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Perspectives on Transit Security in the 1990s:

Strategies for Success

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This report presents the findings of a study sponsored by the Federal Transit Administration (FTA) and the Volpe National Transportation Systems Center (1) to identify the types and level of crime occurring in the transit environment, (2) to identify the security strategies that are utilized effectively in the transit environment to reduce crime and improve patron perceptions of security, and (3) to document the security practices of nine transit agencies located throughout the nation.

To meet the first objective, a comprehensive literature search and extensive telephone interviews were performed to identify types of crimes occurring on rail and bus systems and the relative impact of different crimes on system operation and ridership. The second project objective required the classification of numerous security strategies into categories that would support analysis and discussion. To devise these categories, transit police and security professionals were interviewed regarding agency patrol activities, security technologies, and facility/vehicle design. Meeting the final objective of this project required the performance of on-site assessments at nine transit agencies to obtain information and data relative to transit security issues, including the crimes experienced by the individual agencies; the methods of police/security personnel deployment used in the transit environment; and the utilization of security technologies and design features.

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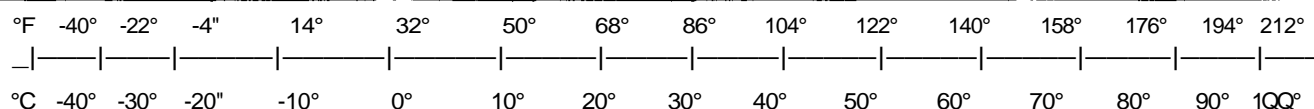| 17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT

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ENGLISH TO METRIC

LENGTH (APPROXIMATE)

1 inch (in) = 2.5 centimeters (cm)
1 foot (ft) = 30 centimeters (cm)
1 yard (yd) = 0.9 meter (m)
1 mile (mi) = 1.6 kilometers (km)

AREA (APPROXIMATE)

1 square inch (sq in, in^2) = 6.5 square centimeters (cm^2)
1 square foot (sq ft, ft^2) = 0.09 square meter (m^2)
1 square yard (sq yd, yd^2) = 0.8 square meter (m^2)
1 square mile (sq mi, mi^2) = 2.6 square kilometers (km^2)
1 acre = 0.4 hectare (ha) = 4,000 square meters (m^2)

MASS - WEIGHT (APPROXIMATE)

1 ounce (oz) = 28 grams (gm)
1 pound (lb) = .45 kilogram (kg)
1 short ton = 2,000 pounds (lb) = 0.9 tonne (t)

VOLUME (APPROXIMATE)

1 teaspoon (tsp) = 5 milliliters (ml)
1 lablespoon (tbsp) = 15 milliliters (ml)
1 fluid ounce (fl oz) = 30 milliliters (ml)
1 cup (c) = 0.24 liter (l)
1 pint (pt) = 0.47 liter (1)
1 quart (qt) = 0.96 liter (l)
1 gallon (gal) = 3.8 liters (1)
1 cubic foot (cu ft, ft^3) = 0.03 cubic meter (m^3)
1 cubic yard (cu yd, yd^3) = 0.76 cubic meter (m^3)

TEMPERATURE (EXACT)

$[(x - 32)(5/9)]°F = y°C$

METRIC TO ENGLISH

LENGTH (APPROXIMATE)

1 millimeter (mm) = 0.04 inch (in)
1 centimeter (cm) = 0.4 inch (in)
1 meter (m) = 3.3 feet (ft)
1 meter (m) = 1.1 yards (yd)
1 kilometer (km) = 0.6 mile (mi)

AREA (APPROXIMATE)

1 square centimeter (cm^2) = 0.16 square inch (sq in, in^2)
1 square meter (m^2) = 1.2 square yards (sq yd, yd^2)
1 square kilometer (km^2) = 0.4 square mile (sq mi, mi^2)
10,000 square meters (m^2) = 1 hectare (ha) = 2.5 acres

MASS - WEIGHT (APPROXIMATE)

1 gram (gm) = 0.036 ounce (oz)
1 kilogram (kg) = 2.2 pounds (lb)
1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons

VOLUME (APPROXIMATE)

1 milliliter (ml) = 0.03 fluid ounce (fl oz)
1 liter (1) = 2.1 pints (pt)
1 liter (1) = 1.06 quarts (qt)
1 liter (l) = 0.26 gallon (gal)
1 cubic meter (m^3) = 36 cubic feet (cu ft, ft^3)
1 cubic meter (m^3) = 1.3 cubic yards (cu yd, yd^3)

TEMPERATURE (EXACT)

$[(9/5)(y + 32)]°C = x°F$

QUICK INCH-CENTIMETER LENGTH CONVERSION

INCHES	0	1	2	3	4	5
CENTIMETERS	0 1 2 3 4 5	6 7 8	9	10 11	12	13
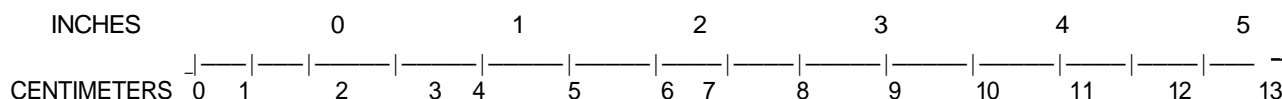
QUICK FAHRENHEIT-CELSIUS TEMPERATURE CONVERSION

°F	-40°	-22°	-4"	14°	32°	50°	68°	86°	104°	122°	140°	158°	176°	194°	212°
°C	-40°	-30°	-20"	-10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	1QQ°

For more exact and or other conversion factors, see NIST Miscellaneous Publication 286, Units of Weights and Measures. Price $2.50. SD Catalog No. C13 10286.

updated 9/29/95

PREFACE

The purpose of this report is to document the state-of-the-practice in security at selected mass transit systems throughout the United States. This report examines both the changing nature of crime in the transit environment and the security practices currently used to reduce crime levels and patron perceptions of crime.

A primary mission of all public transportation systems is to ensure, to the fullest extent possible, the security of passengers, employees, and system property. Each year, the country's mass transit systems provide more than 5 billion trips to commuters, students, tourists, and the elderly. The public transportation infrastructure, valued at more than $1 trillion, routinely serves many of the nation's most dangerous neighborhoods, benefiting transit-dependent populations in areas with high rates of violent crime, drug use, and gang activity. With each trip provided, the transit system must demonstrate its commitment to security.

Transit agencies must address both actual crime committed on the system and patron perceptions of security. These two issues require different, and occasionally conflicting, security deployment and technology strategies. This report presents security strategies commonly used in the transit environment to address these issues.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

BACKGROUND

A primary mission of all public transportation systems is to ensure, to the fullest extent possible, the security of passengers, employees, and system property. Each year, the United States' mass transit systems provide more than 5 billion trips to commuters, students, tourists, and the elderly. Users of public transportation have a variety of trip purposes and destinations. All share the desire that their trip will be secure.

To protect passengers and system property, transit police and security personnel, in cooperation with agency operations and maintenance personnel and local police departments, must implement a variety of security strategies. These strategies utilize police deployment tactics, data collection and analysis, security technologies, system design and modification, and community outreach. Knowing which strategies to use under which conditions can be difficult, since the conditions which encourage criminal activity vary from one community to another. However, failure to recognize and address these conditions can result in the occurrence of crimes which serve to discourage ridership and undermine vital long-term community support for mass transportation. This report has been prepared to assist transit managers, transit police personnel and others in identifying and implementing appropriate security strategies that will reduce the incidents of crime and improve patron perceptions of security.

PROJECT ACTIVITIES AND FINDINGS

The report presents the findings of a study sponsored by the Federal Transit Administration (FTA) and the Volpe National Transportation Systems Center (1) to identify the types and level of crime occurring in the transit environment, (2) to identify the security strategies that are utilized effectively in the transit environment to reduce crime and improve patron perceptions of security, and (3) to document the security practices of nine transit agencies located throughout the nation.

To meet the first objective, a comprehensive literature search was performed to identify not only the types of crimes occurring on rail and bus systems, but also the relative impact of different crimes on transit system operation and ridership. To support the findings of the literature search, extensive phone interviews were conducted with representatives from the Federal Bureau of Investigation (FBI) and with police officials at several transit agencies. Annual crime data from 15 transit agencies also were reviewed. As a result of these information collection activities, 28 specific crimes and crime-related issues were identified that occur in the transit environment.

The second objective of this project required the classification of numerous security strategies into categories that would support analysis and discussion. To devise these categories, transit police and security professionals were interviewed for their expertise in planning patrol activities, utilizing security technologies, and designing rail and bus facilities and vehicles. Representatives from the FBI also contributed to the development of this classification system. Four categories were devised to organize security strategies: Personnel Deployment, System Design and Technology, Data Collection, and Operating Practices.

Meeting the final objective of this project required the performance of on-site assessments at nine transit agencies, to obtain information and data relative to transit security issues, including the crimes experienced by the individual agencies, the methods of police/security personnel deployment used in the transit environment, and the utilization of security technologies and design features. The nine agencies were selected to provide a representative sample of the following characteristics:

- Geographical regions.
- Modes of service (bus or rail).
- Police/security staffing types.
- System sizes and service areas.

The agencies selected were:

- Gary Public Transportation Corporation (GPTC)
- Greater Richmond Transit Corporation (GRTC)
- Los Angeles County Metropolitan Transit Authority (LACMTA)
- Miami Metro-Dade Transit Agency (MDTA)
- Minneapolis-St. Paul Metropolitan Council Transit Operations (MCTO)
- San Diego Metropolitan Transit Commission (SDMTDB)
- St. Cloud Metropolitan Transit Commission (SCMTC)
- St. Louis Bi-State Development Agency (Bi-State)
- Washington Metropolitan Area transit Authority (WMATA).

Security practices at these agencies were documented; crime data was collected and evaluated; and a brief history of the agency's transit security experience was compiled. The practices in place at these agencies should serve to provide positive examples of security strategies utilized by transit police and security personnel working under a variety of different operating conditions.

The principal effort of this study was associated with on-site visits to nine mass transit agencies. The project team questioned police and security representatives about the 28 specific issues that were identified by the literature search and review and the telephone interviews:

- Arson
- Assaults on Operators
- Assaults on Passengers
- Bomb Threats
- Burglary
- Disorderly Conduct
- Drunkenness/Liquor Law Violations
- Fare Evasion
- Gang Activity
- Graffiti/Vandalism
- Hate Crimes
- Homelessness/Vagrancy
- Homicide
- Motor Vehicle Theft
- Narcotics Offenses
- Objects Thrown at Vehicles (Missiles)

- Pickpocketing/Purse Snatching
- Prostitution
- Public Urination/Expectoration
- Rape
- Robbery
- Sex Offenses (Excluding Rape)
- Smoking/Eating/Littering/
  Loud Music
- Theft from Facilities
- Theft from Motor Vehicles
- Theft from Vending Machines
- Trespassing
- Weapons Offenses.

Representatives from each of the nine participating agencies were asked to complete a Questionnaire documenting the types of crimes and general security issues occurring on their properties and the resources devoted to each. The results of the Questionnaire indicate that the 28 crimes and crime-related issues can be classified into the five groups listed below, based upon the amount of resources required from police and security personnel to address them. The rankings listed by each of the 28 crimes and crime-related issues correspond to agency assessments of the amount of security resources required to manage the crime or issue. Disorderly Conduct (Rank: 1st) requires the most police/security resources to manage, while Rape and Homicide (because of their infrequent occurrence in the transit environment) are tied for last place, requiring the least police/security resources. The results of the Questionnaire are as follows:

Quality-of-Life Issues

Disorderly Conduct (Rank: 1st)
Homelessness/Vagrancy (Rank: 3rd - tie)
Drunkenness/Liquor Law Violations (Rank: 7th)
Smoking/Eating/Littering/Loud Music (Rank: 8th)
Public Urination/Expectoration (Rank: 15th)
Narcotics Violations (Rank: 17th - tie)
Sex Offenses - Excluding Rape (Rank: 22nd)
Prostitution (Rank: 26th)

Frequently Occurring Violent Crimes

Assaults on Passengers (Rank: 5th)
Robbery (Rank: 9th)
Assaults on Operators (Rank: 11th - tie)
Gang Activity (Rank: 13th)
Weapons Offenses (Rank: 19th)

Property Crimes Against Patrons

Thefts from Motor Vehicles (Rank: 11th - tie)
Pickpocketing/Purse Snatching (Rank: 13th - tie)
Motor Vehicle Thefts (Rank: 17th - tie)

Property Crimes Against Transit Agency

Graffiti/Vandalism (Rank: 2nd)
Fare Evasion (Rank: 3rd - tie)
Objects Thrown at Vehicle (Rank: 5th)
Trespassing (Rank: 10th)
Thefts from Facilities (Rank: 15th - tie)
Burglary (Rank: 20th)
Bomb Threats (Rank: 21st)
Thefts from Vending Machines (Rank: 23rd)
Arson (Rank: 24th - tie)

Infrequently Occurring Violent Crimes

Hate Crimes (Rank: 24th)
Homicides (Rank: 26th - tie)
Rapes (Rank: 26th - tie)

During the study, the project team also investigated the strategies used by the agencies for addressing the 28 crimes and crime-related issues. These strategies were classified into four general categories as a result of interviews with transit police and security professionals. The strategies were:

- Personnel Deployment
- System Design and Technology
- Data Collection
- Operating Practices.

Personnel deployment refers to the ways in which sworn police officers and non-sworn security personnel secure the system on patrol or fixed post assignments. The methods of personnel deployment include responses to calls for service, random patrol, directed patrol, and apprehension-oriented patrol.

System design and technology strategies take advantage of environmental design theory and utilize the Crime Prevention Through Environmental Design (CPTED) approach to the design of countermeasures. CPTED advocates four guidelines for the design of effective countermeasures: movement control, surveillance, space utilization, and management activity. Examples of physical environmental features utilized to reduce crime include: lighting, monitoring and communication systems, alarms, graffiti/vandalism resistance, easy maintenance, fencing, barriers, signs, landscaping and locks/access control.

Security data collection also provides an effective strategy for security control. However, data collection is also among the most difficult security activities in the transit environment. A discussion of the FBI's UCR program is provided to highlight the ways in which this system is effective in the transit environment as well as the ways in which the transit environment, due to its uniqueness, falls outside this classification system. Also in this section is a discussion of data collection goals and the types of data required to effectively reduce crime in the transit environment.

Operating practice strategies are utilized by the transit system as an effective strategy in reducing transit crime. Route design and scheduling; maintenance; system policies and training; and joint-information collection activities can enhance crime reduction effectiveness.

1. INTRODUCTION

A primary mission of all public transportation systems is to ensure, to the fullest extent possible, the security of passengers, employees, and system property. Each year, the United States' mass transit systems provide more than 5 billion trips to commuters, students, tourists, and the elderly. Users of public transportation have a variety of trip purposes and destinations. All share the desire that their trip will be secure.

To protect passengers and system property, transit police and security personnel, in cooperation with agency operations and maintenance personnel and local police departments, must implement a variety of security strategies. These strategies utilize police deployment tactics, data collection and analysis, security technologies, system design and modification, and community outreach. Knowing which strategies to use under which conditions can be difficult, since the conditions which encourage criminal activity vary from one community to another. However, failure to recognize and address these conditions can result in the occurrence of crimes which serve to discourage ridership and undermine vital long-term community support for mass transportation. This report has been prepared to assist transit managers, transit police personnel, and others in identifying and implementing appropriate security strategies that will reduce the incidents of crime and improve patron perceptions of security.

1.1 BACKGROUND

Transit security, having its origin in the protection of railroad revenue and property at the turn of the century, emerged as a distinct new professional discipline in the 1960s. Since that time, transit agencies have applied a wide variety of crime prevention strategies and tactics to reduce crime and to increase patron perceptions of security. Some of these strategies have been successful; some have not. In many cases, the reasons for success or failure have not been clearly documented. Thus, it has been difficult to determine if factors such as unique system attributes or possible variations in execution are as important to a successful outcome as the security strategy or tactic itself.

Over the last three decades, transit police and security professionals have initiated programs of rigorous experimentation and innovation. New technologies, deployment tactics, information systems, facility designs, and multi-agency task forces are being utilized to combat crime. The results of these strategies are being documented and evaluated. At many transit agencies, crime data analysis units now are directing the activities of transit police and security personnel. These units are encouraging crime prevention programs, improved order maintenance, and community-oriented initiatives which appear to be successfully reducing crime and improving patron confidence in the security of mass transportation service.

1.2 SCOPE AND OBJECTIVES

This Transit Crime Data Assessment Study was sponsored by the Federal Transit Administration (FTA) and the Volpe National Transportation Systems Center to document the state-of-the-practice in security at transit agencies throughout the nation, to share information with the industry, and to open a dialogue concerning "best practices" in transit security.

To meet the goals established by the FTA and Volpe Center, three objectives guided this project:

- Identification of the types of crime occurring in the transit environment.
- Identification of the security strategies utilized in the transit industry to reduce crime and improve patron perceptions of security.
- Documentation of current practices utilized to provide transit security at nine transit agencies, and where appropriate, identification of "best practices."

These objectives were selected to ensure the relevance of the project to the needs of the transit industry.

To meet the first objective, a comprehensive literature search was performed to identify not only the types of crimes occurring on rail and bus systems, but also the relative impact of different crimes on transit system operation and ridership. A complete listing of the literature reviewed for this report is located in Appendix E. To support the findings of the literature search, extensive phone interviews were conducted with representatives from the Federal Bureau of Investigation (FBI) and with police officials at several transit agencies. Annual crime data from 15 transit agencies also were reviewed. As a result of these information collection activities, 28 specific crimes and crime-related issues were identified that occur in the transit environment. A discussion of these issues and their impact is presented in Section 2 of this report.

The second objective for this project required the classification of numerous security strategies into categories that would support analysis and discussion. To devise these categories, transit police and security professionals were interviewed for their expertise in planning patrol activities, utilizing security technologies, and designing rail and bus facilities and vehicles. Representatives from the FBI also contributed to the development of this classification system. Four categories were devised to organize all security strategies: Personnel Deployment, System Design and Technology, Data Collection, and Operating Practices. A complete discussion of these four categories is located in Section 3 of this report.

Meeting the final objective of this project required the performance of on-site assessments at nine transit agencies located throughout the nation. The nine agencies were selected to provide a representative sample of the following characteristics:

- Geographical regions.
- Modes of service (bus or rail).
- Police/security staffing types.
- System sizes and service areas.

Security practices at these agencies were documented; crime data was collected and evaluated; and a brief history of the agency's transit security experience was compiled. A full discussion of the on-site assessments is presented in Section 4 of this report. The practices in place at these agencies should serve to provide positive examples of security strategies utilized by transit police and security personnel working under a variety of different operating conditions.

1.3 PROJECT METHODOLOGY

The methodology which guided this project required four steps:

- Literature Search and Review
- Telephone Interviews
- On-Site Assessments
- Documentation of Results

1.3.1 THE LITERATURE SEARCH AND REVIEW

The literature search and review generated materials that describe the transit security function, including the types of crime occurring in the transit environment, transit agency security practices, and the results of transit and municipal police research studies and experiments. Materials identified include books, reports, agency studies, published and unpublished research findings, procedures, training manuals, and journal articles. Special emphasis was given in the literature search to those materials that describe criminal occurrences on mass transit and agency security practices.

The literature review began with holdings at university libraries, and extended to other sources such as government agencies, literature indexes, and private collections:

Transportation Libraries. Universities and other learning institutions that have programs devoted to transit such as Northwestern University, University of Virginia, and the National Transit Institute at Rutgers University, among others, provided excellent sources of transportation security texts, reports, and articles. Listings of relevant materials were available via computer search, and the materials themselves through inter-library loan programs.

Criminology Libraries. Several universities offer programs devoted exclusively to criminology. The libraries of the John Jay College of Criminal Justice, Northeastern University, and Florida State University, among others, were surveyed for applicable transit security information.

Literature Indexes/Computer Searches. The availability of computerized literature indices and abstracts assured that the published literature was comprehensively examined. These sources enabled the project team to amass and review a large body of research on both general security/crime topics and transit security topics in particular.

Government Agencies. Valuable information regarding the use of various security strategies in the transit environment to reduce crime and increase the perception of security was available through three main branches of the federal government: the Department of Transportation (DOT), the Department of Justice (DOJ), and the Federal Bureau of Investigation (FBI).

1.3.2 TELEPHONE INTERVIEWS

Telephone interviews were conducted with local, state, and federal transit security professionals, including transit agency police personnel and the FBI. These interviews were utilized to identify information to support the findings from the literature search and review and to ensure that those

transit security practices which may not be documented in the literature search were identified during the project.

While a literature review of the sources outlined above is important to the development of a thorough survey of the industry's experience with transit security issues, it is also expected that a great deal of insight into the success of a transit police/security department must come from those already experienced in the profession. In addition, interviewed transit security professionals identified internal reports and unpublished research available to the project team only from State and local sources.

1.3.3   ON-SITE ASSESSMENTS

On-site assessments were performed at nine transit agencies to identify current transit security practices, to assess the level of transit crime, and to obtain further information on patron perceptions in the transit environment. In choosing the nine agencies to participate in this project, the project team sought to include a variety of geographical regions, service modes, police/security staffing types, and system sizes and service areas. The following criteria were established to satisfy these objectives:

- All participating agencies must provide bus service.
- Five participating agencies also must provide rail service (i.e. heavy and/or light rail).
- Both barrier-free agencies and those with traditional fare collection practices must be represented.
- At least two large agencies must be included from the East Coast, Midwest, and West Coast.
- Three of the agencies must be small bus properties, since these agencies are often under-represented in transit security studies.
- All security staffing types must be represented (transit police, contracted local police, municipal transit bureaus, contracted non-sworn security, and non-contracted local police for response to serious incidents only).

The following agencies were selected to participate in the on-site security assessments:

- Gary Public Transportation Corporation (GPTC)
- Greater Richmond Transit Corporation (GRTC)
- Los Angeles County Metropolitan Transit Authority (LACMTA)
- Miami Metro-Dade Transit Agency (MDTA)
- Minneapolis-St. Paul Metropolitan Council Transit Operations (MCTO)
- San Diego Metropolitan Transit Commission (SDMTDB)
- St. Cloud Metropolitan Transit Commission (SCMTC)
- St. Louis Bi-State Development Agency (Bi-State)
- Washington Metropolitan Area transit Authority (WMATA)

WMATA and Miami MDTA were selected to represent large rail systems on the East Coast.

WMATA's sworn transit police force is highly respected throughout the industry, and since the rail system was designed and constructed with special physical features, the agency offers many valuable reference points for studying crime prevention. In addition, WMATA's unique jurisdictional arrangement provides a model for transit agencies struggling with multi-jurisdictional issues.

Miami MDTA was selected because the rail system offers special engineering features designed to deter criminal activity and because of its unique combination of municipal police and non-sworn security personnel. The Transit Bureau of the Metro-Dade Police Department provides security for MDTA bus service, while the Wackenhut Corporation provides the largest contingent of non-sworn security officers used for rail security in the country. Since private security is an alternative more and more transit agencies are selecting, MDTA's experience is valuable for the industry.

St. Louis Bi-State and the Minneapolis-St. Paul MCTO were selected to represent large transit systems in the Midwest. Bi-State offers a new, barrier-free rail system secured with a combination of non-sworn code compliance officers and undercover police officers from the City and County of St. Louis. MCTO has one of the nation's largest sworn transit police departments devoted exclusively to bus service. Both agencies have considerable experience with cameras on buses, advanced communications technology, and effective coordination between operations personnel and police/security personnel.

The LACMTA and the SDMTDB were selected to represent large systems on the West Coast. The LACMTA possesses the largest sworn transit police force in the nation, and utilizes cutting-edge technology to support its policing function. The SDMTDB currently is undergoing an extensive peer review process to determine if the agency should establish its own sworn transit police department. Presently, the agency relies on a combination of non-sworn security and contracted local police.

Transit systems in Gary, Richmond, and St. Cloud were selected to represent smaller bus agencies because they serve small cities with crime rates comparable to large, urbanized areas. Generally, smaller bus systems do not experience incidents of crime as frequently as larger agencies. A large proportion of the crimes committed on smaller bus systems usually are limited to a few types (e.g. fare evasion, disorderly conduct, graffiti, and vandalism). Issues associated with large urbanized areas, such as homelessness, are rare at smaller agencies. However, smaller bus properties occasionally provide service to communities with high rates of crime. Gary, Richmond, and St. Cloud all have crime rates that exceed the national average. In fact, Gary and Richmond both have crimes rates higher than Los Angeles. These agencies must provide security with limited resources and without dedicated police or security forces, making them particularly interesting subjects for study.

1.3.4   DOCUMENTATION OF THE RESULTS

Documentation of the results of the literature search and review, the telephone interviews and the on-site assessments took several forms, including the completion of a detailed Structured Interview Guide and Transit System and Police/Security Department Questionnaire by each of the nine agencies participating in the on-site assessments; the compilation of a comprehensive transit security bibliography; and the recording of telephone interview results in specially designed forms.

2. TRANSIT SECURITY ACTIVITIES AND ISSUES

The typical manager of modern transit security usually has three primary responsibilities:

- Meeting the actual and perceived security needs of the system's passengers.
- Protecting the system's employees, revenue, and property.
- Maintaining order on the system.

These responsibilities must be fulfilled in an environment of limited financial, staff, and material resources. This situation is further complicated by both the difficulty of measuring and documenting security effectiveness and by the highly emotional nature of the public's response to crime. The transit environment is unfamiliar, and even uncomfortable, for many passengers, producing feelings of confinement, vulnerability, and intimidation. These feelings must be addressed by the system in order to reduce patron fear and to increase passenger confidence in the system.

2.1 PATRON FEAR

Transit agencies struggle daily with the problem of patron fear, or the discomfort that fear of crime creates in some riders. Transit systems provide a valuable service which must be marketed to and supported by the public. Communities perceiving a link between crime and the presence of a bus depot or a rail station will not support the expansion of mass transit into their neighborhoods. Patrons who perceive the transit system as dangerous will limit their use of the system, especially during off-peak hours.

Transit-dependent populations, who must use the system to get to work or other locations, may become irritable or even abusive to system employees when travelling on routes they feel are unsafe. Bus operators and rail personnel who work in the transit environment must deal with the stressful consequences of disruptive behavior, fare evasion, intimidation, and public drinking on a daily basis. This environment can have a significant impact on transit personnel morale, absenteeism, management, and the quality of customer interaction.

