TRANSIT POLICING ALTERNATIVES: WHAT WILL BE THE ROLE OF INDEPENDENT TRANSIT DISTRICT POLICE DEPARTMENTS IN PROVIDING LAW ENFORCEMENT SERVICES TO CALIFORNIA'S URBAN RAIL TRANSIT SYSTEM BY THE YEAR 2004?

ACQUISITIONS

TECHNICAL REPORT

BY

C. CLARK LYNCH

CALIFORNIA P.O.S.T. COMMAND COLLEGE

CLASS 18

JULY 1994
This Command College Independent Study 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 consideration.

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 that the planner can respond to a range of possible future environments.

Managing the future means influencing the future—creating it, constraining it, adapting to it. A futures study points the way.

The views and conclusions expressed in the Command College project are those of the author and are not necessarily those of the Commission on Peace Officer Standards and Training (POST).

© 1994 by the California Commission on Peace Officer Standards and Training
What Will Be the Role of Independent Transit District Police Departments in Providing Law Enforcement Services to California's Urban Rail Transit Systems by the Year 2004?


ABSTRACT

The future of transit law enforcement in urban California is examined in terms of anticipated changes and specific techniques which will be employed to better meet the needs of transit riders. The research develops the need for the implementation of a zone policing concept in the delivery of police services. A model strategic plan outlines steps to implement this zone policing concept within an independent transit police department. Appendixes include the survey instruments, biographies of the delhi panel participants, and a bibliography.
TRANSIT POLICING ALTERNATIVES: WHAT WILL BE THE ROLE OF INDEPENDENT TRANSIT DISTRICT POLICE DEPARTMENTS IN PROVIDING LAW ENFORCEMENT SERVICES TO CALIFORNIA'S URBAN RAIL TRANSIT SYSTEM BY THE YEAR 2004?

JOURNAL ARTICLE

BY

C. CLARK LYNCH

CALIFORNIA P.O.S.T. COMMAND COLLEGE

CLASS 18

JULY 1994
This Command College Independent Study 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 consideration.

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 that the planner can respond to a range of possible future environments.

Managing the future means influencing the future—creating it, constraining it, adapting to it. A futures study points the way.

The views and conclusions expressed in the Command College project are those of the author and are not necessarily those of the Commission on Peace Officer Standards and Training (POST).

© 1994 by the California Commission on Peace Officer Standards and Training
TRANSIT POLICING ALTERNATIVES

NEED FOR PUBLIC TRANSIT LAW ENFORCEMENT

Within the United States today, one topic continues to appear on public opinion polls measuring concerns in the country's urban population centers. This concern focuses on the public's safety fears in view of the random violence and widely reported crimes. Published statistics show yearly fluctuations in crime rates, but the public's concerns have remained high as the violence is widely reported in the media. Although not as acute as the crime problem, a second concern expressed in urban areas focuses on the continuously worsening commute problems, with traffic congestion, deteriorating roadways, associated vehicle pollution, and hours wasted by drivers traveling extended distances from home to work. Many areas of the country are attempting to deal with the commute concerns through the construction of improved public transit systems. These new systems include heavy rail subway systems, light rail train and trolley systems, buses, ferries, conversion of existing railroad lines to commute service, or combinations of these modes designed to address the concerns of the commuter.

As these systems are being designed or expanded, extensive studies are conducted by transit authorities in the engineering of
structures, the design of the transit vehicles, and the location of facilities and stations. In most situations, there is less formal analysis undertaken in an effort to address one of the primary concerns of the potential users of the system; how will their safety be ensured and how will they be protected from crime? The field of transit law enforcement is not new, but the decision on how law enforcement services will be provided in a specific system is often undertaken based on the knowledge possessed by the management of the individual transit system, or the system's elected governing body. Additional information may be gathered from local law enforcement leadership, who generally have a well developed expertise within general municipal or county law enforcement, but have a limited exposure and expertise in transit policing. To make an informed decision regarding law enforcement within a transit system, transit administrators and law enforcement officials must communicate their mutual needs and develop programs specific to those needs within the transit setting.

As public transit systems are designed or expanded, one of the primary goals is to attract ridership to the system. This attraction must be strong enough to draw people out of the isolation and perceived safety of their personal vehicles. Instead, the potential patron must be enticed into enclosed public vehicles, often running through underground tunnels, in direct and close contact with all elements of society. This conduit between society and the public transit rider will deter usage unless the system is able to provide reassurances regarding the rider's safety.
and protection. This protection must also extend beyond the confines of the transit system if the surrounding environment is perceived as threatening. The transit system law enforcement agency must recognize that its ridership determines its travel mode based on a variety of measures, not the least of which is perceived safety in and around the transit system. If a transit system provides an area of safety within its limited boundaries, but the rider must then endure other dangerous areas to reach his final destination, the system will not be fully utilized.

EXISTING TRANSIT POLICING MODELS

In an attempt to assure the success of any new or existing public transit system, concern for the safety of the potential patron must be considered to be at least as significant as the design and scheduling for the system. One of the primary decisions which must be made is to determine the method that will be used to provide law enforcement services within the system’s vehicles and facilities. There are a variety of existing law enforcement models utilized by transit systems throughout the country. These existing models range from fully independent police departments employed by the transit district itself, to a total reliance on the police services of local police departments. These independent transit police agencies are departments of fully sworn police officers, employed by a transit district or transit authority, with law enforcement responsibility for the transit system.

Other models include the use of contracts with surrounding law enforcement agencies to provide services within the transit system,
use of non-sworn security personnel employed by the transit system or hired on a contract basis, or any combination of these models. Although regionalization of law enforcement departments is not generally a popular issue among law enforcement administrators, the development in a specialized role, such as transit policing, may be an appropriate area to consider. This transit police regionalization would provide a limited geographic area with one department responsible for, and focusing on, the specific problems related to transit systems in the region.

The decision on what type of law enforcement system will be employed in a specific transit system should not be left to chance or determined through a process of trial and error. If a transit system is to be successful in attracting and retaining ridership, its patrons must feel their safety needs are being met. It is then the responsibility of the transit system to determine the patrons' needs and expectations, and design a law enforcement system which is customized to meet those needs. As a government agency, a primary concern for transit authorities during this evaluation must also focus on the economic realities involved in providing law enforcement services.

Local law enforcement administrators must also be aware of the needs surrounding transit systems, and determine their potential ability to meet these needs. In making this determination, the law enforcement community must recognize that transit law enforcement involves many similarities to municipal and county law enforcement, but it also has distinct aspects which may cause greater demands on
available resources. Unlike cities and counties, transit systems have a significant portion of their budget provided by direct income in payment for the services provided. This income, in the form of transit fares, is supplemented through a variety of other sources, including taxes and bonds. By maximizing the use of the transit system, the generation of available funds is increased. In many ways, this makes a government run transit system more similar to private industry than to traditional government. Although not operated for profit, the ability to generate revenue and manage expenditures does parallel many private enterprise goals.

Another distinguishing feature between municipal governments and government operated transit systems is the percentage of the total budget which is spent on law enforcement services. For example, The San Francisco Bay Area Rapid Transit (BART), employs a police department with full responsibility for deterrent patrols and criminal investigations within the system. This police department operates on a budget which is just over 5 percent of the district’s total operating budget. In comparison, many municipal police agencies have budgets which approach 50 percent of the city’s total operating budget. In view of the need to maintain a workforce designed to fulfill the primary mission within a transit system, the movement of passengers, the emphasis on expenditures outside of the law enforcement area is natural. However, transit systems must remain aware that perceived safety by the passengers is critical in maintaining usage, and there must be a balance between providing effective and economical law enforcement for the
system. Law enforcement administrators of either in-house transit police departments, or outside law enforcement agencies interested in expanding to the transit field, must be aware of this competition for budget dollars with other departments within the transit district.

MISSION STATEMENTS

As transit agencies attempt to determine the model for law enforcement services which is most appropriate for their needs, one of the first steps should be an assessment of the transit system’s general mission. This should be followed by an evaluation of the mission statement for the law enforcement agency which will be providing protection to the system. In evaluating the overall mission of the transportation system, there will be some variations, but most agencies will agree with something similar to;

"Provide safe, reliable, high-quality and economical transportation service to the community."

This is an obvious goal of a public transit system, and it should include some consideration of the additional criteria listed. There may be secondary goals, but if a transit system meets this primary mission, the public will generally agree that it is providing the service for which it was created.

In developing the law enforcement mission for public transit, the process is not as simple. The general law enforcement mission for most cities and counties focuses on three basic missions; the apprehension of criminals, the prevention of crime, and the protection of life and property. These same missions must be
addressed in the public transit setting, but the transit agency must determine if these are sufficient for the system to continue meeting its overall goal. Most major transit systems within the United States have found that there are additional micro-missions which must also be completed by law enforcement if the agency is to be considered effective. One of the most significant micro-missions of transit law enforcement deals with the need to provide services in a manner which enhances the patrons' perception of safety. If riders, and potential riders, do not perceive the system and its surroundings to be safe, whether this perception is real or not, they will find alternate means of transportation.4

This perception of safety is closely tied to the three universal law enforcement missions, but it goes beyond the normal enforcement and prevention aspects related to criminal activity. The transit policing agency must aggressively deal with disruptive behavior, such as lodging, panhandling, or juvenile behavior which may be on the fringe of criminal violations. If not addressed, these behaviors will significantly impact how patrons view the system, and their level of anxiety when utilizing the public transit vehicles. As Robert Dart of the Transit Section of the Chicago Police Department concluded,

"Officers who police these systems must now incorporate into their normal duties, the critical task of changing citizen apprehension about using a subway transit system. Riders must not only be safe; they
As transit systems evaluate their needs in the law enforcement field, the ability to provide this feeling of safety must be a prime consideration. Without providing this perception, the usability of the system will be hampered, and the transit system will fail in its mission of providing the maximum public transit services to the community. There are numerous methods available to enhance this perception of safety, most of which are labor intensive and involve high visibility and strict enforcement of all violations within the system. The use of policing zones, which encourages police ownership and responsibility for specific problems is one method which has proven beneficial in enhancing this perception.

The second micro-mission which transit law enforcement must address deals with the cost of providing law enforcement services. Within all governmental agencies, economics have forced movement toward even greater cost effectiveness in the past several years. Within most governments, ranging from small cities to the United States Government, the techniques outlined in Reinventing Government are being utilized to increase effectiveness and decrease costs. As discussed previously, the priority for transit systems naturally focuses on the direct operation of the transit vehicles, with functions within the policing and security areas being addressed secondarily. Techniques such as consolidation, contracting for services, and civilianization of police departments are natural outgrowths of the necessity to provide law enforcement...
TRANSPORT SYSTEMS' UNIQUE NEEDS

As a transit system evaluates its law enforcement needs, it must continue to analyze the desired level of law enforcement, and the mission or goals which will be established for the policing agency. The governing body should consider what options are available in terms of meeting these goals. Among other factors, the available options will be affected by the type of transportation vehicles utilized by the transit district. For example, public concern and apprehension while riding on a bus, which is attended by a driver and can be exited at any time, is normally much less than the apprehension experienced by riders in a subway train, devoid of employees and confining the riders in an underground tunnel.

The size of transit districts also varies greatly, impacting on the possible methods employed in policing the system. Many systems are fully contained within one city, while others extend into multiple states. The number of policing options for these districts varies depending on the number and types of jurisdictions covered. For example, New York City Transit is one of the country's largest systems, but it operates within the jurisdiction of a single city. The transit authority has chosen to provide law enforcement services to its riders with the use of a police department employed by the transit authority. Other major transit police departments such as Washington Metropolitan Area Transit
Authority (WMATA), and Southeastern Pennsylvania Transit Authority (SEPTA) cover areas extending into multiple states. Because of obvious jurisdictional problems as trains routinely move across state boundaries, the transit police departments of these systems were developed with authority in all areas covered. They report very little interest from local agencies in consolidations with the surrounding police agencies. Systems which cross county and city boundaries will also find potential drawbacks in the consolidation of its law enforcement role within a single agency unless it has a regional base.

For a transit system which does traverse multiple police jurisdictions, the employment of an independent transit police department may be the most expeditious solution. This independent transit police department is designed to focus on the problems associated with the transit system, and to deal with the crime and quality of life issues on the system. Under this system, the transit district is given authority, normally through state legislation, to employ its own force of fully sworn police officers with primary jurisdiction with the transit system. Some of the major transit districts utilizing this independent model of law enforcement include the New York City Transit Authority, WMATA, SEPTA, and BART.

Within this independent police model, the level of responsibility for criminal investigation can also vary. For example, transit police departments may choose to refer certain investigations to local agencies, or they may handle all
investigations for crimes occurring within their facilities or vehicles. The level of responsibility for independent transit police departments should be developed in close coordination with the local law enforcement agencies. There are a number of possibilities for combining levels of service, and each system must establish their parameters based on the local needs and the abilities and availability of resources from other law enforcement agencies.

Transit systems which operate solely within one law enforcement jurisdiction may have an additional option in considering law enforcement services. In this case, contracts with the local jurisdiction may be an efficient and effective method of obtaining law enforcement services, without the associated multi-jurisdictional problems. The Chicago Transit Authority is an example a system which successfully utilizes a section of the local police department for law enforcement services. This transit system has over 200 miles of trackway, but because of its operation within the City of Chicago, it is policed by the Transportation Section of the Chicago Police Department.

When faced with a similar situation, the New York City Transit Authority has continued to maintain its own independent police department. The New York City Transit Police Department remains as one of the largest police departments in the country, with an authorized strength of over 4500 sworn personnel. It has responsibility for the full investigation of all criminal investigations and quality of life issues in its transit system.
carrying 3.5 million passengers a day. The department has proactively addressed many of the perception of safety issues among its patrons, and by customizing its mission to the needs of the transit authority, the department has successfully lowered crime and increased the perceived safety of the subway system. 8

When considering the policing needs of a transit system, the complexity of the system should also be considered. For example, special training for policing a bus system may be minimal among existing municipal police personnel. However, assignment of the same municipal police officers in an underground subway system, with established safety, evacuation, and emergency procedures in a relatively foreign environment, will require an additional level of expertise. This need for special knowledge in some systems, particularly fixed rail subway systems, is an additional drawback to having a large number of police agencies handle the law enforcement functions in this type of system.

TRANSIT POLICING IN THE FUTURE

One possible method available to reduce the costs associated with providing law enforcement services to any entity is to consider the use of civilian personnel. Depending on the role to be filled by the personnel, some functions may be appropriate for employees without the need for powers of arrest or other special roles filled by sworn law enforcement personnel. As part of a study for the California Commission on Peace Officer Standards and Training (POST) Command College, several leaders in California transit policing, peace officer training, and transit agency
management completed a Modified Conventional Delphi Survey dealing with several aspects of the future of transit policing. The participants remained anonymous, and during the first round of the survey, each participant was asked to forecast fifteen trends and evaluate fifteen events related to the future of transit policing. The second round of the Delphi Survey provided feedback and comments from the other participants to allow adjustments and improved consensus from all participants as they re-evaluated their responses from round one. Their revised responses from the second round were then tabulated to gain an insight into trends related to the future of transit law enforcement.

The participants in this survey indicated that they expected a continued trend toward civilianization of transit police positions, with a larger percentage of field positions being filled by non-sworn law enforcement personnel. Among the participants in this survey, there was a divergence of opinion regarding the level of civilianization which will occur, but most participants also saw the trend occurring within all law enforcement. The long-term effectiveness of civilian law enforcement personnel in enforcement roles continues to be a question in all law enforcement fields since the personnel lack full powers of arrest or peace officer authority. In a 1994 speech regarding federal funding for public housing, United States Secretary of Housing Henry Cisneros, emphasized the greater effectiveness of police officers over security personnel. In describing the reasoning for replacing security personnel with police officers, he noted:
"We think the gang members will have a good deal more of a problem confronting a peace officer, a police officer, a trained policeman with backup capability in the same way. So this is an effort to replace the security personnel with sworn officers."  

Any anticipated move to civilian security personnel in the specialized law enforcement role of transit policing will be likely to meet some of these same obstacles.

Another area explored by the Delphi Survey panel dealt with the conflict between the emergence of specialized law enforcement agencies, and the trend toward the consolidation of police agencies. As transit agencies view the possible options on how to most effectively police their systems, the dichotomy of these two trends can be very confusing. Within municipal law enforcement, several police agencies are facing consolidation because of economic situations within the city governments which make it impossible to maintain a viable police department. In some cases, these agencies are being disbanded, with law enforcement responsibility being assumed by the county agency on either a contract or a default arrangement. In other instances, smaller agencies are being absorbed by larger municipal police departments, or several departments are consolidating all or part of their personnel resources. The Delphi Survey Panel saw this consolidation as an on-going trend, even to the extent that larger police agencies will begin to actively solicit policing contracts.
from other government entities as a method to maintain funding.

For the field of transit law enforcement, this active desire to obtain contracts, and generate revenue sources, has potential for both benefits and drawbacks. Not only should transit districts be aware of the possibilities surrounding contracting for police services, but law enforcement agencies that consider seeking transit policing responsibility should be fully aware all facets of the job. The step from municipal or county law enforcement into any specialized field of law enforcement may not be as straightforward as it would first appear. The level of public scrutiny which is given to transit crime is routinely higher then the attention paid to criminal activity in most other public settings. The public demand for police services may be higher than most agencies are prepared to provide, particularly when dealing with quality of life issues such as vagrancy, panhandling, or boisterous or disturbing behavior. In addition, the policing agency must be prepared to provide a high level of service to the employees and the physical resources of the transit system itself.

Even the most modern transit systems require a high level of customer service through interaction with responsive, customer oriented employees. If these non-police employees feel threatened in their work areas, they will not perform their proper role, and the transit agency will logically look to the law enforcement agency to provide the required atmosphere of safety to the employee. The transit system will also look to the law enforcement agency to protect the agency’s resources, including the collection
of fares, and the prevention of damage and vandalism to vehicles and facilities. As noted previously, transit systems are one of the few government agencies with the capability to directly generate significant portions of their operating budgets from their customers. Any fare evasion activity which diverts money from the transit agency impacts that agency's ability to meet its economic obligations. Therefore, evasion of fares, vandalism to transit vehicles or facilities, thefts from ticket or token vending machines, or other criminal activity with the transit agency as a direct victim, cannot be tolerated by the transit district.

As existing law enforcement agencies consider the possibility of moving into the transit policing field, they should be cognizant of these nuances of transit policing compared to municipal and county law enforcement. At the same time, as transit agencies study the alternatives available to obtain the best law enforcement services for the system, the system's needs should be formalized and methods to address these needs should be established. If the transit agency is in a geographic position to consider the use of contract agencies, any formal contracts should provide for clear expectations, and include law enforcement missions and sub-missions which are developed specifically for a transit setting and are not generic for all law enforcement. Also, measures of effectiveness should include non-traditional factors such as formalized surveys measuring patron perception of safety, and the public's willingness to utilize the system based on their perception of safety on and around the system.
Transit systems who choose to develop or utilize an independent police department employed by the transit authority itself should develop these same expectations. The expectations and priorities should be clearly conveyed to the department, along with the resources required to address the priorities established. In view of the limited resources available in nearly all public entities, these expectations must remain realistic and obtainable with the assets to be provided. The establishment of unrealistic expectations, whether for an outside or in-house law enforcement agency, will cause an inevitable failure, and a subsequent loss of confidence in the effectiveness of the law enforcement organization.

CONCLUSION

In evaluating a transit authority's need for law enforcement services, the primary goal of that transit system must maintain a high level of consideration. The mission of the chosen law enforcement agency must then be fully developed to further the goals of general law enforcement, and the mission of the transit district. As public transportation continues to develop in response to the needs of the urban areas of the United States, law enforcement services for these systems continue to require study and development.

Regionalization and consolidation of police agencies will remain viable alternatives for many municipal and specialized law enforcement departments seeking ways to provide the highest possible levels of service. Civilianization may also be an
appropriate cost saving method for some previous law enforcement roles. As the demands on the available resources of most law enforcement agencies exceed their resources, the ability to meet the special needs of transit agencies will not be attainable without special consideration and financing. To maintain a viable, appealing transit system, the governing body of the system must assess these special law enforcement needs, and develop the appropriate method of law enforcement service to meet those needs. The chosen law enforcement agency must then remain cognizant of its mission, and work to attain all aspects of that mission.
END NOTES

1. Dr. Phyllis McDonald, "Developing Patrol Tactics and Strategies for Transit Policing", Transit Policing Journal, Summer/Fall, 1992


6. Ibid #4


10. "Public Housing Crime", Command Staff Advisory, Command Staff Research Group Inc, April 24, 1994

11. Albert M. O'Leary, "Transit Policing and the Media-Or Why Mother Teresa Was Wrong", Transit Policing Journal, Fall, 1993
# TABLE OF CONTENTS

## INTRODUCTION
- Futures Wheel-Illustration #1
- Future Technology

## Research
- Graphs #1-15
- Table #1-Event Evaluation
- Graph #16-Events "Prob. Exceeds 0"
- Graph #17-Events "Prob. Within 5 Yrs"
- Graph #18-Events "Prob. Within 10 Yrs"
- Graph #19-Events "Positive Impact"
- Graph #20-Events "Negative Impact"
- Cross Impact Analysis
- Chart #1-Event vs. Event
- Chart #2-Event vs. Trend

## Scenarios
- Normative Scenario
APPENDIXES

DELPHI PANEL PARTICIPANT RESUME
DELPHI SURVEY-ROUND 1
DELPHI SURVEY-ROUND 2

Pages
A-1 thru A-2
A-3 thru A-20
A-21 thru A-37
INTRODUCTION

Government consolidation, privatization, and the effective disbursement of governmental services, have been topics of research and discussion in recent literature. However, this discussion normally focuses on services which are being provided by similar governmental agencies. For example, two adjoining cities may consolidate their police or their public works departments as a means to cut expenses. However, there are a large number of existing governmental agencies which are not part of a traditional city or county government. These agencies have not received much attention when considering alternative means of providing services and the governmental divisions outside of city and counties are often overlooked when research is being conducted.

One of these relatively unstudied governmental divisions is the "District". District agencies often do not fall solely within a single city, and may even extend beyond the boundaries of a single county. Districts may be utilized to provide a governing body for schools, parks, transit agencies, fire departments, or other public service providers. The direction and input provided to local districts is normally received through an elected board, with a hierarchy which is often very similar to the more familiar city and county governments.

In reviewing literature on the services provided by
government, the focus is normally on Federal, State, County and City Government. When district agencies are addressed, it is normally a discussion of school districts, and their ability to provide quality education. Other government districts have significant impacts on the expenditure of tax revenue, and on the quality of life within specific areas, but they are not highly studied. When considering alternate methods of providing government services, thought should also be given to modifications of current practices which may cross from one type of governmental division to another.

One form of governmental district which appears worthy of study is the area of "Transit Districts". Throughout urban areas of the country, the public continues to place two topics as major concerns affecting the quality of life. The first of these concerns is a perceived increase in crime with an increased fear of victimization. The continued media coverage of shootings, gang violence, and the proliferation of guns in all of society has generated a deep rooted fear in the average citizen.

A second concern of citizens is an increased need for public transportation. Extended commutes, the continued impact on the environment from the use of fossil fuels, and severe traffic congestion are topics which continue to be addressed in public surveys measuring perceived problem areas. However, public debate involving transit districts normally focuses on improved scheduling of available services, mode of transit being funded (rail vs. bus vs. improved highways), and areas of coverage.
Events, such as the multiple homicide on the Long Island Railroad, bring the transportation and crime concerns together, focusing attention on the transit system's ability to protect its riders.

Within urban California, dependance on the automobile has led to extreme traffic congestion, lengthy commutes, and areas of severe air pollution.¹⁰ As the public looks to the government to address these problems in an effective manner, local transit districts are receiving increased visibility and pressure. The ability to provide safe and efficient transportation impacts not only the future of the transit agency, but also the future of the entire area as residents evaluate their choice of locale, and determine if they should be joining the movement to non-urban areas.¹¹ The transit districts are expected to provide not only fast transportation, but to provide safe, protected, and efficient alternatives to the automobile. In order to entice Californians from their automobiles, transit agencies must provide an alternative which is more attractive than the means of transportation which is already well established and convenient.

PERCEPTION OF SAFETY

To be successful in attracting significant numbers of riders, one area that public transit must address is the perception of safety. As a study of the Atlanta, Georgia transit system by the International Association of Chiefs of Police concluded, "Patrons of a transit system must perceive that a strong sense of personal security has been provided." "This is an element that is probably not measurable, but strongly exists and has a direct relationship
to the number of riders who will use the transit system.¹² This "perception of safety" is based as much on observed levels of disorder as on actual crime rates¹³, and is effected by incidents in and surrounding the transit system. Therefore, the policing methods utilized must address both disorder and criminal actions effecting the transit riders.

