department has a Public Information Officer who maintains direct

access to local media outlets.

Stakeholder Identification

A stakeholder is a person or group of persons likely to have an interest in an outcome by virtue of being affected by that outcome. Table 3-1 identifies the stakeholders in the Department’s plan to implement a wide array of less-lethal weapons. Each stakeholder views the issue from a slightly different perspective. Along with identifying stakeholders, the table illustrates their position on the issue as it relates to a need for inclusion in the process, recognition of contributions, sharing of information, and taking a leadership role.

TABLE 3-1
STAKEHOLDERS AND THEIR EXPECTATIONS

STAKEHOLDER	INCLUSION	RECOGNITION	INFORMATION	LEADERSHIP
City Council		X	X	
City Manager	X		X	X
Chief of Police	X	X	X	X
Police Management	X	X	X	X
Police Rank and File	X	X	X	
City Council Members		X	X	X
County Mental Health		X	X	
Courts/Judges	X	X	X	
Health Care Providers (Hospitals, Physicians, HMOs, etc.)			X	
Military and Research Institutions	X	X	X	X
Community Action Groups	X		X	
Community at Large			X	
Media	X		X	X

Leadership Strategies

Leadership will be a key component in making changes within an organization. During the NGT process, three different scenarios were developed as examples of a possible future state. Any of the three future states is possible, depending on the leadership and strategic plan employed.

In the pessimistic scenario, leadership was indifferent to the issue. No new technologies were developed or deployed, and ultimately, service to the community suffered. The leaders refused to recognize the need to modernize systems and training, which led to an all-too-often tragic conclusion.

The normative scenario detailed a future state where leadership was involved in the change, but not actively involved in the change process. In this scenario, leadership accepted the status quo and hoped for the best. No real forward-thinking training or preparation was used as part of the change process. Instead, a relatively simple-fix, or stopgap measure, was developed and accepted as the new standard.

The optimistic scenario represented an active and aggressive leadership role relative to providing officers with the necessary tools and training for resolving a very high-risk situation. Preparation, collaboration with other agencies, and awareness of community sensitivities led to a future state where officers were well-equipped and prepared to deal with a crisis situation that could easily have a negative impact on the public's perception, support, and relations of the Department. Although this type of leadership requires the most work, it

reinforces the organization's mission statement and promotes a shared vision, guiding the organization to a desired future state.²⁷

From the optimistic scenario, many strategies which can have a positive impact on public perception and the future use of less-lethal weapons can be identified. The strategies that need to be developed will primarily be concerned with employee training in handling people in crisis, the use of alternate weapons, public and media awareness, and the availability of less-lethal weapons in the field.

Specific strategies should include:

- ◆ The establishment of formal liaisons with entities that are currently conducting research and development on less-lethal technologies. These entities include the military and its contractors; universities and colleges; and professional organizations, such as the National Institute of Justice and the Police Executives Research Forum.
- ◆ Developing a comprehensive public awareness plan which focuses on the increased use of less-lethal technologies. This plan should include establishing programs designed to inform and engage stakeholder groups that might affect public policy regarding the use of less-lethal technologies.

Examples include:

- Media training and demonstrations
- Citizen academy programs and demonstrations
- Presentations for community action and civil rights groups
- Speaker's bureau for social service organizations

- Presentations for mental-health organizations
- ◆ Specialized officer training, including:
 - Recognition and handling of mental-health patients
 - Suicide-by-cop/police-assisted-suicide response
 - Cultural diversity, particularly with new immigrant groups
- ◆ Development of organizational policies which clearly establish where the use of less-lethal weapons fall within the use-of-force continuum
- ◆ An accountability system should be established to track every use of force within a law enforcement organization. The use of less-lethal force is often unaccounted for, as there is usually little or no injury to offenders. However, an accountability system will provide management with an ability to monitor overall use and emerging trends.
- ◆ Assessment. Law enforcement leaders must actively and continuously, solicit feedback from the public through a variety of forums and sources. Statistics should be routinely collected on arrests, incidents of resisting arrest, officers injured on duty, and deployment of less-lethal weapons. This will allow managers and leaders to measure the effectiveness of organizational policies and practices relative to the use of less-lethal weapons and technology.