Alleviating the fear of crime is difficult. During the 1960s and 1970s, citizen fear became an important factor governing the use of all public spaces, including public transportation. Since that time, significant research has been conducted to answer questions concerning the apparent lack of correlation between high rates of crime and citizen fear levels. In the early 1980s, researchers discovered that citizen fear is more closely correlated with perceptions of disorder than with crime. This finding is of particular importance to transit agencies that routinely experience littering, vandalism, homelessness, and public intoxication — all conditions which indicate disorder and, according to research, serve to promote feelings of insecurity.[1]

Transit police and security personnel can utilize modern crime data collection and analysis techniques to assess their success or failure in reducing crime on transit property. However, gauging the efficacy of fear reduction efforts is far more challenging. The public perception of disorder can be triggered by many different observations and experiences, and these triggers may vary from patron to patron. Both disorder and the patron response to it are very difficult to measure in the quantitative terms traditionally used by police organizations to evaluate performance. In the transit industry, there are many assumptions about the effectiveness of various deployment and technology strategies to reduce disorder and patron fear. However,

transit police and security professionals have only limited measurable evidence with which to evaluate their actual effectiveness in reducing fear.[2]

This lack of quantitative information is further complicated by recent research findings which suggest that patron fear is not only related to the level of disorder evident in transportation facilities and vehicles, but also that the very nature of the service may promote passenger fear.[3] Rail stations and bus depots serve a crowded mix of passengers. This interaction may produce feelings of vulnerability for some patrons. These feelings may cause patrons to avoid using public transportation or to behave in ways more difficult for transit operations and police personnel to manage. Thus, agencies utilizing security strategies that promote an enhanced uniformed police presence in transportation facilities and vehicles, while demonstrating a strong commitment to a secure environment, may fail to address a patron's basic discomfort in the transit environment.

Given the absence of a direct correlation between crime rates and patron fear, considerable debate exists in the transit industry over how much emphasis to place on patron fear reduction. While transit agencies must take patron fear concerns seriously in order to maintain and increase ridership and to improve their relationships with the localities they serve, they also must concentrate their resources in ways that address actual patterns of criminal occurrence on the system.

2.2 CRIME IN THE TRANSIT ENVIRONMENT

In 1979, the Southeast Michigan Council of Governments (SEMCOG) conducted a study of 57 U.S. transit systems. The findings of this study suggest that crime on transit systems, while generally lower than in the neighborhoods surrounding the system, "is a national problem of major proportion that cannot be ignored in terms of the seriousness and/or frequency with which offenses are committed."[4] Over the past two decades, researchers have demonstrated that transit crime patterns generally parallel crime patterns in the surrounding neighborhoods (i.e., a high incidence of transit crime is likely to occur in those geographical areas with a high incidence of street crime). In addition, it has been documented that most violent or serious crimes which occur within the transit environment occur on large metropolitan transit systems. More recent research indicates that the majority of crimes committed on public transportation are committed by juveniles and young adults.[5]

Rail systems generally experience higher crime rates than bus systems, although crime reporting for bus services tends to be less reliable than that for rail services. Transit systems, because they provide shelter and 24-hour availability, are also a favored location for the homeless, panhandlers, and with increasing frequency, low-level drug dealers. The crimes committed by these groups within the transit system are of special concern because of their impact on patron perceptions.

While general trends in transit crime can be identified, different crime levels exist within cities, and from one city to the next. This variability of transit crime makes predicting crime rates difficult. For example, the San Diego Trolley reports that it has recently become the target of gang activity (vandalism, graffiti, weapons violations, initiation rites). This situation has affected all deployment and technology countermeasures initiated by the system. In Washington, D.C., however, gang juveniles were reported to have left the WMATA rail system relatively untouched. Even though both agencies serve areas with high levels of gang activity, "spill-over" only occurred in San Diego. This situation highlights the complexity of predicting national trends in transit crime, especially when juvenile behavior is involved.

Past research on transit crime indicates that robbery, larceny, and serious assaults account for the majority of crimes committed against people, while vandalism, public drunkenness, and disorderly conduct constitute the majority of crimes against property. The findings of this project support this earlier research.

2.3 COMPARISON WITH MUNICIPAL POLICE

Police services in the United States typically react to incidents reported by citizens. While no police department operates solely on a reactive basis, many departments become involved with a criminal incident only after it has occurred. Police departments' standard procedures include:

- Responding to citizen calls.
- Gathering incident information from victims, witnesses, and offenders.
- Invoking the criminal justice process.
- Using aggregate statistics to evaluate department performance.

Few police departments focus on the underlying causes of crime, or the ways in which system environment, incident analysis, and community interaction can be utilized to reduce and prevent crime and improve the effectiveness of response.

Over the last decade, however, transit police and security departments, motivated by special concerns for patron fear and order maintenance, have been creating their own brand of proactive policing. Prior to the 1970s, transit security methods were based on tradition and the assessments of senior personnel. More recently, progressive transit police and security professionals have been using past research, including detailed crime data analysis and field studies, to supplement tradition and professional judgment. No longer focusing exclusively on response, many transit agencies are working to increase ridership and protect system property through highly interactive security programs focusing on customer interface, community-outreach, youth programs, and directed teams designed to handle special problems, such as vandalism and parking lot crime.

This evolution of the discipline stems from the transit industry's newly acquired appreciation for the differences between municipal and transit policing. In the 1960s, many transit police organizations based their practices exclusively on those of their municipal counterparts or on the old-time practices of private railroad police. However, over the last three decades, transit police organizations have identified the uniqueness of the transit environment, and, subsequently, have designed security strategies that require an approach to crime reduction which is significantly different from the approach used by municipal police. Transit security is characterized by five major differences from municipal policing:

- **Crime Mobility, Randomness, and Vulnerability**

  Crimes committed in the transit environment tend to be both more mobile and generally more random in nature than street crime. Municipal crime may be more serious on average, but it tends to follow trends which are easier to identify than those in the transit environment. And, while the majority of crimes committed on the transit system are minor in nature, the system remains vulnerable to the most devastating types of violence, such as random shootings, terrorist bombings, and biological warfare. Since city blocks

generally do not provide the same political and media targets as mass transit systems, the potential for catastrophic occurrences may be lower in municipal policing.

- **Geographical Boundaries**

    Municipal jurisdictions are clearly defined within relatively manageable geographic boundaries. Transit police and security departments must cover enormous geographical areas that cross city, county, and occasionally, state borders. Transit police and security professionals devote considerable resources to coordinating with local police to secure clear jurisdictional authority over their systems.

- **Public Interaction**

    Transit police and security officials provide public information in addition to providing security. The presence of uniformed personnel interacting with passengers is key to reducing patron fear and creating an unfavorable criminal environment. In most cases, municipal police are not responsible for interacting with the public to this degree.

- **Restoration of Operations**

    A primary goal of transit security is resolving system crime with as little disruption to scheduled service as possible. Municipal police rarely operate under such time pressure.

- **Funding and Political Support**

    Transit police and security departments are often placed in direct competition with transit operations for funding. Municipal police maintain a more stable source of public and financial support.[6]

Addressing these differences, while maintaining an appreciation for the similarities shared with municipal policing, has enabled transit police organizations throughout the nation to tailor municipal strategies in innovative ways that improve effectiveness in the transit environment.

2.3.1 SYSTEMS APPROACH

To address their differences from municipal police, many transit police and security departments now embrace the **systems approach** to provide the maximum level of security for a given agency. Through the application of technical and managerial skills, many transit operations are adopting the philosophy that the vast majority of security incidents occurring on agency property can and should be prevented.

This philosophy begins with designing an acceptable level of security into the transit system prior to operation, utilizing physical features which reduce vulnerability to criminal activity. Once the design phase is complete, the systems approach requires transit police and security officials to commit to the early remedy of threats and vulnerabilities which may emerge with changes in operation, ridership, and neighborhood crime patterns. Finally, this philosophy guides the agency through the safe termination and disposal of vehicles and equipment associated with the system. Thus, the system approach identifies, evaluates, and controls security threats through all system life cycle phases.

The systems approach encourages both the design of features which "harden" system elements against criminal activity and the implementation of security information monitoring systems, which identify and help control new threats and vulnerabilities. This approach also identifies designs, technologies, and deployment strategies which assist in reducing patron fear.

A security program utilizing a systems approach offers the functional and integrated capability of protecting users and operators of the system, as well as the resources comprising the system. The basic elements of protection involve prevention or deterrence of acts or conditions threatening the safety or welfare of those persons or resources and corrective or remedial action to limit the effects of such acts or conditions when they do occur.

To be effective, the systems approach must be an integral element of the agency's operating policy and be considered as essential to service as safe equipment design and operation. However, while security should be the concern of all system employees, direct responsibility for the security program must be assured and administered by persons with special capabilities and authority to ensure that program objectives are achieved.

2.4 SECURITY PROGRAM ADMINISTRATION

Currently, transit security programs are administered throughout the industry by organizations with varying degrees of police powers. All transit agencies receive some support from municipal police in the jurisdictions through which their systems pass. However, this support is provided only in response to serious incidents that occur on the system. Municipal police, overwhelmed by the demands of serious criminal activity in their jurisdictions, do not have the resources to respond to minor, quality-of-life incidents on the transit system, nor can they engage with any consistency in crime prevention activities. Therefore, transit agencies, especially those located in large urbanized areas, must design and fund their own police/security organizations. These organizations may include:

- Sworn transit police forces with jurisdiction for the entire transit system.
- Contracted non-sworn security personnel.
- Contracted local law enforcement (off-duty police officers and formal contractual arrangements with municipal police services).

Currently, there are approximately fifty full-time transit police and security departments throughout the United States, and many other transit agencies utilize in-house security to supplement the emergency response activities of municipal police. Table 2-1 identifies the types of security staffing utilized at most of the larger transit systems throughout the nation. See Appendix D for transit system abbreviation definitions.

TABLE 2-1 POLICE/SECURITY STAFFING AT REPRESENTATIVE TRANSIT AGENCIES ACROSS THE UNITED STATES

Policy/Security Staffing Type	Transit Agency
Dedicated Sworn Transit Police: • Transit agencies have full authorization from state and local legislative bodies. • Transit officers exercise police powers limited to protecting passengers, employees, and system property. • Transit agencies with police departments must impose the same qualifications and standards that apply to all police agencies in the state.	BART Metro-North DART Niagara Frontier GCRTA N. Indiana CTD Houston Metro NJ Transit LACMTA PA Transit LIRR PATCO MARTA PATH Maryland MTA SamTrans MBTA SEPTA MCTO SIRT Metra WMATA
Dedicated Non-Sworn Contracted Security: • Transit agencies use security departments staffed with full-time security officers. • Officers' responsibilities include promoting system order and working closely with local police. • Non-sworn security personnel do not have police powers. (Many in the transit industry have expanded legal powers of detention and citation.)	Denver RTD Gary PTC Miami Metro-Dade (Rail) Milwaukee County Transit System Santa Cruz Transit Tri-County Commuter Rail
Dedicated/Contracted Local Police: • Transit agencies use contracts or Memorandums of Agreement with local police departments. • Transit agencies are secured by municipal officers with full police powers in a given jurisdiction.	Capital Metro Miami MDTA (Bus) Chicago TA Muni Charlotte DOT New Orleans RTA Detroit DOT NY City Transit Kansas City TA Portland Tri-Met LACMTA Metrolink Sacramento RTD Lane Transit Seattle Metro Long Beach
Combination of Contracted Local Police and Non-Sworn Security: • Transit agencies combine contracted local police officers and contracted non-sworn security officers to secure the system.	HART St. Louis Bi-State San Diego MTDB Santa Clara County Transit District SCAT

Section 2: Endnotes

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2. Vincent Del Castillo, <u>Fear of Crime in the New York Subway</u> (Ann Arbor, MI: University of Michigan, 1994); Vincent Del Castillo, "Fear of Crime: The Police Response," Transit Policing. Vol. 3, No. 1 (Winter/Spring 1993), p. 1+.

3. <u>Ibid</u>, p. 1+.

4. Quoted in John P. Sullivan, "Transit Security: Lights, Camera, Action," <u>Transit Connections.</u> (June 1995), pp. 37-40 from SEMCOG, <u>Crime and Security Measures on Public Transportation Systems: A National Assessment (</u>Washington, DC: U.S. Urban Mass Transportation Administration ; Springfield, VA, 1979).

5. Henry DeGeneste and John Sullivan, <u>Policing Transportation Facilities</u> (Springfield, IL: Charles C. Thomas), 1994, pp. 3-27 and pp. 114-122; Urban Mass Transportation Administration, <u>Transit Security : A Description of Problems and Countermeasures</u> (National Technical Information Service, Washington, DC, 1984); Eileen O. Hargadine, <u>Documentation and Assessment of Transit Security Data Reporting and its Utilization</u> (Washington, DC: U.S. Department of Transportation, 1985); Urban Mass Transportation Administration, <u>Case Studies of Transit Security on Bus Systems</u> (Springfield, VA: National Technical Information Service, 1983); Ronald Clarke et al, "Subway Slugs: Tracking Displacement on the London Underground," <u>British Journal of Criminology</u>. Vol. 34. No. 2, (Spring 1994), pp. 122-138.

6. George L. Kelling and William J. Bratton, "Transit Police and Their Communities," <u>Transit Policing</u>. Vol. 1, No. 1 (Fall 1991), p. 1+.

3. FOUR STRATEGIES FOR SECURITY

In the transit environment, four basic strategies are utilized to provide overall security:

- **Personnel Deployment.**
- **System Design and Technology.**
- **Data Collection.**
- **Operating Practices.**

Using this classification of transit security strategies enables an organized discussion of the components constituting any security program. Most transit agencies find that some combination of the above strategies, tailored according to local contingencies, provides the most effective way to combat transit crime. This section of the report presents a general discussion of each of these strategies and describes how the agencies participating in the study utilize them.

3.1 PERSONNEL DEPLOYMENT

Transit agencies deploy uniformed police, uniformed non-sworn security officers, or undercover police. Deployment of uniformed and undercover personnel in the transit environment is essential for:

- Preventing criminal incidents on the system.
- Responding effectively to incidents.
- Reducing patron fear.

Police officers and security personnel are deployed either at fixed posts or on patrols. When stationed at fixed posts, police/security personnel monitor activity in a given area, handle access control, supervise inventories and revenue collection, and provide public information. When on patrol, officers provide security throughout a given geographical area by responding to calls for service, performing undercover surveillance, providing a uniformed presence to deter crime, and conducting special operations targeting specific types of criminal incidents.

Traditionally, municipal police patrol operations were structured around responding to calls for service. Time not spent on service demands was then consumed by random patrol in a given zone, sector, or beat. Random patrol was originally intended to deter crime by providing a visible police presence at unpredictable levels.[1]

Over the past decade, officers on random patrol have been building solid relationships with the communities they serve, identifying and enforcing community standards and obtaining information from citizens about the occurrences of local crimes. This type of patrol, often termed **community-oriented policing,** is particularly important in the transit environment.

Transit agencies must attract riders to maintain service. A secure and well-patrolled system effectively solves patron problems, prevents crime (rather than responds only after incidents have occurred), and maintains order. Such an emphasis on patron security provides an excellent advertisement for an agency's commitment to passenger satisfaction. Though considerable interest in community-oriented patrol techniques exists, significant debate over the effectiveness of this type of uniformed foot patrol and its appropriate role in providing security in the transit environment remains.[2]

Over the past 20 years, municipal police departments have experimented with foot patrol, producing widely contradictory results. Perhaps the most widely known study, The Kansas City Foot Patrol Experiment, reported no observable differences in the level of crime in areas of high, regular, and low patrol intensity. Similar conclusions were reached in patrol projects conducted in the Nashville, Tennessee and Albuquerque, New Mexico Police Departments.[3]

Conversely, some departments experienced a reduction in reported crime when they increased foot patrols. During the Wilmington, Delaware, Split-Force Experiment, patrol officers were assigned to either a basic (call for service) or a structured (random patrol) platoon. The number of reported crimes decreased, and the number of arrests increased.[4]

The Newark Foot Patrol Study, a five year evaluation of the effectiveness of foot patrol in New Jersey, determined that while crime rates were not reduced foot patrol had many unanticipated benefits. Residents of foot-patrolled neighborhoods felt more secure and had a more favorable opinion of the police than residents of other neighborhoods. The police officers who participated in the project had higher morale, greater job satisfaction, and a more favorable attitude toward citizens in their neighborhoods than did officers assigned to patrol cars.[5]

In transit policing, there has always been resistance to the use of uniformed officers on patrols. An important component of this resistance is rooted in tradition. With the exception of the New York and Boston Transit Police, most systems providing police/security forces through the 1960s were modeled after the railroads, whose police patrolled in plainclothes and touted an apprehension-oriented philosophy of policing.[6]

However, with the construction of major new transportation systems in Washington, D.C., San Francisco, and Atlanta during the 1970s, uniformed policing was reintroduced as a viable means of patrolling the transit environment. These agencies, heavily influenced by the experiences of the municipal police departments in the areas they were to serve, designed transit police organizations centered on uniformed operations and supplemented by undercover units to perform surveillance functions, follow-up investigations, and apprehension activities. Transit police for the Washington Metropolitan Area Transit Authority (WMATA), the Bay Area Rapid Transit District (BART), and the Metropolitan Atlanta Rapid Transit Authority (MARTA) incorporated "lessons learned" from municipal police during the 1970s into transit policing. This focus on uniformed patrol, community interaction, and problem solving has had an enormous impact on the subsequent development of the transit policing profession.

In transit policing, community-oriented foot patrol, with its potential for reducing patron fear, has become an important part of overall security efforts. Perhaps no other type of policing relies more on officer interface with the public than transit policing. However, foot patrol is expensive and, while no comprehensive analysis has been performed, it is generally considered not as effective at reducing crime as undercover policing. Therefore, in order to manage patrol resources more effectively, many transit agencies have initiated programs to curb the expense of random uniform foot patrol by *directing* patrol activities according to crime data analysis.

Directed patrol assignments address identified problems in the officers' beats, and officer effectiveness can be measured through specified goals established in advance of deployment. In this way, officers on patrol perform pre-planned, crime-and location-specific activities to reduce criminal activity (e.g., graffiti, vandalism, pickpocketing, public disorder, and activities which enhance positive patron perceptions of the system). By implementing directed patrol

tactics throughout the transit industry, uniformed officers are now typically able to engage in meaningful interactions with the riding public.[7]

Many transit agencies also deploy uniformed personnel to implement a **zero tolerance** policy. This policy prevents even the most minor offenses on the system, such as eating, drinking, loud music, and disorderly behavior. When uniformed officers aggressively cite perpetrators of minor offenses, an environment intolerant of crime is created. This environment conveys to would-be perpetrators of serious crimes that they are likely to be apprehended and that the consequences of their actions will be grave. This approach also improves patron perceptions, creating a comfortable and inviting environment in which system users are orderly and peaceful.

To enforce zero tolerance policies on rail systems, transit agencies deploy random or directed uniformed patrols in teams or individually to cover a zone, sector, or beat comprising several stations. These officers observe the stations, ride trains between stations, and work closely with transit operations personnel and patrons to identify any unlawful activity that may be occurring on the system. Throughout their tours, uniformed officers converse with the riding public, provide assistance, and demonstrate both their presence and their availability to assist. Uniformed officers are also assigned to fixed posts to monitor access control, to identify fare evaders or others in violation of system policies, and to interact with the riding public, answering questions and solving patron problems.

Canine patrol is also used to maintain a zero tolerance policy. A uniformed officer and a trained police dog walk platforms, meet trains, and patrol parking lots to provide high public visibility. Finally, school education programs, associations with health and human service agencies, and participation in community activities by uniformed officers reinforce agency connections to the community and encourage community appreciation for the agency's zero tolerance policy.

Zero tolerance policies are more difficult to enforce on bus systems, primarily because of the number of buses in service. However, bus operators, if well-trained to enforce agency policies, can mitigate conflicts, and manage problems, and can help to ensure that patrons understand and comply with system policies. Transit agencies deploy random or directed uniformed patrols on bus systems to reinforce the importance of compliance with system policies. Uniformed patrols monitor transit centers and bus depots, board buses, and trail buses in marked vehicles.

Undercover operations also play an important role in zero tolerance policies. Undercover police officers are deployed in two ways:

- Random or Directed Patrol

  Undercover officers ride transit vehicles; monitor rail stations and bus stops/shelters; and engage in joint-task activities with municipal police to apprehend, cite, or arrest system perpetrators.

- Special Operations

  Undercover officers conduct stakeouts or decoy activities to remove serious offenders from the system.

Generally, uniformed patrols are utilized to improve patron perceptions and to deter serious criminal activity, while undercover operations are used to combat the actual occurrences of crime on the system.[8]   However, when well-publicized, undercover operations can be an

effective deterrent, as potential offenders are unsure whether officers are present. A series of arrests, well-covered in the media and advertised by the transit agency, can be used to create the impression of a large, omnipresent force of undercover officers.

3.1.1 APPROACHES TO DEPLOYMENT

Deployment planning, with its inherent mission to maximize the agency return on its personnel investment, is complex and encompasses a number of interrelated processes including the following:

- Work scheduling.
- Assessing the trade-offs between directed, random and undercover patrol.
- Establishing the number of fixed posts required to secure a given location.
- Identifying alternative responses to calls for service.

Deployment decisions require executives and planners to make complex judgments in prioritizing goals and attempting to meet multiple objectives.

The following four categories describe the most prominent methods for deploying police and security personnel in the transit environment. As illustrated in Table 3-1, each of these methods can be used by either uniformed or undercover police officers.

- **Response to Calls for Service**

  This method provides for the immediate response to calls for incidents in progress received by phone, radio, or alarm system. Response to calls for service also involves different strategies for prioritizing calls and referring callers to the correct social service organizations and crisis centers. Response is usually provided by uniformed officers and police dispatchers.

  Primary Functions of Response Method:

  - Cope with legal requirements of crime.
  - Use legal system to prosecute criminals.
  - Build cases and maintain evidence.
  - Restore order after an incident has occurred.

- **Random Patrol**

  Uniformed or undercover officers engaged in this type of activity patrol assigned areas in a random or unscheduled manner. This type of patrol relies heavily on individual officer discretion and initiative. Used by many transit systems employing off-duty police officers, this type of patrol offers considerable management flexibility.

  Primary Function of Uniformed Random Patrol Method:

  - Maintain order.
  - Patron/employee perception.
  - Deter crime.

TABLE 3-1: PATROL ACTIVITIES

Patrol Method	Uniformed	Undercover
Response to Calls for Service	• Respond to radio calls. • Conduct follow-up investigations. • Provide patron and employee assistance. • Manage after-effects of incidents (vandalism, etc.).	• Provide back-up support for serious incidents. • Not commonly used for general response activities.
Random Patrol	• Tail buses in marked cars. • Conduct vehicle boardings at bus stops/transfer centers. • Ride buses/rail vehicles. • Patrol bus terminals/rail stations and commuter parking lots. • Provide community outreach.	• Ride bus/rail vehicles. • Wait at bus/rail stops. • Monitor public restrooms/public space areas.
Directed Patrol	• Same as random patrol, except activities are directed only at problem areas (based on crime data analysis, operator experience, and passenger reports).	• Same as random patrol, except activities are directed only at problem areas (based on crime data analysis, operator experience, and passenger reports).
Apprehension-Oriented Patrol	• Conduct saturation activities, such as sweeps, designed to cite or arrest as many perpetrators as possible. • Provide back-up support for undercover officers.	• Conduct surveillance activities. • Manage undercover operations. • Make arrests. • Provide follow-up investigations

Primary Function for Undercover Random Patrol Method:

- Apprehend, cite, or arrest offenders after crime is committed.
- Deter crime.

• **Directed Patrol**

This type of patrol assigns both undercover and uniformed officers to those routes or areas where incidents are likely to occur (based on crime analysis). Officers are briefed on the types of incidents that occur, and if possible, names and physical characteristics of perpetrators. Directed patrol allows maximum resources to be focused on problem routes and areas. This patrol method is the primary one used by transit police departments.

Primary Function of Uniformed Directed Patrol Method:

- Maintain order.
- Patron/employee perception.
- Deter crime.

Primary Function of Undercover Directed Patrol Method:

- Apprehend, cite, or arrest offenders after crime is committed.
- Deter crime.

• **Apprehension-Oriented Patrol**

This patrol method is used when a crime pattern is so well established that the chance of interrupting an incident in progress is predictable, or when an offender is identified and certainty of capture exists.

Primary Function of Apprehension-Oriented Patrol Method:

- Reduce criminal occurrences by arresting perpetrators.

3.1.2 DEPLOYMENT PRACTICES AT THE PARTICIPATING TRANSIT AGENCIES

The nine agencies participating in on-site assessments for this project deploy police and security officers in a variety of ways. Table 3-2 presents the most common methods of deployment currently used by both uniformed and undercover personnel. These methods are listed in order of frequency of use based on agency assessments of their relative effectiveness.

Table 3-2 demonstrates that, while the participating agencies utilize fixed post and traditional response deployment to meet patron needs, newer tactics, such as directed and random uniformed patrols, are being embraced both to deter crime from occurring and to improve patron perceptions of security. The seven agencies in the project with transit police or security departments devote 60 to 70 percent of their personnel to uniformed deployment, with the remaining resources supporting undercover operations and administrative activities. This distribution of personnel represents a transformation in an industry historically devoted to undercover patrol.