As the public leaves the isolation of their individual automobile and enters public transit vehicles, they are in close proximity to a wide variety of other people. Where an individual's automobile served as his barrier to the outside world, public transportation provides a direct conduit for exposure to this world. To be successful in attracting people to this atmosphere, transit agencies must effectively reassure riders that their safety and comfort are protected.¹⁴ This protection must also extend beyond the confines of the transit system if the surrounding environment is perceived as threatening. If a transit system provides an area of safety within its limited boundaries, but the rider must then endure other dangerous areas to reach his final destination, the system will not be utilized. The system must recognize that its ridership determines its travel mode based on a variety of measures, not the least of which is perceived safety in and around the transit system.

Within California, local transit districts have utilized a variety of means to provide this level of protection to their patrons. The range of protective services has included full dependence on local law enforcement agencies for service, sometimes
under provisions of a contract; coverage by non-sworn security personnel; and the use of fully sworn police departments employed by the transit district. Combinations of these alternatives have also been utilized within California, and throughout the United States.

**TRANSIT LAW ENFORCEMENT MODELS**

As all local governments are forced to seek more cost effective methods of providing a high level of service, transit districts will also be expected to efficiently maximize the level of service for the passenger and taxpayer.\(^{15}\) Focusing on protection for the transit district and its riders, the method of providing this protection is instrumental in determining the level of service a transit agency will be able to provide.\(^{16}\)

If transit districts are able to provide an acceptable level of protection to their riders without the expenditures required to employ fully sworn police officers, then transit district leaders should be expected to do so.\(^{17}\) At the same time, if the transit district requires the presence of police personnel to ensure the safety of patrons, employees, and facilities, the effective operation of the district will require that this police presence be maintained and funded. The question must then be asked, "What is the most effective source of personnel to maintain this protective presence and ensure the safety of the transit district's riders?" Some of the options include; the use of civilian security personnel, the use of sworn personnel from local agencies under contract to the transit district, placing responsibility on local
agencies without contract or compensation, or use of an independent police department employed by the transit district.\(^8\)

Within California, two transit districts currently employ fully sworn police departments, independent from local city or county agencies. These agencies, The San Francisco Bay Area Rapid Transit (BART) Police Department, and Los Angeles County Metropolitan Transportation Authority (MTA) Police Department are both responsible for heavy rail transit in large urban areas. These agencies also have a responsibility for policing buses, but to a varied degree. In addition, Los Angeles MTA also contracts with the Los Angeles Sheriffs Department for law enforcement services within certain areas. Other transit districts within California, such as San Francisco Municipal Railway, rely solely on police services provided by the local city police force. Another policing method is utilized by Sacramento Transit which utilizes a combined force of city police and county sheriffs deputies contracted through the transit system. Alameda/Contra Costa (AC) Transit District contracts with two county sheriff’s departments to provide deputies dedicated to patrolling their buses and facilities.

The diversity of law enforcement within transit districts throughout California is also representative of the variances found throughout the United States\(^9\), and the situation is continuously changing. For example, the status of the independent Los Angeles MTA Police Department is currently under scrutiny, with possible consolidation with the Los Angeles Police Department or the Los
Angeles County Sheriffs Department. Other districts, such as AC Transit are reviewing their contracts, and considering granting the contracts to regional transit police agencies or non-sworn security agencies. The question of the most effective and efficient method of providing law enforcement protection to transit districts will continue to be raised in the next decades as the need for safe public transit increases.

Even when districts employ fully independent police departments, these departments must develop positive working relationships with surrounding jurisdictions. For example, the BART Police Department interfaces with sixteen municipal police departments and four county sheriff's departments in its jurisdiction covering 72 miles of trackway. When the BART system was first opened in 1972, the district did not employ a police department, and expected the local agencies to provide police services, supplemented by non-sworn personnel employed by the BART District. After this system proved to be unworkable, the district established its current police department. Over the next twenty years, the BART Police Department worked to establish an effective working relationship with the surrounding jurisdictions sharing information, assisting with ongoing cases, and often employing lateral transfer personnel from one agency to another. Without cooperation and commitment to the common goal of protecting the community, the effectiveness of the BART Police Department would be limited. Whether law enforcement services are provided through police or security contracts, or by sworn or non-sworn employees of
a transit district, this common goal and a good working relationship must be maintained.

In the Eastern United States, transit districts, such as New York City Transit, have maintained independent police departments for decades. The officers employed by this agency have focused on the criminal activity within the vehicles and facilities operated by the district.\textsuperscript{20} During 1994, there was a renewed debate surrounding the consolidation of this longstanding transit police department with the New York City Police Department. Discussions with Chief O'Connor of the New York City Transit Police Department indicate that this consolidation will probably not occur in the near future, but the political discussions have appeared more serious than any time in the recent past. Similar consolidation considerations have occurred in other locations, particularly when the transit district is fully contained within a single city or county.

Within California, this independent transit policing model has been adopted on a limited basis, primarily by BART and Los Angeles MTA. In Los Angeles, the policing responsibility for extensions constructed by MTA was a matter of speculation as each extension was opened in 1993. Only after extensive study and competitive bidding was the MTA Police Department given primary authority for policing on the district's Red-Line extension. This authority is the subject of further review as the local police and sheriffs departments seek funding which may be available through the transit district.
As city and county police agencies are required to provide a high level of service within their jurisdictions, with a limited or diminishing budget, their ability to provide free service to transit agencies will necessarily be curtailed. The governing bodies of these cities and counties are currently seeking alternate sources of revenue to support their own governments, and many are considering the imposition of charges for services provided, or actively seeking contracts with other government entities. Districts which are currently receiving services without charge may find that they will be expected to provide funding for these services in the future. Districts employing their own personnel with security or police responsibilities may also find offers from surrounding agencies to provide these services on a contract basis. Districts must then explore these alternate methods of obtaining services, particularly if the services can be obtained at an economic savings to the district.

FUTURE EXPECTATIONS

During the next ten years, society will be requiring a high level of social services from government, and government should be responsive to those desires. Society is calling for the improved public transportation systems which have been promised, and during the next decade, delivery on these promises will be expected. Along with the physical presence of the transit systems, there will be an expectation that the system can be utilized safely and comfortably. Fulfilling this expectation will require some form of security or police system. The development of effective
and economical law enforcement systems cannot be left to chance. Planning should be undertaken to determine the needs of transit districts and its riders, and the most expeditious methods of meeting these needs. This paper will attempt to examine those areas as it explores the future of transit policing by the year 2004.

In reviewing the transit policing needs of California by the year 2004, discussions were held with a variety of personnel related to public transit, security, and municipal and transit policing. These personnel included transit officials from throughout California, many of who later participated in a Modified Conventional Delphi Panel on this subject. Other line and staff members of the San Francisco Bay Area Rapid Transit District Police Department, and police managers from throughout California were also interviewed and provided input on emerging issues in general and transit law enforcement that were expect to influence California transit law enforcement in the future.

Based on the information provided in these discussions and obtained through literature scanning, a futures wheel was developed and utilized to determine potential impacts of trends occurring in the transit policing field. This futures wheel is included below as Illustration #1, and it outlines three issues related to transit policing. These three listed issued were raised most often during these discussions. The discussions also pointed out the potential impacts of these issues on the course of the future. These most commonly discussed impacts are also indicated on the futures wheel.
ISSUES

Based on this information and the potential impacts on transit policing, the primary issue to be researched and developed through this paper was determined to be, "WHAT WILL BE THE ROLE OF INDEPENDENT TRANSIT DISTRICT POLICE DEPARTMENTS IN PROVIDING LAW ENFORCEMENT SERVICES TO CALIFORNIA'S URBAN RAIL TRANSIT SYSTEMS BY THE YEAR 2004?" This issue was then discussed further with personnel in the field, and evaluated in terms of the future wheel. These discussions continued to point to three related sub-issues. These sub-issues included; "What role will consolidation and/or contracts for service have in the delivery of law enforcement service to rail based transit agencies by the year 2004?" The second sub-issue to be studied was; (2)"What transit policing roles will be handled through civilian employees by the year 2004?" The last sub-issue to be studied deals with: (3) "What will be the primary mission of rail based transit policing agencies by the year 2004?"

Two of the emerging trends in California Law Enforcement directly impact policing of transit districts. The first of these trends is a movement toward the consolidation of small police agencies to save money. The second trend is a movement toward specialized law enforcement as existing police resources in cities and counties are stretched beyond their limits. This strain on existing assets has caused specialized law enforcement to grow in response to a void in general services. This movement toward consolidation and specialization makes the future of transit
policing a topic without a clear model. The changes within the transit policing field, both within California and the United States, indicate that there is no single design for policing which can be applied universally to all rail transit districts. Instead, each system must be considered for its unique environment, its policing needs, and the law enforcement sources available to address the needs.

The scope of this study will be focused on fixed rail transit systems within urban areas of California. Although many aspects may be applicable to other transit systems, or other district policing agencies, the study will necessarily be focusing on urban transit districts with rail systems. The focus of the study also deals with "independent transit district police departments". For purposes of this study, these departments include police agencies which hire and employ their own personnel, paid by the transit district. These police personnel may be specifically enumerated in the California Penal Code, such as BART Police Officers listed under section 830.33(a) of the California Penal Code, or they may obtain their peace officer authority through the general penal code provision of being employed by a "district". For purposes of comparison, the study will also discuss contracts with municipal police departments and county sheriffs departments. This discussion of contracts will normally indicate a formal agreement between the transit district and the law enforcement agency to provide a specified level of service to the transit agency in exchange for enumerated fees. Discussion of security personnel
will normally focus on non-sworn, non-police employees, who may contract with governmental or private interests to provide some form of law enforcement services. For purposes of this study, security personnel do not include peace officers, and the security personnel are limited in their arrest authority to statutory citizen's arrest situations.

FUTURE TECHNOLOGY

In addition to the social, economic, political and environmental factors which will have significant impacts on transit law enforcement, technological advances will also greatly impact this field. Rapid advances are occurring in area of electronics which could significantly impact the methods utilized in providing law enforcement services, especially in a fixed rail, transit setting. These transit settings are often more conducive to the use of electronic monitoring and surveillance because potential victims and suspects gather at specific, limited locations.

In large transit districts, such as the San Francisco Bay Area Rapid Transit District (BART), individual trains may contain over 2,000 people at a time, station parking lots house over 2,500 vehicles for periods of ten hours or more, and stations may have over 10,000 people passing through in less than one hour. This collection of people and property make the use of electronic equipment more effective than in nearly any municipal setting.

A subsidiary of T. R. W., the Electromagnetic Sensors Lab, is one of the many companies developing equipment which could
significantly impact the methods of policing, and policing effectiveness, in this type of setting. One key to this technology is the placement of high resolution video cameras within parking facilities, within stations, and on-board transit vehicles. These cameras could be remotely monitored from one central location, the ability to zoom to specific problem areas, and focus on the face of suspects, or the license plates of suspect vehicles. Emerging technology would allow for the instant printing of pictures of these suspects. Current technology would allow these pictures to then be transmitted directly to responding officers by way of in-car fax machines. With further refinements, these fax transmissions will be in high resolution color. Additional technology which could be available within the next ten years would also allow patrol personnel to selectively view the Closed Circuit Television (CCTV) monitors within the patrol vehicles, and then make their own prints of suspicious persons.

The placement of closed circuit television cameras on-board the moving trains operating in tunnels and throughout a system with 100 miles of trackway creates another technological challenge. The effective placement of cameras in these moving locations is a possibility which would have a dramatic impact on the perception of safety, and the reality of safety, enjoyed by the patron.

A step in the direction of greatly enhanced video surveillance is currently be developed as a pilot program to be tested in a BART parking structure, an open air parking facility, and an underground station. This pilot program may include the availability of a
remote transmitter to be sold or rented to the BART patron for a small fee. The transmitter would fit on a key ring, and be similar in size to the remote door lock activators on many new vehicles. The pilot program is designed to allow persons possessing one of these transmitters to activate the device as they enter a monitored station or parking facility. The transmission will cause a camera to focus on the transmitter, and in turn the person holding it. In this way, the holder would receive an "electronic escort" to the parked vehicle, or onto an arriving train. If a problem developed, the incident will be "witnessed", and a recorded video tape available to identify any suspects. In addition, the same transmitter may be activated in an alarm mode to summon the police or report an emergency.

As with most technological advances, these items do not come without expense. If the pilot project proves to be effective, the BART District will need to determine if the cost of outfitting certain locations with the cameras makes good "business sense". In making this determination, a transit district must use a variety of factors which cross many traditional lines between a government agency and private business. The ability to make the transit business attractive to potential customers, while continuing to operate as economically as possible, continue to be priorities.

In addition to the costs of installation, an additional concern regarding the use of CCTV cameras is the labor cost required to monitor the resulting pictures. With the projected trend away from using sworn police officer to perform tasks that do
not require arrest powers, these monitoring positions would not appear to be suitable for staffing with police officers. Two workable alternatives for staffing do exist; the use of civilian police employees, or the use of contract employees who work for the installation company or an associated alarm or security company. In view of the Modified Conventional Delphi Panel's forecast for increased contracting of non-sworn work, this contract option appears to be the most likely alternative.

The same factors that tend to make transit systems good candidates for CCTV monitoring also tend to make many other technological innovations attractive for use on the system. The large collections of people also increase the cost effectiveness of equipment, and several developers have expressed an interest in utilizing transit systems such as BART for use in pilot programs to demonstrate a product's effectiveness. Among such innovations could be environmental sensing devices which could alert to the presence of explosives including gunpowder.

Although not currently available, installing this type of portable sensor at selected entry points could significantly improve a patron's perception of safety by decreasing the likelihood other people on the train are armed. The selectivity of searching for explosives or gun powder also makes this technology preferable to current metal detectors by eliminating the number of false alerts. At the same time, this technology would also require sworn police personnel for monitoring and action when the sensor is activated. With further refinement, this same equipment could be
made hand held, and could be used by police personnel randomly patrolling on-board trains and in stations. Public announcements and media attention regarding the use of this technology would again enhance the transit rider's feeling of safety within the transit system.

Other technology is also being developed which will impact the transit policing field. Current innovation in personal vehicles, which make vehicle thefts and auto burglaries more difficult, should be in place by the year 2004. This target hardening should allow some reallocation of resources transit police agencies must currently expend in the protection of property. Other physical improvements in the transit system itself, such as window coverings to prevent glass etching and anti-graffiti surfaces to speed clean-up, will also allow the re-deployment of police personnel from assignments in the protection of transit property.

Transit police departments' responsibility for the protection of transit revenues will also be impacted by changes in technology. Within the next several years, the purchase of transit tickets from in-station vending machines accepting bank debit cards or credit cards will be taking place. With current machines, schemes continue to develop with a range of success allowing thefts from the "cash only" ticket vending machines. When technology is introduced over the next several years, and society moves toward less dependence on cash, the potential for bank card and credit card fraud in the purchase of tickets increases. If the transit police department is to continue to protect the resources of its
employer, increased manpower will be expended in this area.

The potential benefits and liabilities that will occur with the introduction and widespread use of this technology may be significant. Although this brief overview of potential technological advances is not all-inclusive, it does provide some insight into how innovation may impact the role of transit police. As federal defense contractors continue their conversion to civilian needs, the potential for new products continues to grow. The development and eventual availability of the products will continue to depend on the end user's ability to purchase the product, ensuring a profit for the developer. If crime funding maintains its current political popularity, these innovations should eventually become available. Agencies, and their citizens or clients, must then determine their willingness to pay for the technology and the required support personnel. Although many of the technological advances will result in enhanced personal safety, they do not reduce the need for response by law enforcement personnel. The availability of technology may enhance police effectiveness, but is not expected to replace significant numbers of personnel within the next decade.
FUTURES STUDY

In addition to literature studies, information gathered from existing sources, and interviews with personnel in the police, transit and technical fields of the future, this paper will also include information gathered through independent research. This research was conducted utilizing input from individuals with a variety of experience within the police and/or transit fields. The pool of individuals with a high level of expertise in both of these areas is limited, especially if boundaries are established within a small portion of the state. If the information gathering technique utilized in this research required the participants to travel and meet at a single location, the pool of "experts" would have been limited to those within the San Francisco Bay Area. This would then exclude important information from other participants throughout the state. Therefore, an alternate method of research methodology was chosen to gather information on this topic.

To allow for this use of a geographically diverse pool of experts, a Modified Conventional Delphi Panel was utilized in conducting this research on transit policing. A brief resume of each participant is included in Appendix #1 of this report. The participants in the panel were from throughout the State of California, and represented practitioners in the field of transit policing, law enforcement training, and public transit administration. The individuals were from Northern and Southern
California, and a special effort was made to obtain participants with varied perspectives on transit policing. For example, the survey participants with transit policing backgrounds included staff level members of two different rail transit district police departments, staff level members of two city police departments with assignments to the transit section of the department dealing with fixed rail transit systems, staff level members of sheriffs’ departments with contracts to provide police services to fixed rail transit districts, and a transit district executive employee responsible for granting and overseeing the transit policing contract to sheriff’s departments.

Among the non-police participants in the survey, this same balance was attempted in order to obtain the widest possible perspective on the issue, without regional or professional prejudice. The non-police participants included an elected transit district board member, two individuals currently involved in the training of police personnel, a member of a regional transit oversight organization, and civilian supervisory or executive level employees of transit districts in positions which require future perspectives or planning as a major aspect of their jobs.

The Modified Conventional Delphi Panel technique utilized was designed to include two surveys to be completed by each participant. The participants remained anonymous to the other participants. During the first round, each participant was asked to forecast fifteen trends and evaluate fifteen events. The second round of the Delphi Survey provided feedback and comments from the
other participants to allow adjustments and improved consensus from all the participants as they re-evaluated their responses from the round one.

Each participant was contacted in person or by telephone to request that they take part in the survey, and a brief explanation of the purpose of the research and process being utilized was provided. The actual survey instrument was prepared based on conversations with the participants, and with non-participants who had knowledge of the subject matter. These non-participants included police personnel from both transit and municipal law enforcement. Additional input was obtained from transit officers responsible for monitoring and evaluating transit passenger needs and expectations. The questionnaire included two specific sections, one on "Trends" and one on "Events". The instrument included a cover letter to the individual participant, and each section included specific instructions on the completion of the form. A copy of this first round survey instrument, with a copy of the letter sent to each panel participant, may be found in Appendix #3.

TRENDS

The survey instrument included fifteen trends which could have varying impacts on transit policing. The survey participants were asked to review these trends, and forecast the direction and magnitude of any movement of the trends on a graph. Five of these trends had subjective data which showed the trend over the past ten
years. For these five trends (numbered #1 through #5), the graph for the past ten years was completed and the participant was asked to project the next ten years. For the ten trends without clear, subjective data on the past (number #6 through #15), the participant was asked to evaluate the past ten years and project the trend for the next ten years, making comments on the basis of their forecasts.

The fifteen trends utilized in the survey were:

1. The rate of crime in the United States (based on total crimes per 100,000 inhabitants). 27

2. The number of law enforcement officers per 1000 inhabitants in the United States 28

3. The crime rate for violent crime in the United States (based on violent crimes per 100,000 inhabitants). 29

4. Police clearance rates in the United States (reflecting the ability of police departments to solve crime). 30

5. The level of federal budgeting for the funding of mass transportation facilities (based on percentage of the total federal budget). 31

6. The number of local, county and district police departments that combined specialized functions (dispatch, investigations, etc)

7. The number of government agencies who seek competitive bidding from private industry to provide some services (corporation yards, street sweeping, recreational services, etc).

8. The number of city, county and state police agencies who contract out the work of non-sworn personnel within the agency which had traditionally been staffed by full time employees. Examples include contracting for janitorial services, or the use of "temporary
service personnel to staff clerical positions.

9. The number of cities, who disband all municipal services, relinquishing control and responsibility to the county or state government as a result of fiscal constraints.

10. The ratio of civilian (non-sworn) personnel in field positions in transit police agencies, compared to the number of sworn personnel.

11. The number of police agencies of larger cities or counties (over 500 employees) who actively pursue contracts with smaller surrounding government agencies for the right to provide police services within the jurisdiction of smaller government's boundaries.

12. The use of flex time, telecommuting and cottage industries are successful in lessening traffic congestion in urban areas.

13. The level of use of transit stations by homeless in urban areas is sufficient to cause urban commuters to avoid these locations.

14. The number of existing transit police agencies in the United States seek consolidation with existing municipal/county police agencies.

15. The public's perceived level of disorder, lack of control and safety, and criminality within transit systems and vehicles.

EVENTS

After evaluating the fifteen trends on graphs, the panelists were asked to review a listing of fifteen events which would have an impact on transit policing if they occurred. The participants were asked to review the events and provide information in five areas related to the event. These five areas were;
1. The number of years until the probability of this event occurring first exceeds zero.

2. Probability of the event occurring within five years.

3. Probability of the event occurring within ten years.

4. Positive impact on the issue if the event occurred, rated on a scale of 1-10

5. Negative impact on the issue if the event occurred, rated on a scale of 1-10

The panelists reviewed the fifteen events, and provided a numerical score for each event in each of the five categories. The participants were also encouraged to provide comments on their rationale for the decisions. The fifteen events which were reviewed by the participants were:

1. The Federal government enacts a $.10 per gallon gasoline tax with all proceeds allocated to funding public transit.

2. State Air Quality Control Act requires that no vehicles with less than 2 occupants be driven on highways in urban areas during peak commute hours.

3. There is a major oil embargo resulting in lines at gasoline stations of the magnitude experienced in the 1973 embargo.

4. Political terrorists announce that they will utilize bombings in mass transit systems of the United States to call attention to their cause.

5. Federal legislation is passed which allows college students to excuse loan payments in exchange for specified service to government agencies which receive federal funding. (Police service is one of the specified positions)

6. State legislation declares all infraction violations (including transit violations such
as fare evasion) to be civil matters, not subject to criminal sanctions.

7. State legislation enacts a state police force to handle all municipal, county and district police functions.

8. The federal government ends all subsidy to intrastate public transit agencies.

9. At least one city in the United States with a population over 50,000 people dissolves its uniformed patrol force after contracting with a private security company to perform this function.

10. State legislation is passed to allow non-police transit personnel (station attendants) to issue notices to appear for transit related violations. Failure to appear on the citation has criminal sanctions.

11. Federal legislation mandates that all local governments receiving federal funding must obtain at least 3 competitive bids for any expenditure, including personnel costs of specialized departments, which exceed 10% of the agency's budget.

12. Distribution of state collected taxes to cities, counties and districts is cut 50%, with the money retained by the state.

13. Cost of gasoline exceeds $3.00 per gallon.

14. Court rulings require public transit systems receiving federal funding to provide free services to anyone who is unable to pay normal fares.

15. One of the ten largest transit agencies in the country reports laying off all employees who are not directly responsible for the operation of the transit vehicles.

The initial survey was mailed to the participants on June 10, 1993, with a request that they complete it according to the directions, and return it by June 25, 1993.
were also requested to indicate the trends which they felt would have the greatest impact on the future of transit policing in the next ten years. A copy of the second round of the survey, along with the cover letter sent to the participants, may be found in Appendix #4.

Thirteen questionnaires were distributed in this second round, and all were returned. Upon the return of this second round, the data was again tabulated. In compiling information on the trends, the input from the participants was also evaluated regarding which of the initial fifteen would have the greatest impact on the future of transit policing. The results from the participants is shown on the following graphs. On all the graphs, the median forecast is shown as a solid line, and the range of the interquartile limits shown as dotted lines. The high and low ranges are shown at "Year 10". The order and numbering of the graphs has been modified to reflect the significance of the trend as established by the Delphi Panel. The ten most significant trends are listed as numbers one through ten. Trends number eleven through fifteen were determined by the panelists to have a less significant impact on the issue of transit policing. A brief discussion is also included with each of the graphs.
THE RATE OF CRIME IN THE UNITED STATES (BASED ON TOTAL CRIMES PER 100,000 INHABITANTS)

Discussion: Information on the past ten years of this trend was obtained from Crime in the United States. The responses of the participants all indicated an expectation that the crime rate would increase during the next 10 years. Most respondents indicated that the increase would be in the 30 to 50% range, with only three of the responses on round 2 of the questionnaire falling significantly outside of the interquartile range.

Most participants did not make modifications from their first round responses on this trend. This may indicate that they were confident in their perception of future crime rates, and not easily influenced in this area. Comments attributed the rising crime rate to a variety of factors, including technological crime, economic sluggishness, and an increasing alien population. One participant indicated his projection would have included a greater increase, but felt that decriminalization of some acts would tend to lower crime statistics.
Discussion: The source of information on the past ten years of this trend was Crime in the United State, published by the U. S. Dept of Justice. The responses on this trend showed a fairly wide range of responses, with the median response indicating a slight increase. Some participants saw the number increasing, some decreasing. The second round of the survey did result in the median response moving up slightly. In comparing the responses of police personnel on this question, more indicated a movement toward a lower number of officers. The civilian participants indicated a slightly higher trend toward more police officers over the next ten years.