Transition Management Plan

To successfully move an organization from its current state to a desired future state, a transition management plan is essential. For this project, the future state would be an law enforcement environment where less-lethal

weapons such as tasers, are widely deployed, safely and successfully used, and readily accepted by police leaders and the community. A transition management plan provides a tool to describe and sell the output of the strategic planning process to key stakeholders, and serve as a guide for the organization to set priorities, make decisions, and allocate resources. Elements critical to a transition management plan include identification of a need for change, critical mass, and implementation methods.²⁸

Need for Change

Without a recognized need for change, any attempt to make changes will be met with frustration, resistance, and even resentment. There must be a common desire to move the organization to a desired future state. Communication among stakeholders is critical. The ultimate goal must be clear, roles and expectations must be defined, and stakeholders must understand that their roles are important to the plan's success.

Critical Mass

In any complex change process, there is a critical mass of individuals or groups whose active commitment is necessary to provide the energy for the change to occur.²⁹ Furthermore, a commitment plan should be implemented to include the following action steps:

- Identify the target individuals or groups whose commitment is needed.
- Define the critical mass needed to ensure the effectiveness of change.
- Develop a plan for getting the commitment of the critical mass.

- Create a monitoring system to assess the progress.

For the issue of this project, the following individuals or groups have been identified as critical mass:

- City Council
- City Manager
- Chief of Police
- Police Management Staff
- Police Line Staff
- District Attorney's Office
- Local Media
- County Mental Health Services

Table 3-2 illustrates the current levels of commitment of these critical-mass members. It also shows the movement of commitment that each member must reach to successfully bring about the desired change.

TABLE 3-2

CRITICAL MASS COMMITMENT

X = Current Position
 O = Desired Position

Critical Mass Members	Block the Change	Let Change Happen	Help Change Happen	Make Change Happen
City Council	X →	→	→	O
City Manager	X →	→	→	O
Chief of Police			X →	O
Police Personnel (Line and Staff)	X →	→	→	O
District Attorney's Office		X →	O	
Local Media		X →	→	O
County Mental Health Services		X →	O	

Implementation Method

Developing an Infrastructure

To bring about lasting change within an organization, the infrastructure of the organization must support the desired change. Several critical elements must be established and institutionalized to allow exploration, experimentation, and implementation of this and other technology-related projects. An organizational infrastructure that encourages idea-sharing, solicits input from employees and outside sources, and includes stakeholders in the decision-making process will bring about the most desirable long-term change. The following proposed infrastructure is not designed to create layers of bureaucracy, but to create a structure and process for an effective flow of information throughout the organization.

A management-level Technology Oversight Committee should be established within the Department to be responsible for reviewing several aspects of technology-related projects. This group should include police upper-management, mid-managers, supervisors, and strategic employees who maintain close liaisons with identified stakeholder groups such as the media, mental health care providers, and community-action groups. Their roles will be to keep these stakeholder groups informed of issues related to policy, new technologies being deployed, and most importantly, the purpose of implementing new technologies. The overall focus of this steering committee will be to review policies, identify and research new and emerging technologies for law enforcement, encourage innovation throughout the department, seek alternative funding sources for technology-related projects, and make recommendations directly to the Chief of Police.

A Safety Equipment User's Committee, comprised of uniformed officers, supervisors, and managers should be established to identify and field-test new weapons, tools, and other items that will increase their effectiveness in the field. Additionally, this group will be responsible for identifying and researching new technologies related to police safety equipment, and particularly, less-lethal weapons. Also, this group will forward recommendations to the Technology Oversight Committee and, likewise, receive occasional direction from the Oversight Committee, with regard to equipment and weapons. Members of the committee will be rotated frequently, to include a wide variety of employees, and further encourage new ideas and innovation.

Training programs must address utilization of less-lethal weapons. This training should include local representation from stakeholder groups such as mental-healthcare providers, community action group members, a city attorney, and civil rights advocates. Training of this nature can breakdown existing communication barriers and misunderstanding, while developing trust and cooperation among various stakeholders. Roll call, or daily briefing training will be the most effective environment for this instruction, providing concise instruction and group-interaction among stakeholders. Additionally, less-lethal weapons training should be incorporated in annual firearms and defensive tactics training.