TABLE 3-2: UNIFORMED AND UNDERCOVER DEPLOYMENT TACTICS RANKED ACCORDING TO USE AND EFFECTIVENESS

	Uniformed Deployment Tactics	Undercover Deployment Tactic
most often used	**Fixed Post** - Stationing officers at one area or station.	**Directed Riding Patrol** - Officers ride high-crime routes.
	Traditional Response - Stationing officers at decentralized locations to respond quickly and effectively to calls for service.	**Random Riding Patrol** - Officers ride random trains/buses to cite, apprehend, or arrest offenders.
	Random/Directed Riding Patrol - Officers assigned to ride specific rail line or bus route to deter crime (based on crime data analysis).	**Camera Surveillance** - Officers utilize camera surveillance to identify criminal activity and perpetrators.
	Directed Patrol of Stations/Bus Boardings - Officers assigned to patrol specific rail stations or to conduct bus boardings (based on crime data analysis).	**Graffiti/Vandalism Abatement Teams** - Officers assigned to special teams to perform covert surveillance, identify perpetrators, and cite or arrest offenders.
	Random Patrol of Stations/Bus Boardings - Officers assigned to patrol stations or to randomly board buses within a given sector.	**Station/Bus Stop Patrol** - Officers walk through rail stations/bus terminals to observe behavior and apprehend, cite, or arrest offenders.
	Vehicle Patrol - Marked police/security cars follow buses on high crime routes.	**School Patrol** - Officers patrol bus stops/routes taken to and from school by juvenilles.
	Saturation Patrol - Large numbers of officers deployed in a given area to maximize visibility.	**Special Issue Patrol** - Officers assigned to special units to address specific incidents (e.g., narcotics offenses, rock throwing, fare evasion, and pickpocketing).
	Canine Patrol - Police-dog teams utilized to meet passenger trains, patrol rail stations, and provide crowd control.	**Stakeouts** - Officers perform covert surveillance of a specified location to identify criminal activity and perpetrators.
least often used	**Community Outreach/School Education** - Officers work with students and others to explain system policies, build trust, and gain information to support crime-fighting activities.	**Decoys** - Officers pose as potential victims to attract offenders, and arrest and remove them from the system.
	Bicycle Patrol - Officers utilize bicycles to patrol parking lots, transfer centers, pedestrian malls, and to respond to criminal incidents.	**Internal Fraud Operations** - Undercover officers monitor activity in revenue collection areas, inventory control, and maintenance.

The following characteristics guide the deployment of uniformed and undercover officers at the seven agencies in the project with transit police or security departments:

- Focusing on directed patrol activities to match staffing levels to projected workload.
- Providing overlapping shifts for extra coverage during peak hours.
- Maintaining sufficient patrol units to provide an immediate mobile response to emergency calls for service.
- Planning directed patrol assignments in response to problems identified through crime analysis.
- Increasing use of data processing for analysis.
- Generating routine monitoring reports for management.

3.2 SYSTEM DESIGN AND TECHNOLOGY: CRIME P12 THROUGH ENVIRONMENTAL DESIGN (OPTED)

Crime prevention and control, especially in the transit environment, begin with facility and vehicle design. This involves creating and maintaining an environment which will not tolerate criminal activity. This environment is designed and preserved by transit professionals including engineers, architects, planners, managers, operators, and maintenance personnel. Extensive research demonstrates the connection between the environment and criminal activity. Broken Windows the landmark article published by James Q. Wilson and George Kelling in the early 1980s, provides an insightful discussion of the ways in which a poorly designed and maintained facility affects the opportunities available to criminals, the attitudes of the users of the facility, and the ability of society to act effectively to reduce crime.[9]

All of the agencies participating in this project utilize the Crime Prevention Through Environmental Design (CPTED) approach to the crime problem. This approach reduces the number of criminal incidents occurring on the system by minimizing both the opportunity to commit crime and the motivation of the criminal to do so. By manipulating the physical environment to produce effects which deter criminal behavior, transit agencies improve the quality of life on their systems by reducing both the fear and incidence of crime. CPTED seeks to prevent certain specified crimes within a well-defined area by manipulating environmental variables based on an assumed relationship between a station, vehicle, or building and its user. To be effective, CPTED requires close cooperation among all levels of transit personnel.

CPTED theory maintains that crime can be reduced by:

- Minimizing the number of available targets.
- Creating an environment which increases a criminal's perceived risk in attacking a particular target.[10]

Thus, CPTED advocates designing a physical space based on the needs of legitimate users of the space, the normal and expected use of the space, and the predictable behavior of both legitimate users and criminals. A successful CPTED design meets the following four objectives:

- Recognize the designated use of a space.
- Define the crime problems likely to occur within the designated space.
- Identify countermeasures to prevent the types of crimes likely to occur in a given space.
- Incorporate crime prevention strategies to enhance the effective use of space.[11]

To meet these objectives, CPTED design is based on the results of a threat and vulnerability analysis. This technique identifies system threats and vulnerabilities and develops countermeasures to eliminate or control them during all life cycle phases of the system. This analysis is performed to identify the following:

- Physical areas susceptible to criminal activity.
- System policies which may encourage criminal activity.
- Steps taken to improve system design.
- Steps taken to improve system management.

CPTED advocates four general approaches to designing countermeasures. These approaches enable the transit agency to implement effective crime prevention strategies using physical hardware, building design, personnel, procedures, and supplemental electronic equipment. These four approaches are:

- **Movement Control**

    Criminals often select targets that are familiar and offer several escape routes. Barriers, whether perceived or genuine, inform criminals that a space is restricted and access will be detected or denied, increasing the chances of arrest.

    Occasionally, movement control strategies conflict with fire safety codes and the general goals of the Americans with Disabilities Act. Barriers also oppose aesthetic principals supporting open space and easy access to public facilities. However, systems ignoring the basic principles of movement control suffer the consequences of higher crime rates and patron fear levels. Addressing movement control concerns early in the design process enables compromise, planning, and increased control over the physical environment during all phases of the system life cycle.[12]

- **Surveillance**

    The objective of surveillance is to place a potential criminal under the threat of being observed, increasing his chances of arrest. Observation may be by mechanical means (e.g., cameras, alarm systems), police/security patrols, use of authorized personnel only in certain restricted areas, or facility design which provides high visibility and offers no place to hide, wait, or commit a crime without observation. Evolving technologies and police procedures make surveillance a particularly interesting approach in designing countermeasures.[13]

- **Space Utilization**

    This process uses system patrons and the general public to create an environment which does not support criminal activity. Space utilization often involves creating mixed-space facilities such as allowing a hotdog stand in an otherwise deserted area of a commuter parking lot. This type of activity reduces the opportunity for a crime to be committed in that area. Space utilization techniques may also involve the design of kiosks and public information booths to create the perception that a close connection exists between patrons and the transit system.[14]

- **Management Activity**

     This approach encourages patrons and employees to enact positive attitudes about their environment. Through its policies and procedures, transit management sets vital cues concerning a system's tolerance for criminal activity. Strict procedures for revenue collection, employee training, drug and alcohol testing, and maintenance standards ensure that system personnel understand their contribution to the security function thus discouraging employee attempts to defraud the system.[15]

3.3   DATA COLLECTION

Crime reduction also involves collecting and analyzing information concerning the types of crimes occurring on the transit system. A strong data collection process enables the transit system to use resources effectively by targeting high crime areas, identifying trends in crime, and designing and testing countermeasures. While this type of analysis is somewhat technical in nature, it can be performed by police, security, dispatch, management, operations, and maintenance personnel. This analysis can also improve relations with municipal police, encouraging more efficient working relationships and more rapid response to criminal activity.

Before the 1970s, transit police/security methods, like those of any emerging profession, were based on tradition and the assessments of senior personnel. More recently, progressive transit police/security professionals have been using past research, including detailed crime data analysis and field studies, to test new ideas and reevaluate old ones. To encourage this trend, the Federal Transit Administration (FTA) has modified the National Transit Database compiled through the Section 15 Program to include transit crime statistics. This change in reporting requires all transit systems receiving Section 9 funds (operating grants) to report to the FTA on an annual basis the occurrence of Part I and Part II crimes classified according to the FBI's UCR system. Part I crimes include the following eight categories: homicide, rape, robbery, aggravated assault, burglary, larceny/theft, motor vehicle theft, and arson. Part II crimes cover 20 violations generally enforced by state and local jurisdictions and considered less serious that Part I crimes (e.g., simple assaults, vandalism, drunkenness, disorderly conduct).

3.3.1   THE UCR PROGRAM AND TRANSIT CRIME DATA COLLECTION

The data collected by the UCR program and its method of presentation imply a certain level of similarity across the law enforcement agencies it describes. Transit agencies, with their unique concerns and special emphasis on quality-of-life crimes, do not fit neatly into UCR categorizations. This section describes the three limiting characteristics of the UCR program with respect to transit organizations.

- The UCR program is victim-oriented, rather than location-oriented.

     UCR data collection emphasizes crime victims rather than the locations where crimes occur. Crime data is not recorded as having occurred on a transit system (on a specific bus route or rail line or in a specific facility or stop), but is folded into municipal crime statistics identifying only the number of victims within a given jurisdiction, the types of crimes perpetrated, and the number of arrests.

     Other valuable information, including the time of the incident, the underlying conditions surrounding the incident, and the impact of the incident on transit service, is not included

on the UCR compilation, though transit agencies collect this information to varying degrees. Consequently, the UCR program, while providing an important indication of the level and types of crime in a local police jurisdiction, does not identify transit crime separately, nor does it aid transit police and security personnel in targeting segments of their systems that are particularly vulnerable to crime.

● The UCR program emphasizes Part I incidents over Part II incidents.

According to the UCR program, law enforcement agencies are only required to submit the number of arrests for Part II crimes, not the number of reported incidents. This practice ensures that clearance rates for Part II crimes cannot be calculated, and that police agencies must judge their success or failure based on their management of Part I crimes. The media also emphasizes "the murder rate" and "the rate of violent crime," and rewards police agencies experiencing a lowering of these rates with favorable publicity. The attention devoted to Part I crimes has reduced the perceived importance of order maintenance concerns among local law enforcement agencies.

For the agencies participating in this study, Part II crimes play a critical role for the following reasons:

- Crimes such as fare evasion, loitering/vagrancy, and drunken/disorderly behavior disrupt the system on a daily basis, inhibiting the transit agency's ability to provide service efficiently and cost-effectively.
- The repeated occurrence of Part II crimes impacts passenger perceptions and, eventually, passenger willingness to ride and fund public transportation.

While transit police and security must mobilize to manage Part I crimes, it is the Part II crimes which determine the quality of life on the system, and that play a vital role in the long-term financial stability of the agency. Also, while the research remains tentative, there is considerable evidence linking the occurrences of Part II crimes to Part I crimes in the transit environment. It is not uncommon for a transit police officer to arrest a perpetrator for a minor offense, only to find that he has a more serious record of criminal activity on the system. Combatting the occurrence of Part II crimes is the primary mission of most transit police and security organizations. In this mission, the UCR program offers only limited support.

● Transit organizations are not clearly represented in the UCR agency profile.

UCR reporting does not allow for the variation among transit systems and environments, and therefore, does not offer the best means of performance comparison. When counting law enforcement personnel, the UCR program often combines transit and municipal police. In addition, the UCR program provides no information concerning the varying responsibilities of transit police or security personnel. For example, transit police at some agencies patrol parking lots, while at other agencies they do not. When parking lots are not patrolled, both elevated crime statistics for the agency (motor vehicle thefts) as well as the personnel profile submitted to the UCR program (increased staffing to fulfill this responsibility) result. Thus, because of the varying responsibilities of transit agency security personnel comparing performance using UCR data alone is difficult.

3.3.2 DATA COLLECTION: GOALS AND REQUIRED DATA

A properly designed and maintained data collection process serves as a valuable tool in countering transit crime. Such a process reveals the vulnerabilities of the system to different types of crime, and assists those responsible for providing security in limiting these vulnerabilities. Collected information can be used to:

- Prioritize problems.
- Design strategies to solve problems.
- Assess the effectiveness of problem solving strategies.
- Communicate information with municipal police agencies.[16]

Lack of complete or accurate information can frustrate each of these efforts and can inhibit the overall security operation.

Choices regarding data content, collection, storage, and format dictate the utility of the data collection effort. The types of data stored within transit police and security information systems determine to some degree which issues capture the attention of the transit agency. The arrangement of data within files largely determines the types of analysis that can be performed and the utility of the data for deployment decision-making, case clearance, and the design of effective countermeasures. The content and form of information released to the public helps to determine the framework within which the department is held accountable to the community, and plays a significant role in determining public expectations.

While variability exists among the systems participating in this project, the goals for transit crime data collection can be grouped into the following five categories:

- Provide legal evidence supporting the arrest and conviction of perpetrators.
- Assist in decision-making for deployment of transit police and security agency manpower.
- Organize information to improve and test the effectiveness of crime countermeasures.
- Present crime information to strengthen the position of the transit police or security agency within the transit system.
- Influence patron perceptions of system security.[17]

In order to meet these goals, the transit agency including police and security personnel, must identify: number and type; location and time; and information on underlying conditions of incidents occurring on the system. The following information improves the crime analysis process, but is not essential to a basic information system:

- Impact of the incident on transit service.
- Information concerning previous "quality-of-life" violations committed by the criminal of a serious offense.
- Attention/treatment of the patrons involved in the incident (victims and witnesses).

Given the varying police powers of the organizations participating in this study, not every transit agency could collect this information. Limited access to crime data is a special problem for those transit agencies relying exclusively on municipal police for security and for those non-sworn security agencies providing security in partnership with municipal police.

Three valuable information sources from which the participating agencies collect crime data are:

- Dispatch Logs.
- Operator Reports.
- Incident Report Forms.

While no one of these sources presents a complete picture by itself, in combination they enable an accurate assessment of the crime occurring on the system, as well as valuable information to improve both the deployment of police/security personnel and the design of crime security countermeasures.

3.3.3   DISPATCH LOGS

The amount of information recorded in a transit agency's dispatch log varies from system to system. In most cases, effective monitoring of the dispatch log enables transit systems relying on municipal police to gain an accurate assessment of serious incident occurrences on the system. The dispatch log is even more important for transit police and security departments, as operations and record-keeping efforts are organized around the agency's dispatch system.

While the majority of transit dispatchers possess no police training, they routinely record the following information:

- Day, date, and time of operator call for assistance.
- Reason for operator call.
- If police notification was required due to operator's call.
- Total system delay time resulting from problem.

For transit systems passing through several police jurisdictions, the dispatch log also provides a record of the transit agency's interaction with these municipal police agencies. This information summarized in weekly or monthly reports assists in understanding security problems.

The dispatch log is not a comprehensive source of transit crime information. While it identifies incidents, the dispatch log has the following limitations:

- Offers no description of the incident or of the underlying circumstances contributing to the incident.
- Does not identify quality-of-life issues that may discourage ridership.
- Does not provide data in sufficient detail to design countermeasures or to test countermeasure effectiveness.

3.3.4   OPERATOR REPORTS

Since bus or rail operators are often the only representatives of the transit agency present when a security incident occurs, they can provide considerable information concerning the offense experienced by the system. Transit agencies collect security information from operators in a variety of ways. Some systems use informal means to discuss crime, such as weekly or monthly meetings, newsletters, union coordinators and support services, or joint-committees within the transit agency. Other systems document incidents witnessed or experienced by operators by requiring operators to file formal reports. Some agencies also establish incentive programs encouraging operators to testify in court against perpetrators.

Operator reports are especially valuable for transit agencies relying on municipal police to provide security and possessing only limited data regarding system incidents. Many systems currently use a brief, one-page form documenting:

- Operator information (name, badge number, route, run, bus number).
- Description of the incident (date, time, location, incident type, and operator actions).
- Whether or not a dispatcher was notified.

While collecting this information does not provide a comprehensive assessment of incidents, it does allow the transit agency to target problem routes and riders. It also empowers the operator to feel that he/she is actively involved in combatting crime.

When cross-referenced with dispatch logs, operator reports offer municipal police insights into crime on the system. This additional information may improve the relationship between the transit agency and the municipal police. Familiarity with operators may encourage local police to place a higher priority on transit incidents.

For those systems with transit police or security departments, filing operator reports offers an opportunity for a responsive and productive working relationship between operators and the police/security department. These reports also provide valuable information to supplement police reports, assist in resource allocation decision-making, and aid in investigations.

3.3.5   INCIDENT REPORT FORMS

In addition to dispatch logs and operator reports, information is collected in police/security incident report forms. The incident report form may provide crime analysts with sufficient information to:

- Group similar incidents together for monitoring and analysis.
- Improve deployment efficiency.
- Design effective countermeasures.

By involving crime analysts in the incident report form design, it can be used to provide maximum benefit. Incident report forms generally have two sections. The first section provides general information coded for easy entry into an information management system allowing for quick classification of an incident. The second section contains detailed documentation of the incident.

While the incident documentation may provide more complete information relative to a specific crime, the information included in the first section, because of its format, is more valuable to the crime analyst in constructing a complete profile of crime on the system. Thus, to facilitate analysis, an effective form includes as much information as feasible in the first section.

Incident report form changes are most readily conducted by transit police and security agencies currently completing and monitoring incident reports. Most transit police and security agencies require detailed information about an incident including:

- Time and place of occurrence (day, date, and time).
- Exact location (i.e., bus route and run/ rail line and run).
- Name of operator.
- Vehicle number.

These agencies also use a variety of classification schemes to define an incident allowing for easier grouping and analysis of incidents for monthly reports. Some agencies collect additional information to facilitate resource allocation and the design and analysis of appropriate security countermeasures. Other information which assists the crime analyst in targeting conditions contributing to the incident include:

- Victim actions prior to the incident.
- Suspicious actions committed by the perpetrator before the reported incident (e.g., fare evasion, public drunkenness, stake-out of facility, loitering).
- Environmental conditions that may have contributed to the incident (e.g., burned-out light bulb, broken lock).
- Apparent target of the perpetrator (if applicable).

Transit police and security agencies can also include in the form a series of measurements on the impact of the incident on the system (e.g., service delay, vehicle pulled from service, employee injury). These measurements assist transit police and security agencies in quantifying the value of their service and the extent of the operational problems caused by crime on the system. Finally, the form can document information concerning the involvement and treatment of system patrons, victims and witnesses. This type of information assists the system in handling affected patrons in a manner which minimizes negative impressions of the system.

The standard incident report form, with the cooperation of the agency's crime analyst, can incorporate additional information in a format easily coded into the agency's information system. While some transit police and security agencies may resist including this much information in the first part of the incident report form, concerned about both the amount of time required to complete the form and the redundancy (since much of this information is included in the second part of the form - incident documentation), the value of this information, already coded for entry into the information system, outweighs the drawbacks.

For transit agencies relying on municipal police, meetings with municipal crime analysts and officials may result in alterations to the municipal incident report form. Some transit agencies working with local police have modified incident report forms to include exact locations, times, and in some cases, information concerning environmental conditions where the incident occurred. Transit agencies may also work with municipal police to demonstrate the importance of an accurate record of transit crime. This may include establishing monthly or quarterly meetings to discuss data collection and analysis issues.

Section 4 of this report provides a detailed discussion of how crime data collection and analysis strategies can be used in the transit environment to deter specific crimes and to promote effective response to criminal incidents.

3.4   OPERATING PRACTICES

By limiting, controlling, and managing a transit agency's operating environment a number of options for reducing incidents of criminal occurrences and for improving patron perceptions of security exist. While the security function is administered by transit police or security personnel, transit operations personnel also make valuable contributions. Transit personnel at the transit agencies participating this project support the security function in four essential ways:

- Route Design and Scheduling.
- Maintenance.

- System Policies and Training.
- Joint-Information Activities.

3.4.1 ROUTE DESIGN AND SCHEDULING

Impending budget cuts and Americans with Disabilities Act requirements are encouraging transit agencies to evaluate route and service schedules. Transit personnel at the agencies participating in this project are investigating ways to:

- Limit night-time service on high-crime routes.
- Reduce headway between vehicles on routes with high incidents of criminal occurrences.
- Relocate bus stops and shelters to more attractive locations.
- Close shelters during off-hours.

Also, transit police and security personnel, recognizing the importance of on-time performance, are working with transit operations personnel to determine ways to assist agencies in meeting performance objectives. The participating agencies, also aware of possible revenue sources if services are expanded to universities and hospitals, are addressing the security concerns of this type of expanded service.

To enhance system security, police and security officers recommend the following route design and schedule modifications:

- Relocate bus shelters/stops from street corners near convenience stores, bars, and abandoned buildings to more attractive locations on the same block.
- Implement cooperative programs with utility companies to fund bus shelter lighting.
- Utilize private advertising companies to manage/maintain bus shelters.
- Limit late night service on routes connecting juveniles to malls and other recreational areas.
- Decrease number of cars on trains operating during off-peak hours.
- Install temporary barriers to define passenger off-hour waiting areas at rail stations/bus transfer centers.
- Block and secure parking lots not in use during off-peak service.
- Improve traffic enforcement against illegal parking in bus zones and illegal jitney service.
- Reduce headway between vehicles on high-crime bus routes during off-peak hours.

3.4.2 MAINTENANCE

Police and security personnel at the participating agencies recommend close coordination with maintenance personnel both to create and maintain an inviting atmosphere and to alleviate passenger discomfort in the mass transit environment. Most of the agencies utilize police or security personnel to monitor the condition of agency facilities and equipment. Broken windows, graffiti, vandalism, burned-out light bulbs, and safety hazards are reported to maintenance personnel immediately. At some agencies, police or security officers are stationed near a temporarily darkened area or other safety hazard to protect patrons.

Police and security personnel also noted the importance of a well-maintained system to effectively implement a zero tolerance policy. They emphasized the following policing/maintenance activities:

- Aggressive citing for eating, drinking, and littering on the system.
- Installing adequate trash cans and recycling bins for newspapers.
- Utilizing fluorescent and halogen lighting wherever possible.
- Landscaping which prevents sleeping/hiding, and does not block line-of-sight.
- Immediate notification of graffiti on system property (clean-up within 24 hours).
- Immediate notification of vandalism (clean-up within 24 hours).
- Daily cleaning of rail stations/bus terminals.
- Bi-weekly cleaning of rail cars and buses (daily walk-through).
- High maintenance of restrooms and other public amenities.
- Aggressive sign campaign concerning system policies on littering.

3.4.3   SYSTEM POLICIES AND TRAINING

In order to support the security function, transit personnel must be trained to utilize operating policies which protect system passengers and property. The participating agencies identified the following important policy areas:

- **Conflict Management**

  Transit personnel, particularly bus operators, experience contact with angry and disruptive passengers on a daily basis. These personnel must be trained to:

  - Diffuse potentially violent situations.
  - Enforce system policies on fare evasion.
  - Call for police assistance without creating further problems.

  Emergency alarms, frequently triggered by accident or to divert dispatcher attention during peak-hour rush, must be reserved only for legitimate emergencies. At most of the participating agencies, transit or local police provide training on crucial aspects of transit operations. Insurance companies also offer training programs.

- **Passenger Codes of Behavior**

  Transit police and security personnel unanimously stated that the agency's code of behavior was one of the most important tools available in the on-going struggle to preserve order on the system. An effective agency code:

  - Incorporates input from police and security personnel.
  - Incorporates applicable local laws and codes.
  - Is prominently displayed throughout the system.

  High-profile signs provide valuable reference for bus operators, transit police, and security personnel during discussions with offenders. Well-advertised codes also demonstrate a commitment to orderly service. Such a commitment attracts system riders and creates an inviting environment for mass transit use.

Several of the participating agencies through negotiations with local legislative bodies have obtained special offense citations for littering, loud music, and disorderly conduct on transit property. Ticketing revenues for these offenses are generally redeemed by the locality, although, in a few cases, the transit agencies acquire a percentage of the revenue.

- **Emergency Procedures**

  Developing emergency procedures and training transit personnel to handle emergencies are central to providing effective response to problematic incidents. Transit police and security personnel should be included in:

  - Drafting emergency procedures.
  - Providing and receiving training.
  - "Transit" training of local police, fire departments and emergency medical service agencies.

  Emergency response plans require a high degree of coordination, especially for agencies with transit police who control incidents occurring on agency property. Transit dispatchers also require special training for coordinating communications between police, fire, and medical service personnel. Conducting drills and emergency simulations are essential to ensure that training effectively prepares agency personnel for emergency situations.

3.4.4   *JOINT-INFORMATION ACTIVITIES*

Important security information is captured in a variety of places in the transit environment. As previously discussed in Section 3.3, dispatch logs, operator reports and incident report forms are valuable data collection tools. In addition "unusual occurrences reports," Road Supervisor Incident Report Forms, and customer complaints also provide valuable insights into the types of incidents occurring on the system. Transit police and security professionals require access to this information.

Transit dispatchers and transit operations personnel require special training to interpret, communicate, and record information on security incidents. In order to promote security data collection and documentation at transit properties, the participating agencies utilized the following procedures:

- Dispatcher and operator training for reporting and documenting security incidents.
- Shared facilities for transit police/security dispatchers and transit operations dispatchers (transit police dispatchers require access to a secured line).
- Financial incentives to encourage completion of operator incident reports.
- Transit police/security access to customer complaint logs.

Section 3: Endnotes

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3. National Institute of Justice, pp. 1-8; The Newark Foot Patrol Experiment (Washington, DC: Police Foundation, 1981); Anthony Pate et al, Reducing Fear of Crime in Houston and Newark: A Summary Report (Washington, DC: The Police Foundation, 1986).

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13.   Ibid, pp. 1-47.

14.   Ibid,pp.1-47.

15.   Ibid. pp. 1-47.

16.   Ned Levine and Martin Wachs, <u>Factors Affecting the Incidence of Bus Crime in Los</u>
       Angeles (Washington, DC: Department of Transportation, 1985), pp. 64-87.

17.   Ibid. PP. 64-87.

4. TRANSIT AGENCY STUDY

As described in Section 1, the nine-agency study conducted for this project was designed to provide current data on the transit security activities and issues discussed in Section 2 and on the implementation of the strategies discussed in Section 3 for addressing those security problems. The agencies were selected with the intent of providing a representative cross section of data in terms of geographic region, service mode, police/security staffing type, and system size and service area. The study was conducted in four phases, which are listed and described in Table 4-1.

Section 4.1 describes the nine agencies that were surveyed. Section 4.2 presents the approach used; it included visits to the agencies to collect data on their experiences and perceptions, and use of a questionnaire to rank 28 transit security issues. Section 4.3 presents the survey results. Security practices used by the participating agencies for each crime or crime-related issue studied are discussed in terms of the four basic strategies identified in Section 3: personnel deployment, system design and technology, data collection, and operating practices.

4.1   AGENCY DESCRIPTIONS

A discussion of the criteria for selecting the participating agencies appears in Section 1. The nine agencies selected were:

- Gary Public Transportation Corporation (GPTC)
- Greater Richmond Transit Company (GRTC)
- Los Angeles County Metropolitan Transit Authority (LACMTA)
- Miami Metro-Dade Transit Agency (MDTA)
- Minneapolis-St. Paul Metropolitan Council Transit Operations (MCTO)
- San Diego Metropolitan Transit Development Board (SDMTDB)
- St. Cloud Metropolitan Transit Commission (SCMTC)
- St. Louis Bi-State Development Agency (Bi-State)
- Washington Metropolitan Area Transit Authority (WMATA)

Table 4-2 profiles the relevant characteristics of each agency. Figure 4-1 demonstrates the relative size of each of the participating agencies, measured in terms of annual ridership. Figure 4-2 depicts the modes of transportation service operated by the participating agencies. Figure 4-3 indicates the security staffing types used at each of the participating agencies. Figure 4-4 highlights the geographical distribution of the participating agencies.