Comments on this trend indicated that the public would continue to demand more officers, but the economic reality would not allow this to occur. Several comments pointed to a faltering economy during the next five years, indicating this would prevent government budgets from meeting the requirements of increased police personnel. Other participants indicated that the public would demand additional officers as the crime rate increased.
Discussion: The source of the information for the past ten years of this trend was Special Analysis, Budget of the United States Government, published by the United States printing office. Most participants saw the trend turning from its current downward track. The median response still did not forecast that the level of funding would reach today's level within 10 years. There was a wide range of responses on this trend, with the top forecast indicating today's level of funding would double while the low forecast showed it being cut in half.

Many comments focused on the priority of the newly elected Democratic Administration, and the movement toward domestic programs. Other comments indicated that there would be too many competing demands for Federal funds to allow for any significant changes. The second round of the questionnaire did cause some upward movement of the median response, but the range still extended over a 150% range. The low end comments focused on the conflicting demands and deficit reduction requirements while those forecasting increases seemed to focus on the stated priorities of the newly elected administration.
THE NUMBER OF LOCAL, COUNTY AND DISTRICT POLICE DEPARTMENTS THAT COMBINED SPECIALIZED FUNCTIONS (DISPATCH, INVESTIGATIONS, ETC).

Discussion: All participants saw this trend increasing in the next ten years, only the extent of movement was in question. The high range indicated a 200% increase in ten years while the low forecasts showed only a very slight movement upward. The median forecast was part of a very constricted interquartile group, indicating a moderate 40% increase.

The comments of the participants in the high ranges indicated that movement toward consolidation and combining functions would be an economic necessity as agencies were forced to do more with less money. Most comments recognized that the trend toward consolidation was moving ahead, but did not feel it would be moving very quickly in the next decade. One participant may have summed up why this movement was forecast to be gradual with the comment, "Movement of public entities is very slow and may be more talk than action." Another participant felt that the economy would be improving enough within ten years to avoid the need for continued consolidation.
THE NUMBER OF GOVERNMENT AGENCIES WHO SEEK COMPETITIVE BIDDING FROM PRIVATE INDUSTRY TO PROVIDE SOME SERVICES (CORPORATION YARDS, STREET SWEEPING, RECREATION SERVICES, ETC).

Discussion: All participants agreed that there would be some increase in this area, the level of increase was the only dispute. The interquartile group was again very constricted, showing a large degree of agreement among these participants.

The comments of the participants indicated that private industry is often more efficient in providing services, and this efficiency would be required in economically difficult times. Many comments echoed the sentiments put forth in the book, Reinventing Government, that more efficient methods must be found in the future. If this trend does continue at the rate projected, many employees of public agencies will be replaced with non-government positions. This trend could have a very significant impact on the public employee sector, and job stability within government organizations.
THE NUMBER OF CITY, COUNTY AND STATE POLICE AGENCIES WHO CONTRACT OUT THE WORK OF NON-SWORN PERSONNEL WITHIN THE AGENCY WHICH HAD TRADITIONALLY BEEN STAFFED BY FULL TIME EMPLOYEES. EXAMPLES INCLUDE CONTRACTING FOR JANITORIAL SERVICES OR THE USE OF "TEMPORARY SERVICE" PERSONNEL TO STAFF CLERICAL POSITIONS.

Discussion: This trend resulted in a wide range of forecasts with a wide band in the interquartile range. Most participants felt that there would be some increase, with the low forecast indicating the trend would remain at today's level. The median forecast indicated approximately a 50% increase in the next 10 years.

Among those forecasting only small increases, the comments indicated that changes would first occur in non-police fields, before moving into public safety. Comments also pointed to a lag time in public acceptance of contract employees. Among those forecasting more substantial increases, the comments focused on the requirement for more economical solutions to the impending budget crisis. The use of contract employees was seen as a potential step toward addressing this problem.

There was not much movement between round one and round two on this issue, indicating that the participants had strong feelings on their responses.
THE RATIO OF CIVILIAN (NON-SWORN) PERSONNEL IN FIELD POSITIONS IN TRANSIT POLICE AGENCIES COMPARED TO THE NUMBER OF SWORN PERSONNEL

**Discussion:** There was a wide range of responses on this trend, but the interquartile group was closely gathered. The median forecast showed only a slight increase on this trend. The associated comments were also widely divergent, but noted the trend toward civilianization in all police fields. Movement occurred between round one and round two, but only among the forecasts in the middle of the range. The outlying forecasts remained unchanged between the two rounds.

For the issue of this research, this trend was one of the most significant for study. The widely divergent range of responses reinforces the lack of reliable data on the topic. Many respondents pointed out the trend toward civilianization was occurring in all police fields, and transit policing would be included. Other comments pointed out that specialized policing fields seem to be gaining strength as the demands on municipal departments increase and their ability to meet special demands decreases. Budget concerns continue to enter into the forecasts, in this case, balanced against the expectations and desires of the public.
THE NUMBER OF POLICE AGENCIES OF LARGER CITIES OR COUNTIES (OVER 500 EMPLOYEES) WHO ACTIVELY PURSUE CONTRACTS WITH SMALLER SURROUNDING GOVERNMENT AGENCIES FOR THE RIGHT TO PROVIDE POLICE SERVICES WITHIN THE JURISDICTIONS OF THE SMALLER GOVERNMENT'S BOUNDARIES.

Discussion: Again, all respondents agreed with an upward trend, the level of movement was the matter in dispute. The second round of the survey did cause some downward movement of the median forecast, with the final median indicating about a 40-45% increase. The initial round had indicated a nearly 100% increase.

The driving force behind the forecasts again focused on the diminishing budgets available to government agencies. The use of contracts was a method which would allow larger agencies to retain their personnel, and was therefore, felt to be a desirable tactic. One respondent also indicated that the formation of district or regional police agencies was a possible step which could be used to address the needs of small agencies.
THE NUMBER OF EXISTING TRANSIT POLICE AGENCIES IN THE UNITED STATES WHO SEEK CONSOLIDATION WITH EXISTING MUNICIPAL/COUNTY POLICE AGENCIES.

Discussion: This one trend is probably the single most significant topic which will impact the issue being researched. The range of responses shows the diversity of opinion on the matter, but the second round did bring the group much closer to agreement. The first round of the survey had a high forecast of a 100% increase and a low of 50% decrease. The first round median showed a slight decrease in the projected trend. After the second round, the range had been constricted to a high of 50% increase and a low of a 30% decrease. The final median response showed no change from today's level.

Some of the comments indicated that the trend of consolidation will be more widespread in municipal departments, but not in transit. Comments also pointed out that funding for transit was currently healthier than municipal funding, making the move more attractive to cities than transit agencies. The need for special attention to transit's needs was also pointed out as a reason cities would not find transit policing attractive, even though the funding would be attractive. In studying the future of transit policing in California, the forecast that independent transit police departments will remain intact is a very significant forecast.
THE PUBLIC’S PERCEIVED LEVEL OF DISORDER, LACK OF CONTROL AND SAFETY, AND CRIMINALITY WITHIN PUBLIC TRANSIT SYSTEMS AND VEHICLES

Discussion: Although the comments indicate that this cannot be allowed to occur, the trend forecasts show that most participants felt that this trend will increase. Only one participant saw this trend moving downward. The median level did not change substantially between the two rounds of the survey, estimating about a 40% increase.

Economic drivers of crime were again cited in the comments as reasons for the increase in criminal activity. One comment indicated that not only would the perception increase, but the reality of the situation would also show increases in these areas. This is again a trend which must be addressed by transit agencies if they hope to retain their patrons. If transit systems are not perceived as safe and reliable, patrons will find other means of commute and the further loss of funding will be difficult to deal with. For public transit police agencies, the mission must be to provide a system which is attractive to the public.
TREND 11

THE CRIME RATE FOR VIOLENT CRIME IN THE UNITED STATES (BASED ON VIOLENT CRIMES PER 100,000 INHABITANTS)

Discussion: The information on the past ten years of this trend was based on information from the U. S. Dept of Justice publication, Crime in the United States. All the participants saw an increase in violent crime, with most responses closely paralleling the increase in all crime. Most comments pointed toward today's increase in violence, along with the increase in narcotic activity and violence between the "haves" and the "have nots".

Most respondents did not list this trend as one of the ten most significant, sometimes indicating that the overall crime rate would appear to be more significant. As with Trend #1, there was unanimous agreement among the participants that the violent crime rate would increase over the next ten years. In view of the significant increases experienced over the past decade, movement to even higher rates is alarming. Comments by the participants also pointed out that violence has become normalized in today's society through television and gang activity.
TREND 12

POLICE CLEARANCE RATES IN THE UNITED STATES (REFLECTING THE ABILITY FOR POLICE DEPARTMENTS TO SOLVE CRIME)

Discussion: The source of information for the past ten years was the U.S. Department of Justice publication, Crime in the United States. The range of responses indicated some optimism and some pessimism. Most responses were bunched closely around the indicator of no change from today's rate of clearance. Comments included the complexity of white collar crime, and the technological future of crime.

One respondent who saw the clearance rate moving up pointed out the brazenness of criminal activity at this time, and an indication that some people no longer care if they are caught. Carried into the next ten years, this attitude would make arrests and prosecution easier. Another participant, who did not see an increase in the officer/citizen ratio, pointed out that the increase in criminal activity would make crimes even more difficult to investigate and solve. Overall, the participants did not feel that the ability to maintain a high clearance rate would be one of the ten most significant trends impacting transit policing in the next ten years.
THE NUMBER OF CITIES WHO DISBAND ALL MUNICIPAL SERVICES, RELINQUISHING CONTROL AND RESPONSIBILITY TO COUNTY OR STATE GOVERNMENT AS A RESULT OF FISCAL CONSTRAINTS

Discussion: The second round of this survey did result in closer agreement on this trend. Most respondents did see an increase in this trend, with the median response indicating only about a 20% increase. In the first round, the median forecast showed approximately a 40% increase, a substantial movement, apparently indicating that several participants moved toward a forecast which was less dismal.

Comments on both rounds indicated that participants anticipated more disbanding of municipal services, but only in limited areas and not sweeping changes. One participant also pointed out that many communities were still moving toward incorporation to obtain more local control over service delivery. This desire for local control appeared to be one of the driving forces to prevent cities for relinquishing control to other agencies. However, budget impacts still indicated that the trend would increase.
THE USE OF FLEX TIME, TELECOMMUTING AND COTTAGE INDUSTRIES ARE SUCCESSFUL IN LESSENING TRAFFIC CONGESTION IN URBAN AREAS.

Discussion: The range of responses on this trend indicated a high of 150% increase to a low of a slight increase. Comments indicated that several factors would impact traffic congestions, but none would be successful in lessening it. The median trend showed over 50% increase.

Comments indicated that there would be an increase in telecommuting and flex time, but these would not offset increases in population and commuting. Overall, all respondents indicated that they expected increased traffic congestion, pointing out the need for transit systems to lessen the impact. The idea that traffic will not be a major problem in the next decade because of changing work patterns is not supported by the Delphi panel.
THE LEVEL OF USE OF TRANSIT STATIONS BY HOMELESS IN URBAN AREAS IS SUFFICIENT TO CAUSE COMMUTERS TO AVOID THESE LOCATIONS.

Discussion: The median forecast showed only a slight upward movement in this trend. There was a wide range of responses and comments on the topic. Some comments indicated personal experience in avoiding these stations. Other comments indicated that public tolerance of homeless and panhandlers seemed to be decreasing and the public was demanding stricter laws and stronger enforcement. One respondent indicated that commuter would generally ignore the problem in order to complete their travel. The range of the responses did shift downward between the first and second rounds of the study, indicating some changes in perspective. The indication that problems with the homeless would deter public transit use is something that transit agencies must be aware of if they hope to continue to attract riders. This trend also relates to trend #10, dealing with the perception of disorder and crime in transit systems. Although the trend of homeless utilizing transit facilities was not listed as one of the ten most significant, it contributes to the overall perception of safety within the system, and must be addressed.
As noted earlier, fifteen events were also presented to the panelists for evaluation. A table and charts showing the final results from the second round of the survey are listed on the following pages. The listings include the range of responses from the participants in each of the five categories, along with the median of the responses from the participants.

When evaluating the impact of the event on the issue of providing police services within a transit agency, the participants were instructed that a given event may have either a positive impact, a negative impact, or both a positive and negative impact on the issue. The scale utilized for rating impact was:

**Rating of "1"**- Minimal impact on the ability to provide police services. Some minor modifications to deployment may be required, but could be handled without the addition of personnel or additional expense.

**Rating of "5"**- Would require/allow significant adjustments to current methods of deployment. In positive situations, this level of impact would allow significant improvements in the level of service provided. In negative situations, there would be a significant decline in service. In both cases,
there would still be an ability to work through the situation with long term planning and adjustment.

Rating of "10"- Events with this level of impact would require immediate and dramatic changes in the manner or operation. In positive situations, the changes could be sought after and well received. In negative situations, the changes in the ability to provide transit police services would be catastrophic to the agency and its patrons.

The following table provides the range of response for each of the events which was provided by the thirteen Delphi Panelists. In addition, the table also indicates the median response of the panelists in the five areas forecast.
## EVENT EVALUATION TABLE

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF EVENT OCCURS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIVE YRS FROM NOW (0-100%)</td>
<td>TEN YRS FROM NOW (0-100%)</td>
<td>POSITIVE</td>
</tr>
<tr>
<td>1. Federal government enacts a $.10 per gallon gasoline tax with all proceeds allocated to funding public transit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 0-N</td>
<td>0-90</td>
<td>0-100</td>
<td>1-8</td>
</tr>
<tr>
<td>Median 3</td>
<td>40</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>2. State Air Quality Control Act requires that no vehicles with less than 2 occupants be driven on highways in urban areas during peak commute hours.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 0-N</td>
<td>0-70</td>
<td>0-70</td>
<td>2-10</td>
</tr>
<tr>
<td>Median 15</td>
<td>20</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>3. There is a major oil embargo resulting in lines at gasoline stations of the magnitude experienced in the 1973 embargo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 0-N</td>
<td>0-40</td>
<td>0-60</td>
<td>0-9</td>
</tr>
<tr>
<td>Median 10</td>
<td>10</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>4. Political terrorists announce that they will utilize bombings in mass transit systems of the United States to call attention to their cause.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 0-N</td>
<td>10-70</td>
<td>15-95</td>
<td>0-10</td>
</tr>
<tr>
<td>Median 1</td>
<td>40</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>5. Federal legislation is passed which allows college students to excuse loan payments in exchange for specified service to gov't agencies which receive federal funding (Police service is one of the specified postions).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range 0-15</td>
<td>5-100</td>
<td>10-100</td>
<td>2-8</td>
</tr>
<tr>
<td>Median 3</td>
<td>40</td>
<td>50</td>
<td>5</td>
</tr>
</tbody>
</table>
## EVENT EVALUATION TABLE

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY Five Yrs from Now (0-100%)</th>
<th>Ten Yrs from Now (0-100%)</th>
<th>IMPACT ON THE ISSUE AREA IF EVENT OCCURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. State legislation declares all infraction violations (including transit violations such as fare evasion) to be civil matters, not subject to criminal violations.</td>
<td>Range 0-N</td>
<td>0-75</td>
<td>10-100</td>
<td>2-5</td>
</tr>
<tr>
<td></td>
<td>Median 5</td>
<td>20</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>7. State legislation enacts a state police force to handle all minicipal, county, and district police function.</td>
<td>Range 0-N</td>
<td>0-10</td>
<td>0-20</td>
<td>2-5</td>
</tr>
<tr>
<td></td>
<td>Median 50</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>8. The federal government ends all subsidy to intrastate public transit agencies.</td>
<td>Range 0-N</td>
<td>0-80</td>
<td>0-80</td>
<td>0-5</td>
</tr>
<tr>
<td></td>
<td>Median 20</td>
<td>15</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>9. At least one city in the United States with a population over 50,000 people dissolves its uniformed patrol force after contracting with a private security company to perform this function.</td>
<td>Range 0-N</td>
<td>0-100</td>
<td>0-100</td>
<td>0-8</td>
</tr>
<tr>
<td></td>
<td>Median 10</td>
<td>30</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>10. State legislation is passed to allow non-police transit personnel to issue notices to appear for transit related violations. Failure to appear on the citation has criminal sanctions.</td>
<td>Range 0.5</td>
<td>15-100</td>
<td>15-100</td>
<td>2-8</td>
</tr>
</tbody>
</table>
11. Federal legislation mandates that all local governments receiving federal funding must obtain at least 3 competitive bids for any expenditure, including personnel costs of specialized departments, which exceed 10% of the agency's budget.

12. Distribution of state collected taxes to cities, counties and districts is cut 50% with the money retained by the state.

13. The cost of gasoline exceeds $3.00 per gallon.

14. Court rulings require public transit systems receiving federal funding to provide free services to anyone who is unable to pay normal fares.

15. One of the ten largest transit agencies in the country reports laying off all employees not directly responsible for the operation of the transit vehicles.

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF EVENT OCCURS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PROBABILITY</td>
<td>Five Yrs from Now (0-100%)</td>
<td>Ten Yrs from Now (0-100%)</td>
</tr>
<tr>
<td>11. Federal legislation mandates that all local governments receiving federal funding must obtain at least 3 competitive bids for any expenditure, including personnel costs of specialized departments, which exceed 10% of the agency's budget.</td>
<td>Range 0-N</td>
<td>0-95</td>
<td>0-100</td>
</tr>
<tr>
<td>Median 5</td>
<td>20</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>12. Distribution of state collected taxes to cities, counties and districts is cut 50% with the money retained by the state.</td>
<td>Range 0-7</td>
<td>0-100</td>
<td>20-100</td>
</tr>
<tr>
<td>Median 2</td>
<td>50</td>
<td>75</td>
<td>2</td>
</tr>
<tr>
<td>13. The cost of gasoline exceeds $3.00 per gallon.</td>
<td>Range 0-15</td>
<td>0-50</td>
<td>0-80</td>
</tr>
<tr>
<td>Median 7</td>
<td>15</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>14. Court rulings require public transit systems receiving federal funding to provide free services to anyone who is unable to pay normal fares.</td>
<td>Range 0-N</td>
<td>0-50</td>
<td>0-100</td>
</tr>
<tr>
<td>Median 10</td>
<td>25</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>15. One of the ten largest transit agencies in the country reports laying off all employees not directly responsible for the operation of the transit vehicles.</td>
<td>Range 0-50</td>
<td>0-75</td>
<td>0-75</td>
</tr>
<tr>
<td>Median 15</td>
<td>10</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>
EVENT GRAPHS

Following are five graphs listing the event forecast information in a format to allow ease of comparison. Each graph shows the fifteen events, and indicates the panelists' median forecast in one of the five areas evaluated. Comments on the significance of the forecasts, along with comments provided by the panelists follow each graph. The event numbers of the graph correspond to the following events:

1. Federal Gas Tax enacted
2. Peak hour driving requires 2 occupants
3. Major oil embargo
4. Terrorists target transit
5. College Student service
6. Infractions equal a civil matter
7. State enacts overriding state police force
8. Fed. government ends all transit subsidy
9. City Dissolves its Police Dept.
10. Civilians issue criminal citations
11. Fed. government mandates 3 bids
12. State Tax Distribution is cut
13. Gasoline price exceeds $3.00
14. Transit must provide free rides
15. Transit agency has massive lay offs
EVENTS
Yrs Until Probability Exceeds "0"

1. FEDERAL GAS TAX ENACTED
2. PEAK HR DRIVE REQUIR 2 OCCPNTS
3. MAJOR OIL EMBARGO
4. TERRORISTS TARGET TRANSIT
5. COLLEGE STUDENT SERVICE
6. INFRACTIONS EQUAL CIVIL MATTER
7. STATE POLICE FORCE ENACTED
8. FED. GOV'T ENDS TRANSIT SUBSIDY
9. CITY DISSOLVES POLICE DEPT.
10. CIVILIANS ISSUE CRIMINAL CITES
11. FED. GOV'T MANDATES 3 BIDS
12. STATE TAX DISTRIBUTION CUT
13. GASOLINE PRICE EXCEEDS $3.00
14. TRANSIT MUST PROVIDE FREE RIDE
15. TRANSIT AGENCY MASS LAY OFFS
Years Until Probability Exceeds "0"

As indicated on the graph, all events had at least one respondent who indicated the lower limit on the range as "0". The upper range was listed at "Never" by at least one respondent on eleven of the events. For purposes of calculation and graphing, all responses that listed "never" were calculated as occurring at least 50 years in the future.

Event #12, dealing with the redistribution of state taxes, had the lowest median forecast in this category, indicating a median forecast of only two years before the probability of this event occurring exceeds 0%. Event #10, dealing civilian issuance of criminal citations also had a median forecast of two years. Event #5, dealing with college students performing public service for loan repayment, and event #1, which dealt with a federal gasoline tax to finance public transit, both had median responses of three years until their probability exceeded 0%.

Comments by the panelists stressed budgetary considerations in government forcing the redistribution of tax revenues. Event #10, the civilian citation event, was enacted by the California State Legislature sooner than the forecast two years, and became law on January 1, 1994.
EVENTS
Probability Within 5 Years

Event Number

Median Response

1. FEDERAL GAS TAX ENACTED
2. PEAK HR DRIVE REQUIR 2 OCCPNTS
3. MAJOR OIL EMBARGO
4. TERRORISTS TARGET TRANSIT
5. COLLEGE STUDENT SERVICE
6. INFRACTIONS EQUAL CIVIL MATTER
7. STATE POLICE FORCE ENACTED
8. FED. GOV'T ENDS TRANSIT SUBSIDY
9. CITY DISSOLVES POLICE DEPT.
10. CIVILIANS ISSUE CRIMINAL CITES
11. FED. GOV'T MANDATES 3 BIDS
12. STATE TAX DISTRIBUTION CUT
13. GASOLINE PRICE EXCEEDS $3.00
14. TRANSIT MUST PROVIDE FREE RIDE
15. TRANSIT AGENCY MASS LAY OFFS
Probability Within 5 Years

The graph showing the probability of the event occurring within five years again demonstrates the wide range of responses. Only three events had the lower limit of the range above 0%. Four events had at least one respondent indicating a 100% probability for the event within 5 years.

Event #10, allowing civilians to issue criminal citations, and event #12 dealing with a decrease in the distribution of taxes to local government were the only events where the median probability reached 50% within five years. Comments indicated that this redistribution had begun, and the panelists felt that the state would continue to retain taxes, negatively impacting all local governments.

The probability of Event #7, establishment of an all encompassing state police force, was felt to be the least likely event within five years, receiving an median probability of only 5%. Comments regarding this event indicated that local control concerns would prevent it from occurring, but the idea would probably receive increased discussion.
EVENTS

Probability Within 10 Years

![Probability Chart]

Event Number

1. FEDERAL GAS TAX ENACTED
2. PEAK HR DRIVE REQUIR 2 OCCPNTS
3. MAJOR OIL EMBARGO
4. TERRORISTS TARGET TRANSIT
5. COLLEGE STUDENT SERVICE
6. INFRINGEMENTS EQUAL CIVIL MATTER
7. STATE POLICE FORCE ENACTED
8. FED. GOV'T ENDS TRANSIT SUBSIDY
9. CITY DISSOLVES POLICE DEPT.
10. CIVILIANS ISSUE CRIMINAL CITES
11. FED. GOV'T MANDATES 3 BIDS
12. STATE TAX DISTRIBUTION CUT
13. GASOLINE PRICE EXCEEDS $3.00
14. TRANSIT MUST PROVIDE FREE RIDE
15. TRANSIT AGENCY MASS LAY OFFS
Probability Within 10 Years

The same events which rate as probable after five years still ranked as most probable after ten years. Events #10 and #12 remained as the most probable based on the forecast of the panel. At the ten year mark, Event #1, dealing with a gasoline tax to finance public transit also reached a median forecast above the 50% probability.

Event #7, the state police force, still showed very little probability with a median rating of 5%. The desire for local control and responsiveness to local needs were still cited as the major reason this event was unlikely to occur.