This Section has described the processes involved in strategic planning and transition management as they relate to preparation and implementation of organizational change. Through the NGT process, a desirable future state was identified. Strategic planning and effective transition management are necessary to move, and eventually arrive, where the organization should go. Understanding the organization's strengths and weaknesses as they relate to the future use of less-lethal weapons is essential. Identifying and involving stakeholders, recognizing and utilizing the force of critical mass, and developing an infrastructure to encourage new innovations are critical components to building public support for the expanded use of less-lethal technologies in a large urban police agency by 2007. These things, along with action toward creating events, will determine the future. The next Section discusses the study's findings and its implications on leadership and conclusions.

SECTION IV

CONCLUSION

Findings

Until recent events brought this issue to the forefront, less-lethal weapons have received little media and public attention. In a sense, “The cat has been let out of the bag” and the public and media are intrigued by these relatively new technologies. Law enforcement can anticipate an increase in public expectation to utilize these new technologies and rely less on the use of deadly force. Public and political scrutiny of police shootings will increase significantly. Community leaders will readily ask, “Why didn’t officers use a taser or other less-lethal device?” Conversely, there is significant misperception regarding conducted-energy weapons and electricity in general. Unless the media and public are adequately informed and involved with their local law enforcement agency, these misconceptions can easily lead to the banning of such technologies.

As law enforcement officers become more comfortable with these technologies, there will likely be a tendency to overuse such weapons. Though society is technologically advanced, the basic nature of police work is not. The nature of law enforcement is to deal with people who are in a crisis situation. Officers who are quick to apply new technologies, in lieu of interacting with people at their basic level, will only work to distance law enforcement agencies from the communities they serve.

Implications On Leadership

The optimistic scenario developed through the NGT process presented a win-win situation where field officers were equipped with the right tools under the right conditions, with a very desirable outcome. In reality, police high risk situations are increasing, and the outcomes have often become a political and media free-for-all. Permanent damage to a department's credibility and standing is often the result. In the future, departments will face the routine question, "Why wasn't a less-lethal technology used?"

Law enforcement leadership will continue to face these pressures. Public awareness and media involvement will minimize public misconceptions about new weapon technologies. Visionary and participatory leadership will bring the organization to a voluntary, desirable future state where employees properly and effectively utilize less-lethal weapons and are enthusiastic about new and emerging technologies. Law enforcement leaders will need to embrace new ideas and technologies; trust employees; reinforce the organization's mission, vision, and goals through actions; and encourage participation in the decision-making process.

Budgetary Implications

It costs approximately \$500 per unit to outfit a patrol officer with the Advanced Taser M26 unit. Cartridges cost approximately fifteen dollars with batteries costing an additional ten dollars. To outfit a patrol force of 200 officers will take an initial outlay of approximately \$100,000. Annually, an additional

\$25,000 will need to be budgeted for replacement costs, training cartridges and batteries.

In today's economic environment, there is little room for additional funds for equipment such as tasers. There are, however, alternate sources of funding that should be explored. These include grants, foundation sponsorship and private donations to offset initial capital outlay.

Conclusion

This project asks the question of how public opinion will affect the future use of less-lethal weapons in a large municipal law enforcement agency. The literature research and futures forecasting indicate the public supports the expanded use of these weapons and technologies in law enforcement. Yet, less than ten percent of all law enforcement officers have weapons such as tasers immediately available to them in the field. The obvious question here is, "Why is this so?" If there is public support for the increased use of these weapons, why is it not happening? To arrive at the desirable future state where less-lethal weapons, specifically, conducted energy weapons, are commonly and effectively used in law enforcement, several basic barriers must be overcome. These obstacles include misperceptions by police leaders and the public, cost, and the development of the technology itself.