Table 4-3 identifies the crime rates in the cities served by the participating agencies based on the FBI's Crime in the United States. The majority of these agencies serve cities with crime rates exceeding the national average of 5,483 criminal incidents per 100,000 inhabitants.[1] Miami, St. Louis, Washington, D.C., and Richmond experienced the highest levels of crime in the study; St. Cloud, San Diego, and Los Angeles had the lowest crime levels. Crime levels in Gary and Minneapolis/St. Paul fall mid-range between the highest and lowest levels, still exceeding the national average with crime rates of approximately 9,500 per 100,000 inhabitants.[2]

TABLE 4-1: PROJECT ACTIVITIES

Project Phase	Description
Phase I: **Identify Participating Agencies**	Identify transit agencies to serve as a representative sample for transit security practices using the following criteria: • Geographic diversity • Modes of service • Police/security staffing type • System size and service area
Phase II: **Survey Participating Agencies**	Survey participating agencies on the following topics: • System characteristics • Police/security staffing • Types and level of crime experienced on the system • Deployment of uniformed and undercover personnel in the transit environment • Patron fear reduction practices
Phase III: **Conduct On-Site Assessments**	Utilizing a Standardized Interview Guide (SIG), conduct on-site assessments of security practices, including the following: • Policies • Procedures • Data collection and analysis • Security technologies • Coordination activities with local police
Phase IV: **Document Findings in Report**	• Document practices used throughout the transit industry to provide security. • Identify the current level of crime in the transit environment.

TABLE 4-2: PROFILES OF PARTICIPATING AGENCIES

	Annual Trips	Geographic Region	Security Staffing Type[1]	Service Area (sq. mi.)	Mode of Service	
					Bus	Rail
Gary Public Transportation Corporation (GPTC)	2,069,287	Midwest	US	38	✓	
Greater Richmond Transit Company (GRTC)	21,811,093	East Coast	L	374	✓	
LA County Metropolitan Transit Authority (LACMTA)	414,192,158	West Coast	T	1,433	✓	✓
Miami Metro-Dade Transit Agency (MDTA)	90,000,000	East Coast	TB, S	285	✓	✓
Minneapolis-St. Paul Metropolitan Council Transit Operations (MCTO)	66,303,403	Midwest	T	1,105	✓	
San Diego Metropolitan Transit Development Board (SDMTDB)	52,973,557	West Coast	CL,S	902	✓	✓
St. Cloud Metropolitan Transit Commission (SCMTC)	1,587,000	Midwest	L	350	✓	
St. Louis Bi-State Development Agency (Bi-State)	45,600,000	Midwest	CL, S	3,580	✓	✓
Washington Metropolitan Area Transit Authority (WMATA)	353,947,615	East Coast	T	1,486	✓	✓

[1] L = Non-contracted Local Police (for response to incidents only); S= Non-Sworn Security;
T = Sworn Transit Police; TB = Local Police Transit Bureau; CL = Contracted Local Police

FIGURE 4-1: RELATIVE SIZE OF PARTICIPATING AGENCIES MEASURED IN TERMS OF ANNUAL RIDERSHIP
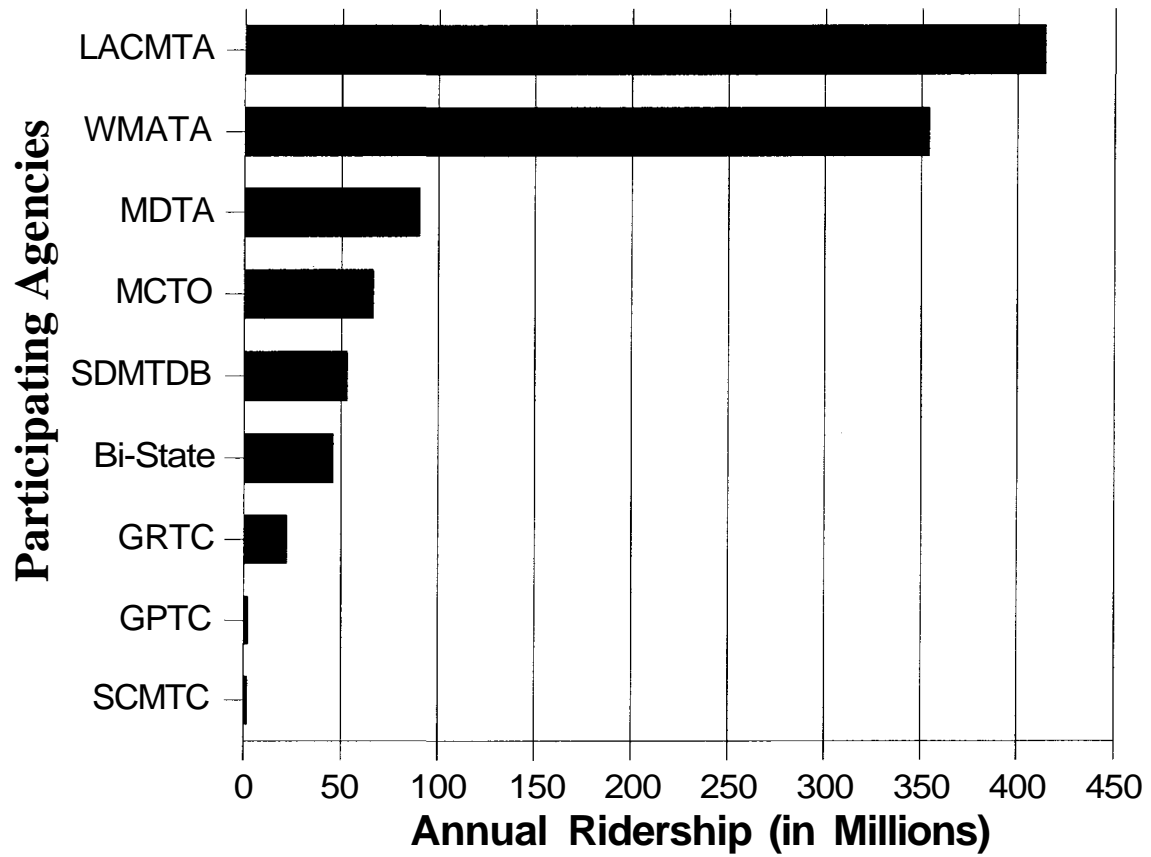
FIGURE 4-2: MODES OF SERVICE OPERATED BY PARTICIPATING AGENCIES

Heavy Rail/Bus: WMATA
Light Rail/Bus: Bi-State, SDMTDB
Multiple Rail Modes/Bus: LACMTA, MDTA
Bus Only: GPTC, GRTC, MCTO, SCMTC
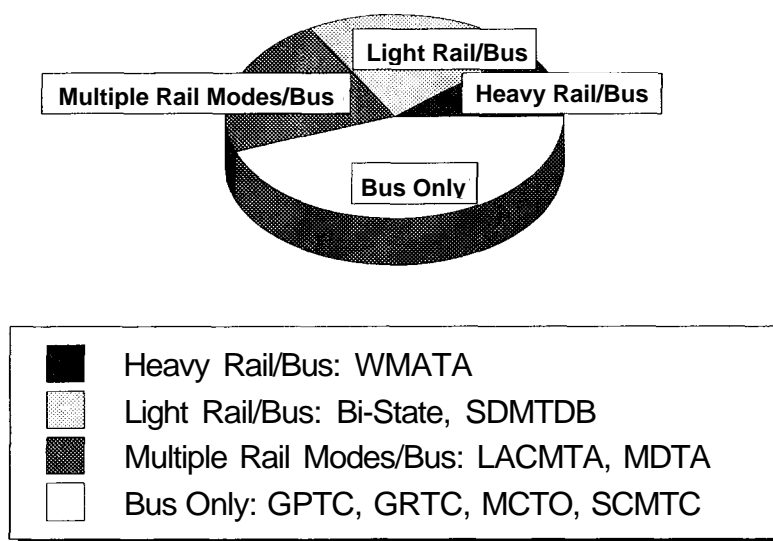
FIGURE 4-3: STAFFING TYPES USED BY PARTICIPATING AGENCIES

TP: LACMTA, MCTO, WMATA
L: GPTC, GRTC, SCMTC
CL, S: Bi-State, SDMTDB
S: MDTA

4-5
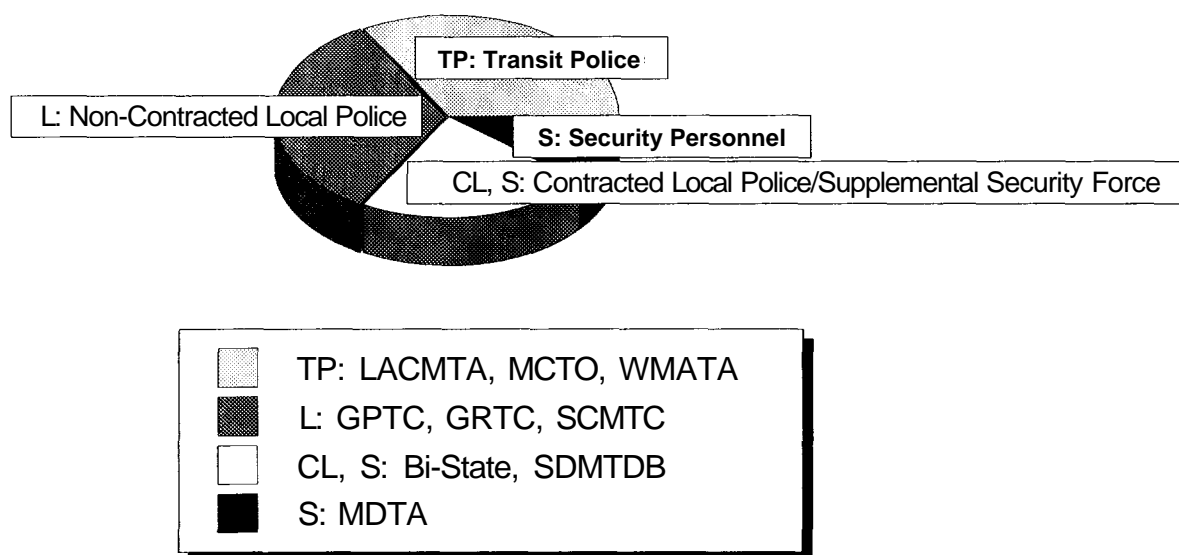
FIGURE 4-4: GEOGRAPHIC DISTRIBUTION OF PARTICIPATING AGENCIES

TABLE 4-3:1993 CRIME RATES FOR THE CITIES SERVED BY THE PARTICIPATING AGENCIES

City	Population	FBI Crime Index (Violent Crimes and Property Crimes)	Number of Criminal Incidents per 100,000 Inhabitants (National Avg: 5,483)	Number of		
				Violent Crimes	Property Crimes	Murders
Gary, Indiana	117,836	11,231	9,530	2,484	8,747	105
Los Angeles, California	3,525,317	312,789	8,887	83,701	229,088	1,076
Miami, Florida	372,519	69,828	18,740	14,502	53,326	127
Minneapolis/ St. Paul, Minnesota	637,850	60,845	9,539	9,185	51,660	80
Richmond, Virginia	205,331	22,142	10,780	3,275	18,867	112
St. Cloud, Minnesota	50,412	2,924	5,800	85	2,839	2
St. Louis, Missouri	387,053	64,438	16,640	14,998	49,440	267
San Diego, California	1,160,603	85,227	7,340	13,463	71,764	133
Washington, D.C.	578,000	67,946	11,760	16,888	51,058	454

Source: Federal Bureau of Investigation, Crime in the United States: 1993.

4.1.1 GARY PUBLIC TRANSPORTATION CORPORATION (GPTC)

GPTC provides and maintains public mass transit in the city of Gary, Indiana. GPTC provides two types of transportation services:

- Fixed bus route service.
- Complementary paratransit service for citizens with disabilities.

GPTC's bus service consists of 17 routes, with a peak vehicle requirement of 29 buses. One demonstration express route serves the Calumet Campus of Purdue University. The agency provides transportation to all central business districts and major trip generators within the city of Gary. GPTC also offers a Tri-City Connection Express Route which links the three transit systems of Gary, Hammond, and East Chicago.

GPTC headquarters are located in the agency's central terminal, an intermodal facility connecting GPTC service to Greyhound and the Northern Indiana Commuter Transportation District. This facility is secured by a force of non-sworn security guards who patrol the platforms and boarding areas, meet trains and buses, and monitor the facility and surrounding parking lots.

The agency also uses closed circuit television (CCTV) and communications equipment, as well as extensive coordination with local police, to protect passengers, employees, and system facilities and equipment.

4.1.2 GREATER RICHMOND TRANSIT COMPANY (GRTC)

GRTC operates a fixed route bus service throughout the city of Richmond, Virginia. Created as the public transportation provider for the City of Richmond in 1974, the GRTC operates 290 buses over 56 routes with an annual ridership of approximately 22 million.

The GRTC relies exclusively on local police for response to security incidents that occur on the system; however, the GRTC's Safety Department coordinates interagency security efforts. Bus operator and supervisor training programs focus on handling angry and disruptive passengers, managing fare evasion, enforcing agency policies, identifying problem passengers, communicating with radio dispatch, completing operator incident report forms, and coordinating emergency procedures. The agency also utilizes silent alarms, a customer tip line, and an aggressive signage campaign stating agency policies and procedures.

4.1.3 LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (LACMTA)

LACMTA provides five distinct transportation services:

- Metro Bus operates more than 2,300 buses to provide transportation for approximately 1.2 million riders each day.
- Metro Red Line, a 4.4-mile heavy rail line, serves downtown Los Angeles.
- Metro Blue Line, a 22-mile light rail line, provides service between Los Angeles and Long Beach.

- Metro Green Line, a recently opened 20-mile, 14-station rail line, connects Norwalk and El Segundo.
- Metro Access provides curb-to-curb service to transport riders with disabilities.

The LACMTA's rail lines are barrier-free and require patrons to provide proof of payment. To provide security for bus and rail service, the LACMTA utilizes an in-house, sworn transit police department of 350. This is the largest sworn transit police force in the nation (since the New York City Transit Authority Police merged with the New York Police Department in April 1994). In addition, 58 security guards are stationed at fixed posts within LACMTA operating divisions, primarily within facilities. The LACMTA Transit Police Department utilizes a mixture of uniformed and undercover operations to secure the system.

The Green, Red, and Blue Lines have been designed with many security features, including passenger communications systems, CCTV coverage at all stations, alarm systems, and the use of graffiti-and-vandal resistant construction and materials.

4.1.4   MIAMI METRO-DADE TRANSIT AGENCY (MDTA)

MDTA is an integrated system which consists of four major components:

- Metrobus fleet, which runs almost 24 hours per day and connects most areas of Dade County.
- Metrorail, which is an electrically powered, aerial heavy rail line stretching 21 miles from Dadeland to Hialeah.
- Metromover, which is a double-loop, 4.4-mile elevated people-mover system serving downtown Miami.
- Special Transportation Services (STS), which is a paratransit system designed to meet the needs of disabled riders.

The Transit Bureau of the Metro-Dade Police Department provides security for the MDTA bus service. Eight officers provide undercover operations, incident response, and bus vehicle tails. This force is supplemented by off-duty officers to handle special events, such as football games and parades.

The MDTA rail system contracts with the Wackenhut Corporation for 175 armed non-sworn Custom Protection Officers (CPOs). The Wackenhut CPOs operate fixed posts at stations and random patrols throughout the rail system. At most stations, the CPOs act as a station manager who locks and unlocks the station, notifies maintenance of needed repair work/ graffiti removal, and assists the agency with platform activities. The CPOs, who have special detention authority from the Florida State Legislature, are uniformed and provide both a crime prevention and a public information function.

The agency utilizes the following technologies to support the policing function:

- Extensive CCTV monitoring system.
- Ticket vending machines.
- Emergency telephones.
- Passenger intercoms.

4.1.5 MINNEAPOLIS-ST. PAUL METROPOLITAN COUNCIL TRANSIT OPERATIONS (MCTO)

MCTO is the principal transit provider in the Minneapolis-St. Paul metropolitan area. It operates approximately 900 buses during peak service hours with 750 shelters and more than 150 parking lots.

MCTO police operations began in 1971 to supplement the level of policing provided by local jurisdictions. During the last decade, the agency obtained full jurisdictional authority over the transit system for its police department. The MCTO transit police service is comprised of a combination of eight full-time transit police supervisors and investigators and 26 full-time equivalent officers drawn from a pool of off-duty police officers from several communities in the Twin Cities area. The MCTO police patrol in plainclothes as well as in uniform. The agency uses directed patrol techniques for bus boardings and bus vehicle tailing.

MCTO also utilizes a variety of technologies to support the policing function, including:

- Advanced communication systems.
- Automatic Vehicle Locator (AVL) system on buses.
- Extensive CCTV surveillance of bus shelters, transfer centers, and vehicles.
- Automated information collection and analysis systems.
- Automated dispatch system.

4.1.6 SAN DIEGO METROPOLITAN TRANSIT DEVELOPMENT BOARD (SDMTDB)

Created in 1975, SDMTDB owns and oversees the operation of San Diego Trolley, Inc. (SDTI) and San Diego Transit Corporation (SDTC). These systems combined serve an area covering 570 square miles with a population of 1.8 million located in southwestern San Diego County. SDTI consists of two light rail lines covering a total of 35.2 miles, with a daily ridership of 50,000. SDTC operates 308 buses in 29 fixed routes over 635 miles. There are 3,600 stops located throughout the SDTC service area. SDTC also serves 14 park-and-ride lots and 10 Transit Centers which offer time-coordinated transfers to other regional bus and/or trolley routes.

Security is provided on the barrier-free SDTI by a combination of 28 unarmed, non-sworn compliance inspectors, 45 armed security guards from a private security contractor (Heritage Security Services), and 16 undercover police officers from the city of San Diego. Undercover police officers are also used by SDTC.

The SDMTDB has developed special programs including:

- Vandalism abatement.
- Coordinating with local law enforcement, school district security systems, and the courts to identify, prosecute, and seek reimbursement from those responsible for damaging system property.
- Conflict management training for bus operators.
- Sacrificial plastic bus window liners.
- Passenger emergency alarms on rail cars.
- Cameras on buses.

4.1.7 ST. CLOUD METROPOLITAN TRANSIT COMMISSION (SCMTC)

The St. Cloud Metro Bus system provides fixed route bus service in St. Cloud, Sack Rapids, and Wait Park, Minnesota, and specialized transit service for persons with disabilities. With a fleet of 17 buses, St. Cloud Metro Bus provides approximately 1.5 million trips annually. Metro Bus also provides service for students attending St. Cloud State University. SCMTC operates an intermodal transit center connecting Metro Bus to Greyhound service.

SCMTC provides security by utilizing a variety of design and surveillance features. Metro Bus relies on the local St. Cloud police for response to incidents occurring on buses. The agency has an active Driver's Security Committee which drafts policies governing fare evasion, revoked ridership privileges, and passenger ejection.

4.1.8 ST. LOUIS BI-STATE DEVELOPMENT AGENCY (Bi-STATE)

Bi-State owns and operates the mass transportation system for the St. Louis Metropolitan area. Bi-State serves the City of St. Louis; the Missouri Counties of St. Louis, St. Charles, and Jefferson; and the Illinois Counties of Madison, Monroe, and St. Clair. This service area covers approximately 3,600 square miles with more than 200 municipalities. Bi-State provides the following bus and rail services:

- Bi-State Transit provides a fleet of over 700 buses with more than 100,000 daily trips.
- Metrolink, the agency's 18-mile light rail system which opened in 1993, provides approximately 40,000 daily trips.

Metrolink is a barrier-free system secured by a combination of uniformed, non-sworn code compliance officers and undercover police officers from both the city and county of St. Louis. Fifty-five non-sworn code compliance officers, provided by Waylan Security, have responsibility for light rail platforms, park and ride lots, and fare enforcement. Fifteen undercover officers patrol Metrolink and conduct special operations. Bi-State also has arrangements with local police who provide assistance during special events.

The agency also uses the following technologies to support the policing function:

- CCTV surveillance of rail stations.
- Cameras on buses.
- Hand-held ticketing units.
- Advanced communication systems.

4.1.9 WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA)

WMATA was created by an interstate compact in 1967 to plan, develop, build, finance, and operate a balanced regional transportation system in the nation's capital. WMATA rail construction began in 1969 and four area bus systems were acquired in 1973. The first phase of Metrorail, the rapid rail service, began operating in 1976. WMATA currently serves an area of 1,500 square miles with a population of 3.2 million, and provide the following bus and rail service:

- Metrorail provides 552,000 weekday trips on its 89 miles of track.
- Metrobus, the agency's bus service, provides 441,000 weekday trips using a fleet of 1,439 buses.

WMATA utilizes an in-house, sworn transit police force comprised of 286 officers who possess police authority in Maryland, Virginia, and the District of Columbia. A variety of access control measures employed on Metrorail keep passengers and employees secure, and prevent fare revenue thefts and equipment damage. A "zero tolerance" policy implemented by WMATA officers ensures that the agency pays attention to minor offenses such as fare evasion, panhandling, disorderly school children, and vandalism. Metrorail security techniques include random uniformed patrol, motorcycle patrol, bicycle patrol, a canine program, and undercover assignments. WMATA officers also have primary responsibility for parking lots and bus route security. Officers patrol the bus fleet by riding undercover and tailing buses.

Trains and stations have a sophisticated communications system, including passenger to operator intercoms on each rail car, and CCTVs in each rail station.

4.2   PROJECT APPROACH

Initially, each of the selected agencies was contacted and asked to participate in this project. Once agreement to participate was secured, a representative of each system completed the Transit Crime Issues Questionnaire documenting crime issues and security practices of the agency. Appendix A contains a blank copy of the Questionnaire. Where applicable, separate questionnaires were completed for bus and rail modes. The agencies were also asked to submit crime data for 1993 and 1994. Five of the agencies submitted crime data from 1990 through 1994.

The Questionnaire was designed to help quantify and evaluate key issues facing transit agencies by ranking a list of crimes and general security issues in order of impact on system performance. The list includes both specific crimes (e.g., homicide, larceny, fare evasion) and general security issues (e.g., gang activity and homelessness). Issues in the latter category are usually associated with a small group of related crimes. For example, agencies with a large homeless population typically experience associated problems with trespassing, panhandling, and liquor law violations.[3]

The FBI's Uniform Crime Reporting (UCR) classification forms the basis of this crimes/issues list. Established in 1930 as part of a joint effort between the International Association of the Chiefs of Police (IACP) and the Department of Justice (DOJ), the Uniform Crime Reporting system has been successful in developing standardized crime categories which encourage consistency in reporting among the nation's law enforcement agencies. However, some crimes appearing on the UCR list, but not commonly occurring among transit agencies, were omitted from the Questionnaire. Conversely, offenses of primary concern to transit agencies were subdivided and included on the list.

For example, the UCR classification subdivides larceny (theft) into the following nine types:

- Pickpocketing
- Purse-Snatching
- Shoplifting
- Theft from Motor Vehicles (except Parts and Accessories)
- Theft of Motor Vehicle Parts and Accessories
- Theft of Bicycles
- Theft from Facilities

- Theft from Vending Machines
- All Other Larceny

Six of the nine larceny types are of concern to transit agencies; therefore the following issues were included in the Questionnaire list (note: some crimes have been combined into a single category where appropriate):

- Pickpocketing/Purse-Snatching
- Theft from Motor Vehicles (including Parts and Accessories)
- Theft from Facilities
- Theft from Vending Machines

As shown in Figure 4-5, the agencies were asked to score each of the 28 crimes/issues in terms of:

- Police/security personnel time devoted to the crime/issue, and
- Level of other agency resources required to manage the crime/issue.

After the Questionnaire was completed, an Agenda and Structured Interview Guide (SIG) were developed to direct on-site assessments at each of the agencies. Using the SIG ensured that on-site interviews were consistent and comprehensive. On-site visits lasted between one and three days, depending on the size and complexity of the transit agency and its police/security department. A blank copy of the Structured Interview Guide is presented in Appendix B, and a representative Agenda for the assessments is presented in Appendix C.

The on-site assessments covered the following topics:

- Overview of security practices.
- Security responsibilities and organization.
- Deployment tactics and techniques.
- Types of crime experienced by the agency.
- Collection and analysis of crime data.
- Crime reporting.
- Interface with local police.
- Budgeting.
- Technology use.
- Patron perception of crime.

4.3   STUDY RESULTS

Results from the questionnaires submitted by the nine participating agencies were compiled, generating an average rating between 0 and 4 for each of the 28 issues. In cases where the response was Not Applicable (N/A), a score of 0 was entered. The N/A response either indicates that the crime was not a problem at the agency or that the agency was not required to provide a response to the issue. For example, although most transit agencies provide some form of parking, in some cases, responsibility for patrolling system parking lots belongs to the local police department.

The average of the rankings of crime occurrences by all 9 systems are presented in Table 4-4. The individual rankings of the bus systems and rail systems are presented in Table 4-5. Results ranked in order of resource consumption by the bus and rail systems are presented in Figures 4-6 and 4-7, respectively.

Comparison of the 1993 and 1994 data provided by the transit agencies shows a general rise in the number of Part I crimes (i.e., serious crimes: homicide, rape, robbery, aggravated assault, burglary, larceny/theft, motor vehicle theft, and arson) occurring in the transit environment. In

contrast, the direction and amount of change in the number of Part II crimes (i.e., misdemeanor and local ordinance violations) between those 2 years varied from agency to agency. Table 4-6 displays the percentage change from the previous year in the incidence of Part I and Part II crimes for 1993 and 1994. The individual agency crime statistics are not presented because definitions and arrest practices vary considerably from agency to agency. "N/A" indicates that information was not available from the transit agency in the UCR format.

Combined, the participating agencies experienced 2,360 Part I crimes in 1994 and 2,289 Part I crimes in 1993. The agencies also had 11,534 arrests for Part II crimes in 1994 and 10,727 arrests in 1993. Over the two year period 1993-1994, the transit agencies issued more than 120,000 citations for local ordinance violations and traffic infractions. According to the FBI, nation-wide Part I crime levels fell by 1.5 percent, and Part II crime levels fell by 3.4 percent between 1992 and 1993.[4]

Section 4.3.1 separates the 28 issues on the Questionnaire into five categories and discusses the agencies' responses in terms of these categories. Section 4.3.2 defines and describes each of the 28 issues, and presents the specific security strategies used at the nine participating agencies to address each issue.