Comments regarding the gasoline tax indicated two primary thoughts. Although many indicated that there would be a significant increase in the tax, the application of the revenues to transit agencies was not felt to be as likely. It was felt that any major revenue sources available to the federal government would first be allocated to deficit reduction before the funding of public transit was considered.
EVENTS

Event's Positive Impact on the Issue

Positive Impact

Event Number

Median Response

EVENT LISTING

1. FEDERAL GAS TAX ENACTED
2. PEAK HR DRIVE REQUIR 2 OCCPNTS
3. MAJOR OIL EMBARGO
4. TERRORISTS TARGET TRANSIT
5. COLLEGE STUDENT SERVICE
6. INFRACTIONS EQUAL CIVIL MATTER
7. STATE POLICE FORCE ENACTED
8. FED. GOV'T ENDS TRANSIT SUBSIDY
9. CITY DISSOLVES POLICE DEPT.
10. CIVILIANS ISSUE CRIMINAL CITES
11. FED. GOV'T MANDATES 3 BIDS
12. STATE TAX DISTRIBUTION CUT
13. GASOLINE PRICE EXCEEDS $3.00
14. TRANSIT MUST PROVIDE FREE RIDE
15. TRANSIT AGENCY MASS LAY OFFS
Event’s Positive Impact on the Issue

Several events were seen as having both positive and negative impacts on the issue of transit policing. Of these, some included high ratings of 10 on both the positive and negative scale. All of the Delphi Panel saw at least some positive impact on eight of the events evaluated.

Event #2, which dealt with a mandate requiring carpooling, received the highest median positive rating at 8. This event was also rated at only having a 25% probability within 10 years, so it was not determined to be one of the ten most significant events.

Four events received positive median ratings of five. These events included increased gasoline tax for public transit, college students available for public service, allowing civilians to issue criminal citations, and the cost of gasoline exceeding $3.00 per gallon. Each of these four events were also forecast among the most probable to occur.

Panelists’ comments on the mandatory carpooling indicated that the event could force people onto transit, but it could also relieve congestion on highways to the point that driving would become more convenient. Comments on the impact of higher gasoline cost also showed a diversity of opinion. Some comments indicated that the increase would make transit systems a more attractive
alternative, while other comments indicated that the cost of gasoline alone is not enough to cause people to abandon their cars. Comments regarding college student service indicated the possibility of benefits by providing increased staffing, but also questioned the commitment and quality of the staffing police agencies might see from these temporary personnel.
EVENTS
Event's Negative Impact on the Issue

Event Number

Median Response

EVENT LISTING

1. FEDERAL GAS TAX ENACTED
2. PEAK HR DRIVE REQUIR 2 OCCPNTS
3. MAJOR OIL EMBARGO
4. TERRORISTS TARGET TRANSIT
5. COLLEGE STUDENT SERVICE
6. INFRACTIONS EQUAL CIVIL MATTER
7. STATE POLICE FORCE ENACTED
8. FED. GOV'T ENDS TRANSIT SUBSIDY
9. CITY DISSOLVES POLICE DEPT.
10. CIVILIANS ISSUE CRIMINAL CITES
11. FED. GOV'T MANDATES 3 BIDS
12. STATE TAX DISTRIBUTION CUT
13. GASOLINE PRICE EXCEEDS $3.00
14. TRANSIT MUST PROVIDE FREE RIDE
15. TRANSIT AGENCY MASS LAY OFFS
Event’s Negative Impact on the Issue

For the events evaluated, the negative impact was generally higher than the positive impact. Eight of the events had median negative impacts at or above 5, while only four of the positive impacts had median ratings at that level.

Event #4, dealing with terrorist threats against public transit, had a median negative impact rating of eight by the panelists. This event also received a probability of 50% within ten years, indicating it is an issue which must receive attention in future planning.

Event #12, dealing with a cut in the distribution of state taxes, and event #15, dealing with the lay off of transit employees also received a median negative impact of eight. The probability of a cut in state tax distribution was also forecast to be the most probable of the fifteen events. This high probability, along with the negative impact, indicate that this event must also be considered in developing strategic plans for the future.

Comments on the terrorist targeting of transit not only emphasized that is more likely than most are willing to admit, but also point out the potential for tragic results. The New York City World Trade Center bombing was cited as an example by several panelists. Comments regarding event #15, the lay off of transit employees, indicated many panelists felt that transit police may be
spared in layoffs due to a civilian desire for law and order. Other panelists pointed out that contracting services in all aspects of government, including police services, may allow for these layoffs. Examples of the movements toward the contracting of governmental services were provided not only in transit agencies, but also within city and county governments.
CROSS-IMPACT ANALYSIS

Based on the panel's forecasts, the ten events which received the highest median probability of occurring within the next ten years were utilized in subsequent portions of this study. The ten most likely events the panelists chose are:

1. Federal Gas Tax Enacted
2. Terrorists target transit
3. College Student Service
4. Infractions equal a civil matter
5. City dissolves its police department
6. Civilians issued criminal citations
7. State tax distribution is cut
8. Gasoline price exceeds $3.00 per gallon
9. Transit must provide free rides
10. Transit agency has massive lay offs

Utilizing the median probability determined by the Delphi panel at the ten year mark, a cross-impact analysis was performed for these ten most likely events. The final probability for the events which was determined from this analysis was then used to cross-impact with the ten most significant trends. These cross-impact analysis were performed to determine the probability that a specific event will occur when it is considered in conjunction with the other events and trends.

The methodology utilized for this cross-impact included an estimate of how each event would impact each of the other events. This cross-impact was determined by the project's author, based largely on the written comments provided by the panel participants.
For example, if event #2 occurred, what impact would this have on the probability of event #1 occurring? This impact was estimated as a positive (increased) or negative (decreased) probability. This probability was then multiplied by the likelihood of the second event occurring, and the product was added or subtracted from the probability of the first event occurring. This process was repeated for each of the other eight events, calculating their individual impact on the probability of event #1 occurring. The impact of these other nine events was totaled, and this "cross-impact" either increased or decreased the final probability that event #1 would occur. The same process was then completed for the other nine events, again comparing the impact each of the other events would have on the probability of the event in question occurring.

The same process was then repeated with the adjusted event probability, comparing this probability of the event occurring with the ten most significant trends. After analysis with each of the ten most significant trends, a final probability for each of the ten events was calculated. The completion of this cross impact process was assisted by the use of a computer program. Copies of the completed cross impact matrixes are included below as Charts #1 and 2.

The cross impact analysis of event to event resulted in an increase in probability for all of the ten most significant events. Event #6, dealing with legislation to allow civilians to issue criminal citations, was determined to be the most likely event with
a 93% probability. This event subsequently occurred, with enacted legislation taking effect January 1, 1994.

When these adjusted probabilities were then cross-impacted with the ten trends, the ranking of the events did not change significantly. The probability of legislation dealing with issuance of citations remained the most likely. Event #10, which dealt with a transit agency undertaking large scale lay offs, showed the largest change in this cross-impact analysis. The likelihood of this event dropped considerably below a 50% probability, while each of the other ten events remained above that level.
## EVENT VS. EVENT

### 10 X 10 Cross Impact Matrix

10 = Number of Events

<table>
<thead>
<tr>
<th>Initial</th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>E9</th>
<th>E10</th>
<th>Final Probabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob V</td>
<td>60</td>
<td>50</td>
<td>50</td>
<td>40</td>
<td>50</td>
<td>70</td>
<td>75</td>
<td>50</td>
<td>30</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

| E1      | 60 | X  | 0  | 0  | 0  | 0  | 5  | 20 | 15 | 15 |
| E2      | 50 | 0  | X  | 0  | 0  | 15 | 0  | 10 | 0  | 15 |
| E3      | 50 | 0  | 5  | X  | 0  | 25 | 0  | 10 | 0  | 5  |
| E4      | 40 | 0  | 5  | -10| X  | 10 | 40 | 25 | 0  | -15|
| E5      | 50 | 0  | -25| -15| 0  | X  | 0  | 35 | 0  | 15 |
| E6      | 70 | -10| 15 | -20| 25 | 10 | X  | 10 | 0  | 10 |
| E7      | 75 | 10 | 0  | 0  | 5  | -15| 0  | X  | 5  | 5  |
| E8      | 50 | 15 | 0  | 0  | 0  | 0  | 5  | X  | 15 | 0  |
| E9      | 30 | 35 | 0  | 25 | 0  | 0  | 0  | 20 | X  | -20|
| E10     | 30 | 15 | -10| 15 | 5  | 0  | 10 | 10 | 0  | -10|

### EVENT SUMMARY

- E-1 Fed Gas Tax
- E-2 Terrorists target transit
- E-3 Student service
- E-4 Infraction=civil matter
- E-5 City dissolves PD
- E-6 Civilians issue cites
- E-7 Tax distribution cut
- E-8 Gasoline over $3.00
- E-9 Free Rides
- E-10 Transit Lays off
# EVENTS VS. TRENDS

10 X 10 Cross Impact Matrix

10 = Number of Events

<table>
<thead>
<tr>
<th>Initial</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T7</th>
<th>T8</th>
<th>T9</th>
<th>T10</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob V</td>
<td>45</td>
<td>20</td>
<td>-20</td>
<td>30</td>
<td>50</td>
<td>50</td>
<td>20</td>
<td>45</td>
<td>1</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td>83</td>
<td>0</td>
<td>0</td>
<td>-30</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>-5</td>
</tr>
<tr>
<td>E2</td>
<td>70</td>
<td>10</td>
<td>-5</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>E3</td>
<td>82</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>-5</td>
<td>0</td>
<td>5</td>
<td>-10</td>
<td>-10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>E4</td>
<td>79</td>
<td>-10</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>-2</td>
<td>2</td>
</tr>
<tr>
<td>E5</td>
<td>61</td>
<td>-10</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>E6</td>
<td>93</td>
<td>5</td>
<td>-5</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>-15</td>
<td>-10</td>
</tr>
<tr>
<td>E7</td>
<td>83</td>
<td>5</td>
<td>-10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>-5</td>
<td>0</td>
</tr>
<tr>
<td>E8</td>
<td>67</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E9</td>
<td>68</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-5</td>
</tr>
<tr>
<td>E10</td>
<td>55</td>
<td>-10</td>
<td>-20</td>
<td>25</td>
<td>-5</td>
<td>-5</td>
<td>0</td>
<td>-5</td>
<td>15</td>
<td>25</td>
<td>10</td>
</tr>
</tbody>
</table>

## TREND/EVENT SUMMARY

- **T−1** Crime Rate
- **T−2** Ofc/Population
- **T−3** Fed Budget
- **T−4** Combining Funct.
- **T−5** Competitive Bidding
- **T−6** Contract Work
- **T−7** Trans. PD Civilian
- **T−8** Muni PDs pursue contracts
- **T−9** Transit PDs seek consol.
- **T−10** Perception of trans. safety

- **E−1** Fed Gas Tax
- **E−2** Terrorists target transit
- **E−3** Student service
- **E−4** Infraction=civil matter
- **E−5** City dissolves PD
- **E−6** Civilians issue cites
- **E−7** Tax distribution cut
- **E−8** Gasoline over $3.00
- **E−9** Free Rides
- **E−10** Transit Lays off
After the development of this research, including the ten most significant trends and the ten most significant events determined by the panel, the information was utilized to develop three scenarios. The first of these scenarios is a normative scenario, developing a future based on what would be preferred. This scenario utilizes only events which the panel felt would have an overall positive impact on the issue of transit policing, along with the ten trends which the panel felt were most the significant.

The second scenario is a nominal scenario, or one which develops a likely future. The third scenario is written as a hypothetical scenario, developing a potential worst-case development of trends and events. The formulation of the nominal and hypothetical scenarios were based on information generated through the use of a Sigma Scenario Generator program. This computer program utilizes the probability of each event which was determined through the panel forecasts and the cross impact analysis. It also evaluates the positive and negative impact of the event and assigns a theoretical occurrence date. Through the program, all events are determined to occur at a specific time, or not to occur during the ten year period being analyzed for these scenarios. These events were tied to the ten significant trends, presenting a possible picture of the future. A copy of the Sigma
Scenario projections for these two scenarios are listed after each scenario.

These scenarios of the future should serve as focal points for what the future might hold. Since the future is not predetermined, the awareness of potential futures can then be utilized to assist in determining the desired direction of the future, and formulating strategic plans to move toward that desired state.

For reference while reviewing these scenarios, the events and trends are referenced in the text. The events, (E1 through E10) and trends, (T1 through T10) refer to the top ten events and trends listed below:

E-1 Fed. Gas Tax  T-1 Crime Rate
E-2 Terrorists target transit  T-2 Ofc/Population ratio
E-3 Student Service  T-3 Fed. Budget
E-4 Infraction=Civil Matter  T-4 Combining Police Function
E-5 City Dissolves PD  T-5 Competitive Bidding
E-6 Civilians Issue Cites  T-6 Contracting Gov't Work
E-7 Tax Distribution Cut  T-7 Transit PD Civilianizes
E-8 Gasoline over $3.00  T-8 Muni. PDs pursue contracts
E-9 Free Rides  T-9 Transit PDs seek consolid.
E-10 Transit System Lays Off  T-10 Perception of transit safe
A normative, or preferred, scenario was developed utilizing the top ten trends and events forecast by the Modified Conventional Delphi Survey. To develop this scenario in the most positive manner, only those events where the positive impact was forecast to be higher than the negative impact are presented as occurring. Events which the Delphi participants felt had a greater negative impact are forecast to not occur during the ten year period of this "preferred scenario."

In response to the continued decline of federal funding for mass transit (T-3), transit lobbyists have continued to push for a method to raise funds without further impacting the mounting deficit. A compromise was reached in March, 1997, when federal legislation was passed which placed an additional $0.10 per gallon tax on gasoline (E-1). All proceeds from this special tax went directly to federal subsidies of public mass transit agencies for use in capitol improvement and operating subsidies. These additional operating funds were instrumental in avoiding extensive lay offs, particularly those which had just been initiated at the Southeastern Pennsylvania Transit Authority (E-10).

As transit agencies evaluate the uses for these additional
funds, public safety of patrons and employees continues to be emphasized. Cost saving options which had been previously discussed as probable necessities have now been re-evaluated. Many transit police departments had faced elimination as a cost saving effort prior to this additional tax. Some had intended to combine with local municipal agencies, while seeking contracts with the agencies to provide police protection on the transit systems (T-8). Since most municipal agencies are now in much worse financial condition than transit districts, there is no incentive for the districts to now seek consolidation. In fact, as the crime rate continues to rise in most urban areas of the country (T-1) and the number of police officers is held steady to meet budget constraints (T-2), the trend is exactly the opposite in most public transit settings.

An example of a fiscally thriving transit agency is the San Francisco Bay Area Rapid Transit (BART) District. After the increased gas tax revenue in 1997, BART was able to complete its extensions projects, many of which had been suspended previously. During the mid 1990's, patrons of BART and most other transit systems, reported an increased concern for their safety in the systems (T-10). In an effort to increase the presence of police personnel, the BART Police Department undertook four programs. The department first began utilizing civilian personnel for many non-enforcement patrol functions. The civilian personnel were part-time employees who received no benefits and approximately 50% of the pay of a sworn officer. These cost savings allowed the
employment of a larger number of personnel, but their effectiveness was extremely limited because of their lack of police powers (T-7). At the same time, the District funded the purchase of several closed circuit television systems for installation throughout the system. These cameras allowed surveillance of all areas of the system by non-sworn employees, and the immediate dispatch of officers to situations in need of police intervention. Coupled with the immediate transmission of a picture of the suspect to the responding police unit, the effectiveness of this CCTV system became known throughout the criminal community. As a result, the attractiveness of the BART system for potential crime diminished significantly. The use of these cameras proved so successful, that the police department was able to decrease the number of non-sworn personnel in the field, but maintained a full staff of personnel to monitor CCTV cameras.

In addition, the police department also began utilizing college students on a short term basis under a federal program which allowed the students to repay college loans through police service (E-3). Although many of the students were dedicated to public service, most of their repayment time was expended in training.

Lastly, the BART Police Department undertook a decentralized policing posture, establishing substations within policing zones built throughout the system. Although not common in specialized policing such as transit policing, this community policing approach allowed the transit riders to deal directly with the departmental
personnel responsible for their areas of concern. It also caused a significant increase in "police ownership" of the zones by the responsible police personnel, while benefitting many individual officers by shortening their commute to work each day.

At this same time, the concept of regionalization of the transit agencies within the Bay Area was pushed by the Metropolitan Transportation Committee. Under threats to withhold federal transit funding, local transit districts agreed to study consolidation as a method to avoid duplication of services, competition for the same ridership, and wasting scarce public transit funds. The Metropolitan Transportation Committee was successful in obtaining agreement from all local transit agencies that the BART Police Department would be retained as the regional transit police agency for the entire Bay Area. This move placed law enforcement responsibility of all local transit vehicles, including buses, trains, and ferries under the former BART Police Department, now renamed Bay Area Transit (BAT) Police Department.

State legislation regarding the enforcement and issuance of notices to appear for infraction violations did assist in saving police personnel resources for a short time in the mid 1990's. Civilian employees of BART who were normally assigned as station agents were given legal authority to issue infraction citations to persons who committed minor violations such as evading the payment of fare (E-6). The move to remove all criminal sanctions from these violations was not passed by the legislation (E-4), so most non-police employees were very hesitant to take enforcement action.
because of concern for their own safety. As soon as the BART Police Department was returned to a full staffing level, the labor union for the station agents was successful in modifying the work rules to eliminate the need for agents to issue criminal citations. Other transit agencies did take advantage of this legislation, employing civilian fare inspectors to issue citations for violations.

A final program which was utilized throughout the BART District during the mid 1990’s was found to be very cost effective, and continued even after the increased availability of revenue. Under this program, most non-supervisory personnel in non-technical positions were hired through temporary agencies. Most clerical positions were filled through this method, along with many janitorial and ground keeping positions (T-6). The temporary employees were not granted benefits or vacation, at a great savings to the BART District. With the high unemployment levels being experienced, the pool of available employees has remained very stable.

Many of these same cost saving steps were begun in all local municipal governments at approximately the same time. In addition, many local law enforcement agencies were forced to pool their resources to maintain special services such as investigations (T-4). Most counties within California also assumed the dispatch function for municipal police agencies. Within Alameda County, a private contractor was successful in obtaining agreements from several cities to provide dispatch services. The contractor
successfully underbid the Alameda County Sheriff’s Department’s bid, and the cities report receiving excellent service (T-5).

The availability of tax revenues for cities throughout California continued to decline through the 1990s, even after transit districts were able to rebound with the federal gasoline tax. During preparation for the 1999-2000 budget year, several cities reported the possibility that they may be forced to disband city government if additional funding was not available (E-5). Fortunately, the State of California reported that the shift to the Federal Government providing all health and welfare benefits allowed the state to restore a significant portion of its tax distribution back to local government. This sudden reversal of the previous redistribution cuts revitalized most city governments (E-7). Those city governments who had been successful in maintaining strong and effective police departments were now able to capitalize on the funds available in surrounding cities. Many of these large agencies began to actively pursue contracts with the smaller surrounding cities. The large agencies reported a better training base to expand services in these more prosperous times, and relieved the small cities of the need to spend time in the necessary selection and training required to allow a return to a full level of service (T-8). Most elected officials of the smaller cities were reluctant to give up local control, and very few contract cities were developed.

Many police agencies in major urban areas of California were tested during this same period. As gasoline rose above the $3.00
per gallon level (E-8), environmental groups seized the milestone as a time to call attention to the pollution concerns created by the use of fossil fuels. The environmental groups threatened to undertake bombings and other acts of destruction against highways and bridges. The groups were emphatic that they would not take any action against public transit since these agencies were designed to limit the pollution caused by automobiles (E-2). The same environmental groups were also active in seeking free transportation on publicly supported transit systems for most residents. Because of the very violent and extreme positions taken by the groups, their proposals were not seriously considered by the legislature (E-9).

As the availability of resources to city, county and district governments became more accessible, all agencies were able to restore many of their lost services and make better use of their personnel by utilizing technology. With the availability of personnel, police agencies were able to return to a more proactive stance to deal with violations, and returned to the community to work in partnership. The use of community alliances with police departments has become the accepted way of conducting business. Even in large municipal departments, recently formed regional police departments and transit police departments, communication and interaction is enhanced through ties established with the community.
NOMINAL SCENARIO

An example of a nominal or likely scenario was generated through the use of the Sigma Scenario Generator program. The run selected as a "likely scenario" included seven events which would occur, and the projected date of occurrence. Utilizing this information, along with the ten most significant trends determined by the Delphi Panel, a picture of the next ten years could develop along these lines:

The fiscal constraints within the California State government continue to worsen. Despite the election of nearly all new assemblymen, senators and governor, the California government is unable to resolve its budget conflicts, and the distribution of state revenues to local governments are cut by over 50% effective in December, 1995 (E-7). This loss of revenue is felt sharply by all forms of government within the state, including cities, counties and districts. Within 3 months, as a result of the loss of state revenue and the devastating financial losses from the recent forest fires in the area, the City of Redding was forced to disband its municipal government, laying off all city employees (E-5).

These layoffs were held out as examples of the need for the
use of innovative methods of government financing to avoid the loss of government services. Several large cities facing similar revenue losses have begun an active campaign to assume responsibilities within smaller adjoining municipalities. Medium to large city police departments have quickly developed expertise in marketing their agencies, and are making presentations at city council meetings of adjoining cities to provide information on how their agency could provide superior service at a lower price than other existing departments (T-8). Many small cities have been forced to accept the contracts with larger city or county jurisdictions. This gradual disbandment of local government services has continued to frustrate all levels of law enforcement, especially in view of the continued rise in the crime rate throughout the state (T-1).

Requests for federal funds to ease the state economic problems have not met with any positive results. Most funds within the federal budget have been dedicated to either deficit reduction or health care, leaving most other areas unfunded. Defense contractors have been forced to continue retro-fitting to non-defense oriented production, without the benefit of federal programs to assist them. Within the public transit field, the federal funding for the construction and maintenance of transit systems has continued to shrink (T-3), forcing the reallocation of local construction and extension funds back to operating budgets.

To combat the diminishing budgets, most government agencies have begun looking for methods to save on expenditures. Within the
public transit field, many agencies have begun paring their work forces through contracting work to temporary personnel or to outside vendors (T-6). For example, within the Police Department of the Bay Area Rapid Transit (BART) Police Department, the clerical and records staff has been cut by 80%, with all routine tasks being assigned to personnel employed by Lynch Temporary Services. These temporary personnel receive no benefits and a lower salary, realizing a 45% savings for the department for these positions. In addition, BART PD has expanded on its previous movement to civilianizing a portion of its patrol force. Beginning with the 1996-97 budget, its sworn patrol force was cut by 5%. However, the overall department was fortunate to maintain the funds previously allocated for these sworn personnel, moving it into funding to hire non-sworn, part-time personnel. The department lost 8 officers, or 320 hours of work per week. With these same funds, they were able to hire the equivalent of 30 employees working 30 hours per week each. This provided the transit district with 900 hours of work per week, primarily in deterrent non-enforcement patrol (T-7). Half of these hours were utilized in monitoring of Closed Circuit Television (CCTV) cameras which were installed in a few selected locations within the system. Although technology is available to greatly improve the quality and usefulness of CCTV within the system, the District has not been able to obtain the necessary funding for the capital purchase of the equipment. In 1996, the BART Police Department also eliminated its local substations in a cost saving move, consolidating all
support staff in its central headquarters.

In response to public resentment over a lack of available jobs, the federal government pushed forward its plan to provide a domestic job corps by having college students repay loans through civil service. In January, 1997, the first college student began her service with the BART Police Department, designed to repay her loan at the California College of Arts and Crafts (E-3). Under the federal program, two years of service with a federally subsidized police department (such as a transit district police department) would repay the loan received over a four year period. The employing districts and selected cities hailed the program as a way to attract quality employees. Unfortunately, after 20 weeks of academy training and 22 weeks of Field Training, the usable time period for these students is slightly over one year, the period generally recognized as a major part of the learning curve for police work.

The federal constraints did not allow use of the students in civilian positions. All public statements regarding the college student repayment program are worded in a positive context, often pointing out how these additional personnel have assisted in increasing the ratio of police officers to citizens throughout the country (T-2). However, the effectiveness of these personnel during their short term assignments has been questioned. An alternative which has been continuously proposed is to allow civilian personnel, such as station attendants in transit systems or security guards working loss prevention in retail stores, to
issue notices to appear to citizens who violate infraction and misdemeanor statutes. Under pressure from labor unions, the legislature has not granted authority to issue these notices to appear to civilians (E-6).

The labor unions have not been as successful in protecting other job positions in local governments. One field of municipal employment which is quickly disappearing is the corporation yard responsible for servicing and repairing vehicles. Through the competitive bidding process, private mechanics have successfully shown significant cost saving. In addition, the short term contracts have often forced quicker and more reliable repairs in many instances (T-5).

One program undertaken by most local agencies in an attempt to avoid further service cuts has been the combining of specialized functions within regions (T-4). Dispatch centers and narcotics units were the first functions combined in most regions, often taking place on a large scale basis beginning in the early 1990's. By 1997, most agencies had developed comprehensive plans to combine nearly all specialized units with other surrounding agencies.