Law enforcement leaders must actively support the future development of less-lethal technologies and be inclusive with the public and media in the general evaluation of their use. An expansion of their use will stimulate further development of technology, particularly delivery systems and portability. With

more successful and safe deployments, in lieu of fatal police shootings, political and financial support can be expected. So, it becomes obvious that the primary obstacles are inter-related and must be approached systematically and collectively. Law enforcement leaders may not be able to directly affect technology development and cost, but they can directly affect public perceptions and their own potential misperceptions. Therefore, the priorities in addressing these obstacles begin with law enforcement leadership.

The effective and widespread future use of less-lethal weapons and technology in law enforcement will require police leaders to be innovative, risk-takers, and informed supporters. Within the next five to ten years, an increase is expected in the number of tasers and other conducted energy weapons being deployed in law enforcement. However, the full potential for widespread acceptance will not likely come about until law enforcement leaders take an active role in pushing for the technological development of the weapons and engage in an awareness effort to gain public support and financing. The expanded use of less-lethal weapons in law enforcement will require law enforcement to intensify police training, stay abreast of new technologies, increase public awareness, and develop and maintain media support.

APPENDIX A

INTERVIEW WITH PATRICK SMITH, TASER INTERNATIONAL

RIES: How many Advanced Taser units are in use today?

SMITH: We have approximately 25,000 advanced tasers fielded by over 1,500 law enforcement agencies, primarily in the United States and Canada. We are starting to see some movement internationally. There are approximately one million law enforcement officers in the United States, so there is a lot of room to grow.

RIES: Some elements of society would like to see officers armed only with less-lethal weapons. Will less-lethal technology ever replace deadly-force weapons? Is there a relationship that exists between these two types of weapons?

SMITH: The march of technology is inexorable and unstoppable to a certain degree. I mean, we're going to continue, as a society, to invent new technologies and better ways of dealing with situations. Ignoring this is not a plausible or possible solution. So it becomes a question of how you position it. And we have tried to be very careful with law enforcement to back the officers in their needs, basically saying, "Look, this isn't a reason to go out and disarm the officers. This is to arm them with a new tool, a new opportunity that, in many cases, can avoid getting into a situation where the officer must use deadly force to defend his life or someone else's." That's where I think lethal force will always be.

RIES: Where do you see the future of taser-type weapons?

SMITH: I think, first, if we take a look at where we've been historically, in terms of the generation of non-lethal weapons, it will help us understand the future. The first true generation of non-lethal weapons includes impact weapons and munitions. The baton to the body, and blunt physical force, have always been used as an alternative to a firearm. More recently, the amount of kinetic force used in weapons has increased significantly, which often causes severe injuries such as broken bones and soft-tissue damage. The second generation of weapons included chemical sprays that have come on line over the past 30-40 years. I think the focus here was to try and develop some tools that might be less injurious but still create discomfort, and instead of doing it physically, by doing it chemically,

impacting the membranes, etc. The third generation of weapons includes the taser. The original concept of the taser was to attack the body at a command-control level, instead of relying on physical force to either debilitate someone, or cause distraction or pain. And rather than trying to attack the sensory nervous system through chemical receptors, what about using electricity to directly attack the neuromuscular control centers of the human body?

RIES: Taser weapons have been around for about 30 years. How have they changed from the first versions? Why has it taken so long for them to develop and be accepted in law enforcement?

SMITH: The first generation of tasers really didn't deliver well. Individuals could fight right through being shot with the early tasers. I feel the early failures have been a major factor that limited the development of non-lethal weapons. In the mid-90's we had some very embarrassing demonstrations with our early seven-watt air taser, where we had groups of officers, one after another, get up, get motivated, get themselves back up, and let us shoot them; and then they would walk right over and punch you or take the weapon away. So at that point, we really focused, about four years ago, on the effectiveness problem. How do we get a non-lethal weapon to accomplish similar outcomes as the lethal weapons, at least in terms of what the officer is looking to achieve...and that is debilitation of the subject. The officer's goal, at least from our perspective in looking at it from a weapons developer, is to debilitate the target as quickly as possible. So with the development of the M26, our entire focus was to get the effectiveness down so when we get good connection, this weapon can and will stop focused, aggressive, combative people.