4.3.1   CATEGORIES OF THE ISSUES STUDIED

The crimes and security issues identified by the agencies can be categorized into five types. These categories are presented and discussed in order of the amount of resources consumed by the participating agencies to address the component issues:

- Quality-of-Life Issues.
- Frequently-Occurring Violent Crimes.
- Property Crimes Against Patrons.
- Property Crimes Against Transit Agency.
- Infrequently-Occurring Violent Crimes.

4.3.1.1   Qualitv-of-Life-Issues

Quality-of-Life-Issues limit the agency's ability to provide riders with an inviting environment on the transit system. This category includes issues that typically do not pose a physical threat to passengers, but may cause intimidation, increase patron perception that the system is not secure, and reduce the likelihood that public transit will be utilized in cases where riders have other options. In the Questionnaire, all participating agencies indicated that the majority of their resources are spent dealing with these Quality-of-Life Issues. This emphasis accounts for the fact that the top three issues identified by the agencies address quality-of-life concerns. The following issues fall into this category:

- Disorderly Conduct (Rank: 1st).
- Homelessness/Vagrancy (Rank: 3rd - tie).
- Drunkenness/Liquor Law Violations (Rank: 7th).
- Smoking/Eating/Littering/Loud Music (Rank: 8th).
- Public Urination (Rank: 15th).
- Narcotics Violations (Rank: 17th).
- Sex Offenses - Excluding Rape (Rank: 22nd).
- Prostitution (Rank: 26th).

Rate the following offenses in terms of the police/security time and resources required to manage them:

	Require Minimal Time/Resources		Require Extensive Time/Resources		N/A
Arson	1	2	3	4	❑
Assaults on Op erators	1	2	3	4	❑
Assaults on Passengers	1	2	3	4	❑
Bomb Threats	1	2	3	4	❑
Burglary	1	2	3	4	❑
Disorderly Conduct	1	2	3	4	❑
Drunkenness/Liquor Law Violations	1	2	3	4	❑
Fare Evasion	1	2	3	4	❑
Gang Activity	1	2	3	4	❑
Graffiti/Vandalism	1	2	3	4	❑
Hate Crimes	1	2	3	4	❑
Homelessness/Vagrancy	1	2	3	4	❑
Homicide	1	2	3	4	❑
Motor Vehicle Theft	1	2	3	4	❑
Narcotics Offenses	1	2	3	4	❑
Objects thrown at Vehicle	1	2	3	4	❑
Pickpocketing/Purse Snatching	1	2	3	4	❑
Prostitution	1	2	3	4	❑
Public Urination/Expectoration	1	2	3	4	❑
Rape	1	2	3	4	❑
Robbery	1	2	3	4	❑
Sex Offenses (excluding Rape)	1	2	3	4	❑
Smoking/Eating/Litter/Loud Music	1	2	3	4	❑
Theft from Facilities	1	2	3	4	❑
Theft from Motor Vehicles	1	2	3	4	❑
Theft from Vending Machines	1	2	3	4	❑
Trespassing	1	2	3	4	❑
Weapons Laws Violations	1	2	3	4	❑
Other _____	1	2	3	4	❑
Other _____	1	2	3	4	❑
Other _____	1	2	3	4	❑

TABLE 4-4: RANKING OF TRANSIT CRIME AND SECURITY ISSUES ACCORDING TO THE QUESTIONNAIRE COMPLETED BY PARTICIPATING AGENCIES (AVERAGED FOR BUS AND RAIL SYSTEMS)

Rank	Issue
1	Disorderly Conduct
2	Graffiti/Vandalism
3+ 3+	HomelessnessA/agrancy Fare Evasion
5+ 5+	Assaults on Passengers Objects Thrown at Vehicle
7	Drunkenness/Liquor Law Violations
8	Smoking/Eating/Littering/Loud Music
9	Robbery
10	Trespassing
11+ 11+	Assaults on Drivers Theft from Motor Vehicles
13+ 13+	Gang Activity Pickpocketing/Purse Snatching
15+ 15+	Public Urination Theft from Facilities
17+ 17+	Narcotics Offenses Motor Vehicle Thefts
19	Weapons Offenses
20	Burglary
21	Bomb Threats
22	Sex Crimes (excluding Rape)
23	Theft from Vending Machines
24+ 24+	Arson Hate Crimes
26+ 26+ 26+	Homicide Prostitution Rape

+ Indicates Tie

TABLE 4-5: RANKING OF TRANSIT CRIME AND SECURITY ISSUES - Bus AND RAIL

Rank	Issues: Bus
1+ 1+	Disorderly Conduct Objects Thrown at Vehicle
3+ 3+ 3+ 3+	Assaults on Operators Assaults on Passengers Drunkenness/Liquor Law Violations Graffiti/Vandalism
7	Fare Evasion
8	Homelessness/Vagrancy
9+ 9+	Robbery Smoking/Eating/Littering/Loud Music
11	Trespassing
12	Theft from Motor Vehicles
13+ 13+ 13+ 13+ 13+	Gang Activity Narcotics Offenses Pickpocketing/Purse Snatching Public Urination Theft from Facilities
18	Weapons Offenses
19	Motor Vehicle Thefts
20+ 20+ 20+	Arson Bomb Threats Burglary
23	Sex Crimes (excluding Rape)
24	Prostitution
25	Rape
26+ 26+	Hate Crimes Theft from Vending Machines
28	Homicide

Rank	Issues: Rail
1	Homelessness/Vagrancy
2	Disorderly Conduct
3	Graffiti/Vandalism
4	Fare Evasion
5+ 5+ 5+	Assaults on Passengers Smoking/Eating/Littering/Loud Music Trespassing
8+ 8+ 8+ 8+	Drunkenness/Liquor Law Violations Objects Thrown at Vehicle Robbery Theft from Motor Vehicles
12+ 12+	Gang Activity Motor Vehicle Thefts
14	Pickpocketing/Purse Snatching
15	Theft from Facilities
16	Public Urination
17+ 17+	Burglary Narcotics Offenses
19+ 19+	Assaults on Operators Weapons Offenses
21	Bomb Threats
22	Sex Crimes (excluding Rape)
23	Theft from Vending Machines
24+ 24+	Hate Crimes Homicide
26	Rape
27	Arson
28	Prostitution

+ Indicates Tie

4-17

FIGURE 4-6: CRIME ISSUES EXPERIENCED BY Bus SYSTEMS
RANKED IN ORDER OF RESOURCE CONSUMPTION BY PARTICIPATING AGENCIES
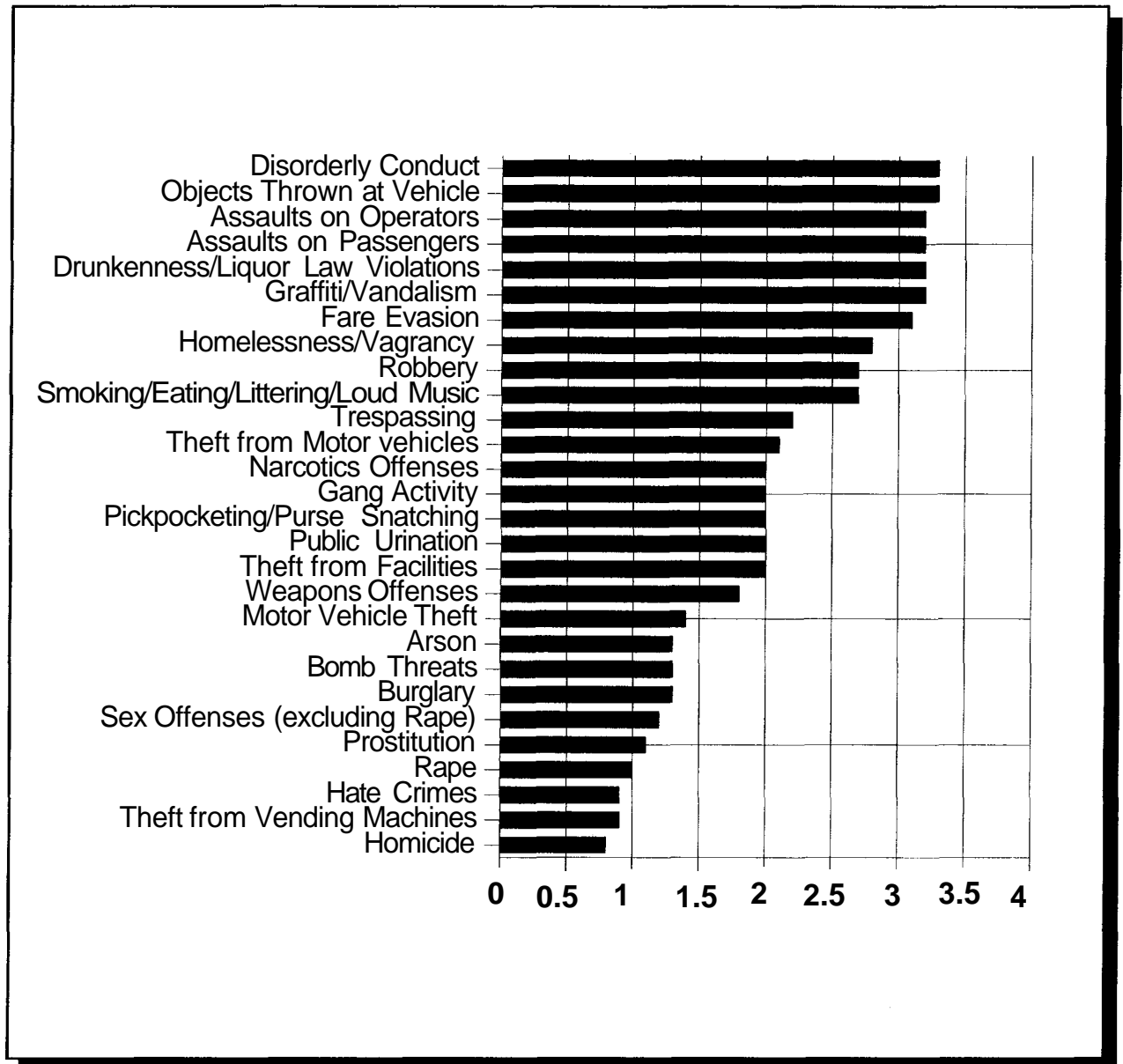
FIGURE 4-7: CRIME ISSUES EXPERIENCED BY RAIL SYSTEMS RANKED IN ORDER OF RESOURCE CONSUMPTION BY PARTICIPATING AGENCIES
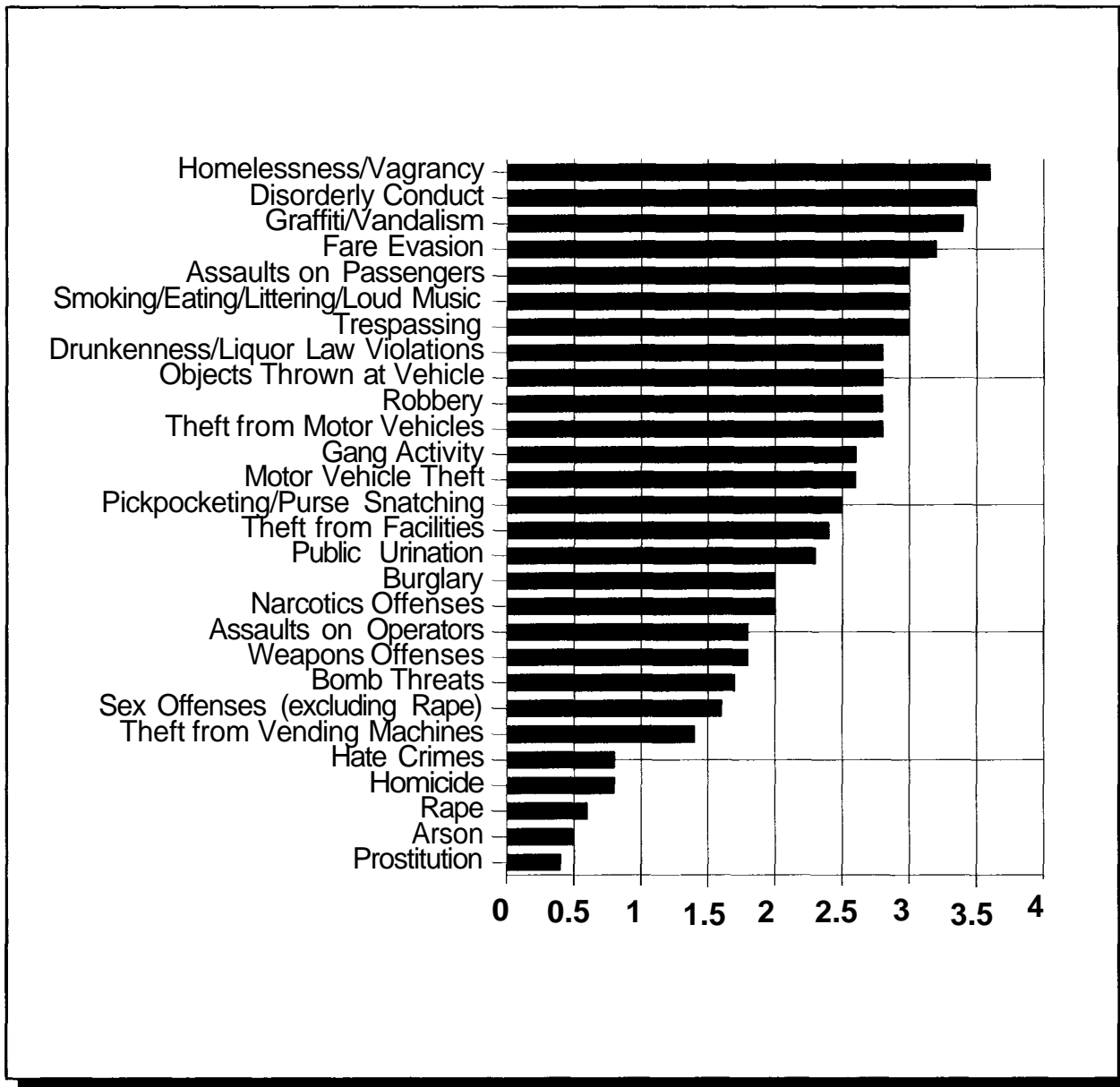
TABLE 4-6 PERCENT CHANGES IN PART I AND PART II CRIMES AND TOTAL CRIMINAL OCCURRENCES

Agency Name	Part I Crimes		Part II Crimes	
	1994 (% change)	1993 (% change)	1994 (% change)	1993 (% change)
Bi-State	20.0	N/A	12.0	N/A
GPTC	N/A	N/A	33.0	N/A
GRTC	N/A	N/A	28.0	N/A
LACMTA	-6.5	-20.0	-2.3	-17.0
MCTO	16.0	8.0	12.0	15.0
MDTA	45.0	-14.0	-11.2	25.6
SCMTC	N/A	N/A	N/A	N/A
SDMTDB	-23.0	36.0	5.9	4.7
WMATA	7.0	4.0	27.0	6.0
TOTAL INCIDENTS	2,360	2,289	11,534	10,727

In addition, although vandalism and graffiti (Rank: 2nd) are property crimes against the system, they are also Quality-of-Life Issues in the sense that they detract from the appearance of the surroundings and contribute to the perception that the transit agency is not secure.

4.3.1.2   Frequently-Occurring Violent Crimes

Violent crimes received a broad range of scores, with passenger assaults ranking fifth, and incidents of rape and homicide tied for last. Further analysis shows that the ratings are related roughly to the frequency of occurrence of the crimes. Crimes such as rape and homicide rarely occur on transit property. However, incidents of assaults on operators and passengers are somewhat frequent occurrences on many transit systems, and do require extensive time and attention from the police/security department.

Next to Quality-of-Life Issues, survey results indicate that Frequently-Occurring Violent Crimes consume the second largest amount of agency police/security resources. This category includes the following offenses:

- Assaults on Passengers (Rank: 5th).
- Robbery (Rank: 9th).
- Assaults on Operators (Rank: 11th - tie).
- Gang Activity (Rank: 13th).
- Weapons Offenses (Rank: 19th).

4.3.1.3   Property Crimes Against Patrons

In addition to protecting passengers and employees from physical harm, it is the function of the police/security department to protect system and passenger property. According to the Questionnaire results, more time and effort is expended protecting passengers from property crimes than is spent preventing similar crimes against the transit agency.

Three non-violent Property Crimes Against Patrons were ranked by the agencies participating in the study. These crimes rated only slightly lower, on average, than the Frequently-Occurring Violent Crimes in terms of the consumption of police/security resources. These crimes include:

- Thefts from Motor Vehicles (Rank: 11th - tie).
- Pickpocketing/Purse Snatching (Rank: 13th - tie).
- Motor Vehicle Thefts (Rank: 17th-tie).

4.3.1.4   Property Crimes Against Transit Agency

Most of the issues involving Property Crimes Against Transit Agency rank just below Property Crimes Against Patrons. This holds true for the following issues:

- Trespassing (Rank: 10th).
- Thefts from Facilities (Rank: 15th - tie).
- Burglary (Rank: 20th).
- Bomb Threats (Rank: 21st).
- Thefts from Vending Machines (Rank: 23rd).
- Arson (Rank: 24th - tie).

These issues are ranked roughly in order of their frequency of occurrence at a typical transit agency, with incidents of trespassing being somewhat common (especially on rail systems) and arson being relatively rare.

The following three Property Crimes Against Transit Agency, however, had a relatively high ranking:

- Graffiti/Vandalism (Rank: 2nd).
- Fare Evasion (Rank: 3rd - tie).
- Objects Thrown at Vehicle - Missiles (Rank: 5th).

These three issues differ from the previous property crimes in that they are perhaps the most common crimes experienced by the transit agencies, and perhaps the most costly as well. For example, a single incident of arson may be extremely expensive, requiring an agency to develop fire-resistant designs and effective patrol strategies to counter threats of arson. However, a single incident of fare evasion or graffiti, while far less costly initially, may occur thousands of times annually, resulting in a greater loss of revenue than a single case of arson.

LACMTA spends approximately $14 million annually repairing graffiti and vandalism damage to buses, and SDMTDB spends between $40,000 and $60,000 monthly on similar repairs. Both agencies report that costs would be even higher if they did not spend extensive resources in prevention and response to graffiti and vandalism.

4.3.1.5 <u>Infrequently-Occurring Violent Crimes</u>

Despite passenger perceptions to the contrary, transit agencies are generally more secure than the areas through which they travel (i.e., the rates of serious violent crimes on the system are typically lower than the rates of the same crimes in the neighborhoods the system serves). For this reason, the following crimes occur very rarely at transit systems and receive low scores in the rankings.

- Hate Crimes (Rank: 24th-tie).
- Homicides (Rank: 26th - tie).
- Rapes (Rank: 26th-tie).

At least as influential in this ranking is the fact that the local police (rather than transit police personnel) typically handle investigations for these most serious of offenses, and always handle these investigations if the system uses a non-sworn force of security guards.

4.3.2 CRIMES AND CRIME-RELA TED ISSUES STUDIED AND STRATEGIES FOR THEIR RESOLUTION

Each of the issues on the questionnaires is presented alphabetically in the following subsections. Each subsection contains the definition from the FBI UCR Manual, the problem description based on transit-specific occurrences, and strategies used by the participating agencies for addressing the issue. Each strategy discussion is separated into the four categories of solutions discussed in Section 3:

- Personnel Deployment.
- Data Collection.
- System Design and Technology.
- Operating Practices.

4.3.2.1 Arson

Issue Rank (of 28)	
Bus	Rail
20	27

Definition: *Any willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, or personal property of another.*

Problem Description:

Arson presents a relatively minor problem for the agencies participating in this project.   In general, burning of rail or bus terminals is extremely rare. When a bus garage or a rail yard is an arsonist's target, however, damage costs are extremely high. In April 1994, juveniles unlawfully entered a WMATA bus division at night, lit a bus on fire, destroying the vehicle and seriously damaging other adjacently parked buses. WMATA, consequently! ranked this issue as a 3.0, while the average ranking for bus systems was 1.25.

For bus agencies, shelter burning accounts for the majority of ars^n incidents. Specifically, plexiglass windows found in many shelters are often burned (melted) with cigarette lighters. Generally, this offense is categorized as vandalism; however, depending on the extent of the damage, occasionally burnt windows are classified as arson.

Arson presents even less of a problem for the rail systems participating in the study than for the bus systems. Some rail agencies, other than those included in this study, experience literally dozens of trash fires on their tracks daily. Some are started by vehicle wheel sparking, some by carelessness of passengers who smoke, and yet others are deliberate acts. For both bus and rail modes, trash can fires are a source of arson arrests. Often juveniles start these fires, and, depending on the extent of the damage, these incidents are classified either as vandalism or arson.

System Strategies:

Personnel Deployment

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur. Certain details rely on gang intelligence, field identification of repeat offenders, or interface with schools.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.)

Fire Suppression and Alarm Systems

Equipment that can be disabled from local sites (i.e., smoke detectors with removable batteries) is not recommended.

Intrusion Alarms

Alarms, linked directly to dispatch or station manager's booth, alert system personnel of unauthorized assess.

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders. Bright lighting is particularly important for deterring arson.

Resistant Seats and Windows

Provide glass or flame-resistant seats and windows which are difficult to damage with matches, lighters, or similar implements.

Shelter/Bench Removal	These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior.
Target Hardening	Facilities are redesigned to make them more difficult to break into and to make assets more difficult to steal or destroy. This method often involves use of screen covers, locks, metal or plastic housings, and shielding devices. Fire-retardant materials are used to minimize the potential for arson or accidental fires. Materials selection is crucial not only for vehicles and facilities, but also for trash cans, outdoor amenities, and public information displays.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide *a* means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Aggressive Maintenance	Damage to facilities (e.g., vandalism to shelters and broken windows) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.
Corporate Shelter Maintenance	Businesses or marketing firms are hired to maintain bus shelters in exchange for the posting of advertisements on shelters and trash cans. Liquor advertisements are not recommended.
Indoor Bus Storage	Buses are stored indoors overnight and during off-hours to reduce risk of damage.
Limiting System Access	Transit agency management works with maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.
Restitution/Instruction Programs	Transit agencies work with local courts and prosecutors to design programs (e.g., graffiti clean-up and cash restitution for vandalism damages) that demonstrate to offenders the seriousness of their crimes.

4.3.2.2 Assaults on Operators

Issue Rank (of 28)	
Bus	**Rail**
3	19

Definition: *An unlawful attack by one person upon another (in this case, upon the operator of a transit vehicle). Further classified as aggravated assault or simple assault.*

- *Aggravated Assault: Unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. Usually accompanied by use of a weapon or by means likely to produce death or serious bodily harm (involves use of: firearm; knife or cutting instrument; other dangerous weapon; or hands, fists, or feet).*

- *Simple Assault: Includes all assaults not involving the use of a firearm, knife, cutting instrument, or other dangerous weapon and in which there are no serious or aggravated injuries to the victim.*

Problem Description:

Of all the issues considered, Assaults on Operators received the largest disparity in ranking between bus and rail systems. The dissimilarity between modes reflects the difference in function between operators of buses and operators of rail vehicle. On rail systems, operators' activities are generally limited to controlling the vehicle. Since rail operators are most often seated in a separate compartment, minimal passenger interface occurs, thus reducing the likelihood of operator assault.

In contrast, bus operators are seated in the same area of the vehicle as passengers, increasing their exposure to potential violence. Moreover, bus operators are generally responsible for enforcing system policies, including fare payment. Disputes over fares and system policies are the most common causes of operator assaults.

Assaults on Operators take many forms. In the least severe cases, passengers may spit on the operator, typically while exiting the vehicle. In more severe cases, operators may have objects thrown at them or be physically struck while the bus is in motion. Instances of assault have occurred in some cities when gang initiations have involved attaching a bus operator. In the most severe cases, operators may be severely beaten, raped, or killed. Often, the threat of violence can be equally menacing. For example, upon boarding, a passenger may indicate to the operator that he is carrying a weapon in order to avoid fare payment. Other assaults are initiated by intoxicated patrons, gang members, or juveniles.

System Strategies

Personnel Deployment

Coordination with Destinations

Agency police or security staff coordinates and shares information with personnel responsible for providing security at destinations frequented by offenders/juveniles (e.g., shopping mall security staff) in order to anticipate and prevent crime on the transit system. Destination security staff may be aware of crime trends that will likely affect the transit system.

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Media Relations

Security features and policies, as well as agency rules and regulations, are publicized to promote appropriate conduct on the transit system.

Tailing Police/Security Vehicle

Marked police/security vehicles follow transit vehicles, to observe passengers in the vehicle. This method is typically used on "problem routes" where operator assaults are ongoing concerns.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Automatic Vehicle Locators (AVL)

AVL systems are used to assist emergency response units in locating buses quickly.

Emergency Communications Systems

Emergency communications systems prioritize calls received from operators under duress.

Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Enhanced Shielding of Operators	Some buses are equipped with plexiglass guards behind and around the operator's seat to prevent blind-side attacks. These shields protect operators without limiting over-the-shoulder visibility.
Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Gang Intelligence	Police/security forces remain aware of gang activity to anticipate assaults or other crimes likely to occur on transit property. This sometimes involves interface with local police.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Operator Conflict Management Training	Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.
Pepper Spray	At a few agencies, pepper spray or a similar aerosol irritant has been issued to operators (in conjunction with appropriate training) for self-defense. Note: Exposure to aerosol irritants may require medical attention.
Road Supervisor Training	Conflict management training is provided to supervisors who are often first to respond to system disturbances.
Safe Layover Locations	Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.

Special Operator Procedures

The following procedures and mechanisms are used by many of the participating transit systems:

- Policies encouraging operators to appear as witnesses in court.

- Committees addressing operator security concerns and suggesting/drafting corresponding agency security policies.

- Emphasis on on-time performance to help alleviate passenger frustration with service delays and resulting anger with operators.

- Peer counseling programs for operators who have been assaulted with other specially-trained operators acting as a support group.

- Specialized procedures for layover periods occurring at the beginning of a route (e.g., requiring that passengers must wait to board until a few minutes before departure, to minimize the risk of operator assault).