In view of these investigative cuts, and the continued high unemployment among unskilled workers, the crime rate has continued to rise despite the efforts of police and many communities. Within public transit, riders continue to report a feeling of uneasiness within transit vehicles and stations. They report that their perception of safety is often affected by contacts with people who they perceive as threats, even though there is no criminal
activity. The presence of homeless people and panhandlers is often pointed out as examples of reasons why transit riders feel more unsafe in these public arenas (T-10). In November, 1997, an additional incident occurred which reinforced this perception of an unsafe environment.

In response to the United States' continued blockade of oil producing countries of the mid-east, several underground terrorists groups announced that their terrorist bombings would be expanded to specifically target high concentrations of the civilian population, such as in transit vehicles (E-2). Up until that time, most bombings have targeted structures and highly visible landmarks. After the destruction of the Lincoln Memorial in Washington, D.C. failed to produce any concessions on easing the blockade which had been placed in response to the $100.00 per barrel oil prices, the groups announced they were being forced to target individuals who were avoiding gasoline usage by riding public transit. The local transit districts attempted to purchase explosive sensing devices for their police personnel after these threats, but the market demand was so high that there was a waiting period of at least three months for delivery. Fortunately, after 2 months, the price of oil was lowered, the blockade removed, and no bombings occurred.

These threats did cause a greater focus on the protection of public transit, which had not received much formal study previously. As the threats came to light, the level of police protection provided to transit was examined and the level of safety was statistically compared to surrounding areas. The effectiveness
of the existing special district police departments was reassuring to the public. In view of the more drastic service cuts which were being mandated in surrounding cities and counties, the police agencies of these jurisdictions were not in a position to address many of the concerns expressed by patron riders, such as the non-criminal activity of persons loitering in stations. Police actions designed to deter crime were also limited in cities and counties, with the thrust for this responsibility being given to the community. Within the transit districts of California, the agencies had been successful in providing a high level of service and their efforts were critical in maintaining an atmosphere which was conducive to attracting riders willing to pay to utilize the system. The continued high demand on city and county agencies, compared with the transit patron's demands for protection in the public transit systems, has caused additional districts to consider the formation of their own police departments. This has also avoided any movement toward consolidation of the existing transit district police agencies in California (T-9).

The demand for reliable public transportation continued to increase in urban California, as the cost of living also continued to rise. The use of alternate fuels was successful in minimizing the price increases for gasoline, but in October, 2001, the price exceeded $3.00 per gallon throughout the state (E-8). The federal government used this occasion to initiate an additional push to require all public transit agencies to provide free transportation to low income or unemployed residents of the area. The legislation
was defeated by a narrow margin, but analysts predict it will be enacted in the near future (E-9). Related legislation did pass in California in May of 2002 which dealt the penalties for a variety of criminal infractions such as fare evasion.

Due to a clogging of the court systems, and a desire to avoid stigmatizing violators, all infraction violations of the California Penal Code and Vehicle Code were deemed to be civil matters with no criminal sanctions attached (E-4). As a result of this change, all traffic violations which did not result in injury, and all property related crimes with losses under $500.00, have been removed from the criminal courts and persons convicted have been released from the threat of incarceration.

Despite the apparent need and success of reliable public transportation within California, the lack of funding did have a severe fiscal impact on all transit agencies throughout the country during the past decade. In preparation for its 2002-2003 annual budget, the New York City Transit Authority reported it would be forced to undertake large scale employee lay offs beginning July 2002 if some form of bailout funds were not available (E-10). In June, 2002, the federal government was successful in raising these funds by enacting a special $0.10 per gallon tax with the full proceeds allocated to public transit agencies (E-1). The funds from this special tax were sufficient to avoid any significant lay offs by New York Transit, and were also instrumental in allowing other existing agencies throughout the county to reallocate some funds back to capitol improvement projects. With these funds,
public transit continued to provide a level of service which was sufficient to retain current riders and attract new patrons.
1993 Copyright The Policy Analysis Co., Inc.
Washington, DC 202 - 328 - 9480

The Policy Analysis Co., Inc. SIGMA Scenario Generator

For Seed No. > 1676780 < and the clark.si2 data --
in a 10 year SCENARIO that begins in 1994,

THIS IS WHAT HAPPENS !

   T = 104  P= 93  +I = 5 & -I = 2 Cnfd= 0 Cnsn= 0
   T = 107  P= 93  +I = 5 & -I = 2 Cnfd= 0 Cnsn= 0
   T = 104  P= 66  +I = 2 & -I = 5 Cnfd= 0 Cnsn= 0
   T = 107  P= 93  +I = 5 & -I = 2 Cnfd= 0 Cnsn= 0
   T = 104  P= 66  +I = 2 & -I = 5 Cnfd= 0 Cnsn= 0
   T = 107  P= 93  +I = 5 & -I = 2 Cnfd= 0 Cnsn= 0
7. Jun. 2002  E-1.1. Fed gas tax at $0.10
   T = 110  P= 93  +I = 5 & -I = 2 Cnfd= 0 Cnsn= 0

The EVENTS which do NOT Happen are:

1. E-6. Civilians issue cites
2. E-9. Free Rides to low income
3. E-10. Transit Organi. lay offs

1993 Copyright The Policy Analysis Co., Inc.
Washington, DC 202 - 328 - 9480
An example of a hypothetical scenario was also developed utilizing the Sigma Scenario Generating program. The scenario developed provides an example of a worst case scenario related to providing police services to a transit organization. This scenario finds four of the ten events occurring over the next ten years, in conjunction with the development of the ten most significant trends from the Delphi Survey.

As public transit organizations throughout California struggled through the mid 1990s, all efforts to improve their economic future met with negative responses from the voting public. In 1995, transit organizations from throughout the country lobbied heavily in Washington to seek a $0.10 per gallon gasoline tax, with the proceeds to be utilized to assist public transit organizations with operating budgets and with funding for capitol improvements. Despite early promises of support for public transit, the tax was eventually passed with one major modification (E-1), all proceeds were to go exclusively toward the reduction of the federal deficit. This allocation of tax revenue eliminated one of the last hopes for public transit to locate additional sources of funding. Instead of
finding federal assistance, transit agencies throughout the country found the available federal funds continued to shrink ((T-3)).

Transit organizations in California took several steps to protect their operating budgets, and to provide a viable alternative to the private automobile. The San Francisco Bay Area Rapid Transit (BART) District was forced to eliminate most extension projects in 1995, reallocating these funds to pay normal operating budgets. In addition, the BART District also began an aggressive approach toward contracting work out to non-District employees. Like most transit organizations, BART was able to avoid massive layoffs by not filling positions left open through attrition (E-10). For example, all vacant clerical positions were filled only through the use of temporary personnel, hired through agencies at a lower rate of pay and with no benefits provided by the employer. The BART Police Department was included in the District hiring freeze in the clerical area, having its compliment of full time clerical staff cut by 40% between 1993 and 1996 (T-6). This same trend of hiring only temporary employees was also being seen in most local governments throughout the state.

Many cities had eliminated or combined their corporation yards, instead utilizing private enterprise to meet their needs (T-5). Small governments were also actively combining specialized functions during the mid 1990s, eliminating the duplication of similar units (T-4). Although major cities in the state were able to avoid the total elimination of their police departments (E-5), the level of services had been cut dramatically by the late 1990s.
Most departments received their dispatch services and investigative services on a county wide basis. Other specialized functions, such as collection of physical evidence and SWAT Teams had been virtually eliminated.

In view of these cutbacks in local law enforcement, the total number of officers sagged throughout the state as the population continued to rise (T-2). Most experts pointed to this lack of personnel, and the resultant move away from Community Oriented Policing, as one of the primary reasons the crime rate increased dramatically (T-1). Public transit was not immune from the increasing crime in the surrounding communities. Many riders stressed concern for their personnel safety as a reason they were leaving public transit and opting for the use of personal vehicles (T-10). Unlike public transit, personal vehicles did not put the riders in direct contact with people they viewed as threatening. The problem was compounded in February, 1998, when federal legislation required that all federally subsidized transit agencies must provide free service to anyone receiving public assistance or unemployment compensation (E-9). Within the San Francisco Bay Area at that time, this accounted for nearly 30% of the adult population. The availability of free transportation for this segment of the population took away available space from riders who had been paying substantial fares to the transit agency.

To combat this loss of revenue, and in an attempt to bolster the perception of safety on the BART System, the BART Police Department was forced to move toward a greater use of civilian
personnel (T-8). The police department replaced many positions previously filled with sworn officers with non-sworn employees (T-7). There was no immediate change in the number of personnel on the system, but the effectiveness of the non-sworn personnel was limited because of their lack of arrest or enforcement powers. At this same time, the BART Board of Directors was besieged by proposals from surrounding police agencies offering to provide services to the District on a contract basis (T-8). Although the state tax distribution cuts had not reached a 50% level (E-7), significant cuts had forced cities to slash budgets and seek alternate funding if they hoped to retain their current workforces. These city agencies submitted proposals which would eliminate the existing BART Police Department, and replace it with services provided by a combination of city police agencies. The cities involved viewed this proposal as a way to retain up to ten percent of their police budget, especially for the small agencies with BART Stations within their boundaries.

As with most transit agencies throughout the country, the BART District resisted movements toward the elimination of its Police Department through the late 1990s, hoping for an alternative which would provide the district with a greater degree of control (T-9). One hope was for the use of college graduates under a federal program which allowed the graduates to repay federal loans through public service. It was hoped that this program would give transit police departments a source of low cost officers on a short term basis. Unfortunately, the federal government's program was never
instituted, and the revenue savings could not be realized (E-3).

In September, 2002, an additional blow struck all law enforcement when state legislation was passed which decriminalized all infraction violations within the state (E-4). This was followed one month later by legislation which authorized any employee of a government agency to issue notices to appear for offenses which had previously been criminal violations (E-6). Under these two statutory changes, the BART District re-evaluated its needs, and made the decision to significantly alter its previous positions on safety and policing. In January, 2003, the BART District eliminated its police department and required all field personnel to be responsible for the enforcement of infraction and misdemeanor violations within the system. Despite the objections of labor unions, the field personnel (primarily station agents and train operators) were required to take enforcement action, including the issuance of the notice to appear in court. The BART District did not contract with local police agencies, but the elimination of the District's Police Department did require that they respond to crimes within the system.

The BART Board Members pointed to two primary factors which had drastically cut its "fare box revenue" over the past ten years. This fare box revenue compared the amount of funding the agency collected from fares versus the amount received in direct subsidy. In 1993, BART's fare box revenue constituted 50% of its operating budget. By 2003, this revenue made up only 30% of the budget. The Board first pointed to the federally required free ride program
which took away space from patrons willing and able to pay a fare. Secondly, former BART patrons returned to their automobiles because of the low cost of gasoline resulting from the development of alternate fuels (E-8), and safety concerns within the system. Without this source of fare paying customers, the BART District was not able to support its own police department, or other employees who did not directly accomplish the task of operating the trains.

Within eleven months of the BART Police Department's elimination, the response of local police departments was put to its first severe test. As part of its worldwide terrorism, the members of C.O.P.P.S (Coalition Of Petroleum Producing States) announced that they would be taking all steps possible to disrupt any public transit which did not utilize oil based fuels (E-2). This organization, comprised of Middle Eastern Countries who blamed their local economic problems on a lack of demand for petroleum, hoped to increase oil demands by preventing the use of gasoline saving transportation. The first act of terrorism claimed by this organization was the destruction of two mile of underground trackway in downtown Los Angeles. In view of the already high concern for personnel safety, BART patronage immediately dropped even further. Within 2 months, the BART District announced it could no longer meet its payroll or bills for electricity, and turned its operations and facilities over to the federal government.
The Policy Analysis Co., Inc. SIGMA Scenario Generator

For Seed No. > 2345678 < and the clark.si2 data --
in a 10 year SCENARIO that begins in 1994,

THIS IS WHAT HAPPENS !!

   \[ T = 99 \quad P = 66 \quad +I = 2 \quad & \quad -I = 5 \quad \text{Cnfd= 0} \quad \text{Cnsn= 0} \]
   \[ T = 98 \quad P = 79 \quad +I = 3 \quad & \quad -I = 4 \quad \text{Cnfd= 0} \quad \text{Cnsn= 0} \]
   \[ T = 101 \quad P = 93 \quad +I = 5 \quad & \quad -I = 2 \quad \text{Cnfd= 0} \quad \text{Cnsn= 0} \]
   \[ T = 100 \quad P = 79 \quad +I = 3 \quad & \quad -I = 4 \quad \text{Cnfd= 0} \quad \text{Cnsn= 0} \]

The EVENTS which do NOT Happen are:

1. E-1.1. Fed gas tax at $0.10
2. E-3.3. College Student credit
3. E-5. City dissolves PD
4. E-7. Tax Distribution Cut
5. E-8. Gasoline over $3.00
6. E-10. Transit Organi. lay offs
SCENARIO SUMMARY

The range of possible futures dealing with public transit is not fully encompassed by these three scenarios, but they do serve to point out possible directions which could be taken. By considering these possibilities, planners will be in a better position to address the future in a proactive manner. Without considering the possibilities, the only option available is to continuously react and attempt to make adjustments as the world changes.

Within the field of transit policing, the future appears to hold a need for law enforcement service. Keeping the possible futures in mind, and emphasizing that the future can be molded based on the desires of those who share a vision, the positive and negative aspects of these scenarios should be borne in mind. With this shared vision, the goal should then be to develop a plan which will maximize the positive events and limit the events and trends which have negative impacts.

This vision must include a transit policing plan that is not only effective in dealing with real and perceived crime, but also a plan that meets the financial constraints of the future. As these scenarios illustrate, the future policing methods will need to be extremely effective in terms of both cost and crime deterrence.
A: MISSION STATEMENT

Regardless of the type of organization utilized to provide police services within a public transit system, certain basic missions must be accomplished. These basic missions are no different than those found in most municipal or county law enforcement agencies, and include the prevention of crime, apprehension of criminals, and the protection of life and property. In addition, the specialized transit environment also requires that other concerns be addressed.

One of the two existing independent rail transit district police departments operating in California is the San Francisco Bay Area Rapid Transit (BART) Police Department. The mission of the BART Police Department is to provide a high level of service to the BART District and its passengers, and to do so more effectively and efficiently than other available policing means. The published Mission Statement of the BART Police Department is:

THE BART POLICE DEPARTMENT IS DEDICATED TO ENSURING THE SAFETY AND SECURITY OF DISTRICT PATRONS, EMPLOYEES AND THEIR PROPERTY; AND COMMITTED TO THE PREVENTION OF CRIMINAL ACTIVITY THROUGH HIGHLY VISIBLE POLICE PRESENCE AND VIGOROUS ENFORCEMENT OF LAWS AND REGULATIONS THROUGHOUT THE DISTRICT.

The accomplishment of this police mission will allow the entire BART District to more effectively accomplish its mission of
providing safe and reliable public transportation to the citizens of the San Francisco Bay Area. The BART Police Department is the sole agency providing law enforcement services within BART trains, stations and facilities. The transit system carries over 250,000 daily patrons and provides parking for over 30,000 personal vehicles. The BART Police Department is a full service department, providing deterrent patrol and investigation of all criminal incidents within its jurisdiction, up to and including homicides.

Included within the BART Police Department Mission Statement are several micro-missions which must be accomplished if the department, or any police agency responsible for providing police services to a transit agency, is to be successful. One of the most important Micro-Missions of the BART Police Department is to provide the services to the patrons of the transit system in a manner which enhances their perception of safety within the system. As employees of the transit district, members of the police department not only have a primary responsibility to enforce the law, but they also must have a commitment to provide a system which is attractive to riders by virtue of its safety and pleasant conditions.

If riders, and potential riders, do not perceive the system and its surroundings to be safe, whether this perception is real or not, they will find alternate methods of transportation. As Robert Dart of the Chicago Police Department concluded, "Officers who police these systems must now incorporate into their normal duties, the critical task of changing citizen apprehension about using a
subway transit system. Riders must not only be safe; they must also feel safe. Within California, the ability to move people from their vehicles to public transit is difficult, even without this added concern for personnel safety. Any transit policing agency must include a goal to maintain a high perception of safety if it is to accomplish its full mission.

One additional micro-mission of a transit police department is to provide the highest possible level of police protection to the transit district and its riders in the most economical fashion possible. As with any governmental agency, the resources within transit districts are limited. However, within cities and counties, the portion of the budget allocated to police protection is routinely near or above 50% of the total budget. Within the BART District, the budget for police protection accounts for less than 5% of the total annual budget. Within transit districts, the priority is the operation of the transit vehicles designed to furnish the public transportation that the district was established to provide. The police protection on these vehicles and facilities is funded secondarily, only after the essential transportation needs are funded.

The funding within transit agencies is unique from most government entities because of its revenue collection provisions. Because government transit agencies are in the "business" of providing a service in exchange for payment, good business practice maximizes the employees who are instrumental in providing the profitable service. This good business practice would then point
to additional train operators, mechanics, and direct service providers. Since police officers do not directly impact the ability to operate the transit system, the salaries for police officers are often not viewed as a priority for the transit district. This budget process forces transit policing agencies to provide the required level of service in an economical fashion, and to continue to search for alternate methods of delivering the service. If the police department fails in this area, the potential for outside contracting or alternate sources of police protection remain as a viable alternative.
ENVIRONMENTAL ANALYSIS

In developing a long term plan to accomplish the police department's mission, an analysis of outside influences and the department's abilities is necessary. A "WOTS-UP" analysis method was utilized to organize this appraisal. The WOTS-UP analysis involves an evaluation of the Weaknesses, Opportunities, Threats, and Strengths of the organization and its environment. The analysis for rail transit policing in general, and more specifically, the police department of the San Francisco Bay Area Rapid Transit District, are very similar. The analysis was conducted by staff level members of the BART Police Department.

THREATS:

One of the most significant current threats to any police organization is a lack of available funding. As the Modified Conventional Delphi Panel evaluating the future of transit policing pointed out, the availability of government funds will be limited at all levels. Within California, a reduction on the return of tax revenues to local governments should be anticipated. In addition, federal subsidies to public mass transit systems have significantly decreased in the past ten years, with no anticipation that it will be fully restored in the next decade. This limit on available
resources will impact all police departments' ability to accomplish one of the fundamental portions of their mission, the prevention of crime. This inability for the police community to meet this primary mission was also highlighted by the Delphi Panel. The panel forecasted a continued increase in the crime rate during the next ten years, especially prevalent in the incidence of violent crimes. If the crime rate continues to rise, while available funds continue to shrink, the resources of all police agencies will be drained. This increasing crime rate and economic deterioration will also impact transit police agencies, with an increased perception of disorder and criminality within the transit systems. The trends forecast by the Delphi Panel indicated this increased perception of disorder, and the local transit police departments will be called upon to reverse the trend so the systems can continue to attract and retain riders.

A final external threat to individual transit police departments is not exclusive to transit departments. This threat deals with other agencies seeking contracts to perform the police function that had previously been performed by an independent agency. To date, very few police agencies have actively sought to eliminate other existing agencies by obtaining contracts. However, as the existence of police agencies becomes more tenuous, the active pursuit of contracts will increase. As agencies actively solicit contracts from surrounding jurisdictions, a political decision to grant a contract could lead to the total elimination of existing departments. In addition, this active solicitation may
not always come from existing police departments, but may also come from security contractors or companies making attempts to obtain private policing contracts.

OPPORTUNITIES:

For existing police agencies, and especially transit police agencies, some of the same factors that generate significant threats may also generate opportunities. Especially within California, transit districts have been spared many of the state revenue disbursement cutbacks experienced by cities and counties. As these cities and counties experience decreased resources, their ability to provide a high level of service may also decrease. At the same time, transit police departments may be able to sustain a high level of service to the public, promoting their effectiveness and ability to provide a safe environment.

As police agencies are forced to look toward consolidation, fiscally secure transit police agencies may be in a position to guide consolidations in a positive way. In addition, smaller transit agencies which had normally relied upon the free services of municipal agencies for policing, may find that their level of services have been cut. If these transit agencies desire a higher level of service, they may look toward existing transit police departments, as a ready source to provide service on a contract basis.

The same fiscal constraints which were forecast to impact government services have also been forecast to impact many private
sector areas of California. If this occurs, financial hardships on individuals may cause an increase in demand for public transportation. Economics may require people to utilize public transportation instead of automobiles, particularly if gasoline prices rise drastically. An additional positive opportunity which was forecast by the Delphi panel is increased traffic congestion in urban areas, again making public transportation more attractive. Without this demand for public transportation, there would be little demand for police services on the transportation systems.

WEAKNESSES:

Within the BART Police Department, there are several internal weaknesses which hinder the department’s ability to rapidly adapt and to achieve the stated mission, and they will continue to be hindrances in the next decade if they are not addressed. One of these obstacles is the presence of a strong employee labor union and labor contract for both the police officers and for the general employees of the BART District. When instituting any change, the immediate impact on the labor union membership must be considered. Since the contracts include a binding beneficial practice clause, any change to an established practice may be grieved and taken to arbitration. If it is determined that there was a violation of an established practice in instituting the change, the labor contracts require that the change be agreed to or eliminated.

A recent example of the use of the beneficial practice provision of the BART Police Officer Association Contract occurred
within the past year. The BART District was attempting to establish a Police Reserve Program to supplement the 150 sworn officers within the department. The matter was grieved and proceeded to arbitration. At arbitration, it was successfully argued that the institution of a reserve program would change working conditions in violation of the labor agreement, and the reserve program could not be instituted without the agreement of the Police Association. Similar awards have been made in other organizations, including a Pennsylvania State Labor Relations Board and a California Superior Court Case which rejected city’s moves toward civilianization. Similar rulings may be expected if the department attempts to move toward a higher level of civilianization or contracting work without the agreement of the labor union.

An additional weakness is found in an impending turn-over in the police department’s upper management level. Within a one year period between June 1993 and June 1994, it is anticipated at least five of the nine staff positions from lieutenant through chief will have been vacated. A sixth vacancy may also occur at the chief’s level within the next few years, with no specific date announced. Although this movement creates an opportunity for change, the resultant confusion, and periods of adjustment as people shift to new roles, may hinder the effectiveness of the organization.

Without the established leadership within the police department, influences from other manager’s within the BART District may have an increased impact. The overall management
style within the BART District has seen a very controlling approach by top management. In cases where specialized knowledge and police expertise are required, this very controlled environment can stymie the ability to address problems in the most effective way. This has also contributed to line employees' resistance to policies and the institution of new practices. This lack of commitment by the person required to carry out a practice could continue to be detrimental to the effectiveness of the district and the police department.

STRENGTHS:

While the internal weaknesses of the organization may appear substantial, the department and the district do have several strengths to build upon to assist in reaching the established mission. One of these strengths is that BART facilities are currently considered safe, with the levels of crime within the transit system are generally lower than the crime reflected in surrounding areas. Because the BART system is not viewed as an attractive area for the commission of crime, it does not draw criminal elements in search of victims. Although some facilities are in economically depressed areas with high crime rates, the BART Police Department has been successful in maintaining a safe zone within the facilities. Police activities within transit districts share this ability to mold their working environment to a greater degree than in cities or counties. The ability for transit policing agencies to control their "home ground" assists in keeping
crime levels normally lower than the surrounding community. However, media focus on crimes which occur at or near transit facilities does negatively impact the perception of safety by the public.

The media focus on transit crime in California is not unique. As the director of media services for the New York City Transit Police Department points out, crimes occurring in transit systems are "owned by the transit system", and are more attractive to report. By contrast, crimes in a city are not owned by any individual or organization. Media attention to transit crime is not unique to just New York. Reporting on transit crime in Chicago, "the media tend to publicize these crimes, while seeming to ignore these same types of crimes when they occur on the streets. This only services to reinforce the belief that subway transit is unsafe." Failure to prevent transit crimes will result in a public loss of confidence in the transit police department's ability to protect potential commuters. This will result in a loss of ridership, and a failure by the system to provide its basic mission of a safe reliable system. Only by maintaining an atmosphere of freedom from crime, cleanliness and order, can the perception of safety be maintained. If this atmosphere deteriorates, the resources necessary to reassert control are substantial.

An advantage which is enjoyed by transit police agencies in providing this protection to the public is that the responsibility extends over a limited geographic area. Within cities and
counties, the area of responsibility is widely spread, and the city or county government has direct control over a very limited portion of the real estate. Within a transit agency, especially an agency such as BART which utilizes heavy rail vehicles on fixed trackways, the majority of the police operations are performed on the property of the district. As an agent of the property owner, the police can exert additional influence and have a more effective role in controlling their environment.