This kind of gets me to where we're at today. With improvements in delivery technology using wire systems, we elected not to bite off more than we could chew. So in this first generation, our goal was to get the effectiveness solved. And part of that also is what led to the gun-shape. There were two issues for the gun shape. One was accuracy and usability under stress. We found that it was better than other shapes that we had tested. The other thing, frankly, was we needed to appeal to the line-level officers. And we found that the shape of something that feels like a firearm, conveys a sense of confidence and effectiveness to a potential user. There was a lot of skepticism because of the previous shape of the taser and its reputation for failure; but because the M26 prototypes were shaped in a more familiar fashion and more aggressive, we found that police officers were much more accepting.

I think we're in a position where today, we have the most effective knock down technology on a human being, period. We have delivery limitations, yes. We can only deliver the charge up to 21 feet. We can only deliver it through up to 2-1/2 inches of clothing.

RIES: Compared to other less lethal weapons, what are the advantages you see with taser-type weapons?

SMITH: Of the ways you can attack the human body, electricity has a couple of real key advantages. It's certainly more effective than trying to do some sort of physical restraint, like a net gun or something like that. If we're going to go after something beyond a pain response, the only thing you're going to be able to do, in my opinion, is attack the central nervous system or the neuro-communication network, in general. Now, in terms of attacking the nervous system, there's electrical and there's chemical. The chemical approach poses many problems. Any time you deal with chemical structures, you have to deal with allergies and, most importantly, dosage. If you're dealing with something that's delivered by injection, like a tranquilizer gun, then the speed with which that chemical will take effect on the human body, depending on where it's delivered, not only physically where on the body, but also into what type of tissue is it injected? Is it injected muscularly? Is it injected directly intravenously? How fast is the chemical diffused into the body? And then you've also got to be adjusting dosage concentration depending on the blood volume and body mass of the target. As you can see, there is a lot of complexity here. One of the advantages of electricity that I think really makes this the technology of the future, is that the electrical potentials that form across nerve-cell membranes are uniform across humans. Whether you're an infant or a NFL linebacker, it takes the same level of electrical charge to stimulate the nerve cells in the body at a microscopic level. So we don't have to meter the amount of charge to specific characteristics. We just need to know that we can create electrical fields of a sufficient level that disrupt neuromuscular communication but do not affect critical body functions like breathing and heartbeat, or cause unconsciousness.

In the future, I believe electrical is where it's at, and that's where the big development will be. The next generation of development is going to be dealing with items other than the pure effectiveness. The effectiveness of the waveforms and the electrical stimulation is approaching 100% under controlled-delivery circumstances. The issues of the future relate to size and portability. We've got to get the technology to where it can fit on an officer's belt and they are wearing it as regular piece of equipment, like handcuffs or a flashlight. Future tasers will have multiple-shot capabilities, and the first thing you'll see

out of us is heavier clothing penetration. That accounts for the majority of our failures today. We're just getting ready to announce a winter cartridge, a heavier dart with a longer needle designed to penetrate more clothing.

RIES: Do you think advancements in battery technology will reduce taser size, making them more portable?

SMITH: Yes. It's going to come down to a variety of factors, most of which just relate to the pure efficiency and size of the batteries and the power transformers. As these items become miniaturized, many possibilities will open up.

RIES: Let's take this out a little bit farther than just the next generation, say five years from now, and then even ten years from now. Can we expect to see weapons of this nature that are wireless?

SMITH: There are a couple schools of thought on that. We believe for the next five years, wired solutions will remain the primary delivery system. Right now there's not a real clear vision of how to get to a wireless solution. Certainly, we get asked about wireless, all the time. It is a big factor. People would love to see this without the wires. In the next five years, you will see one wireless system, and that's the military application called the Area Denial System. Basically, it uses microwaves as a delivery system and delivers a beam that heats a person's skin, creating a painful response. The beam is only one inch by one inch and can be swept over a number of people. The main problem with this weapon is its size. It literally takes a tracked vehicle to transport it, and it is still experimental. In terms of tasers going wireless, there's really two possibilities. One is that somebody figures out how to transmit the electricity through a column of air. Leading thoughts on that have been to use phaser-beams to ionize a column of air that then will become conductive to act like a virtual wire and transfer an electrical pulse through this column of air to the target. I'm a real skeptic on that one. Technical people I've spoken with indicate that something with enough power to ionize a column of air will also ionize large parts of flesh at the other end. And the power required would make this a very large weapon. It would burn holes through whatever you're shooting it at. Another system deals with using liquid as the conducting-medium. From what I understand, those have not been real successful, just because you can't get the water to stay in a steady stream. They tend to form droplets, and then you get breaks in the stream. Although, that idea holds a little more practical promise than the phasers do.