4.3.2.3 Assaults on Passengers

Issue Rank (of 28)	
Bus	**Rail**
3	5

Definition: *An unlawful attack by one person upon another (in this case, upon a passenger of a transit vehicle). Further classified as aggravated assault or simple assault.*

- *Aggravated Assault: Unlawful attack by one person upon another with purpose of inflicting severe or aggravated bodily injury. Usually accompanied by use of a weapon or by means likely to produce death or serious bodily harm (involves use of: firearm; knife or cutting instrument; other dangerous weapon; or hands, fists, or feet).*

- *Simple Assault: Includes all assaults not involving use of a firearm, knife, cutting instrument, or other dangerous weapon and in which there are no serious or aggravated injuries to the victim.*

Problem Description:

Assaults on passengers are a primary concern for all transit agencies. All of the participating agencies experience some level of passenger assaults, regardless of the level of crime in the surrounding neighborhoods. In urbanized areas, or those with particularly high crime rates, incidents of aggravated or gang-related assaults may be more common than in other areas.

Assaults on passengers usually consist of one patron striking another. Simple assaults are far more common than aggravated assaults. Assaults on bus and rail vehicles generally result from problems in the surrounding community (e.g., domestic violence, gang activity, or disagreements) which spill-over onto the transit system. Whether on bus or rail, most passenger assaults occur between passengers who know each other. In addition, assaults often involve one or more parties who are under the influence of alcohol or narcotics.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Canine/Foot Patrol	Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders.
Coordination with Local Police	This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.
Tailing Police/Security Vehicle	Marked police/security vehicles follow transit vehicles, to observe passengers in the vehicle. This method is typically used on "problem routes" where passenger assaults are ongoing concerns.
Undercover Riding Patrol	Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.
Uniformed Patrol	Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Alarm Buttons at Stations/Stops/Shelters	Alarm buttons installed at key locations allow patrons to notify agency or emergency personnel that a crime is in progress or likely to occur.
Automatic Vehicle Locators (AVL)	AVL systems are used to assist emergency response units in locating buses quickly.
Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Emergency Communications Systems	Emergency communications systems prioritize calls received from operators under duress.

Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.
Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.
Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Operator Conflict Management Training	Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.
Passenger Information	Flyers supplying system information, explaining techniques to avoid becoming a victim, and providing emergency procedures are distributed to passengers.
Road Supervisor Training	Conflict management training is provided to supervisors who are often first to respond to system disturbances.
Signage	Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.

Special Operator Procedures

The following procedures and mechanisms are used by many of the participating transit systems:

- Policies encouraging operators to appear as witnesses in court.

- Committees addressing operator security concerns and suggesting/drafting corresponding agency security policies.

4.3.2.4 Bomb Threats

Issue Rank (of 28)	
Bus	**Rail**
20	21

Definition: *A threat issued against the system to discharge an explosive or an incendiary device in an area that may result in serious injuries, death, or significant property damage.*

Problem Description:

A bomb threat may be issued to:

- Attract attention.

- Intimidate transit system.

- Disrupt service.

- Express grievance against system or system personnel.

- Create political disturbance.

Threats may be issued by:

- Telephone (most common): The intent to detonate an explosive is phoned to the transit system. The caller has placed a device, has knowledge of someone placing a device, or wishes to disrupt system operation.

- Written Threats (less common): These are more difficult to trace than phoned-in threats and are generally more serious.

- Letter and Package Threats (rare): These serve a variety of purposes, but generally are directed at specific system personnel rather than at the system as a whole. Personal motivation of the perpetrator may be important.

System Strategies:

Personnel Deployment

Special Bomb Threat Procedures

Command Post	A command post, such as a switchboard room or other focal point of telephone/radio communications, is designated for use during a bomb threat. Management personnel are selected to operate the command post and make decisions on actions taken during the threat.
Coordination with Local Agencies	Internal transit departments and external agencies (e.g., local police, fire departments, emergency agencies, and other local government agencies) coordinate with local agencies regarding plans for handling bomb threats. Plans include familiarity with the FBI's role and scenarios for contacting the local police bomb squad.
Inter-Agency Committee	Inter-agency committees formed with local authorities assist transit systems in maintaining contact and facilitating coordination.
Police Walk-Through	Many agencies ask local police and emergency personnel to walk through the system with transit security/police department staff to determine vulnerable areas where explosives may be placed. Special attention is paid to elevator shafts, ceiling areas, restrooms, access doors, crawl spaces, electrical fixtures, storage areas, boiler rooms, main utility switches, trash receptacles, mail rooms, and fire hose racks.

Operating Practices

Control of Critical Information	Agencies utilize special policies to adequately protect classified documents, blue prints, proprietary records and other information essential to system operation.
Control of Keys	Agencies monitor distribution of keys and codes to personnel with access to critical areas.

Equipment	Equipment is evaluated to identify vulnerabilities. Checklists and inter-departmental plans are used.
Limiting System Access	Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.
Lines of Command	Clear lines of authority are used for handling bomb threats. Dispatchers and mail handlers who receive threats deliver them to designated supervisor for evaluation. Supervisors evaluate threats for seriousness, and contact appropriate officials if threat is determined to be serious. Clear plans are developed by agencies that contain system policies and procedures for handling threats, including coordinating with outside agencies, establishing command post, managing a search, identifying and disposing of suspicious packages, and gathering evidence to build case against perpetrators.
Specialized Training (Bomb Threat)	Transit personnel receive training in system's policies and procedures for handling bomb threats, to enable them to do the following:

- Recognize suspicious persons, unauthorized persons, and suspicious packages or materials.

- Conduct periodic checks of all restrooms, stairwells and other areas of the system.

- Follow specified procedures if bomb threat call is received (especially telephone switchboard personnel).

- Organize an evacuation unit consisting of key management personnel to evacuate system, including employees and patrons.

Threat Checklists

Checklists are used for the four stages of managing a bomb threat:

Preparation

- Inspection
- Coordination
- Training
- Plans

Response

- Internal system evaluations of threats
- Contact lists of police/emergency personnel
- Bomb search
- System shut-down
- Evacuation

Recovery

- System reentry
- System start-up
- Incident report

Post-Recovery

- Media relations
- Corrective actions and evaluation

4.3.2.5   Burglary

Issue Rank (of 28)	
Bus	**Rail**
20	17

Definition: *Unlawful entry into a structure to commit a felony or a theft. Subdivided into the following groups:*

- *Forcible entry.*

- *Unlawful entry.*

- *Attempted forcible entry.*

   Note: UCR system classifies theft from a motor vehicle as a larceny-theft. Some states classify such a theft as a burglary.

Problem Description:

Burglary differs from theft because it involves unlawful entry into a *structure.* Pickpocketing, theft from vending machines, and theft of items from revenue areas are classified as thefts. Theft from a facility involves forcible, unlawful, or attempted entry into a structure. A perpetrator entering a bus garage at night to remove a computer is committing burglary, while a perpetrator removing a sign from the wall of a bus terminal is committing theft. Transit agency employees are sometimes involved in burglaries, either by assisting in a crime or by supplying information (regarding equipment or shipments) to persons committing burglary.

Bus systems ranked this issue as less of a concern than rail systems. The lower ranking for bus reflects the fact that bus systems have fewer facilities than rail systems.

System Strategies:

Personnel Deployment

Entrance Control

An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points.

Local Police Privileges

Privileges (e.g., making employee restrooms/break rooms available, providing areas to fill out reports, and encouraging parking in system lots while doing routine paperwork) are provided to local police to attract them to transit agency parking lots and facilities. Police visibility deters potential burglars and increases the likelihood that burglars will be observed and apprehended.

Police/Security Personnel Sweeps

Sweeps are performed to ensure that facilities are empty before closing.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Architectural Design

Facilities designed using the "defensible space" concept ensure a limited number of observable points of entry, clear lines of sight, redundant access control systems on doors and garages, and secure storage areas for inventory.

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Intrusion Alarms

Alarms, linked directly to dispatch or station manager's booth, alert system personnel of unauthorized assess.

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Motion Detection Systems	Systems are installed that sense the presence of unauthorized personnel in facilities during off-hours.
Target Hardening	Facilities are redesigned to make them more difficult to break into and to make assets more difficult to steal or destroy. This method often involves use of screen covers, locks, metal or plastic housings, and shielding devices. Design selection is crucial for vehicles and facilities, as well as ticket vending machines and other passenger amenities.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Inventory Control	Policies requiring clear record-keeping and strict control of inventory items are in place. Bar coding systems are used to provide a paper trail for loss control activities.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Risk Management Data	The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.

Operating Practices

Control of Critical Information	Appropriate policies adequately protect classified documents, blue prints, proprietary records and other information essential to system operation.
Control of Keys	System staff monitors distribution of keys and codes to personnel with access to critical areas.

Limiting System Access

Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.

Operations Personnel Sweeps

Sweeps are performed to ensure that facilities are empty before closing.

4.3.2.6 Disorderly Conduct

Issue Rank (of 28)	
Bus	Raill
1	2

Delinition: *Includes all charges of committing a breach of the peace, e.g.:*

- *Disturbing the peace.*

- *Disorderly conduct in state institutions or on trains/public conveyances.*

- *Boisterous and unruly conduct.*

- *Refusing to assist an officer.*

Problem Description:

Disorderly conduct received the highest overall ranking by the participating agencies, reflecting the time, resources, and effort involved in addressing the issue with preventative measures and responding to calls for service from operators. Disorderly conduct describes a number of situations, from annoying or menacing behaviors (obscene language, "cat calling," etc.) to potentially dangerous actions (disruptive acts that may affect the safe operation of the transit vehicle).

On a typical system, the vast majority of disorderly conduct occurrences are committed by juveniles, who may establish a consistent pattern of disrupting activities on the rail or bus vehicle. The problem is intensified on systems transporting large numbers of schoolchildren. In addition to juvenile offenders, persons under the influence of alcohol or narcotics, the mentally ill, and homeless persons are likely to engage in disorderly behaviors. Disorderly conduct crimes may present an impediment to the safe and secure operation of the vehicle, and they are also a deterrent to ridership.

System Strategies:

Personnel Deployment

Coordination with Destinations

Agency police or security staff coordinates and shares information with personnel responsible for providing security at destinations frequented by offenders/juveniles (e.g., shopping mall security staff) in order to anticipate and prevent crime on the transit system. Destination security staff may be aware of crime trends that will likely affect the transit system.

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit (e.g., identifying offenders through school police).

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Tailing Police/Security Vehicle

Marked police/security vehicles follow transit vehicles, to observe passengers in the vehicle. This method is typically used on "problem routes" where disorderly conduct is an ongoing concern.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols travelling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Mirrors

Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.

Public Address System

Public address systems enable vehicle operators to warn offenders.

Shelter/Bench Removal

These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior.

Data Collection

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.

Dispatch Records

These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)

FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Incident Report Forms

The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Operator Conflict Management Training	Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.
Redesigning Routes	Agencies typically avoid placing stops in problem areas such as in front of bars, corners frequented by prostitutes, and areas in which the sale of narcotics is common.

Special Student Services:

Restricted Student Fare Hours	Student fares are offered only during times when students are travelling to and from school to discourage students from using transit services for trips that are unrelated to school.
Student Identification Cards	Persons travelling at student rates are required to show identification containing name and school. This practice allows operators to identify problem passengers and to report offenders to local principals for disciplinary action.
Student Trippers	Vehicles that carry only students are provided in the afternoon, to minimize disruptions on routes servicing schools.

4.3.2.7 Drunkenness/Liquor Law Violations

Issue Rank (of 28)	
Bus	**Rail**
3	8

Definition: ***Drunkenness*** *includes intoxication and drunk and disorderly violations.*
Liquor law violations *include all alcohol-related state and local crimes with the exception of "drunkenness" and "driving under the influence."*
Specifically mentioned in the UCR definition is "drinking on a train or public conveyance."

Problem Description:

Drunkenness and liquor law violations are likely to occur on transit property if they are issues in the community at large. These offenses range in severity from nuisances to disruptive or dangerous behavior. Most transit agencies experience a number of these violations. Although the consequences of these crimes may not be as serious as some of the other infractions experienced by transit systems, transit police/security personnel may spend an inordinate amount of time removing intoxicated passengers from vehicles. In addition, the behavior of intoxicated passengers and the sight of passengers consuming alcohol on public transit vehicles dissuade many passengers from using public transit.

System Strategies:

Personnel Deployment

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Topic-Specific Legislation

Legislation has been passed in several states disallowing alcoholic beverages on public transit vehicles.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols travelling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity. Uniformed officers also refer offenders to Health and Human Services (HHS) agencies.

System Design and Technology

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.
Seat Redesign	Seat designs that discourage sleeping in shelters, stations, and vehicles are effective.
Shelter/Bench Removal	These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles are used to support special police operations or to document the agency's problem with public drunkenness.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Monitoring Restrooms/Limiting Access   System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.

Operations Personnel Sweeps   Sweeps are performed to ensure that facilities are empty before closing.

Operator Conflict Management Training   Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.

Policy Training   Clear and consistent policies for managing offenders address the problem of persons under the influence of alcohol on the system. Police/security personnel are trained on these policies.

Redesigning Routes   Agencies typically avoid placing stops in problem areas such as in front of bars, corners frequented by prostitutes, and areas in which the sale of narcotics is common.

Road Supervisor Training   Conflict management training is provided to supervisors who are often first to respond to system disturbances.

4.3.2.8 Fare Evasion

Issue Rank (of 28)	
Bus	**Rail**
7	4

Definition: *Use of transit agency services without full payment of the associated fare, including fraudulent use of transfers and discount media (e.g., student/disabled passes.)*

Problem Description:

Fare evasion is a key issue for both bus and rail systems. Three of the five participating rail agencies are barrier-free systems. These systems ranked fare evasion as less of a problem than the other two agencies. This ranking reflects the fact that barrier-free systems typically experience fare payment rates of over 98%, better than that of systems with automatic fare collection equipment.

Although this issue ranks higher on rail, fare evasion is also a problem on bus systems. The problem is typically handled by the operator on this mode, however, and not by law enforcement officials or security guards. On most systems, operators are instructed to announce the fare to patrons who have not paid, but to take no further action in the case of refusal. Much of the problem with fare evasion, especially on bus systems, is that while known to be a serious concern, the magnitude of most agencies' fare evasion problem is not well documented. Bus operators spoken to during the course of this project consistently ranked fare evasion as one of the major problems they face and most felt that fare evasion on bus systems is under-reported.

Fare evasion on transit systems includes the following:

- Refusing payment of the fare (or a portion of the fare).

- Jumping turnstiles.

- Counterfeiting passes.

- Misusing discounted media or monthly passes.

- Selling transfers.

- Entering revenue areas unlawfully (e.g., back door of the bus, climbing station fences).

- Failing to purchase tickets on barrier-free systems.

4-53

System Strategies:

Personnel Deployment

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Entrance Control

An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points, including entrances for persons with disabilities.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Saturation Patrols/Sweeps

Intensive efforts are undertaken at particular locations for specific time periods to ticket or arrest of fare evaders. Periodic sweeps "advertise" police/security presence and discourage future theft of service.

Special Details

Special police/security units perform surveillance of system facilities during times when and at locations where fare evasion is likely to occur.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols travelling on transit vehicles are used to deter potential offenders.

System Design and Technology

Architectural Design

Facilities designed using the "defensible space" concept ensure a limited number of observable points of entry, clear lines of sight, redundant access control systems on doors and garages, and secure storage areas for inventory.

Fare Box Design	Many systems use "registering fare boxes," which indicate to the operator when passengers do not pay the correct fare. "Non-registering fare boxes" only allow the operator to see and count the deposited fare.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Magnetic Stripe Fare Cards	These cards offer passengers convenient means of payment that guarantees an exact fare. Some of these cards contain an anti-pass-back feature on the magnetic stripe that prevents the card from functioning when used twice in succession.
Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.
Turnstile Design and Location	Some types of turnstiles designs are especially difficult to jump over or pass through without payment. If located close to entrances, these turnstiles help to ensure fares are paid before entering system.

Data Collection

Camera Surveillance	On-board analog or digital cameras are used to identify suspects, deter potential fare evaders, and provide evidence in court. They are also used to indicate the extent of the problem and to record operator adherence to system policies.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

| Risk Management Data | The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities. |

Operating Practices

| Fare Paid Zones | On some barrier-free systems, certain areas have been designated as "fare paid" zones. Persons within this area without tickets may be ejected. |

| Identification Check | Operators check identification for those using special fares (students, persons with disabilities, senior citizens). |

| Policy Training | Clear and consistent policies for managing offenders address the problem of persons under the influence of alcohol on the system. Police/security personnel are trained on these policies. |

| Signage | Signs are posted advising patrons of fare requirements. |

Specialized Fare Policies:

| Advance Fare Payment | This policy eliminates the possibility of underpayment on-board transit vehicles. |

| Control of Fare Media | Strict practices requiring vendors to check identification of those purchasing discounted fare media (students, senior citizens, persons with disabilities) prevent fare underpayment. Outside vendors of fare media are required to keep accurate records of sales. |

| Control of Transfers | Policies prevent passenger/employee theft/misuse of transfers (strict accounting of transfers, removal of transfers when operator leaves vehicle, etc.). |

| Fare Recognition Training | Operators have been trained to recognize monthly passes, discounted passes, and transfers. |

4.3.2.9 Gang Activity

Issue Rank (of 28)	
Bus	**Rail**
13	12

Definition: *Any of a number of criminal activities perpetrated by organized groups, typically comprised of juveniles and young adults. Related crimes may include incidents of graffiti, narcotic law violations, weapon law offenses, assaults, and homicides.*

Problem Description:

Gang activity is increasingly prevalent in cities throughout the United States. Large urban centers typically experience more gang-related crime than small or rural cities. Most of the participating agencies are located in moderate to large sizesd cities which experience gang activity (Los Angeles, Miami, Washington, D.C., San Diego, St. Louis, Minneapolis/St. Paul, and Gary). Although gang members may not use public transportation, their activities are still intimidating to transit ridership. For example, at MCTO, only members of certain gangs use the bus system while most gang members travel exclusively by automobile. However, drug dealing at city bus stops by gang members affects ridership.

Gangs are involved in various illegal activities, including:

* Marking territory, such as walls on transit system property, with graffiti.

* Illegal narcotics trade.

* Violence.

* Carrying weapons on the system.

* Gang-related disputes on transit vehicles.

In addition, gang members are often identifiable by their clothing, creating an uncomfortable environment for system employees and passengers.

System Strategies:

Personnel Deployment

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit (e.g., identifying offenders through school police).

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Special Details

Special police/security units perform surveillance of facilities during times when gang activity is likely to occur. Anti-gang details also provide intelligence information about gangs, perform field identification of gang members, and interface with schools and social service agencies.

Topic-Specific Legislation

Legislation has been passed in some states disallowing concealed weapons on public transit vehicles.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Emergency Call Boxes

Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.

Emergency Communications Systems

Emergency communications systems prioritize calls received from operators under duress.

Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Enhanced Shielding of Operators	Some buses are equipped with plexiglass guards behind and around the operator's seat to prevent blind-side attacks. These shields protect operators without limiting over-the-shoulder visibility.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.
Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.
Resistant Windows	Several types of resistant windows are being used in transit facilities and vehicles:

- Bullet-proof glass.

- Coatings (hardened surfaces on windows) to prevent etching.

- Removable transparent sheets.

- Shatterproof plexiglass windows in shelters.

- Shatterproof window materials in operator area.

- Plastic window liners/shields fastened inside window frames to protect passengers from shattering glass. Shields can be easily and inexpensively removed and replaced.

Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.
Vandal-Resistant Materials	Several materials and techniques are being used in transit facilities and vehicles:

- Materials (e.g., hard coatings on painted surfaces) that repel or resist ink and paint, provide easy clean up, and are not easily marred or gouged

- Vandal-resistant seating (e.g., etch-proof seating, metal surfaces, easy-to-replace seats) or no seating

- Security fasteners (e.g., fasteners that are not easily loosened by conventional tools) for vehicle components

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Gang Intelligence	Police/security forces remain aware of gang activity to anticipate graffiti or other crimes likely to occur on transit property. This sometimes involves interface with local police.

Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Aggressive Maintenance	Damage to facilities (e.g., graffiti and broken windows) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.
Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.

Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.
Restitution/Instruction Programs	Transit agencies work with local courts and prosecutors to design programs (e.g., graffiti clean-up and cash restitution for vandalism damages) that demonstrate to offenders the seriousness of their crimes.
Safe Layover Locations	Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.

4.3.2.10 Graffiti/Vandalism

Issue Rank (of 28)	
Bus	Raial
3	3

Definition: *Vandalism is the willful or malicious destruction, injury, disfigurement, or defacement of any public or private property, real or personal, without consent of the owner or person having custody or control by cutting, tearing, breaking, marking, painting, drawing, covering with filth, or any other such means as may be specified by local law.* **Graffiti** *is a specific type of vandalism involving writing or marking on property.*

Problem Description:

Transit agencies are favorite targets of vandals and graffiti "artists," as reflected by the ranking given the issue by the participating agencies. Graffiti artists select the most visible places possible as sites for their work, and transit agency property is an ideal location. Walls adjacent to railway tracks may be viewed by thousands of riders daily, and buses and rail cars travel throughout the city, displaying the work of "taggers." Rail sysitems, especially, have a tremendous capital investment in vehicles, facilities, and equipment, and law enforcement officials and security guards at the agencies visited spend much of their time preventing and responding to property destruction crimes.

Vandalism damage may involve:

- Broken windows.

- Slashed or damaged seats.

- Etched windows or paint.

- Removal of vehicle equipment.

- Destruction of shelters.

- Littering.

Graffiti is a serious concern for transit agencies due to the frequency of its occurrence on transit property, the cost of graffiti-removal, and the resulting perception that the transit system is not secure.

System Strategies:

Personnel Deployment

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit (e.g., identifying graffiti artists through school police, participating in anti-graffiti courses/ campaigns for younger school children).

Special Details

Special police/security units perform surveillance of system facilities during times when criminal activity is likely to occur. Anti-Graffiti Details typically perform field identification of gang members, interface with schools/local police, and manage gang intelligence (track gang activity to anticipate graffiti or other crimes likely to occur on transit property).

System Design and Technology

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Intrusion Alarms

Alarms, linked directly to dispatch or station manager's booth, alert system personnel of unauthorized assess.

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed. Utilize plants and vines to cover concrete pillars or place prickled bushes in front of walls to deter graffiti.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Mirrors

Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle which is a frequent location for vandalism. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.

Resistant Windows	Install bullet-proof glass on facilities and vehicles. Prevent etching by using coatings (hardened surfaces on windows). Simplify repair with removable transparent sheets. Reduce shattering with plexiglass for shelter windows, shatterproof material in operator area on buses, etc. Install plastic window liners/shields fastened inside window frames for protection against shattering glass. Shields can be easily and inexpensively removed and replaced.
Shelter/Bench Removal	These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior. If repeated/expensive damage occurs, removal may be necessary.
Vandal-Resistant Materials	Several materials and techniques are being used in transit facilities and vehicles:

- Materials (e.g., hard coatings on painted surfaces) that repel or resist ink and paint, provide easy clean up, and are not easily marred or gouged

- Vandal-resistant seating (e.g., etch-proof seating, metal surfaces, easy-to-replace seats) or no seating

- Security fasteners (e.g., fasteners that are not easily loosened by conventional tools) for vehicle components

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Gang Intelligence	Police/security forces remain aware of gang activity to anticipate graffiti or other crimes likely to occur on transit property. This sometimes involves interface with local police.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Aggressive Maintenance	Damage to facilities (e.g., graffiti and broken windows) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.
Corporate Shelter Maintenance	Businesses or marketing firms are hired to maintain bus shelters in exchange for the posting of advertisements on shelters and trash cans. Liquor advertisements are not recommended.
Indoor Bus Storage	Buses are stored indoors overnight and during off-hours to reduce risk of damage.

Limiting System Access	Transit agency management works with the *ma*ntenance department and other system pe sonnet to restrict access to revenue areas du ing off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.
Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isc lated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., an festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likislihood that criminal behavior will be observed.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.
Restitution/Instruction Programs	Transit agencies work with local courts and presecutors to design programs (e.g., graffiti clean-up and cash restitution for vandalism damages) that demonstrate to offenders the seriousness of their crimes.
Vendors in Parking Lots	Sceme agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.11 Hate Crimes

Issue Rank (of 28)	
Bus	**Rail**
26	24

Definition: *Any of a number of crimes motivated by religious, ethnic, racial, or sexual-orientation prejudice. May include incidents of graffiti or assault targeted against members of these groups.*

Problem Description:

Hate crimes on transit property include criminal acts such as painting a swastika on a bus shelter or committing a racially-motivated assault. Hate crimes are not a significant issue at the agencies participating in this project.

The Hate Crime Statistics Act, passed by the U.S. Congress and signed by the President in April 1990, mandates data collection of crimes motivated by religious, ethnic, racial, or sexual-orientation prejudice. Data collection commenced January 1,1991, and the UCR Program distributed Hate Crime Data Collection Guidelines and Training Guides to city, county, and state law enforcement agencies. Training sessions have been held across the nation to educate federal, state, and local law enforcement agencies in the hate crime reporting procedures.

Since most agencies have not collected statistics on hate crimes until very recently, incidents are most likely under-reported. Data collection, therefore, is an important first step in addressing the problem. Incident report forms, effective questioning of victims, and shared information with local police are valuable tools in reducing incidents of hate crimes.

System Strategies:

Personnel Deployment

Specialized Training

Specialized training programs teach police/security to be sensitive to conditions promoting hate crimes and the impact these crimes have on victims. Also, these programs educate personnel on special hate crime reporting requirements and how to question vieims appropriately to capture significant data.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

Data Collection

Dispatch Records

These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)

FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Gang Intelligence

Police/security forces remain aware of gang activity to anticipate hate crimes likely to occur on transit property. This sometimes involves interface with local police.

Incident Report Forms

The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data

Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.

Operator Reports

Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Aggressive Maintenance

Damage to facilities (e.g., hate graffiti) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.

4.3.2.12 Homelessness/Vagrancy

Issue Rank (of 28)	
Bus	**Rail**
8	1

Definition: *Violations of local vagrancy, panhandling, and loitering laws committed by the homeless population on the transit system.*

Problem Description:

Homelessness ranked as the number one problem facing rail systems, and the number eight issue facing bus agencies. The homeless community is legally troublesome for many agencies because eviction is usually not an option. If fares are paid by the homeless or if they congregate in areas where no fare is necessary (station entrances, restrooms, etc.), agency representatives typically have no recourse except to refer them to a Health and Human Service (HHS) agency, even if their presence intimidates or irritates other passengers.