The limited area of responsibility also allows very effective use of technology and electronic surveillance equipment to assist in the accomplishment of the mission. Surveillance cameras have been used for a number of years in stations to detect and assist in making arrests for thefts from the ticket vending machines. As a result of increased capabilities and decreased costs, the use of surveillance cameras is being instituted in some of the District’s twenty-five parking facilities. With daily parking for nearly 30,000 vehicles, the parking lots have been the area of most criminal activity within the BART system. A pilot program is currently being developed which may allow patrons to purchase remote transmitters similar to automobile alarm activators. These activators are then be used to activate closed circuit cameras, focussing on the carried transmitter as the patron walks to his parked car. This is just one example of how technology can be adapted to the limited environment encountered in the transit system.
STAKEHOLDER ANALYSIS

Related to the issue of the future of independent public transit policing, and more specifically the future of the BART Police Department, a variety of stakeholders were identified. These stakeholders were chosen from both inside and outside the BART District and the BART Police Department, and they have a direct interest in the performance of the department. In addition, one "snail darter" was also chosen. This snail darter represents a group which would not normally have an involvement or interest in the operation of the police department, but could take an interest in limited aspects and influence the decision making process.

Assumptions were developed for each of the stakeholders and the snail darter to assess their viewpoint and expectations on the issue. Each stakeholder is identified with a letter, and assumptions for that stakeholder are identified with a numeric designator. The combined alpha-numeric label for the assumption was then plotted on an assumption map is included below. Points plotted in the upper quadrants of this assumption map indicate a relatively high confidence in the accuracy of the assumption. Movement of the assumption points from right to left indicates a decreasing importance of the assumption on the issue.

STAKEHOLDER:
A. BART District Board of Directors-the elected governing body of
the BART District;
1. The BART Board requires that the District’s Police Department provide sufficient protection so there is no deterrence of riders from utilizing the system. If the level of policing is not sufficient, and the perceived level of disorder and criminal activity on the system deters people from utilizing the system, the board will not feel that they are adequately performing the job that they were elected to perform.

2. The BART Board requires that the policing agency provide the service at an expense which is within the budget of the full district, without utilizing funds which must be allocated to the actual operation of the transit vehicles. Expenses of the policing agency must be held to a minimum, and salaries and benefits are set at a level where they will not be used as bargaining points for other labor groups within the district.

B. BART District Management—Ranging from Department Heads to the General Manager;
1. The BART District’s upper management requires that perceived threats to safety within the system be addressed in an effective manner with a minimal negative impact on the operation and scheduling of the transit vehicles.

2. The BART District’s upper management desires that the policing
agency be under their direct control so they may provide direction on the problems to be addressed, and the methods and costs of addressing the problems. For example, management may mandate specific levels of uniformed coverage on-board trains, while indicating that parking facilities be de-emphasized.

3. The BART District’s upper management requires that the policing agency be responsive to activities which are direct costs to the generation of district revenues (fare evasion) and direct expenses which result from criminal activity (graffiti clean-up). The policing agency must be responsive to the revenue needs of the transit district and must be effective in controlling sources of loss.

C. BART Police Department Managers;

1. The BART Police managers require that all criminal activity within the district be addressed in a manner consistent with accepted police standards within the state. This includes adequate investigations, and a clearance rate for Part 1 crimes comparable to the statewide average. All relevant evidence shall be properly collected, witnesses properly interviewed and all investigative leads thoroughly researched.

2. The BART Police managers require that all activities of police personnel be conducted as safely as possible, without unduly
jeopardizing the safety of police personnel or the public.

3. The BART Police managers require that police personnel utilize their available on-duty time for activities designed to apprehend violators, or prevent and deter criminal activity within the system.

D. BART Police Line Personnel;
1. The BART Police line personnel require that their working conditions be as safe as practical within the limits the profession places on police officers. For example, solo patrols on-board trains at certain times and locations are felt to be unsafe and should not be utilized.

2. The BART Police line personnel desire autonomy in addressing police related problems. Personnel feel that they are professionals who have knowledge of the most effective techniques available to deter crime and apprehend offenders. Attempts to exert excessive control on these personnel without justification are viewed negatively.

3. The BART Police line personnel place a greater emphasis on the apprehension of violators anywhere in the jurisdiction of the agency, and a lesser emphasis on the potential deterrence of crime.
E. BART District's non-police employees with field assignments--
This employee group consists of primarily station agents and train operators who are responsible for most public contacts;
1. The BART District's non-police employees require that the District provide a high level of protection to the employees responsible for dealing with the public on a routine basis. Employees demand a police presence which is designed to protect the employee from confrontations and violence directed toward them.

2. The BART District's non-police employees desire that the policing agency address all perceived rule violations within the system, relieving the other employees from the responsibility to confront potentially volatile or uncomfortable situations.

F. BART Police Department Union Officials-- these officials represent sworn officers and non-sworn employees of the police department;
1. The BART Police Officer's Association officials desire an increase in staffing levels with assurances that officers will not be replaced by non-sworn personnel. In addition, they desire that their employees receive a salary and benefit package comparable or higher than other police agencies in the area.

2. The BART Police Officer's Association officials require that the police department be maintained as an autonomous organization
of the transit district, providing a stable work environment for members of the association.

G. Patrons of the BART District Transit Vehicles;
1. District patrons require that the policing agency of the District provide an environment which is clean and safe. Patrons interpret conditions such as panhandling and lodging of homeless people as indications of disorder and a lack of safety.

2. District patrons require that the policing agency of the District provide an environment which is free from criminal activity which could threaten their safety. Crimes vs. person are of greatest concern throughout the system, including trains, stations and parking facilities.

3. District patrons desire that the policing agency of the District provide a high level of protection for their property, particularly their vehicles parked in District facilities. A high probability of damage or theft from vehicles will deter patrons from utilizing the system.

H. Police Departments Surrounding and Adjoining the BART District.
1. The surrounding police departments expect BART's policing agency to provide independent police services within district
facilities with a minimum of assistance or expenditure from the local agencies.

2. The surrounding police departments expect BART's policing agency to handle criminal activities within the district facilities before they carry into the jurisdiction of the surrounding agency.

I. Smaller Transit Districts utilizing BART facilities
   1. Other local transit districts who utilize the BART facilities desire that BART's policing agency respond to their security needs with an understanding of constraints faced by a transit agency. Many transit agencies will call BART PD to handle problems on their vehicles when the vehicle reaches a BART Station. They report that many municipal agencies are less willing to address perceived needs of the transit employees, scheduling constraints, and public expectations.

   2. Other local transit agencies expect BART's policing agency to provide station facilities which are accessible to their vehicles, free from traffic congestion or other obstructions.

J. SNAILDARTER Union Officials of the BART District's non-police employees;
1. The BART non-police union officials require the district's policing agency provide protection for their membership while performing all aspects of their jobs within district facilities.

2. The BART non-police union officials require that police employees not perform tasks which could be considered functions of their membership. For example, police employees should not perform duties related to collection of fares unless there is some indication of criminal violations such as fare evasion.
ALTERNATIVE STRATEGIES

To develop alternative strategies for the BART Police Department to use in reaching its desired mission, a modified delphi process utilizing management and line personnel of the BART Police Department was employed. The modified delphi panel included both supervisory and management personnel, in addition to the department’s community relations/crime prevention officer, juvenile officer and union membership representative. The panel developed a variety of possible strategies which could be utilized by the department. After discussion of the strategies, the panel rated each strategy based on criteria which included: 1) Safety of BART’s Field Employees, 2) Feasibility, 3) Cost, 4) Desirability, 5) Stakeholder Support, and 6) Patron Perception of Safety. The panel’s combined ratings were then utilized to choose the two strategies felt to be most beneficial to accomplishing the mission. The first of these dealt with the establishment of policing zones with substations and the second dealt with seeking police contracts. The panel also chose one strategy with the greatest divergence of ratings, which dealt with developing a greater community involvement in police operations.

Each of these three strategies then received further discussion from the panel, including discussion of pros and cons of the strategy, and the potential support or lack of support from the stakeholders. The same topics were also discussed among the
department's staff personnel in a one day meeting designed to develop plans to prepare the department to deal with pending expansions and to move into the future. Based on these discussions and the evaluations of the panel, the following information was developed regarding the three strategies.

STRATEGY #1: Develop Police Zones and Substations:

One of the most popular strategies developed by the delphi panel dealt with the increased use of police zones and substations established on the four lines of the BART System. Since the system currently covers 72 miles of trackway, and is undergoing extensive construction to expand the area of coverage, the need to decentralize the facilities of the police department was felt to be significant. Most employees of the department currently report to a central location, with only patrol personnel on the four beats at the extreme ends of the lines reporting to a "direct reporting location" to begin their shifts. These direct reporting locations are small offices which are not accessible to the public and have minimal equipment.

The development of multiple police zones with substations would supplement these direct reporting locations, and would greatly increase the effective use of available resources. Establishment of police zones was seen as a method to allow areas to receive consistent supervision from commanders assigned to the area, and would provide for personnel who are more familiar and
have a greater commitment to a specific area. The substations would also allow a greater identification with the local community and give the local transit patrons the ability to deal directly with police personnel responsible for the problems of that area.

The presence of a substation which is readily recognizable as a BART Police facility would also have a tendency to increase the department's visibility in the region, thereby increasing patron's perception of safety within the BART System. Although there would be initial construction costs involved to develop substations, these costs would be recouped by savings realized through increased availability of personnel who no longer would be forced to travel through congested areas to reach their assigned patrol beats. The establishment of substations would also receive relatively widespread support from the stakeholders, with the possible exception of some district managers who might perceive the loss of immediate control over the decentralized personnel. Some District managers might also object to the initial costs of establishing substations. The police union would also raise objections based on a change in past practice. Although most union members support the zone concept, union leaders are expected to seek a negotiated resolution to this perceived change.

STRATEGY #2: Seek Policing Contracts:

An additional highly rated strategy by the delphi panel involved the BART Police Department undertaking an active program
of seeking contracts to provide policing services to other transit agencies within the San Francisco Bay Area. Currently, Alameda/Contra Costa Transit (AC Transit) operates a large fleet of buses through two San Francisco Bay Area Counties. This transit agency receives police services from approximately 30 sheriff’s department personnel from these counties as a result of contracts controlled by AC Transit. Several other small agencies also operate in these same areas, overlapping the areas serviced by BART. The development of contracts to provide police services to these other transit agencies was seen as having two major benefits to the BART Police Department. It would first provide an additional source of revenue to the BART District as the agencies paid directly for the services they receive. Secondly, the use of contracts would increase the police department’s leadership role as a regional transit police department, which could be built upon to eventually include all buses, ferries, light and heavy rail public transit vehicles in the area. By increasing the visibility of the department throughout the region, it was felt that the department would increase the public’s knowledge that protection was a priority on all forms of public transportation in the area.

Conversely, the granting of contracts to the BART Police Department could also be viewed negatively by agencies which currently provide services to local transit agencies. For example, if the sheriff’s departments lost this contract, it would result in reductions in force and potential friction between that agency and the BART Police Department. With the exception of the local police
agencies which could lose existing contracts or areas of operation, the panel felt most other stakeholders would support BART Police Department's efforts to expand its area of operation to include other transit agencies, establishing itself as the Bay Area's regional transit police department. Since it would provide financial benefits to the BART District, it would be supported by the District's management and Board of Directors. Securing contracts would also meet the needs of the police employees, and labor groups.

STRATEGY #3: Develop Community Involvement:

The strategy which received the widest diversity of support from the panel dealt with a need for a concerted effort by the BART Police Department to develop increased community support for the department and the entire BART District. The strong advocates of this strategy felt that the department should be encouraging neighborhood watch organizations around the BART stations, encouraging corporate sponsorships to support activities at designated stations, and developing programs to "adopt a station" to provide funding for clean ups and improvements at selected stations. The need for community support from both patrons of the system, and residents and corporations surrounding the system, was emphasized. Panel members who did not strongly advocate this strategy felt that the department could more effectively utilize
its resources in other areas.

Although crime prevention activities were universally recognized as essential to the effective operation of the department and the accomplishment of the mission, the willingness for people to become actively involved in support of the BART Police Department was not universally accepted by the panel. Some members felt that the patrons would not be willing to become involved beyond their daily commute times and local residents would be more willing to exert efforts in support of the local municipal police departments which provided a service directly to the resident in the home. The panel did feel that most stakeholders would be supportive of efforts to generate community involvement, but the stakeholders would probably not be energetic in their endorsement of the program due to a feeling that the results could be limited. Portions of this strategy could easily be adopted as part of a plan with zone policing.

PREFERRED STRATEGY: Develop Police Zones and Substations

After discussing and evaluating each of these three strategies, the panel rated these three strategies based on the same criteria utilized previously when selecting the three for further discussion. From this rating, it was determined that strategy #1, development of policing zones and substations, was the one area with the most potential for a major impact on assisting the department in accomplishing its mission. Although each of the
three strategies should be undertaken, a focus on decentralizing the operation of the department, and seeking more contact with the community, was felt to be the area where efforts should be focused. This strategy has the ability to meet economic needs of the district, it addresses the expanding base of the BART District, and most importantly, it will increase the department’s ability to deal with criminal activity, maintenance of order, and the perception of crime within the district facilities.

Although the costs of establishment of police zones, both in terms of necessary physical sites and increased personnel to make zone policing a reality cannot be ignored, the ability to enhance the department’s effectiveness was felt to outweigh these costs. The monetary costs to implement the zone policing concept include capital costs for the construction and equipping the actual facilities. Initial capital estimates for the facilities is nearly one-half million dollars. To be fully effective, this capital investment must be accompanied by a commitment to provide staffing within the zone headquarters. If this staffing is accomplished through the use of non-sworn police employees, the annual costs will still be near one million dollars annually for less than full coverage. If the facility is to remain open to the public for more than daytime hours, these costs will increase further. These initial and continuing costs must then be evaluated in terms of potential benefits to the district.

In 1994, the system is expected to transport over 250,000 people daily, and provide parking spaces for over 30,000 personal
vehicles. Extensions planned for completion over the next several years will extend the area of service in three different directions with an anticipated immediate increase in ridership of over 50,000 daily patrons and parking for an additional 10,000 vehicles by 1997. Additional extensions and station openings are planned through the year 2000. The geographic barriers and distances covered by these extensions, along with the continuously worsening traffic patterns, make the current practice of utilizing a central reporting location for the police department impractical.

The location of a police facility within each zone, the management responsibility for police activity within the zone, the allocation of personnel resources, and the increased economic demands of this decentralization are all areas which will need to be addressed if the program is to be successfully implemented. Although tentative plans have been developed by the BART Police Department, there has been no approval granted by the BART District's Budget Committee, which will be necessary to make the capital expenditures required in this decentralization project. Since this will also involve some change in working conditions for the police employees, contractual concerns must also be considered. Implications for the police managers will also need to be addressed, along with the impact this change will have on all employees and patrons of the BART District. Although this change in policing strategy will increase the department's ability to perform its assigned mission, it is a major modification to the current method of operation. Because of the natural resistance to
change, the potential for negative impact on some individuals, and the economic requirements for implementation, it will be necessary to work with all the forces involved to make the transition smoothly and as effectively as possible.

The movement toward zone policing could begin as early as 1994, but the full development of the total package will not occur in a short time frame. Just as community policing is currently taking place in municipal and county agencies in a gradual process, full development of zone policing also requires a transition period. The full development of the BART Police Department’s zone police program will entail more than just the construction of a decentralized substation to decrease employees’ on-duty and off-duty commutes to their work locations. As zone policing unfolds, it will include enhanced familiarity with the local policing needs within zones, and a commitment from the assigned officers to address these needs. The establishment of zone commanders will allow increased contact with community by establishing a single individual responsible for BART Police activities in that area. This continuity, commitment, familiarity and accountability all point to a more efficient and effective method of law enforcement.
CRITICAL MASS

When considering any changes within the structure and operation of the BART Police Department, there are a large number of identifiable stakeholders with an interest in the operation of the department. The specific changes dealing with reporting locations and establishment of policing zones does not significantly impact all these identified stakeholders. When considering the stakeholders who are involved in these changes, some individuals may be in a position to significantly influence more than one of the groups. To successfully implement this change, these individuals and their position on the issue need to be identified. The individuals determined to be critical to the implementation of this change are identified as the "Critical Mass."

In developing the list of individuals critical for the successful implementation of this zone policing project, the ability to influence multiple groups, and the elimination of non-essential stakeholder groups, were considered. For example, a general analysis of stakeholder groups included separate listings for the non-police field employees of the BART District, and the union officials representing these employees. For the zone policing program, the general employee union president was identified as the individual able to influence both these groups. In this case, it was felt that the interests of these stakeholder
groups would not be mutually exclusive, and their concerns could be addressed adequately by one person.

The listing below identifies the "Critical Mass", who will be instrumental in the implementation of the program. Listed below each individual member of the critical mass are the groups that the person will be able to influence.

1. President of the District's Board of Directors
   A. District's Budget Committee (combined with #2)
   B. General Public (through enhanced media releases)

2. General Manager of the BART District
   A. District's Managers
   B. District's Budget Committee (combined with #1)

3. Police Chief
   A. Police Managers
   B. Police Line Personnel (combined with #5)

4. Project Manager-Police Staff Person Appointed by the Chief
   A. Influence on Entire Committee
   B. Influence all police employees

5. Union President of the Police Officer's Union
   A. Police Line Personnel (combined with #3)
   B. Influence on other Unions (with #6)

6. Union President of the General Employee's Union
   A. General Employees Operating in the Field

Through the activities and influence of these six individuals, the
success of the zone policing/substation program will best be ensured.

In evaluating the current and required level of commitment of the individuals in this critical mass, the following chart was prepared. The individual's current level of commitment is indicated on the chart with an "X", and the minimum commitment necessary to ensure success of the program is indicated with an "O". The amount of change in commitment is shown as the line between these two symbols.

<table>
<thead>
<tr>
<th>Critical Mass Member</th>
<th>Block Change</th>
<th>Let Happen</th>
<th>Help Happen</th>
<th>Make Happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board President</td>
<td>X------------</td>
<td>&gt;O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Manager</td>
<td>X------------</td>
<td>&gt;O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Chief</td>
<td>X------------</td>
<td></td>
<td>&gt;O</td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>X------------</td>
<td>&gt;O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Union Pres.</td>
<td>X------------</td>
<td>&gt;O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen. Emp. Union Pres.</td>
<td>X------------</td>
<td>&gt;O</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The factors considered in determining these commitment levels varied according to the groups they will influence and the individual's role in the BART organization. The board president was determined to have a current position of "let happen" since this is the type of internal policy that does not normally involve the Board of Directors. However, because of the potential expenses in the development of substations and the need for additional
personnel for the policing of the extensions, the support of the Board of Directors was considered essential. The media attention related to any criminal activity within the transit system will also influence the board’s decisions regarding support for police related proposals. Since the allocation of the increasingly limited funds is the ultimate responsibility of the Board of Directors, it was felt that the support of the board would be required for the success of the program. To ensure the board as a whole does not block the change, it was felt that the position of the board president should be to fully support and to help the change happen.

To accomplish this position movement, the most effective tack would be to stress the increased safety to the voting public which will be generated by the change. The problems associated with patron’s perception of safety and employee safety are issues often considered by the board members. As an elected official, the board president must be responsive to the safety concerns of his constituents, along with the financial requirements of the district. Since the zone policing and substation program would increase officer presence on the system and increase police department accessibility to the community, these benefits would be particularly attractive to the political concerns of the board president.

In evaluating the position of the General Manager, it was felt that his initial response to the zone policing/substation proposal would be negative because of the financial and manpower
requirements. The General Manager has often stated his position that the BART District's priority must remain with the district's transportation personnel since they actually provide the service of moving passengers. Even as the individual serving as general manager changes, the position has continued to place the district's priorities with the operation of the transit vehicles. Any demands for resources away from the direct transportation of passengers is normally met with initial resistance. If this police program is to be successful, the resistance must be overcome, and the position must be at least a neutral "let the change happen". Ideally, the movement would be more significant, but movement beyond this zone would not be essential to the success of the program.

To successfully move the general manager from the position of blockage, two areas should be stressed. The first area again deals with the patron perception of safety, and the patron's desire for an enhanced police presence throughout the BART System. The substation concept would allow police personnel to spend a larger percentage of the shift in actual field assignments rather than travelling to reach the area of assignment. This increased patrol time could then be converted to increased visibility and improved patron satisfaction. The second approach to use in dealing with the General Manager deals with the long term financial benefits of the program. Although the initial cost of substations and establishment of policing zones would require capital expenses for construction, long term savings would be realized in terms of decreased mileage on patrol vehicles, decreased overtime, and a
decrease in wasted work hours travelling to and from remote locations.

The "help happen" position of the police chief was determined based on statements he has made regarding the move toward a zone policing concept. The police chief was an active participant in the design of the zone policing program and the substation system. As a result, his support for the program is already stated. However, because of other demands on his time, the chief is not in a position to make the change happen. The chief will have the ability to impact other police managers, seeking input and allowing modifications to the program. He will also have the power to convince many of the line level personnel within the department of the need for the program and the effectiveness of the planned changes. This influence over the line personnel will need to be in conjunction with their union leadership, and the position of the chief will be critical in developing the approval of the union.

The chief will also be responsible for choosing a project manager from the staff level members of the department. This project manager will have the responsibility for making this change happen. Currently, most staff personnel within the department are very supportive of the program, and are willing to help the change happen. However, other assigned duties and responsibilities prevent most of the staff members from pursuing an active role in making the change happen. The formal designation of the project manager by the chief will fix this responsibility on an individual. Within the department's current and anticipated management
structure, the Operations Bureau Commander would be the logical choice to assume the role as project manager. This commander would have the requisite authority to see that appropriate steps are taken and he would have overall responsibility for operating the portions of the department most affected by the change. To be effective, this designation will also require a re-assignment of other duties to allow the project manager to dedicate sufficient time and energy to ensure success. This re-assignment of duties and fixing of responsibility should be sufficient to move the project manager into the position to make the change happen.

The position of the police officer's union president will be one of the most difficult to change. Initially, the union president is expected to attempt to block any proposed changes. In preliminary discussions with the union president, he views the zone policing and substation concept as a change in working conditions which are subject to negotiation. Since the "beneficial practices" clause of the union contract is binding, any unilateral change by the department's management could be challenged through arbitration or the courts. In addition, the labor contract with the police union will be in effect until July, 1995, preventing imposed changes until at least that date.

To effectively address the union concerns, the department must maintain open communications on the needs of the department and the individual rights of the employee. The need to maintain an effective police department must be stressed, and failure in this regard will ultimately impact individual union members if the
department is viewed as ineffective. Changes instituted by the department must be undertaken within the parameters of past practice, requiring study in this light prior to implementation. To allow the union to serve its members, formal discussions should be established, with an agreement reached to allow the program to take place. This agreement may require changes in non-related work rules or practices agreed upon to obtain the consent of the union.

The last member of the critical mass is the union president representing non-police employees of the BART District. This person would not normally have a strong influence in changes initiated within the police department unless they impacted the safety of his union membership. In the implementation of the zone policing program, the safety of the employees would be enhanced, so the initial position of their union representatives would be to let the change happen. To ensure the success of the program, this position must be maintained at that level, and not allowed to slip into a blocking mode. To accomplish this, the union leadership must be kept appraised of the changes and the benefits it should bring to their employees, especially the increased safety. By not including this union president in the critical mass, there would be a risk that the police union would use "union solidarity" to increase resistance to the change. Misconceptions and misinformation by the general employees could cause a resistance to the program which would be difficult to counteract.
TRANSITION PLAN

The implementation of the zone policing concept, with its required substations and direct reporting components, will require a great deal of organization, development of procedures, and design and construction of facilities by the department. Equally important, the personnel involved in making the program work must be supportive of the plan. To accomplish these two tasks, the implementation of the program will be coordinated through the Operations Bureau Commander, designated as the project manager. The project manager will be the chairman of the implementation team which will consist of both staff and line personnel from the department.

In addition to the Bureau Commander, the implementation team will include representative from all levels of the department who will be affected by the change. This includes non-sworn personnel, officers chosen by both the employee union and by management, first level supervisors, and staff level personnel. Although formal rank structure will remain within the team, all personnel will have an equal voice and participation. The project manager will be responsible for directing the accomplishment of specific tasks.

The project manager will be responsible for setting up assignments within the implementation team to make certain all aspects of the transition are addressed. For example, it would be anticipated that individual members of the team will receive
assignments to develop reports on locations of proposed substations, cost estimates from contractors for construction, specific equipment required in the substations, and personnel resources necessary in each of the established zones. The responsibility for the completion of this staff work within the implementation team will be assigned to subcommittee chairmen, who will be chosen from among management personnel assigned to the team. These subcommittees will include staff personnel to assist in gathering the information, and will require clerical support from the department’s administrative section.

The development of substation requirements, reporting locations, work hours, and working conditions will be discussed within the full implementation team, with the subcommittees making recommendations and developing policies that will accomplish the department’s needs, while also meeting contractual requirements and officer’s individual needs. To assist with moving the police union president’s position from blocking the program, the president will be invited to be a member of the implementation team and other officers included on the team will be selected by the union. Additional staff level positions on the team will be chosen by the project manager. The project manager will have the responsibility for formalizing the ideas generated within the subcommittees. He will also be responsible for generating the necessary documents essential in gaining the capital funding necessary for the establishment of the substation facilities. The oral presentations to the budget committees responsible for approval of the funding
will be presented jointly by the project manager and the chief of police, with the majority of the justification information coming from the implementation committee.