Another new weapon being marketed is a self-contained projectile system. I think that probably has the most long-term promise, but that's going to require some real improvements in battery technology. It is just too big and ineffective at this time. However, I think in the long term, the direction is likely to go towards the self-contained projectile. That whole approach just seems to have less black magic. It seems more realistic than the phaser beam.

RIES: What about the public perception of these weapons?

SMITH: One of the things we ran into was that the early Tasers used gunpowder in the cartridge. This made it classified as a Title II weapon like a sawed-off shotgun. They really couldn't help anybody but the specialist law enforcement agencies or people who could get special permits. That led to this perception that the government made tasers for law enforcement because they're scary, or for some other reason. The fact that it was designed to look like a flashlight and used gunpowder was a big mistake that the design team made. They designed it right into a concealed-weapon classification, and we're still dealing with some of those perceptions today. When we first introduced the air taser, four states introduced laws to ban it. We made numerous presentations to congressional panels, and demonstrated that this weapon was not anything mysterious; that it is safe and effective technology. The September 11th terrorist attacks brought recognition of these weapons to a new level of awareness.

RIES: I understand that your company has armed United Airlines pilots with the M26's. Correct?

SMITH: Yes. United Airlines bought 1,300 units, 2 for every flight deck. United spent over \$16 million, giving their pilots and crews 8 hours of training on how to use the taser. Had they elected to arm pilots with firearms, United would have had to provide weeks of training and ongoing re-certification that would have been cost-prohibitive. In this case, tasers were a better choice of weapon, given the environment of an airplane, and much more economical.

RIES: Are the pilots satisfied?

SMITH: Yes. There is a 98% approval rating of the taser.

RIES: In dealing with the media and public perceptions, what would be your advice to an agency who is looking to get public support and funding for widespread distribution or deployment of taser weapons?

SMITH: My advice is to just be honest. Show that you're doing the best you can. Bring the media in. Don't hide anything; there's no reason to. If you hide something, they're going to dig it up. If you're non-cooperative, they're going to be confrontational. For agencies that are looking to deploy non-lethal weapons, the most effective first step you can do is bring the media in. Invite reporters to go through either by using a training course, or even setting up a special media day. This is the kind of interesting, cool, visual stuff that draws viewers; so it accomplishes their goal of getting people to tune in and watch the news. And by putting reporters through the training, you build a better relationship with the department, because now these reporters feel like, "Hey, I'm on the inside. I'm kind of one of the guys. I got to go through this training, and I got to try this new weapon out."

RIES: Do you see any kind of a double-edged sword though? Because when an incident occurs where less-lethal weapons could have been deployed, but weren't, department's have been second-guessed in the media.

SMITH: You're going to be much better off if you train them up front and bring the media in. Where you really get problems is either you use the taser; but you use the taser and then the media, and then the next day you've got front- page newspaper, "Stockton PD Electrocutes Man." So those are things you can avoid by getting the media educated. They don't say stupid things. And that scares the public. When you bring a media guy through the training, they at least leave smart. They understand the weapon and they're less likely to send out misinformation.

RIES: What is their availability to the public?

SMITH: We don't make the M26 available, but we do make a variety of tasers available to the public. We try to self-regulate their availability to the public. The Advanced Taser is only distributed to law enforcement, while other models are available to the public. We have tried to also develop a weapon that citizens could defend themselves without resorting to the use of lethal force.