Transit property often presents a desirable location for the homeless. Transit agencies typically afford some of the following "amenities" which attract the homeless population: heated/air conditioned facilities, restrooms, some measure of security, and contact with a large population for panhandling activities. Although, in most cases, the homeless do not pose a danger to patrons, their presence detracts from the perceived security and quality of transit services. Some patrons may feel hesitant to make use of agency facilities installed for their use (such as restrooms), due to the perceived danger presented by the homeless. In addition, panhandling is a nuisance to passengers who may not be comfortable riding after feeling harassed by the homeless population on or around system property.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Foot Patrol

Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders.

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Entrance Control

An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points.

Saturation Patrols/Sweeps

Intense ticketing, arrest, or removal of homeless for a period of time is used to "advertise" police/security presence and discourage future homeless activities.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur. Certain details rely on gang intelligence, field identification of repeat offenders, or interface with schools.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders. Local policies concerning the rights of homeless populations vary significantly. However, some transit agencies have been successful in promoting tougher laws against panhandling, soliciting, and trespassing.

Topic Specific Legislation

Single-issue legislation is used effectively in some communities to deter crime. Legislation has been passed in several states disallowing panhandling.

Uniformed Patrol	Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity. Uniformed officers also make social service agency referrals, issue warnings, and/or evict the homeless.
Zero Tolerance Policy	Many systems have implemented coordinated policies of enforcing all ordinances and laws. These policies ensure that the transit agencies are perceived as unattractive locations for criminal activity.

System Design and Technology

Architectural Design	Facilities designed using the "defensible space" concept ensure a limited number of observable points of entry, clear lines of sight, redundant access control systems on doors and garages, and secure storage areas for inventory. Appropriate designs limit access and provide an uninviting environment for the homeless.
Barriers	Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.
Fencing	High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed. Also, thorny bushes or similar materials which discourage sleeping in landscaping are selected.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders. Increased visibility discourages sleeping on transit property.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours. This policy prevents persons from sleeping or bathing in these areas.

Seat Design	Seats which discourage sleeping in shelters, stations, and vehicles are provided to patrons.
Shelter/Bench Removal	These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior.
Turnstile Design and Location	Some types of turnstiles designs are especially difficult to jump over or pass through without payment. If located close to entrances, these turnstiles help to ensure fares are paid before entering system.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Aggressive Maintenance	Damage to facilities is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.

Fare Paid Zones	On some barrier-free systems, certain areas have been designated as "fare paid" zones. Persons within this area without tickets may be ejected.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.
Municipal Resources for Maintenance	Some systems use community service hours issued to offenders to maintain facilities and support the agency's zero tolerance policy (graffiti removal, restroom maintenance, etc.).

4.3.2.13 Homicide

Issue Rank (of 28)	
Bus	Rail
28	24

Definition: *The willful (non-negligent) killing of one human being by another and incidents of death caused by gross negligence.*

Problem Description:

Homicide, and other serious violent crimes, ranked among those issues consuming the least amount of security resources for the following reasons:

- Homicide is difficult to predict because of its random occurrence. Relatively few agencies have ever experienced a homicide on system property.

- Typically, when a homicide does occur, local police handle the investigation. Since so few homicides occur on transit systems very few transit police/security departments are equipped to perform homicide investigations.

Many of the security measures provided by a transit agency to address more routine issues have an impact on the frequency of occurrence of serious violent crimes. Transit agencies may design countermeasures to increase visibility, reduce instances of operator/passenger isolation during off-peak hours, provide for operators/passengers to contact police/security in the event of an emergency, and aid in the apprehension of criminals if serious violent crimes do occur.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Canine/Foot Patrol

Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders.

Coordination with Destinations

Agency police or security staff coordinates and shares information with personnel responsible for providing security at destinations frequented by offenders/juveniles (e.g., shopping mall security staff) in order to anticipate and prevent crime on the transit system. Destination security staff may be aware of crime trends that will likely affect the transit system.

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit. In this case, school police may be useful sources of information regarding gang activities.

Topic Specific Legislation

Single-issue legislation is used effectively in some communities to deter crime. Legislation has been passed in several states disallowing concealed weapons on public transit vehicles.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Alarm Buttons at Stations/Stops/Shelters

Silent alarms installed at key locations allow patrons to notify agency or emergency personnel that a crime is in progress or likely to occur.

Automatic Vehicle Locators (AVL)	AVL systems are used to assist emergency response units in locating buses quickly.
Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Emergency Communications Systems	Emergency communications systems prioritize calls received from operators under duress.
Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.
Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Gang Intelligence	Police/security forces remain aware of gang activity to anticipate graffiti or other crimes likely to occur on transit property. This sometimes involves interface with local police.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Operator Conflict Management Training	Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.

Passenger Information	Flyers supplying system information, explaining techniques to avoid becoming a victim, and providing emergency procedures are distributed to passengers.
Pepper Spray	At a few agencies, pepper spray or a similar aerosol irritant has been issued to operators (in conjunction with appropriate training) for self-defense. Note: Exposure to aerosol irritants may require medical attention.
Safe Layover Locations	Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.
Signage	Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.14 Motor Vehicle Theft

Issue Rank (of 28)	
Bus	**Rail**
19	12

Definition: *The theft or attempted theft of a motor vehicle (including automobiles, trucks, buses, and other vehicles).*

Problem Description:

Many transit systems with parking facilities experience incidents of motor vehicle theft. The theft of items from motor vehicles and the theft of motor vehicle parts and accessories, however, are more universal concerns. Securing parking lots is especially difficult for transit systems sharing lot maintenance with other municipal or private authorities.

Many citizens of communities served by mass transit choose to drive rather than risk motor vehicle damage or theft resulting from leaving a vehicle unattended in an agency parking facility. For the majority of agencies, staffing a parking lot full-time (with transit operations or police/security personnel) is financially infeasible. In addition, transit agencies occasionally experience the theft of a non-revenue vehicle such as a service truck or van. Also, thefts occasionally occur from employee parking lots.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Foot Patrol

Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders. Bicycle patrols are particularly effective for large parking lots and garages.

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Elevated Guard Roosts

Elevated police/security guard posts are used in parking lots for increased visibility.

Entrance Control

An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points.

Local Police Privileges

Privileges (e.g., making employee restrooms/break rooms available, providing areas to fill out reports, and encouraging parking in system lots while doing routine paperwork) are provided to local police to attract them to transit agency parking lots and facilities. Police visibility deters potential offenders and increases the likelihood that criminals will be observed and apprehended.

Undercover Patrols

Unmarked vehicles or plain clothes officers/guards are used to apprehend offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Emergency Call Boxes

Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Pay Phones

Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.

Data Collection

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.

Field Identification Reports (FIRs)

FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Local Police Data

Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity. Motor vehicle theft victims may be unlikely to report the theft to the transit agency, but would file a report with the local police.

Tip Lines

Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Mixed-Use Spaces

Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.

Signage (Surveillance)

Posted signs inform potential offenders that a specific area is under surveillance in order to deter criminal activity.

Vehicle Registration

Regular parking lot users register name and license plate number with parking lot attendant. Identification is required to leave the lot with a registered vehicle.

Vendors in Parking Lots

Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.15 Narcotics Offenses

Issue Rank (of 28)	
Bus	Rail
13	17

Definition: *All arrests for violations of state and local laws relating to the unlawful possession, sale, or use of narcotic drugs.*

Problem Description:

Drug offenses are likely to occur on transit property if they are issues in the community at large. Offenses experienced by transit agencies include:

*   Possession of narcotics.

*   Use of narcotics on transit vehicles.

*   Drug-dealinglat bus shelters and rail stations.

Narcotic offenders are an issue to the transit agency because they are more likely to:

*   Present a danger to transit personnel and to passengers.

*   Commit other crimes, such as robbery and assault.

*   Possess a weapon.

*   Intimidate other passengers.

System Strategies:

Personnel Deployment

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Decoy Patrols

Members of special undercover units pose as victims of crimes or participants in criminal activities (e.g., narcotics 'buyers').

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur. Certain details rely on gang intelligence, field identification of repeat offenders, or interface with schools.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders. Single-issue undercover teams are used to apprehend offenders (e.g., drug dealers).

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Architectural Design

Facilities designed using the "defensible space" concept ensure a limited number of observable points of entry, clear lines of sight, redundant access control systems on doors and garages, and secure storage areas for inventory.

Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders. Shelter lighting programs are particularly effective.
Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle. Rear bus door mirrors enable the operator to see passengers illegally entering through the rear door.
Pay Phones	Some agencies block pay phones so incoming calls cannot be received (useful in discouraging drug dealing at phones).

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Gang Intelligence	Police/security forces remain aware of gang activity to anticipate drug trafficking or other crimes likely to occur on transit property. This sometimes involves interface with local police.

Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Corporate Shelter Maintenance	Businesses or marketing firms are hired to maintain bus shelters in exchange for the posting of advertisements on shelters and trash cans. Liquor advertisements are not recommended.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.

Redesigning Routes

Agencies typically avoid placing stops in problem areas such as in front of bars, corners frequented by prostitutes, and areas in which the sale of narcotics is common.

4.3.2.16 Objects Thrown at Vehicles (Missiles)

Issue Rank (of 28)	
Bus	**Rail**
1	8

Definition: *Hurling of missiles (rocks, bricks, balls, etc.) at motor vehicles in order to shatter windows or to inflict other damage. Note: In some communities this crime is a felony due to the safety concerns involved.*

Problem Description:

At most of the participating systems, objects thrown at vehicles constitute the most serious vandalism problem experienced by the agency. This issue was more common for bus systems than for rail systems.

Transit agencies experiencing incidents of objects thrown at vehicles have two primary concerns:

• Safety of riders/operators.

• Damage to system property.

Objects are usually thrown to shatter vehicle windows, occasionally resulting in a vehicle accident. It is not uncommon for patrons to be injured by flying glass as a result of missiles thrown at transit vehicles. Insurance claims for system personnel and patrons can be substantial at agencies where incidents of missile throwing occur frequently. In addition, transit systems must consider repair costs for system property damaged or destroyed as a result of thrown objects.

System Strategies:

Personnel Deployment

Coordination with Marketing Department   Certain types of vehicle advertisements are more likely to invite missile throwing. Coordination with agency marketing departments has been used effectively by some agencies to select appropriate advertising campaigns.

Coordination with Schools   School officials are asked to help to maintain discipline over their pupils who use public transit (e.g., identifying offenders through school police).

Media Relations   Security features and policies, as well as agency rules and regulations, are publicized to promote appropriate conduct on the transit system.

Special Details   Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur. Certain details rely on gang intelligence, field identification of repeat offenders, or interface with schools.

System Design and Technology

Emergency Communications Systems   Emergency communications systems prioritize calls received from operators under duress.

Fencing   High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Lighting   Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Resistant Windows   Some agencies have installed bullet-proof glass or shatterproof windows on certain facilities and vehicles. In addition, plastic window liners/shields fastened inside window frames protect operators and passengers from shattering glass. These shields can be easily and inexpensively removed and replaced.

Data Collection

Camera Surveillance   Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.

Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Aggressive Maintenance	Damage to facilities (e.g., broken windows) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.
Restitution/Instruction Programs	Transit agencies work with local courts and prosecutors to design programs (e.g., graffiti clean-up and cash restitution for vandalism damages) that demonstrate to offenders the seriousness of their crimes.

4.3.2.17 Pickpocketing/Purse Snatching

Issue Rank (of 28)	
Bus	**Rail**
13	14

Definition: *Specific types of larceny-theft. **Pickpocketing** is theft of articles from a person by stealth where the victim is usually not immediately aware of the theft. **Purse-snatching** is grabbing or snatching of a purse, handbag, etc. from the custody of an individual. In either case, if more force is used than to snatch the purse or remove the wallet (or similar item), a strong arm robbery has occurred.*

Problem Description:

Though these crimes, by definition, are not seriously violent, the potential for violence exists. For example, a victim unwilling to let go of a purse may be pushed to the ground or dragged along a station platform by a purse-snatcher. These crimes are typically under-reported since most victims (especially of pickpocketing) do not expect to recover stolen items, and therefore, may not report the crime to police (or to the transit agency). In addition, since pickpocketing is a crime of stealth, a victim may not know for certain when the crime occurred, or even if it occurred on the transit system.

Due to the number of passengers transit systems carry, especially at peak hours, stations, stops, and vehicles are an attractive target for pickpockets. Also, pickpockets often choose elderly victims since they tend to be less aware of their surroundings. Transit systems carry a disproportionate number of elderly passengers. While it is difficult to discourage pickpocketing, it is possible to move the practice off the transit system.

Purse snatching and chain snatching (where the perpetrator grabs a chain from a patron's neck, breaking it in the process) are crimes of opportunity. Usually, the crime occurs when the transit vehicle's doors are open at a stop, enabling the perpetrator to flee. By the time the victim is able to react, the vehicle doors have closed again, and the perpetrator is gone. In some cases, criminals will snatch purses or chains from pedestrians through the window of a moving bus or from persons waiting on station platforms from the window of a moving rail car.

4-93

System Strategies:

Personnel Deployment

Coordination with Destinations

Agency police or security staff coordinates and shares information with personnel responsible for providing security at destinations frequented by offenders/juveniles (e.g., shopping mall security staff) in order to anticipate and prevent crime on the transit system. Destination security staff may be aware of crime trends that will likely affect the transit system. In this case, shopping mall security staff may be a valuable source of information regarding pickpockets.

Coordination with Local Police

This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Decoy Patrols

Members of special undercover units pose as victims of crimes (e.g., pickpocketing) or participants in criminal activities.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Emergency Call Boxes

Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.

Emergency Communications Systems

Emergency communications systems prioritize calls received from operators under duress.

Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Turnstile Design and Location	Some types of turnstiles designs are especially difficult to jump over or pass through without payment. If located close to entrances, these turnstiles help to ensure fares are paid before entering system.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns. Also, since most pickpockets are repeat offenders, the use of FIRs is especially helpful to police personnel in locating and monitoring criminal activities.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Mixed-Use Spaces

Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.

Off-Hours Waiting Areas

Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.

Passenger Information

Flyers supplying system information, explaining techniques to avoid becoming a victim, and providing emergency procedures are distributed to passengers.

Signage

Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.

Vendors in Parking Lots

Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.18 Prostitution

Issue Rank (of 28)	
Bus	**Rail**
24	28

Definition: *All sex offenses of a commercial nature.*

Problem Description:

For most transit agencies, prostitution is not a significant problem. Rail systems experience few incidents of the crime since prostitutes, generally, do not operate from indoor facilities. Bus systems in some cities with high crime levels have a minor problem with prostitutes using bus shelters. The presence of prostitutes at or near bus stops/shelters is normally not a danger to patrons. However, prostitutes may increase rider discomfort about using the transit system.

Bus shelters are an attractive location for prostitution because of the number of people using the system and the perception that the risk of being cited or arrested is low. Prostitution on transit property can be reduced by changing this perception.

System Strategies:

Personnel Deployment

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity. Frequent arrests signal prostitutes that this activity will not be tolerated on or near transit property.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when prostitution is likely to occur.

System Design and Technology

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Data Collection

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.

Dispatch Records

These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns. Since most prostitutes are repeat offenders, the use of FIRs is especially helpful to police personnel in locating and monitoring criminal activities.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.

Redesigning Routes

Agencies typically avoid placing stops in problem areas such as in front of bars, corners frequented by prostitutes, and areas in which the sale of narcotics is common.

4.3.2.19 Public Urination/Expectoration

Issue Rank (of 28)	
Bus	**Rail**
13	16

Definition: *Violations of local or state ordinances prohibiting public urination, expectoration, or other, similar "quality-of-life" type crimes.*

Problem Description:

Public urination is not uncommon at most transit agencies. Bus or rail systems may not provide restrooms, or the restrooms provided are perceived as dangerous. Often, the homeless inhabiting transit facilities will urinate in public areas. Although the issue is fairly common and has a distinct effect on patrons' perceptions of security, the bus and rail systems visited ranked public urination as a mid-range issue, due to the relatively low quantity of resources and time required to manage the problem. Most of the countermeasures are handled by transit operations, and involve system policies, facility design, and maintenance.

Public urination on transit property is a problem because it:

• Increases public perception that the system is "out of control" and heightens security concerns.

• Often occurs in areas such as elevators which are the only points of access and egress for persons using wheelchairs. The system has the same responsibility to provide clean and secure facilities to these patrons as it does to the ridership at large.

• Requires additional maintenance and replacement of equipment (e.g., elevator floorboards which corrode or decay over time, etc.).

System Strategies:

Personnel Deployment

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in elevators provide a particularly effective deterrent to public urination.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Zero Tolerance Policy

Many systems have implemented coordinated policies of enforcing all ordinances and laws. These policies ensure that the transit agencies are perceived as unattractive locations for criminal activity.

System Design and Technology

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders. Increased visibility decreases likelihood that transit target will be selected for public urination.

Resistant Materials/Coatings

Many agencies use urine-resistant materials which are less subject to corrosion and decay, especially in problem areas (e.g., elevator floors).

Transparent Elevators

The use of clear elevator panels (making elevator riders visible from other portions of the building) reduces incidents of urination in elevators.

Operating Practices

Aggressive Maintenance

Damage to facilities is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.

4.3.2.20 Rape

Issue Rank (of 28)	
Bus	**Rail**
25	26

Definition: *The carnal knowledge of a female forcibly and against her will (including attempts).*

Problem Description:

As with homicides, rapes (or other sexual assaults) on transit agency property are extremely, rare occurrences. The threat of a sexual assault, however, is a fear for many women, and plays a role in the decision to utilize public transit.

Rapes are most likely to occur at night in isolated locations such as parking lots or empty facilities. Prevention measures are similar to those used for other serious violent crimes.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Canine/Foot Patrol — Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders. In this case, vehicle and bicycle patrols of transit parking facilities are especially beneficial.

Coordination with Local Police — This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Local Police Privileges — Privileges (e.g., making employee restrooms/break rooms available, providing areas to fill out reports, and encouraging parking in system lots while doing routine paperwork) are provided to local police to attract them to transit agency parking lots and facilities. Police visibility deters potential offenders and increases the likelihood that criminals will be observed and apprehended.

Media Relations — Security features and policies, as well as agency rules and regulations, are publicized to promote appropriate conduct on the transit system.

Specialized Training — Response to a rape or sexual assault requires specialized training in handling the victim in a sensitive manner.

Undercover Riding Patrol — Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol — Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Alarm Buttons at Stations/Stops/Shelters — Alarm buttons installed at key locations allow patrons to notify agency or emergency personnel that a crime is in progress or likely to occur.

Automatic Vehicle Locators (AVL) — AVL systems are used to assist emergency response units in locating buses quickly.

Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Emergency Communications Systems	Emergency communications systems prioritize calls received from operators under duress.
Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.
Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity. In this case, a victim of a rape occurring in a parking lot would be unlikely to notify the transit agency, but instead, would file a report with the local police.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Passenger Information	Flyers supplying system information, explaining techniques to avoid becoming a victim, and providing emergency procedures are distributed to passengers.
Pepper Spray	At a few agencies, pepper spray or a similar aerosol irritant has been issued to operators (in conjunction with appropriate training) for self-defense. Note: Exposure to aerosol irritants may require medical attention.

Request Stop Program	Passengers request transit vehicle stops as close to their desired destination as possible (e.g., in front of their apartment building, place of employment, etc.). These programs are typically used at night in order to minimize incidents of violent crime against women.
Safe Layover Locations	Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.
Signage	Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.21 Robbery

Issue Rank (of 28)	
Bus	**Rail**
9	8

Definition: *Taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear. Offenses are categorized based on use of firearm, knife or cutting instrument, other dangerous weapon, or strong arm tactics.*

Problem Description:

Robberies ranked within the top ten issues for both bus and rail systems, and are a serious concern to transit agencies, as are all violent crimes. Two types of robberies are transit agency concerns:

• System personnel robberies.

• Passenger robberies.

Since the late 1970s, most bus systems have converted to automatic fare collection methods that do not allow an operator access to collected fares. As a result, the incidence of robberies of operators have dropped dramatically. However, robberies of passengers are still a concern. Most robberies of passengers or of system personnel occur at night in isolated areas.

System Strategies:

Personnel Deployment

Special Details	Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur.
Undercover Riding Patrol	Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.
Uniformed Patrol	Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Alarm Buttons at Stations/Stops/Shelters	Alarm buttons installed at key locations allow patrons to notify agency or emergency personnel that a crime is in progress or likely to occur.
Automatic Vehicle Locators (AVL)	AVL systems are used to assist emergency response units in locating buses quickly.
Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Emergency Communications Systems	Emergency communications systems prioritize calls received from operators under duress.
Emergency Sign Outside Bus	Many agencies use buses with an emergency head sign on the front of the bus that can be activated by the operator, without the knowledge of the perpetrator, when the operator cannot communicate via radio (e.g., in violent or potentially violent situations). The sign displays a message such as "Emergency-Call Police" which encourages citizens to notify the police.
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.
Silent Alarm	Many agencies use buses equipped with an alarm that can be activated by the operator, without the knowledge of the perpetrator, that sends a message to central control or a dispatcher that a serious situation exists on-board the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Risk Management Data	The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.

Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Monitoring Restrooms/Limiting Access	System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.
Off-Hours Waiting Areas	Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.
Safe Layover Locations	Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.
Signage	Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.22 Sex Offenses (excluding Rape)

Issue Rank (of 28)	
Bus	Rail
23	22

Definition: *Indecent exposure and indecent liberties (e.g., inappropriate contact).*

Problem Description:

The participating agencies consistently ranked the issue of minor sex offenses as a problem that did not consume substantial police/security time or efforts. Despite the low use of resources, this crime is a concern for many transit agencies because it conveys to passengers the sense that the system is not secure . The fact that many victims are too embarrassed by the incident to report the crime to the agency or to the police limits the amount of data available.

Although offenders of crimes such as indecent exposure typically do not pose a physical threat to passengers, being a victim of a minor sex offense can be an intimidating experience. Women often base their decisions to ride public transportation on their perceptions of security. Persons who are victims of "flashings," who know other victims, or who hear of incidents through the media are less likely to make use of public transit.

Minor sex offenses occur in two types of locations:

- Bus shelters, parking lots, and isolated areas of facilities.

- Crowded platforms and vehicles.

Both types of locations are selected due to the perception that the risk of being cited or arrested is low. Therefore, in order to reduce this offense on transit property, the system must change this perception.

System Strategies:

Personnel Deployment

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity. In this case, officers also refer offenders to social service agencies.

Zero Tolerance Policy

Many systems have implemented coordinated policies of enforcing all ordinances and laws. These policies ensure that the transit agencies are perceived as unattractive locations for criminal activity.

System Design and Technology

Emergency Call Boxes

Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Pay Phones

Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.

Data Collection

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.

Dispatch Records

These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)

FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Incident Report Forms

The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data

Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.

Operating Practices

Control of Keys

System staff monitors distribution of keys and codes to personnel with access to critical areas.

Limiting System Access

Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Signage	Signs, alerting patrons to station/terminal doors which are closed/locked during off-peak hours, prevent passengers from entering isolated hallways or stairwells.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.23 Smoking/Eating/Littering/Loud Music

Issue Rank (of 28)	
Bus	**Rail**
9	5

Definition: *Any of a number of state or local ordinance violations or system policies that prohibit activities such as smoking, eating, littering or playing loud music on transit vehicles.*

Problem Description:

On most systems, local ordinances or system policies prohibit smoking, eating, littering, and loud music. These policies reduce required maintenance of vehicles, shelters, and stations, and provide a comfortable environment for most patrons. These ordinance violations create an environment that is not inviting to patrons, as it symbolizes disorder and a lack of security. The participating agencies ranked these violations as issues that consume considerable resources. Rail systems with dedicated police/security units are more likely than bus systems to have a zero tolerance policy in place. Such a policy involves strict enforcement of all codes and ordinances, including those for smoking or eating on transit property.

System Strategies:

Personnel Deployment

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit (e.g., identifying offenders through school police).

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Topic Specific Legislation

Single-issue legislation is used effectively in some communities to deter crime. Local ordinances may be passed to make smoking on buses a city or county violation.

Undercover Riding Patrol

Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Mirrors

Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle.

Seat Design	Seats which discourage sleeping in shelters, stations, and vehicles are provided to patrons (often, litter is a problem at shelters used by the homeless for sleeping).
Shelter/Bench Removal	These "amenities" naturally attract non-passengers looking for a convenient location to rest or engage in offensive behavior. By discouraging the use of transit facilities by persons other than passengers, loiterers are less likely to congregate and engage in offensive behaviors (playing loud music, littering, smoking, etc.).
Transparent Elevators	Some agencies use clear elevator panels (making elevator riders visible from other portions of the building) to reduce incidents of crime in elevators.
Trash Cans	The provision of an adequate number of trash receptacles minimizes littering at stations/stops/shelters.

Data Collection

Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Risk Management Data	The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.

Operating Practices

Aggressive Maintenance

Damage to facilities (e.g., litter) is removed/repaired immediately to make transit property less attractive as a target for potential offenders. This strategy also increases the perception of security among patrons.

Corporate Shelter Maintenance

Businesses or marketing firms are hired to maintain bus shelters in exchange for the posting of advertisements on shelters and trash cans. Liquor advertisements are not recommended.

Fare Paid Zones

On some barrier-free systems, certain areas have been designated as "fare paid" zones. Persons within this area without tickets may be ejected.

Monitoring Restrooms/Limiting Access

System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.

Operator Conflict Management Training

Vehicle operators are trained to react appropriately to offensive behaviors and to diffuse minor situations before they escalate. This training is especially important for new operators who are often assigned problem routes due to lack of seniority, and is sometimes offered in cooperation with transit or local police.

Outreach Programs

Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.

Restitution/Instruction Programs

Transit agencies work with local courts and prosecutors to design programs (e.g., graffiti clean-up and cash restitution for vandalism damages) that demonstrate to offenders the seriousness of their crimes.

Signage

Post signs indicating transit agency policies on eating, drinking, smoking, and littering.

Zero Tolerance Policy

Many systems have implemented coordinated policies of enforcing all ordinances and laws. These policies ensure that the transit agencies are perceived as unattractive locations for criminal activity.

4.3.2.24 <u>Theft from Facilities</u>

Issue Rank (of 28)	
Bus	**Rail**
13	15

Definition: *A type of larceny defined as "a theft from within a building which is open to the general public and where the offender has legal access." For example, the theft of signs from revenue areas (i.e., cases not involving unlawful entry) is included in this category. However, theft from a structure accompanied by a breaking or unlawful entry without breaking (trespass) is considered a burglary, not larceny-theft.*

Problem Description:

Theft from facilities is generally a crime of opportunity. Effective countermeasures include:

- Removing the opportunity to enter a facility unlawfully.