Other members of the critical mass will not be part of this implementation committee. Their input would not be instrumental in generating ideas to facilitate implementation, and their participation in the committee would not significantly impact their level of commitment to the project. The use of this committee will allow employee support which would not be gained through use of single project coordinator or a committee made up only of staff personnel.
SUPPORTING THE CHANGE

Open communication on the implementation of the zone policing program must be maintained with all involved parties on a regular schedule. Since there will not be large team building workshops to allow all employees to have the opportunity to express their concerns, employees will need to be kept informed, and given the opportunity to convey their ideas to the committee through representatives. Without this constant flow of information and ability to provide input, the implementation committee will not be completely effective in gaining the employee support or presenting the range of divergent ideas it was designed to develop.

To ensure that this flow of information does not overlook anyone, the communications should be written and widely distributed. The communications should begin prior to the development of the implementation committee, and should continue at least once per month during the initial phases of development. In each of the published communications, the program coordinator will emphasize the need for feedback from all employees, and will invite suggestions to be forwarded to the committee through representatives or communications directly to the coordinator. Employees with concerns will also be encouraged to address these concerns with the implementation team directly at the established meetings, or through input relayed by their union officials. The concerns which are presented will be fully documented, along with
plans developed to address the concerns. This information will be included in the written feedback as an additional means of ensuring employees that their ideas and concerns are valued, and are being addressed.

Use of team building workshops or large confrontational meetings on this topic were not considered to be methods of choice for this project. The decision to avoid these techniques was reached because of the highly emotional stances held by some members of the department, the need to keep the department functioning throughout the change process, and the desire to avoid personal agendas which could serve to block the implementation. In addition, the need for the zone policing program was jointly developed by both line and staff personnel, and the actual steps for implementation were felt to be best accomplished through the use of responsibility charting.

To minimize the uncertainty of this change, and the inherent stress associated with uncertainty, the project coordinator will utilize this responsibility chart to clarify individual roles and responsibilities. After the committee has determined the desired end state of the department's zone policing, the tasks necessary to reach this end will be formalized. The individual committee members will complete responsibility charts for these tasks, assigning either responsibility, approval, need to be informed or consulted, or no role, for each of the tasks to "actors" who will have a role in the implementation of the program. These actors are the individuals described as the critical mass, with the addition
of the implementation committee itself. The individual committee member opinions on the charts will be combined to reach a consensus on the roles determined for each of the tasks. The responsibility chart for this project indicates the following individual tasks:
## RESPONSIBILITY CHART

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate Intent to Employ.</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Designate Proj. Manager</td>
<td>-</td>
<td>-</td>
<td>R</td>
<td>A</td>
<td>-</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>Select Implementation Committee</td>
<td>-</td>
<td>-</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Develop &quot;Zone&quot; Perimeters</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Develop Substation Needs</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>A</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>Select Substation Sites</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Develop Staffing Needs</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>Present for Construction Funding</td>
<td>A</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Receive Approv. for Substations</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Present for Personnel Funding</td>
<td>A</td>
<td>A</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Receive Approv. for Staffing Needs</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Modify Work Rules</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>S</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>Construct Substations</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>R</td>
<td>S</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Hire Allocated Personnel</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>S</td>
<td>S</td>
<td>I</td>
<td>-</td>
</tr>
</tbody>
</table>

R=RESPONSIBILITY  A=APPROVAL  S=SUPPORT  I=INFORMED  (-)=NOT INVOLVED
## RESPONSIBILITY CHART

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Final Zone Deployment</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>S</td>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish Zone Command System</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>R</td>
<td>S</td>
<td>I</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Transf Oper Responsibility to Zone I</td>
<td>I</td>
<td>I</td>
<td>R</td>
<td>S</td>
<td>S</td>
<td>I</td>
<td>I</td>
<td></td>
</tr>
</tbody>
</table>

R=RESPONSIBILITY, A=APPROVAL, S=SUPPORT, I=INFORMED, (-)=NOT INVOLVED
This responsibility chart will be useful in clarifying roles, eliminating duplication of efforts, and preventing tasks from being inadvertently overlooked by key players. By clarifying responsibilities, the charts will also decrease uncertainty about the program and assist in making the change process less traumatic to the individuals it will impact. Although the distribution of the actual chart is not necessary, the accomplishment of the listed tasks should be a key element of the communications to the impacted personnel.

To determine the effectiveness of this change, the department will take two primary measures. First, the ratio of crime to daily patrons will be used to evaluate the department’s effectiveness in the traditional role of investigating and preventing criminal activity. Secondly, patron perceptions of safety will be measured through annual patron surveys administered by the police department. If the program is effective, the ratio of criminal activity should decrease and the perception of safety should increase.
IMPLEMENTATION PLAN OUTLINE

COMPLETE BY: ACTIVITIES AND EVENTS

9-93 Hold staff meetings/NGT meetings to determine effective ways to deal with future policing needs of the BART District, including the ability to staff extensions

9-93 Decision made to proceed with zone policing concept, includes the division of the district into three zones, each with local facilities, individual command personnel, and consistent assignment of personnel to that zone. Begin communication of the concept to department members

12-93 Appointment of Project Manager by the Chief of Police. Creation of Implementation Committee which includes personnel from both staff and line positions within the police department, union is allowed to appoint personnel. Formalize communication channels within the department. Formally communicate the program to all members of the Critical Mass

1-94 Begin meetings of the implementation committee. Identify police union concerns, develop methods to address department’s needs and individual employee rights
Through committee input, develop policies, locations of substations, staffing levels, etc.
Begin formal proposals to the District's Budget Committee for capitol expenditures related to facilities and increased manpower needs

Purchase facilities for substations, probably modular offices placed on District parking lots
Begin installation arrangements
Purchase support equipment, additional computers, desks, lockers, etc
Continue implementation committee meetings to address all phases of implementation, seniority shift selections, allocation of manpower resources to each zone, etc

Coordinate installation of facilities, including computer networking
Finalize shift deployment for employees on selected lines

Begin use of zone policing and substations, Initial deployment of personnel

District opens the system extensions which require the additional services of the police department.

Expand zone policing to all four lines of the BART
System - Have zone commanders in place

1-97 Re-evaluate placement geographic divisions of the zones based on extensions, current activities.

1-98 Modify placement of zone substations and established boundaries, Consider further division of zones into sectors.

1-2000 Consider placement of zone substations away from current BART facilities to assist in the policing of non-BART transit activities on a regional basis.

1-2002 Expand zone policing areas to include facilities for all regional transit.
CONCLUSION

As a specialized policing field, transit policing is a field with limited formal study. The need for improved public transit over the next decade is undisputed, but the method of providing law enforcement services to these transit agencies is often based on the personal preferences of that agency's governing body, without the benefit of formal examination or in depth investigation. The research contained in this paper does not provide a single solution to the transit policing needs of all urban transit agencies within California, but it does raise issues which should be considered in determining the method of choice for providing transit law enforcement services.

One of the first issues that a transit agency's governing body must determine regarding to the source of law enforcement services, is the specific mission of the policing agency. If the transit agency requires a high level of service, including enhancing the public's perception of safety within the system, the governing body will probably require a police presence of uniformed sworn officers. This presence will normally require some dedicated force, separate from the general law enforcement agencies within the community. To accomplish the specialized mission of the transit agency, this dedicated force may be drawn as a long term assignment of a larger regional or local department, or it may be
an independent force employed by the transit agency itself.

If the transit agency determines that the general police mission of "protecting lives and property" is sufficient, issuing contracts or employing a special law enforcement agency may not be necessary. However, this general level of law enforcement may not be appropriate for many urban transit systems, particularly fixed rail systems within California who must compete with the automobile for riders. Without a high level of assurance of safety to the riders, the ability to attract and retain patrons will be severely hindered.

Based on this need to provide a high level of perceived and actual safety to its customers, the future mission of urban rail transit agencies will most likely include provisions to reassure the patrons that they are protected at a level higher than the surrounding area. Public transit's biggest disadvantage as perceived by many potential users is that it is so public. This exposure to all elements of society is often a deterrence to many commuters, and only a highly visible law enforcement presence will accomplish the measure of safety required to make the transit system attractive to the community. This will require a law enforcement mission which includes general law enforcement, as well as highly visible and vigorous enforcement of nuisance type behavior in all the transit vehicles and facilities.

After determining the level of law enforcement service desired within a transit agency based on the desired mission, the governing body must determine the most effective use of personnel resources
to accomplish this mission. One of the primary concerns to be addressed, whether the law enforcement agency is employed on a contract basis or an independent agency employed by the transit system, is to determine the civilian or peace officer status of the employees. The cost of employing civilians is obviously much lower than the cost of fully sworn police officers. The salary, benefits, retirement and training costs of police officers will in most cases be nearly twice the cost of civilians. The determination must then be made regarding how the enforcement positions will be staffed within transit law enforcement agencies.

The obvious disadvantage to civilian law enforcement personnel in any agency is a limited ability to take appropriate enforcement action in many situations. Recent legislation has minimized this drawback in relation to transit infractions, but the limitations still exist in more serious violations, or when the offender is uncooperative. The public perception of safety provided by police officers, compared to non-sworn security officers, is also significantly different. As the Modified Conventional Delphi Panel pointed out, these factors will tend to limit transit law enforcement agencies moving quickly toward a large civilianization of the work force.

This does not preclude a movement toward utilizing civilian personnel in supplementary or support roles in transit police agencies. These supplementary roles will likely involve many non-enforcement roles, and may involve an improved use of technology to enhance the effectiveness of the sworn officer. Examples of these
non-enforcement roles may include the monitoring of closed circuit television systems within transit vehicles or facilities, or providing personal escort or fixed post observations areas in designated locations. These civilian support and field employees will be in addition to the sworn officers who will still be required to handle the law enforcement needs of the transit system.

An additional consideration in determining the most appropriate method of law enforcement for rail transit agencies in urban California is the evaluation of consolidated or contract police agencies in comparison to the use of independently police departments employed by the transit district. There are several advantages and disadvantages in each method of providing law enforcement services, and these should be viewed in the context of the specific transit system being evaluated. One of the primary issues which should be evaluated is the number of jurisdictions traversed by the system. If the system travels through several cities, it may be difficult to coordinate contracts with multiple municipal agencies to provide consistent law enforcement services throughout the transit system's length. In that situation, and when the system is fully contained within a single county, the transit district may wish to consider law enforcement services provided by a county sheriff's department. Systems, such as Los Angeles Metropolitan Transportation Authority lines, which are largely contained within a single city and county do provide the opportunity to explore several possible policing methods. Contracts with existing cities and counties do allow for a ready
source of experienced law enforcement personnel, familiar with the needs of the community. These personnel must then be familiarized with the needs of a transit system, the unique working environments of the system, and the specialized transit policing mission. The personnel must also have a dedication to the assignment, and must remain long enough to develop expertise in the special requirements of the field.

Through contracts, a transit district is able to maintain some level of control over the services provided, and the costs to the transit authority for the term of the contract. Dependence on the contract provider, particularly when the provider is the only agency in a position to provide the services, does hinder the transit district’s control at the end of the contract’s term. For example, Orange County Transit, and several contract cities within the county, are currently facing uncertain costs of renewing contracts with the county sheriff’s department. After contracting with the sheriff’s department, new contract proposals include increases in fees being charged by the sheriff’s department for similar services. In view of these increased fees, local governments are now reviewing the economy of the contract service arrangement. Since these local governments have no ready access to alternative sources of law enforcement, continuation of contracts may be the most expeditious alternative for the short term. However, full control over an independent police agency of the local governmental entity may be a method of avoiding this dilemma.
Within a transit agency that traverses several counties, the concerns regarding contracting for services are further compounded. For these transit agencies, contracts would be required within each county, or with a regional department capable of providing law enforcement services within several county jurisdictions. There have been limited discussions regarding transit police services within California being provided through either the California Highway Patrol or the State Police Department. It does not appear that the discussions have advanced to the point that either of these agencies will be moving into the transit policing field within the next decade, and this is supported by the conclusion of the Modified Conventional Delphi Panel. The management of multiple contracts with multiple counties is a potential method of providing law enforcement services in this situation, but the consistent policing of the system would be difficult.

An example of a multi-county California rail transit system is the San Francisco Bay Area Rapid Transit System (BART). The system extends into four counties, each very different in demographic and economic make up. Contracting for police services with local cities and/or counties in this situation would be very cumbersome, and would not be likely to result in coordinated and efficient enforcement activities. By their very nature, transit systems often generate criminal activity which moves. If the criminal or disruptive activity moves from county to county, or jurisdiction to jurisdiction, the responsibility for enforcement becomes cloudy. In some Eastern United States transit systems such as Southeastern
Pennsylvania Transit Authority (SEPTA) and Washington Metropolitan Transit Authority (WMATA), these jurisdictional boundaries cross state lines. In these transit systems, the agencies are fully independent police departments employed by the transit agency, with peace officer powers in all the jurisdictions covered by the system. In multi-jurisdictional transit systems, the choice of an independent law enforcement agency has clear advantages over the use of multiple contracts. In smaller systems, or in transit systems fully contained within large cities or counties, the choice may be more difficult.

Two primary considerations must be continually evaluated by the decision making body of transit agency: whether the law enforcement agency(s) is capable and dedicated to the accomplishment of the transit system's mission, and whether the law enforcement agency(s) is the most economical method of obtaining this level of service. These determinations must be made on an individual basis, with the needs and concerns of each transit district being evaluated. The decision on the method of law enforcement delivery should then be continually monitored to determine if adjustments or modifications should be made.

Because of the number of variables involved in providing law enforcement services to rail transit agencies within urban California, it is impossible to present a single model which is equally appropriate for every system. However, it is appropriate, if not essential, that every transit system recognize a need to provide a strong message of safety within the system. In many
instances, this message is best conveyed through the employment of an independent transit police department. In other instances, the future may find that transit districts can provide a higher level of protection through contract services or by combining existing departments with transit police agencies. It does appear clear that by the year 2004, there will continue to be a great need for law enforcement services within the public transit field. The specialized transit police agency which is successful in meeting the needs and goals of a transit agency should be in a position to not only maintain its role in the law enforcement community, but may expand its role to provide regional law enforcement services in the public transit field. For the BART Police Department, the movement toward zone policing is designed to be cost effective and responsive to the local and district needs. This appears to be a positive step toward ensuring the future viability of the department and the entire transit district.
ENDNOTES


4. Supra note #2

5. Robert Oakes, "Effort to Curb Gridlock", West County Times, September 1, 1992


7. Eugene Linden, "Too Many People", Time, Fall Special Issue, 1992, pp 64-65


14. Dr. Phyllis McDonald, "Developing Patrol Tactics and Strategies for Transit Policing", Transit Policing Journal, Summer/Fall, 1992, pp 7-9

15. Supra note #1

16. Supra note #14


18. Supra note #3

19. Supra note #17

20. Supra note #17


23. Supra note #9


28. Supra note #27

29. Supra note #27

30. Supra note #27


33. Arbitration Award by Anita Christine Knowlton, BART Police Officers Association, SEIU Local 1008 and Bay Area Rapid Transit District, CSMCS Case #92-1-061, July 18, 1993

34. Bethlehem (City of) v. Pennsylvania Labor Relations Board, 621 A.2d 1184, (Pennsylvania Commonwealth, 1993)

"Case Results, Oakland Police and CB &M Stop 'Civilianization' in its Tracks", *The Labor Beat*, 4th Quarter, 1993

35. Supra note #32

36. Albert W. O'Leary, "Transit Policing and the Media-Or Why Mother Teresa Was Wrong", *Transit Policing Journal*, Fall 1993, pp 1-11


38. Jean O. Pasco, "County Considers Raising Fees For Law-Enforcement Services", *Orange County Register*, Santa Ana, Calif, July 7, 1991
BIBLIOGRAPHY

"America's New Boomtowns", U.S. News and World Reports, April 11, 1994

"Back to the Future", BART 1992 Budget Goals and Performance Highlights, BART 1993

"Bethlehem (City of) v. Pennsylvania Labor Relations Board", 621 A.2d 1184, Pennsylvania Commonwealth, 1993


California Penal Code, 1993 Edition

"Case Results, Oakland Police and C.B. and M. Stop 'Civilianization' in its Tracks", The Labor Beat, San Francisco, October, 1993


Phil Hickman, "Transit Crime and Policing", Transit Policing Journal, Summer/Fall, 1992


John King, "Sierra Club Rises to Power", West County Times, October 15, 1992
Anita Christine Knowleton Arbitration Award, "BART Police Officer's Association, SEIU Local 1008 and Bay Area Rapid Transit District, CSMCS Case #92-1-061, July 18, 1993

Kent Lihme, "Culture Change, The First Step into our Future", California Peace Officer, June, 1992

Kent Lihme, "The Four Letter Word", California Peace Officer, September, 1992

Eugene Linden, "Too Many People", Time, Fall Special Issue, 1992


Dr. Phyllis McDonald, "Developing Patrol Tactics and Strategies for Transit Policing", Transit Policing Journal, Summer/Fall, 1992

Robert Oakes, "Effort to Curb Gridlock", West County Times, September 1, 1992

Robert Oakes, "Future BART", West County Times, September 8, 1994

Albert W. O'Leary, "Transit Policing and the Media-Or Why Mother Teresa Was Wrong", Transit Policing Journal, Fall/Winter, 1993

David Osborne and Ted Gabler, Reinventing Government, New York, Plume Publisher, 1993

Jean O. Pasco, "County Considers Raising Fees for Law Enforcement Services", Orange County Register, San Ana California, July 7, 1991


"A Study of the Management and Operations of the Metropolitan Atlanta Rapid Transit", International Association of Chiefs of Police, Gaithersburg, Maryland, December 1986

William Tafoya, "Needs Assessment: Key to Organizational Change", Journal of Police Science and Administration, September, 1983

APPENDIXES
Appendix #1

MODIFIED DELPHI PARTICIPANTS

1. Participant is a command level officer with a Northern California Transit Police Department. He has 21 years experience in transit policing and 29 years total police experience.

2. Participant is a command level officer with a Southern California Transit Police Department. He has 2 years experience in transit policing and 25 years total police experience.

3. Participant is a command level officer with a San Francisco Bay Area Municipal Police Department. He has 23 years total police experience and has been assigned to the transit section of the department for 2 years.

4. Participant is a command level officer with San Francisco Bay Area Sheriff's Department. He has 25 years of police experience and has been assigned to the transit section of the sheriff’s department for nearly 3 years.

5. Participant is a command level officer with a large Central California Municipal Police Department. He has 28 years police experience and has 3 years experience working in providing police services in the public transit field.

6. Participant is a command level officer with a large Southern California Sheriff’s Department. He has 30 years of police experience and has been assigned to the transit section of the department for 3 years.

7. Participant is a Chief of Protective Services and Investigations for a Northern California transit agency. He is responsible for overseeing the contracts the agency utilizes with local sheriff’s departments for providing protection on the agency’s vehicles.

8. Participant is a staff member of a California commission responsible for overseeing the coordination of public transportation within a region. He has a background in civil engineering and 20 years of experience in the public transportation field.

9. Participant is an elected member of a large Northern California transit agency’s Board of Directors. The board is a part-time paid position, and is responsible for overseeing the operation of the transit agency.

10. Participant is an executive officer in charge of several departments within a large Northern California transit agency. He has both municipal and transit police experience, and currently is
in a non-police role in the transit agency.

11. Participant is in the police training field, with 20 years of experience. She has a doctorate of education, and her experience includes providing training on statewide basis to police personnel of all ranks.

12. Participant is in the police training field, associated with a California Police Academy. She has prior transit police experience, and approximately 10 years full-time experience in police training.

13. Participant is a command level officer in a Northern California Transit Police Department. He has 29 years total police experience, including 2 years in transit policing.
June 9, 1993

Address

Dear :

Thank you for agreeing to assist with the completion of this document. As I explained, the information from this survey will be part of a study that I am completing to the California Peace Officer Standards and Training Commission's Command College. The final study will be completed by July 1994, and will be published as part of the POST library.

Your input in this study will be instrumental in providing a balance of information. I have sought volunteers from throughout California who have knowledge in different areas of policing, the transit industry, or both. I have been very fortunate in gaining agreements to cooperate, and I appreciate the time expenditure you will be putting forth.

The focus of my study will be "What will be the role of independent transit police departments in urban areas of California in the year 2003?". The paper will also examine subissues surrounding privatization of transit police agencies, utilization of surrounding municipal or county agencies, or contracting police services through city of county police agencies. This portion of my research will be using a modified Delphi Questionnaire to provide information on anticipated trends, and anticipated singular events, which will impact the future of policing transit districts. Your input in these areas will be tabulated and compared to the responses of the other experts responding. In areas with clear consensus, no further input will be required.

To evaluate events with widely divergent points of view in this first round of the survey, I will report the range of scores and relevant comments in a subsequent survey. This will allow you to re-evaluate your judgements in view of the input of other experts, and make any modifications that you wish. If the input in this first survey are consistent on a given event, and a consensus appears clear, this topic will not require modification in the second round of this survey. The trends and events listed in the attached survey were obtained through discussions with a wide variety of personnel in related fields. Recognizing that this list is not totally inclusive, please feel free to add any information you wish at the end of each section.
Specific instructions on completing the two portions of this survey are included as part of the form. If you have any questions or problems, please contact me at (510) 464-7020 between 7:00 AM and 5:00, Tues-Fri, or FAX at (510) 464-7089. I would like to tabulate the results of this initial survey beginning June 25, and ask that the completed forms be mailed back by that date if possible. I hope to have the second survey mailed out by the first week in July.

I would again like to thank you for assisting in this project, and hope that the final result will be informative and helpful to everyone in the field. I encourage you to complete the questionnaires utilizing your current expertise and opinions. The forecast of the future is not an exact science. Please don't slave over this instrument to the point that you stymie your imagination. Simply complete the areas as you anticipate things will most likely occur, and have fun. Thank you again.

Sincerely,

Clark Lynch

enclosure
MODIFIED DELPHI SURVEY
FUTURE OF TRANSIT POLICING
LT. CLARK LYNCH

Name/Title of Person Completing Survey______________________________

Employer ________________________________________________________________

Address

Telephone Number _______________________________________________________

If applicable, years of experience with public transit? __________

If applicable, years of experience in policing? _______________

If you work for a police agency, number of total sworn? _______
Number of sworn personnel in Transit Division/Section?_________

The attached survey is divided in two sections. The first section covers trends which may affect transit policing. The second section covers specific events which would have some impact on transit policing. Specific directions for each section are provided.

Section I, Trends

The first section of the survey involves several trends which may evolve over the next ten years. Each of these trends would have some impact on public transit and the methods used to provide police services to transit systems. There are a total of fifteen trends listed, accompanied by a graph. Please review the trend and, using your knowledge of the subject matter, estimate the direction and magnitude of this trend over the past ten years and the next ten years. Each graph sets a value of 100 as today's level. Please feel free to make any comments after the graph concerning your rationale for your decision.

Example: Consider a trend evaluating the awareness of the Aids Virus in the United States, with today's level at 100. You would first trace the progression over the past ten years. Since there were very few cases known 10 years ago, the trend line would begin near "0", and move up to the "100" level today. If you feel the awareness of Aids will double in the next 5 years, you should indicate a "200" level at +5. If you feel science will have controlled the virus by that time and public awareness will level off for the next five years, you should continue your rating of 200 for +10. See the chart below for an illustration of this trend.
SAMPLE TREND: Awareness of the AIDS Virus in the United States.

On trends number one through five, the trend lines for the past ten years have already been plotted since there is objective data on these trends. Please complete these trends from today forward.

Trend #1

The crime rate in the United States (based on total crimes per 100,000 inhabitants) increases/decreases:

Comments:
Trend #2
The number of law enforcement officers per 1000 inhabitants in the United States increases/decreases:

![Graph showing trend for law enforcement officers per 1000 inhabitants.]

Comments:

Trend #3
The crime rate for violent crime in the United States (based on violent crimes per 100,000 inhabitants) increases/decreases:

![Graph showing trend for violent crime rate.]

Comments:
Trend #4
Police clearance rates in the United States show an increasing/decreasing ability for police departments to solve crime:

Comments:

Trend #5
Federal budget for the funding of mass transportation facilities increases/decreases (based on the percentage of the total federal budget):

Comments:
On Trends 6-15, there is no clear, objective data on the past. For these graphs, please plot the last ten years; with today's level always at 100, and then continue to plot the next ten years of this trend.