APPENDIX B

Nominal Group Technique Panel Members

Kay Corsun
Supervisor, Adult Protective Services Specialist
San Joaquin County Mental Health

Gloria Nomura
Vice Mayor
City of Stockton

Michael Fitzgerald
Columnist
The Record

Reverend Dwight Williams
Police Chaplain, Stockton Police Department

Lieutenant Richard Sant
Patrol Commander
Tracy Police Department

Lieutenant Blair Ulring
SWAT Commander
Stockton Police Department

Robert Marconi
Planning Manager
Stockton Police Department

Officer Jay Smith
Less-Lethal Weapons Instructor
Stockton Police Department

Rick Taylor
Deputy City Attorney
City of Stockton

Lieutenant Jim Zulim
Command College Mentor
Clovis Police Department

APPENDIX C

Nominal Group Technique Trends

March 2002

- Violent Crimes Committed by Juveniles and Females
- Media Making Public More Aware
- Designer Drugs
- Assaultive Behavior Toward Police
- Non-funded Mandates - POST Reimbursement
- More Laws
- Increased Number of Drug-Induced Mental Illness
- Increased Use of Different Types of Weapons
- Growing Population
- Demographics
- Changing Economy
- Domestic Violence Involving Use of Weapons
- Entertainment/Media Influence (TV)
- Music (RAP Songs - Gang/Violence References)
- Lack of State/Local Funding for Treatment of Mentally Ill
- Suicide by Cop
- Budget Cuts - Unable to Purchase Less-Lethal Weapons
- Policies/Training - De-escalation of Use of Force
- Educate Community - Policies, Training, Objectives
- Partnerships - Community Agencies
- Police Department Substations
- Faith-Based Groups' Involvement with Police
- Further Community-Based Policing
- Overmedication of Society - Creating Dependency

- Anger Management
- Availability of Less-Lethal Weapons to Commit Crime
- Research Money for Law Enforcement Technology
- Military Development of Less-Lethal Weapons Not Available to Law Enforcement
- Private Industry - Monetary Gain for Cheap Imitations of Less-Lethal Weapons
- Drug War
- Diversion for Repeat Offenders
- Three Strikes Law - Affect on Criminal Behavior
- Desensitization to Violence
- Proactive Response to Crime by Community - Neighborhood Watch, Bounty Hunters, Vigilantes, Guardian Angels
- Increase in Public Entertainment Scene
- Homeless/Mentally-Ill Population Increase
- Police Presence in Schools
- Homeland Defense/Public Acceptance of Police Presence
- Increase in Lawsuits
- Globalization - Uniting Law Enforcement Issues
- Reluctance of Police to Use Force/Less-Lethal Weapons

APPENDIX D

Nominal Group Technique Events

March 2002

- Terrorism/Biochemical Attack, (e.g., Chemical Poisoning of Port, Anthrax in Fox Theatre Ventilation System)
- City of Stockton Opens Four District Police Precincts
- Lawsuit Alleges a Victim's Heart Attack/Death Was Result of Police Use of Taser
- Mental Health Director Institutes Policy to Allow Police to Admit Mentally-Ill Individuals
- New Laws Banning Firearms
- OC Regulations
- Media Report on Tasers (Expose')
- Financial Catastrophe of Public Agency
- Protestors/Attendees Clash at Religious Event at University of the Pacific
- Mentally-Ill Subject Locks Himself in Bus Bathroom on Busy Street
- Officers Become Too Dependent on Less-Lethal Weapons, Causing Officer Injury
- State Mandates Require Police Training
- Rodney King II Incident Occurs
- Mentally-Ill Subject Holding Himself Hostage
- Police Unit Vehicle Accident Due to Human Error of Taser
- Crowd-Control Issue at Concert
- Subject With Pitbull at High School
- Mass Anti-War Demonstration on Bay Area Bridge/Shutdown of Bridge
- Officer Misuse/Abuse of Taser
- Parent Uses Taser on Child
- Suspect Uses Taser on Police Officer

- Lethal Force Used by Police When Confronted With Non-Lethal Weapon by Suspect
- Combative Subjects in Bar, One With Taser Pointed at Police
- Mentally-Ill Subject in Hospital ER, Preventing Treatment of Other Patients
- Release of Medical Research That Tasers Cause Neurological Damage
- Company Devises Taser With Wireless System/Broader Range
- Cattle-prodding Device Perfected and Reintroduced to Law Enforcement as Less-Lethal Device
- Subject Hijacks Plane Using Taser

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