**Trend #6**

Local, County and District Police Departments move toward combining specialized functions (dispatch, investigations etc):

![Graph](image)

**Comments:**

**Trend #7**

Government agencies seek competitive bidding from private industry to provide some services (corporation yards, street sweeping, recreational services, etc):

![Graph](image)

**Comments:**
Trend #8

City, County and State police agencies move toward contracting out the work of non-sworn personnel within the agency which had traditionally been staffed by full time employees. Examples include contracting for janitorial services, or the use of "temporary service" personnel to staff clerical positions:

```
+-----------+-----------+-----------+-----------+
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
+-----------+-----------+-----------+-----------+
```

Comments:

Trend #9

Cities, facing severe fiscal constraints, disband all municipal services, relinquishing control and responsibility to the county or state government:

```
+-----------+-----------+-----------+-----------+
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
|           |           |           |           |
+-----------+-----------+-----------+-----------+
```

Comments:
Trend #10
Transit police agencies move toward civilianization (use of non-sworn personnel) in a larger percentage of their field positions:

Comments;

Trend #11
Police agencies of larger cities or counties (over 500 employees) actively pursue contracts with smaller surrounding government agencies for the right to provide police services within the jurisdiction of the smaller government's boundaries:

Comments;
Trend #12

Use of flex time, telecommuting and cottage industries are successful in lessening traffic congestion in urban areas:

Comments:

Trend #13

Use of transit stations by homeless in urban areas causes commuters to avoid these locations:

Comments:
Trend #14

Existing transit police agencies in the United States seek consolidation with existing municipal/county police agencies;

Comments:

Trend #15

The public's perception of disorder, lack of control, safety and criminality within public transit systems and vehicles increases/decreases;

Comments:
Any additional trends which you feel are important when considering the future of transit policing?
Section II, Events

The final section of this survey lists 15 events which are theoretically possible, and would have some impact on policing within transit districts. Please review the event, and evaluate it in terms of probability and in terms of impact.

In terms of probability, there are three areas to evaluate. First, please indicate the minimum number of years from today when you feel there is any probability that this event will take place. If you feel that there is no probability of the event occurring, indicate "Never". For events which do have a probability of occurring within the next ten years, please complete the next two columns, rating a probability that the event will occur in the next five years, and the probability that the event will occur in the next ten years.

The fourth and fifth columns allow you to evaluate the impact each event would have on the issue of providing police services within a transit agency if the event did occur. The occurrence of the event might have a positive impact, a negative impact, or in some cases both a positive and negative impact. If you assume the event has occurred, please indicate how you feel this would impact the ability to provide police services within the transit setting without regard to the method of policing is being utilized, or what type of agency is responsible for providing the police services. To ensure that all ratings are comparable, please use the following scale to evaluate the level of impact:

Rating of "1"- Minimal impact on the ability to provide police services. Some minor modifications to deployment may be required, but could be handled without the addition of personnel or additional expense.

Rating of "5"- Would require/allow significant adjustments to current methods of deployment. In positive situations, this level of impact would allow significant improvements in the level of service provided. In negative situations, there would be a significant decline in service. In both cases, there would still be an ability to work through the situation with long term planning and adjustments.

Rating of "10"- Events with this level of impact would require immediate and dramatic changes in the manner of operation. In positive situations, the changes would be sought after and well received. In negative situations, the changes in the ability to provide transit police services would be catastrophic to the agency and its patrons.

An example of an evaluated event is listed on the following page.
# EVENT EVALUATION FORM

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A major earthquake destroys highways, but leaves transit systems available to provide services.</td>
<td>0</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

**Explanation:**

There is a probability of this event occurring tomorrow, therefore, the number of years until the probability first exceeds zero is "0" years.

There are various earthquake predictions for California, but the person making this evaluation felt that there was a 15% chance of this event occurring within 5 years, and a 30% chance of the event occurring within 10 years.

The positive rating of 6 reflects a very significant adjustment in the way an agency is currently handling the policing of the transit system. However, the benefits of being able to provide the transportation services during this time was seen as a major plus.

The negative rating of 2 indicates some problems would be generated for the policing agency, but these could be handled through minor modifications.
### EVENT EVALUATION FORM

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five Years From Now (0-100)</td>
<td>Ten Years From Now (0-100)</td>
<td>Positive (0-10)</td>
</tr>
<tr>
<td>1. Federal government enacts a $.10 per gallon gasoline tax with all proceeds allocated to funding public transit.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. State Air Quality Control Act requires that no vehicles with less than 2 occupants be driven on highways in urban areas during peak commute hours.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. There is a major oil embargo resulting inlines at gasoline stations of the magnitude experienced in the 1973 embargo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Political terrorists announce that they will utilize bombings in mass transit systems of the United States to call attention to their cause.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Federal legislation is passed which allows college students to excuse loan payments in exchange for specified service to government agencies which receive federal funding. (Police service is one of the specified positions)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### EVENT EVALUATION FORM

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. State legislation declares all infraction violations (including transit violations such as fare evasion) to be civil matters, not subject to criminal sanctions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. State legislation enacts a state police force to handle all municipal, county and district police functions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The federal government ends all subsidy to intrastate public transit agencies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. At least one city in the United States with a population over 50,000 people dissolves its uniformed patrol force after contracting with a private security company to perform this function.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. State legislation is passed to allow non-police transit personnel to issue notices to appear for transit related violations. Failure to appear on the citation has criminal sanctions.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## EVENT EVALUATION FORM

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Federal legislation mandates that all local governments receiving federal funding must obtain at least 3 competitive bids for any expenditure, including personnel costs of specialized departments, which exceed 10% of the agency's budget.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Distribution of state collected taxes to cities, counties and districts is cut 50% with the money retained by the state.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Cost of gasoline exceeds $3.00 per gallon.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Court rulings require public transit systems receiving federal funding to provide free services to anyone who is unable to pay normal fares.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. One of the ten largest transit agencies in the country reports laying off all employees not directly responsible for the operation of the transit vehicles.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please add any additional events you feel should be included;

Comments on specific events.
1:
2:
3:
4:
5:
6:
7:
8:
9:
10:
11:
12:
13:
14:
15:

Thank you again for taking the time to complete this survey. Please return it in the enclosed envelope by June 25, 1993, or FAX (510) 464-7089.
July 1, 1993

Participant Address

Dear :

Thank you for your assistance on the first half of the Delphi Survey covering future aspects of transit policing. The input on the surveys showed a lot of thought and insight into the future, and will be critical in the completion of this research. Several trends and events showed consensus among the participants in the first round. In areas of widely divergent views, the relevant comments indicate that this field has a wide range of possibilities, and the future of public transit and transit policing is not without room for debate. I have enclosed the second, and final round, of the survey which includes a summary of the input from other participants and a request for you to again evaluate the same trends and events.

Specific instructions are again included before each of the two sections of the survey. Because of your familiarity with the questions and the process, this second round should take less of your time than the first. If you could return this second survey in the enclosed envelope by July 16, 1993, it will allow me to stay on my schedule for the completion of this research for the POST Command College. I would again like to thank you for your help with this project. I realize the amount of time this survey takes from your busy schedule, and I appreciate your efforts. I have enclosed a BART PD pin as a small token of my appreciation for your assistance. If I can be of any service to you, or return the favor in any way, please do not hesitate to call.

Sincerely,

Clark Lynch

enclosure
MODIFIED DELPHI SURVEY
ROUND #2
FUTURE OF TRANSIT POLICING
LT. CLARK LYNCH

Name of Person Completing Survey___________________________________

This second round of the survey is divided into the same two sections, Trends and Events. The essential element of the Delphi Survey technique is to allow participants to view input from other participants anonymously, and allow the individual participants to modify their first responses if they wish.

SECTION 1; TRENDS

This section includes the same fifteen trends which may evolve over the next ten years and have some impact on public transit and transit policing. Based on the evaluations of all the participants, I have calculated the interquartile range, where the middle 50% of the forecasts fall. This range is shown as the area inside the hash marks. The median projection is shown as a dotted line. The highest and lowest forecast are shown with an "X": Your forecast from Round 1 is shown in red. Relevant comments which were included on Round 1 surveys are listed below the graphs.

If you feel that your forecast from Round 1 is still the most accurate estimate, you need not make any adjustment and should go to the next trend. If you wish to modify your forecast from Round 1, please draw your new trend line directly on the graph in any color except red, with today's value always equal to 100. Again, please feel free to make any comments concerning the rationale for your decision. Comments are encouraged if your forecast is outside the interquartile range.

As a final step in this section, please place an asterisk next to the graphs which you feel will have the most significant impact on transit policing over the next ten years. Please identify 3-5 of the most significant trends in this way.
Trend #1

The crime rate in the United States (based on total crimes per 100,000 inhabitants) increases/decreases:

![Graph showing the trend of crime rate over the next 10 years.]

COMMENTS: "Increase associated with demographics and economic sluggishness, then moderation as population ages" // "Trend should continue as present rate" // "Technological crime will increase" // "Factors include increasing alien population, density in urban areas, economic and employment downturn" // "Decriminalization of crimes will cause what would have been a marked increase to be a slight increase."

Trend #2

The number of law enforcement officers per 1000 inhabitants in the United States increases/decreases:

![Graph showing the trend of law enforcement officers over the next 10 years.]

COMMENTS: "Public demands more safety, but budgets for personnel don't match crime rate" // "Public budgets will not fund officers" // "Initial decline due to smaller budgets followed by increased police due to heightened public concern" // "Economic downturn and budgetary consequences" // "Faltering economy in the next 5 yrs reduces the increase of officers"
Trend #3
The crime rate for violent crime in the United States (based on violent crimes per 100,000 inhabitants) increases/decreases:

COMMENTS: "Trend continues, but increases slightly due to increased inputs (TV violence, society becoming accustomed, etc)" // "Haves vs. have nots will cause violence" // "Drugs will breed more violence" // "Violence is becoming the accepted M.O. in the commission of crimes" // "Increase due to availability of weapons and gang activity"

Trend #4
Police clearance rates in the United States show an increasing/decreasing ability for police departments to solve crime:

COMMENTS: "Slight increase due to technology and brazeness of criminals" // "Slight decrease due to increase in violent crimes where suspects are unk" // "If rate of occ to population doesn't keep up, clearance rate cannot improve" // "The complexity of white collar crime and inability to deal with these crimes"
Trend #5
Federal Budget for the funding of mass transportation facilities increases/decreases (based on the percentage of the total federal budget):

Comments: "Democratic Admin should reverse trend" // "Decreased defense, increased domestic spending" // "Continued decrease as the Federal Budget focuses on other priorities" // "If Federal Deficit can be controlled in 5 yrs and more positive climate for transit in fed admin and ISTEA flexibility should decrease the declining trend." // "Too many demands for the dollar at all levels"

Trend #6
Local, County and District Police Departments move toward combining specialized functions (dispatch, investigations, etc):

Comments: "Current trend should move even faster" // "Due to smaller budgets" // "With budget problems, consolidation must be considered seriously" // "Movement of public entities is very slow and may be more talk than action" // "Local govt agencies must combine to survive"
Trend #7

Government agencies seek competitive bidding from private industry to provide some services (corporation yards, street sweeping, recreation services, etc):

```
<table>
<thead>
<tr>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>
```

Today's Level: X

Signif. Impact?

YEARS

-10 -5 Today +5 +10

COMMENTS: "Private industry is often more efficient" // "Private contractors don't have the same overhead and benefit liability" // "As budgets continue to shrink, govt agencies will continue to seek cost effective ways to provide services" // "Budget problems will require consideration" // "Necessity requires this"

Trend #8

City, County and State police agencies move toward contracting out the work of non-sworn personnel within the agency which had traditionally been staffed by full time employees. Examples include contracting for janitorial services of the use of "temporary service" personnel to staff clerical positions:

```
<table>
<thead>
<tr>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>
```

Today's Level: X

Signif. Impact?

YEARS

-10 -5 Today +5 +10

COMMENTS: "Public acceptance limits use of contract employees for public safety" // "Non-police public employees will be impacted first" // "Budget problems will require consideration" //
Trend #9
Cities, facing severe fiscal constraints, disband all municipal services, relinquishing control and responsibility to county or state government:

![Graph showing trend]

COMMENTS: "Too much political pressure" // "It has started happening in limited ways, this may continue in view of state tax allotments" // "We are seeing just the opposite in this jurisdiction, small communities are trying to incorporate" // With current state budget, cities may be required to carry a heavier load"

Trend #10
Transit police agencies move toward civilianization (use of non-sworn personnel) in a larger percentage of their field positions:

![Graph showing trend]

COMMENTS: " Seems to be a trend in all police fields" // "We are seeing the opposite, regional transit just contracted to start a light-rail regional transit police department" // "Perceived saving with use of non-sworn personnel is always attractive" // "The Law Enforcement responsibility remains as it is today relating to field positions"
**Trend #11**

Police agencies of larger cities or counties (over 500 employees) actively pursue contracts with smaller surrounding government agencies for the right to provide police services within the jurisdiction of the smaller government's boundaries.

**COMMENTS:** "Fiscal and economic pressures make this attractive" // "It would allow these large agencies to retain their personnel in cutback times" // "Becoming districts seems more likely, but contract will continue to grow".

**Trend #12**

Use of flex time, telecommuting and cottage industries are successful in lessening traffic congestion in urban areas.

**COMMENTS:** "Telecommuting will increase but won't offset additional congestion" // "Traffic congestion will continue to worsen" // "Other trends (aging population and larger households) will also move to slow down rate of traffic congestion".
Trend #13
Use of transit stations by homeless in urban areas causes commuters to avoid these locations:

![Graph](image)

**COMMENTS:** "Public awareness and crackdowns will limit this trend" // "Reinstituted laws on panhandling and lack of public tolerance seems to be moving against this" // "As a daily transit user, I avoid those stations" // "The demand for the commute will outweigh dealing with the homeless"

Trend #14
Existing transit police agencies in the United States seek consolidation with existing municipal/county police agencies:

![Graph](image)

**COMMENTS:** "At least not within these time frames" // "As long as transit funding is better than municipal funding, I don’t think this would happen" // "The field is too specific, local law enforcement would want the revenue but not the responsibility"
Trend #15
The public's perception of disorder, lack of control, safety and criminality within public transit systems and vehicles increases/decreases:

COMMENTS: "Varies with economic drivers of crime and money available for safety" "Agencies can't allow this to occur" // "I agree with that perception and I also think it's fact" // "The increase in security programs should change perception"

Any additional comments or trends which you feel are important when considering the future of transit policing?
EVENTS

The method of evaluating the fifteen events from the first survey is again very similar in this second round. The fifteen events listed are the same as those in the first round of the survey. After each of the listed events are four subheadings: "Range", "Average", "Your Last", and "New". The information in the first two categories has been filled in based on a compilation of the data I received in the first survey. The "Range" shows the highest and lowest scores indicated by the participants. The "Average" shows the average of the participants' scores in this category of the first survey, I have also indicated your entry from the first survey next to "Your Last". Comments from participants are directly below the listed event.

For this second round of the survey, I would like you to again review the fifteen events. During this round, please consider the input from the other participants, and the listed comments. If you would then like to change your initial evaluation, please put your new score next to "New". If you feel your evaluation of the event from round one is still your best estimate, you should leave this space blank and move on to the next event. I would again encourage comments, especially in categories where your evaluation indicates a much different perspective than the group.

The scores you give are again in the areas of Probability and Impact. In the first column, you should be indicating the number of years from today when you feel there is any probability that this event could take place. If you feel that there is no probability of the event occurring, indicate "Never". The next two columns ask you to estimate that probability that the event will occur within the next 5 years, and the probability that the event will occur within the next 10 years.

Again, the last two columns ask you to evaluate the impact each event would have on the issue of providing police services within a transit agency. Some events may have either a positive impact, a negative impact, or both a positive and negative impact. The scale for the rating is unchanged from round one of the survey:

Rating of "1" - Minimal impact on the ability to provide police services. Some minor modifications to deployment may be required, but could be handled without the addition of personnel or additional expense.

Rating of "5" - Would require/allow significant adjustments to current methods of deployment. In positive situations, this level of impact would allow significant improvements in the level of service provided. In negative situations, there would be a significant decline in service. In both cases, there would still be an ability to work through the situation with long term planning and adjustments.
Rating of "10" - Events with this level of impact would require immediate and dramatic changes in the manner of operation. In positive situations, the changes could be sought after and well received. In negative situations, the changes in the ability to provide transit police services would be catastrophic to the agency and its patrons.

Again, this is the final round of this survey and I would like to thank you for taking the time to assist me. If you have any questions or would like information on the final results, please call me or make a notation on the form.
**EVENT EVALUATION FORM**

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>0-N</td>
<td>0-90</td>
</tr>
<tr>
<td>1. Federal government enacts a $.10 per gallon gasoline tax with all proceeds allocated to funding public transit.</td>
<td>Range</td>
<td>3.6</td>
<td>0-10</td>
</tr>
<tr>
<td>COMMENTS: &quot;Very likely with present administration and desire to reduce deficit and decrease use of fossil fuel&quot; // &quot;Tax may go up but gov't wants funds for other purposes&quot; // &quot;Some shift likely this year, but most will go to capitol projects and won't affect current services&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. State Air Quality Control Act requires that no vehicles with less than 2 occupants be driven on highways in urban areas during peak commute hours.</td>
<td>Range</td>
<td>7.8</td>
<td>0-70</td>
</tr>
<tr>
<td>COMMENTS: &quot;Will receive discussion, but American people will require preparation time&quot; // &quot;Some form of this may take place on certain highways in near future&quot; &quot;2 per car would eliminate congestion, the response on transit could be very postive (alot of riders) or very negative (no riders since there is no traffic)&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. There is a major oil embargo resulting in lines at gasoline stations of the magnitude experienced in the 1973 embargo.</td>
<td>Range</td>
<td>8.8</td>
<td>0-40</td>
</tr>
<tr>
<td>COMMENTS: &quot;Middle East unrest continues&quot; // &quot;Oil cutoff is possible, but impact would probably not be as dramatic as 1973&quot; // &quot;Provisions of oil storage and behavior would not cause great impact&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Event Statement

| 4. Political terrorists announce that they will utilize bombings in mass transit systems of the United States to call attention to their cause. |

<table>
<thead>
<tr>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five Years From Now (0-100)</td>
<td>Ten Years From Now (0-100)</td>
</tr>
<tr>
<td>Range 0-10</td>
<td>0-75</td>
<td>20-90</td>
</tr>
<tr>
<td>Avg 2.9</td>
<td>33.6</td>
<td>48.6</td>
</tr>
</tbody>
</table>

**COMMENTS:** "More likely than most are willing to admit" // "Terrorist groups have been targeting U.S. interests for past 10 years." // "Starting to happen in NY" // "Response on announcement rather than actual event"

| 5. Federal legislation is passed which allows college students to excuse loan payments in exchange for specified service to government agencies which receive federal funding. (Police service is one of the specified positions) |

<table>
<thead>
<tr>
<th>RANGE</th>
<th>0-10</th>
<th>5-100</th>
<th>10-100</th>
<th>2-8</th>
<th>0-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg 2.9</td>
<td>48.3</td>
<td>56.3</td>
<td>4.0</td>
<td>-2.2</td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:** "This law will be passed this year" // "A campaign promise that may happen soon" // "The quality of personnel would be questionable" // "Clinton's youth services has this provision"

| 6. State legislation declares all infraction violations (including transit violations such as fare evasion) to be civil matters, not subject to criminal sanctions. |

<table>
<thead>
<tr>
<th>RANGE</th>
<th>0-10</th>
<th>0-75</th>
<th>10-100</th>
<th>0-7</th>
<th>0-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg 5.3</td>
<td>19.5</td>
<td>46.0</td>
<td>3.4</td>
<td>-3.9</td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:** "Very Likely, parking violations were the first step" // "Courts do not want to be involved with infractions"
### EVENT EVALUATION FORM

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIVE YEARS FROM NOW (0-100)</td>
<td>TEN YEARS FROM NOW (0-100)</td>
<td>POSITIVE (0-10)</td>
</tr>
<tr>
<td>Range</td>
<td>Avg</td>
<td>Range</td>
<td>Avg</td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>7. State legislation enacts a state police forced to handle all municipal, county and district police functions.</td>
<td>0-N</td>
<td>0-10</td>
<td>0-20</td>
</tr>
<tr>
<td>Avg</td>
<td>25.8</td>
<td>2.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Your Last</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMENTS; &quot;Not likely, but will receive much discussion&quot; &quot;Probably not in California&quot; //&quot;Local control issues would probably prevent&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The federal government ends all subsidy to intrastate public transit agencies.</td>
<td>0-N</td>
<td>0-80</td>
<td>0-85</td>
</tr>
<tr>
<td>Avg</td>
<td>26.8</td>
<td>18.8</td>
<td>22.5</td>
</tr>
<tr>
<td>Your Last</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMENTS; &quot;Increased subsidy is more in the offering&quot; &quot;Not likely in the near future&quot; //&quot;More of a likelihood if only considering operating subsidy&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. At least one city in the United States with a population over 50,000 people dissolves its uniformed patrol force after contracting with a private security company to perform this function.</td>
<td>0-N</td>
<td>0-100</td>
<td>0-100</td>
</tr>
<tr>
<td>Avg</td>
<td>8.4</td>
<td>37.3</td>
<td>52.7</td>
</tr>
<tr>
<td>Your Last</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| COMMENTS; "New York came close but the U.S. government will bail them out" "It is happening on small scale, may move to larger cities" //
## EVENT EVALUATION FORM

### EVENT STATEMENT

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. State legislation is passed to allow non-police transit personnel (station attendants) to issue notices to appear for transit related violations. Failure to appear on the citation has criminal sanctions.</td>
<td>years: 0-5, 2.3; range: 0-5</td>
<td>probability: 25-100, 50.9; range: 0-100</td>
<td>positive: 2-8; range: 0-10</td>
</tr>
</tbody>
</table>

**COMMENTS:** "Already the case" // "Legislation pending now" // "May already be in place at Municipal Level"

| 11. Federal legislation mandates that all local governments receiving federal funding must obtain at least 3 competitive bids for any expenditure, including personnel costs of specialized departments, which exceed 10% of the agency's budget. | years: 0-0, 6.9; range: 0-0 | probability: 0-95, 20.5; range: 0-100 | positive: 0-8; range: 0-10 | negative: 2-10; range: 0-10 |

**COMMENTS:** "Would have a major impact on police but not likely to happen" // "Negative would be the problem of administering such a program" // "Trend moving in that direction but maybe not to that extent"

| 12. Distribution of state collected taxes to cities, counties and districts is cut 50% with the money retained by the state. | years: 0-15, 2.8; range: 0-15 | probability: 15-100, 50.4; range: 20-100 | positive: 0-8; range: 0-10 | negative: 5-10; range: 0-10 |

**COMMENTS:** "Very likely to happen in the very near future" // "Current budget possibility" // "We are almost there now" // "Was entertained by current legislation"
### EVENT EVALUATION FORM

#### EVENT STATEMENT

<table>
<thead>
<tr>
<th>EVENT STATEMENT</th>
<th>YEARS UNTIL PROBABILITY FIRST EXCEEDS ZERO</th>
<th>PROBABILITY</th>
<th>IMPACT ON THE ISSUE AREA IF THE EVENT OCCURRED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Five Years From Now (0-100)</td>
<td>Ten Years From Now (0-100)</td>
<td>Positive (0-10)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>13. Cost of gasoline exceeds $3.00 per gallon.</td>
<td>Range 0.20</td>
<td>0.75</td>
<td>0-100</td>
</tr>
<tr>
<td></td>
<td>Avg 7.0</td>
<td>20.0</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Your Last</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:** "Europe already pays more than $3.00 per gallon"  
"Not much relationship between cost of gasoline and ridership"

<table>
<thead>
<tr>
<th>14. Court rulings require public transit systems receiving federal funding to provide free services to anyone who is unable to pay normal fares.</th>
<th>Range 0-N</th>
<th>0-70</th>
<th>0-100</th>
<th>0.8</th>
<th>2-10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg 8.7</td>
<td>17.5</td>
<td>36.5</td>
<td>2.6</td>
<td>-5.7</td>
</tr>
<tr>
<td></td>
<td>Your Last</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:** "Perhaps vouchers will be used or govt discount tickets"  
"May be tied to federal subsidy to the agency"

<table>
<thead>
<tr>
<th>15. One of the ten largest transit agencies in the country reports laying off all employees not directly responsible for the operation of the transit vehicles.</th>
<th>Range 0-N</th>
<th>0-75</th>
<th>0-100</th>
<th>0-10</th>
<th>5-10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg 15.7</td>
<td>13.5</td>
<td>23.5</td>
<td>2.4</td>
<td>-8.8</td>
</tr>
<tr>
<td></td>
<td>Your Last</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:** "Not likely because of American's desire for law and order, or perception of safety from seeing police around"  
"There may be significant cuts but not all"  
"Use of contract services may allow this"