- Target hardening efforts to prevent thefts when break-ins occur.

System Strategies:

Personnel Deployment

Detainment Authority

Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Entrance Control

An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points.

Free Passage for Uniformed Officers

Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Special Details

Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur.

Undercover Patrols

Unmarked vehicles or plain clothes officers/guards are used to apprehend offenders.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Fencing

High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).

Landscaping Changes

Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting

Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Data Collection

Camera Surveillance

Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.

Crime Data Analysis

Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.

Dispatch Records

These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.

Field Identification Reports (FIRs)

FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.

Incident Report Forms

The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data

Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.

Risk Management Data

The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.

Tip Lines

Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Limiting System Access

Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.

Mixed-Use Spaces

Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.

Monitoring Restrooms/Limiting Access

System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.

Safe Layover Locations

Vehicle layover points located in well-lighted, well-populated areas deter criminal activities.

Vendors in Parking Lots

Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.25 Theft from Motor Vehicles

Issue Rank (of 28)	
Bus	Rail
12	8

Definition: *Theft of personal articles left in motor vehicles or theft of motor vehicle parts and accessories (e.g., stereos, batteries, and tires). These thefts are categorized as larcenies by UCR, but are defined as burglaries by some states and localities.*

Problem Description:

All of the participating agencies offered some form of parking facilities for their patrons. These agencies ranked the issue as a problem consuming substantial time and resources. Many transit systems are experiencing rising incidents of this offense. The crime is often under-reported to the transit agency because a victim of such a theft may report the crime to the local police department. Unless the local police department shares information, the transit agency may not be aware that the offense has occurred. This is especially true if the parking lot is owned by the municipality, rather than the system. Many victims of theft from vehicles do not report these crimes believing that the stolen items will not be recovered.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Foot Patrol	Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders.
Coordination with Local Police	This method increases local police awareness of transit crime issues and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.
Detainment Authority	Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.
Ejection Authority	Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.
Elevated Guard Roosts	Elevated police/security guard posts are used in parking lots for increased visibility.
Entrance Control	An officer/guard or parking lot attendant (equipped with alarm to request assistance in event of suspicious activity) is posted at access/egress points.
Local Police Privileges	Privileges (e.g., making employee restrooms/break rooms available, providing areas to fill out reports, and encouraging parking in system lots while doing routine paperwork) are provided to local police to attract them to transit agency parking lots and facilities. Police visibility deters potential offenders and increases the likelihood that criminals will be observed and apprehended.
Special Details	Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur.
Undercover Patrols	Unmarked vehicles or plain clothes officers/guards are used to apprehend offenders (e.g., persons committing thefts from motor vehicles).

System Design and Technology

Emergency Call Boxes	Emergency telephones, linked directly to dispatchers and placed in parking lots, stations, and shelters, allow patrons to report a crime that has occurred or that is in progress.
Fencing	High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Pay Phones	Pay phones are used near bus stops and in parking lots to provide the same function as emergency call boxes in locations where call box installations are not practical.

Data Collection

Camera Surveillance	Outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.

Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity. In this case, the victim of a theft from a motor vehicle is unlikely to report the theft to the transit agency, but would likely file a report with the local police.
Risk Management Data	The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Limiting System Access	Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.
Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Signage (Surveillance)	Posted signs inform potential offenders that a specific area is under surveillance in order to deter criminal activity.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.26 Theft from Vending Machines

Issue Rank (of 28)	
Bus	Rail
26	23

Definition: *A category of theft involving larceny from vending machines (e.g., ticket vending machines).*

Problem Description:

This issue is generally not a significant concern for bus or rail systems. Few bus systems provide vending machines, and none provide ticket vending machines. Most rail systems have implemented successful countermeasures to deal with the design of fare vending equipment.

However, the perception (and sometimes the reality) that vending machines contain large sums of money, make them frequent targets of theft. This is an issue to transit agencies because:

• A substantial amount of revenue can be lost by a single theft.

• Thefts and attempted thefts from vending machines often result in the destruction of the machine, many times resulting in repair/replacement costs that exceed the amount stolen.

System Strategies:

Personnel Deployment

Police/Security Personnel Sweeps	Sweeps are performed to ensure that facilities are empty before closing.
Special Details	Special police/security units perform surveillance of transit property during times and at locations when criminal activity is likely to occur.
Undercover Patrols	Unmarked vehicles or plain clothes officers/guards are used to apprehend offenders.
Uniformed Patrol	Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers	Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.
Intrusion Alarms	Alarms, linked directly to dispatch or station manager's booth, alert system personnel of unauthorized assess.
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Target Hardening	Facilities are redesigned to make them more difficult to break into and to make assets more difficult to steal or destroy. This method often involves use of screen covers, locks, metal or plastic housings, and shielding devices. Vending equipment is redesigned such that these devices are extremely difficult to pry open.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.

Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Risk Management Data	The use of risk management data (e.g., information detailing the costs of repairing damage caused by crimes) provides an accurate accounting of lost revenue caused by crime. These data are used to design appropriate police/security strategies, to direct design/architectural changes, and to justify the cost of these activities.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Limiting System Access	Transit agency management works with maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.

Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Operations Personnel Sweeps	Sweeps are performed to ensure that facilities are empty before closing.
Signage (Surveillance)	Posted signs inform potential offenders that a specific area is under surveillance in order to deter criminal activity.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.27 <u>Trespassing</u>

Issue Rank (of 28)	
Bus	Rail
11	5

Definition: *Unlawful presence on transit system property (e.g., rail tracks, non-revenue areas, revenue areas after hours, etc.).*

Problem Description:

Trespassing is a serious concern to most transit agencies, especially rail systems; trespassers on tracks constitute a risk to the offender, system employees, and system patrons. Trespassing is a serious concern for three reasons:

- Safety: Trespassing is a dangerous activity resulting in the death of hundreds of people annually. Trespassing on rail tracks or in subway tunnels is not uncommon. New rail systems often run through existing neighborhoods, interfering with established pedestrian patterns. As a result, pedestrians may walk across tracks rather than using appropriate crossing points.

- Security: Trespassing may lead to more serious crimes. For example, trespassers may be on system property with the intent to commit theft or vandalism.

- Perception: Homeless persons, for example, who trespass on transit property are often intimidating to patrons and heighten the sense that security may be a serious problem at the agency.

System Strategies:

Personnel Deployment

Coordination with Local Police

This method increases local police awareness of transit crime issues (such as trespassing) and procedures. It involves requesting more frequent patrols of problem stops/shelters, sharing resource contacts, or coordinating joint patrol activities.

Coordination with Schools

School officials are asked to help to maintain discipline over their pupils who use public transit and to participate in programs providing rail safety information.

Ejection Authority

Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Police/Security Personnel Sweeps

Sweeps are performed to ensure that facilities are empty before closing.

Ticketing/Citation Authority

Legislation passed in some communities allows police/security personnel to write tickets for offenses as an alternative to arresting offenders.

Topic Specific Legislation

Single-issue legislation is used effectively in some communities to deter crime. Legislation has been passed in several states making trespassing on public transit property a serious offense, due to obvious safety concerns.

Uniformed Patrol

Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Barriers

Both temporary and permanent barriers are used to redirect pedestrian traffic around areas of concern.

Emergency Communications Systems

Emergency communications systems prioritize calls received from operators under duress. In this case, the system may be used in cases where trespassers are seen on the vehicle right-of-way by rail operators.

Fencing	High fencing/barbed wire is used to limit access and protect facilities (stations, vehicles, etc.).
Intrusion Alarms	Alarms, linked directly to dispatch or station manager's booth, alert system personnel of unauthorized assess.
Landscaping Changes	Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.
Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court.
Crime Data Analysis	Problem areas or groups are analyzed to design countermeasures and programs. Many software programs are readily available to assist in organizing and analyzing information.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.

Operating Practices

Control of Keys	System staff monitors distribution of keys and codes to personnel with access to critical areas.
Limiting System Access	Transit agency management works with the maintenance department and other system personnel to restrict access to revenue areas during off-hours and to non-revenue areas at all times. Agency staff must develop and enforce positive means of identifying and controlling those who have access to key assets and denying access to unauthorized personnel.
Mixed-Use Spaces	Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.
Operations Personnel Sweeps	Sweeps are performed to ensure that facilities are empty before closing.
Outreach Programs	Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.
Signage (Surveillance)	Posted signs inform potential offenders that a specific area is under surveillance in order to deter criminal activity.
Vendors in Parking Lots	Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

4.3.2.28 Weapons Offenses

Issue Rank (of 28)	
Bus	**Rail**
18	19

Definition: *Any of a number of state and local laws including sale or possession of deadly weapons and carrying concealed weapons.*

Problem Description:

The amount of transit agency resources consumed in response to weapons offenses is dependent on the level and the nature of crime in the surrounding neighborhoods. Because the participating agencies represent a cross section of systems and communities {in terms of system size, crime rate, and transit system security scenario), the responses to this issue varied. Overall, weapons offenses require a lower than average quantity of resources from the transit agency police and security departments.

These offenses range in severity from possession of a concealed weapon to discharge of a weapon on transit property. Weapons violations are often gang-related. Although shootings on transit property are relatively rare, the threat of violence is a concern to operators and patrons.

System Strategies:

Personnel Deployment

Bicycle/Motor-Vehicle/Canine/Foot Patrol — Problem-specific units are used to patrol parking lots, stations, stops, and shelters. These patrols deter potential offenders and facilitate apprehension of the offenders.

Detainment Authority — Legislation has been passed in some communities allowing security guards to detain offenders until police arrive.

Ejection Authority — Some agencies have passed legislation allowing police/security personnel and/or transit representatives to eject offenders. Special legislation is often required to handle minors.

Free Passage for Uniformed Officers — Many agencies have instituted policies allowing police officers (and, in some cases, uniformed fire fighters, corrections officers, bailiffs, or security guards) to ride the system free of charge in order to discourage potential offenders.

Topic Specific Legislation — Single-issue legislation used effectively in some communities to deter crime. Legislation has been passed in several states disallowing concealed weapons on public transit vehicles.

Undercover Riding Patrol — Well-advertised campaigns of undercover police/security patrols traveling on transit vehicles are used to deter potential offenders. Single-issue undercover teams are used to apprehend offenders (e.g., persons carrying weapons).

Uniformed Patrol — Uniformed police/security guards perform foot patrols, are stationed at fixed posts within facilities, and travel on the system. This method is primarily used to deter criminal activity.

System Design and Technology

Automatic Vehicle Locators (AVL) — AVL systems are used to assist emergency response units in locating buses quickly.

Emergency Communications Systems — Emergency communications systems prioritize calls received from operators under duress.

Landscaping Changes — Landscaping limiting visibility, affording hiding places, or resulting in dark corners is removed.

Lighting	Visibility is increased in facilities, hallways, and parking lots to deter potential offenders and to facilitate apprehension of the offenders.
Mirrors	Mirrors are used in vehicles to enable the operator to observe activity in the back of the vehicle.

Data Collection

Camera Surveillance	Indoor and outdoor cameras are used to identify suspects, deter potential offenders, and provide evidence in court. Cameras in vehicles deter criminal behavior and provide a means for collecting data.
Dispatch Records	These records include all relevant information regarding frequency and location of criminal activity to facilitate crime data analysis.
Field Identification Reports (FIRs)	FIRs contain names of suspicious persons and habitual offenders as well as written warnings and past criminal activities. FIRs provide an important data source for transit police officers in tracking crime patterns.
Gang Intelligence	Police/security forces remain aware of gang activity to anticipate graffiti or other crimes likely to occur on transit property. This sometimes involves interface with local police.
Incident Report Forms	The most useful forms are easy to complete and capture crime data in a coded format that is readily entered into a police or security management information system. Forms that rely exclusively on narrative descriptions to document crimes hinder the performance of statistical crime analysis.
Local Police Data	Arrest and citation data are obtained from local police to provide information on patterns of transit-related criminal activity.
Operator Reports	Vehicle operators are required to document unusual occurrences or criminal activities in reports that are separate from accident reports.
Tip Lines	Telephone tip lines and reward programs are used to receive information on the location and the identity of offenders (e.g., Crime Stoppers program). Customer complaint lines are used to collect more general information regarding quality of service.

Operating Practices

Mixed-Use Spaces

Additional uses are encouraged at stations, stops, and parking lots, to increase activity in otherwise isolated locations. These uses include commercial sales (e.g., newspaper stands and other vendors), public information kiosks, community activities (e.g., art festivals), and charitable purposes (e.g., Goodwill/Salvation Army pickup sites). Increased activity deters potential offenders and increases the likelihood that criminal behavior will be observed.

Monitoring Restrooms/Limiting Access

System employees or police/security personnel provide restroom access (with a key or by using a push-button located in the station agent's booth) when patrons ask to use these facilities. Restroom use by patrons is usually discouraged except during peak hours.

Off-Hours Waiting Areas

Off-hour waiting areas in rail facilities, designated for passengers waiting for trains during off-peak hours, prevent passengers from becoming isolated in a non-visible part of system. These waiting areas are usually under police/security or camera surveillance and are often equipped with an emergency phone or alarm.

Outreach Programs

Programs involving agency contact with schools, youth centers, and other youth organizations create a personal relationship between juveniles and the system.

Passenger Information

Flyers supplying system information, explaining techniques to avoid becoming a victim, and providing emergency procedures are distributed to passengers.

Redesigning Routes

Agencies typically avoid placing stops in problem areas such as in front of bars, corners frequented by prostitutes, and areas in which the sale of narcotics is common.

Signage (Surveillance)

Posted signs inform potential offenders that a specific area is under surveillance in order to deter criminal activity.

Vendors in Parking Lots

Some agencies allow vendors to operate from system parking lots in order to attract the public and increase the likelihood of offenders being noticed.

Section 4: Endnotes

1. U.S. Department of Justice, Federal Bureau of Investigation, <u>Crime in the United States: 1993</u> (Washington, DC, 1994).

2. U.S. Department of Justice, (1994).

3. Henry DeGeneste and John Sullivan, <u>Policing Transportation Facilities</u> (Springfield, IL: Charles C. Thomas, 1994), pp. 3-27 and pp. 114-122; Urban Mass Transportation Administration, <u>Transit Security: A Description of Problems and Countermeasures</u> (Washington, DC: National Technical Information Service, 1984); Eileen O. Hargadine, <u>Documentation and Assessment of Transit Security Data Reporting and its Utilization</u> (Washington, DC: U.S. Department of Transportation, Urban Mass Transportation Administration, Springfield, VA, 1985); Urban Mass Transportation Administration, <u>Case Studies of Transit Security on Bus Systems</u> (Washington, DC: National Technical Information Service, 1983).

4. U.S. Department of Justice, (1994).

Appendix A:

Transit System and Police/Security Department Questionnaire

Transit System and Police Department Characterization
(Please complete before the on-site visit)

STAFFING OF POLICE/SECURITY DEPARTMENT:

What organization has primary responsibility for the security of the transit agency?

Check One:

- ❏ Sworn Transit Police
- ❏ Contracted Security
- ❏ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
- ❏ Non-Contracted Local Law Enforcement
- ❏ Other: _____

What organization(s) provide supplemental security for the transit agency?

Check All That Apply:

- ❏ Sworn Transit Police
- ❏ Contracted Security
- ❏ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
- ❏ Non-Contracted Local Law Enforcement
- ❏ Other: _____

What are the primary roles and responsibilities of the police/security department?

How many police or security personnel are employed/contracted by the transit agency?

Number   N/A
- ____   ❏ Sworn Transit Police
- ____   ❏ Contracted Security
- ____   ❏ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
- ____   ❏ Non-Contracted Local Law Enforcement
- ____   ❏ Other: _____

*What is the transit agency's budget for police/security **personnel?*** $_____ *per year*

*What is the transit agency's budget for police/security **equipment?*** $_____ *per year*

Rate the following offenses in terms of the police/security time and resources required to manage them:

	Require Minimal Time/Resources			Require Extensive Time/Resources	N/A
Arson	1	2	3	4	❏
Assaults on Drivers	1	2	3	4	❏
Assaults on Passengers	1	2	3	4	❏
Bomb Threats	1	2	3	4	❏
Burglary	1	2	3	4	❏
Disorderly Conduct	1	2	3	4	❏
Drug/Narcotic Offenses	1	2	3	4	❏
Drunkenness	1	2	3	4	❏
Fare Evasion	1	2	3	4	❏
Forcible Rape	1	2	3	4	❏
Gang Activity	1	2	3	4	❏
Graffiti/Vandalism	1	2	3	4	❏
Hate Crimes	1	2	3	4	❏
Homicide	1	2	3	4	❏
Motor Vehicle Theft	1	2	3	4	❏
Objects Thrown at Bus	1	2	3	4	❏
Prostitution	1	2	3	4	❏
Public Urination/Expectoration	1	2	3	4	❏
Robbery	1	2	3	4	❏
Sex Offenses (excluding Rape)	1	2	3	4	❏
Smoking/Eating/Loud Music	1	2	3	4	❏
Pickpocketing/Purse Snatching	1	2	3	4	❏
Theft from Vending Machines	1	2	3	4	❏
Theft from Motor Vehicles	1	2	3	4	❏
Theft from Facilities	1	2	3	4	❏
Trespassing	1	2	3	4	❏
Vagrancy/Homelessness	1	2	3	4	❏
Weapon Law Violations	1	2	3	4	❏
Other _____	1	2	3	4	❏
Other _____	1	2	3	4	❏
Other _____	1	2	3	4	❏

What are the five biggest security problems (in order of importance) at the transit agency?

#1: _____

#2: _____

#3: _____

#4: _____

#5: _____

What deployment techniques are used at your transit agency? Please check each box for the deployment tactics used on each mode. Also, rate the effectiveness of these techniques on each mode (1=least effective, 7=most effective):

Deployment Tactic	Rail	Bus	Parking Lots	Effectiveness of Tactic (Rail)	Effectiveness of Tactic (Bus)	Effectiveness of Tactic (Parking Lot)
Fixed Post - Uniformed Presence - Plain Clothes Surveillance___	❑ ❑	❑ ❑	❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7
Riding Patrol - Uniformed Vehicle Boardings - Undercover Vehicle Boardings - Vehicle Stops - On Board Fare Inspections	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7
Mobile/Random Patrol - Zone Patrols - Foot Patrol at Key Fixed Post - Mobile Random Foot Patrols - Mobile Vehicular Patrols - Patrol for a Specific Crime Issue (pickpocket/tagging)	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7
Saturation Patrol - Uniformed Saturation - Saturation Sweeps (homeless, fare evasion, etc.)	❑ ❑	❑ ❑	❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7

Deployment Tactic (continued)	Rail	Bus	Parking Lots	Effectiveness of Tactic (Rail)	Effectiveness of Tactic (Bus)	Effectiveness of Tactic (ParkingLot)
Decoy Operations - On Board Vehicles - In Station/Stops - Parking Lots	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7
Covert Surveillance	❑	❑	❑	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Canine Patrol	❑	❑	❑	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Response Techniques - Immediate Response to All Incidents - Delayed Response based on Severity - Referrals	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7
Community Outreach Programs	❑	❑	❑	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

AGENCY CRIME DATA

What sources of information are used to assess transit agency crime levels?

- ❏ Dispatch Records
- ❏ Trip Sheets
- ❏ Operator Reports
- ❏ Patron Complaint Forms
- ❏ Records of Citations/Fines
- ❏ Cost/Length of Service Disruption
- ❏ Risk Management/Liability Records
- ❏ Incident Report Forms
- ❏ Supplemental Incident Report Forms
- ❏ Police Logs
- ❏ Incident Investigation Records
- ❏ Arrest Reports
- ❏ Disposition Reports
- ❏ Other (explain _____)

Does the transit agency collect any crime data from local police? If so, what is the nature of this data?

List of Information for the FTA Crime Data Collection Study

Documentation describing the size and type of the system

- System map(s) and schedule(s) for all routes and modes (bus, rail, etc.).

- Any relevant brochures or other information that may demonstrate the size of the system and services provided.

Agency personnel

- An organizational chart (or similar documentation) for the system that defines the roles, responsibilities, and inter-relationships of all transit agency departments.

- Information describing the number of personnel employed/contracted by the agency (by department).

- An organizational chart for the transit police department.

- Information describing the number of personnel employed/contracted by the transit police department. Please include the number of civilian and non-civilian personnel and a general breakdown by job function (administrative, patrol, crime statistics, etc.).

Crime data

The FTA would like system crime data of the following types for all of 1993 (and more recently, if possible):

- If your agency provides a periodic (monthly, weekly, etc) report describing the number and types of security incidents on the system, please supply data covering the last year available (or as much data as possible).

- If the agency receives periodic (monthly, weekly, etc.) reports **from the local police** describing the number and types of security incidents on the system, please supply data for the last year available.

- If the agency uses any additional sources of information (incident report forms, police logs, incident investigation records, arrest reports, dispatch records, trip sheets, operator reports, patron complaint forms, records of citations/fines, cost/length of service disruption, risk management/liability records) to estimate crime levels, please enclose a sample copy of each type of form.

Appendix B:

Structured Interview Guide

Transit Crime Data Assessment Study

CONTACT INFORMATION

DATE OF ON-SITE VISIT:

SYSTEM NAME AND ADDRESS

_____

_____

_____

_____

SECURITY CONTACT INFORMATION

Name: _____

Title: _____

Phone Number: _____

Fax Number: _____

OTHER PARTICIPANTS:

Name/TitleOrganization/DepartmentPhone#

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

GENERAL INFORMATION

BACKGROUND AND HISTORY OF TRANSIT AGENCY:

Describe relevant background on the transit agency including history of service delivery, expansion into new transit modes, and changing roles in the community:

SYSTEM MODES: Check *all transit modes at the transit agency:*

❏ **Automated Guideway (AG)** ❏ **Inclined Plane (IP)** ❏ **Trolley Bus (TB)**
❏ **Cable Car (CC)** ❏ **Jitnev (JT)** ❏ **Aerial Tramwav (AT)**
❏ **Commuter Rail (CR)** ❏ **Light Rail (LR)** ❏ **Vanpool (VP)**
❏ **Demand Responsive (DR)** ❏ **Motor Bus (MB)** ❏ **Other (describe:**
❏ **Heavy Rail (HR)** ❏ **Monorail (MR)** _____**):**

Comments/description:

Consultant will request relevant documentation describing the size and type of the system. This information will supplement Section 15 Data available to the consultant.

SYSTEM ORGANIZATION:

> **Consultant will request a system organization chart (or similar documentation) that defines the roles, responsibilities, and inter-relationships of all transit agency departments.**

Total Transit agency employees   _____

Human Resources   _____
Finance   _____
Operations/Maintenance Department   _____
Police/Security   _____
Programs Administration   _____
Public Information   _____
Risk Management   _____
Safety   _____
Transit Development   _____
Other (_____)   _____
Other (_____)   _____
Other (_____)   _____

PASSENGERS:

> **Consultant will request general demographic and socioeconomic information that may be helpful in understanding the public that the transit agency serves. This information will supplement Section 15 data describing ridership already available to the consultant.**

OPERATING SCHEDULE:

Bus Operating Hours: from _____ am/pm   to _____ am/pm
Days of Operation: _____

Please detail times of operation if they are not the same each day:

_____

Rail Operating Hours: from _____ am/pm   to _____ am/pm
Days of Operation: _____

Please detail times of operation if they are not the same each day:

_____

Operating Hours of Other Modes: *from* _____*am/pm*   *to* _____*am/pm*

Days of Operation: _____

Please detail times of operation if they are not the same each day:
_____

Comments/description:

Consultant will request all relevant schedules and maps.

OPERATING ENVIRONMENT:

Describe any environmental characteristics of the service area that affect the delivery of service. Include factors such as traffic, weather, and geography:

Are parking lots provided for passengers?

If so, who owns the lots (municipality, transit agency, other)?

Is the transit agency police/security department responsible for the security of these lots?

Assets of Bus System

Type	Number	Other Information
Buses	_____	
Non-Revenue Vehicles	_____	
Bus Stops	_____	
Vending Machines	_____	
Administrative Buildings	_____	
Yards	_____	
Maintenance Facilities	_____	
Control and Communications Center	_____	
Fuel and Fueling Area	_____	
Power Substations/Equipment	_____	
Telephone Transmission Lines	_____	
Catenaries	_____	
Other Utilities Equipment/Facilities	_____	
Shipping/Receiving Areas	_____	
Counting Rooms	_____	
Fare Card Distribution Area	_____	
Dispatch Equipment/Facilities	_____	
Police/Security Facilities/Equipment	_____	

Assets of Rail System

Type	Number	Other Information
Rail Vehicles	_____	
Non-Revenue Vehicles:	_____	
Rail Stations	_____	
Tunnel	_____	
Track	_____	
Catenaries	_____	
Token Booths	_____	
Vending Machines	_____	
Administrative Buildings	_____	
Yards	_____	
Maintenance Facilities	_____	
Control and Communications Center	_____	
Fuel and Fueling Area	_____	
Power Substations/Equipment	_____	
Telephone Transmission Lines	_____	
Other Utilities Equipment/Facilities	_____	
Shipping/Receiving Areas	_____	
Counting Rooms/ Fare Card Distribution Area	_____	
Dispatch Equipment/Facilities	_____	
Police/Security Facilities/Equipment	_____	

SECURITY DEPARTMENT

STAFFING OF POLICE/SECURITY DEPARTMENT:

What organization has primary responsibility for the security of the transit agency?

Check One:

❏ Sworn Transit Police
❏ Contracted Security
❏ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
❏ Non-Contracted Local Law Enforcement
❏ Other: _____

Details/Comments:

What organization(s) provide supplemental security for the transit agency?

Check All That Apply:

❏ Sworn Transit Police
❏ Contracted Security
❏ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
❏ Non-Contracted Local Law Enforcement
❏ Other: _____

Details/Comments:

What is the history of the security function of the system? Have responsibilities for security been with other groups in the past?

What are the roles and responsibilities of the security department? How do they relate to other departments?

> **Consultant will request all relevant organizational charts.**

How many police or security personnel are employed/contracted by the transit agency?

Number   N/A
__   ☐ Sworn Transit Police
__   ☐ Contracted Security
__   ☐ Contracted Local Law Enforcement (Including Off-Duty Police Officers)
__   ☐ Non-Contracted Local Law Enforcement
____ ☐ Other: _____

Comments/details:

If the transit agency does not employ/contract police or security personnel, does the local police force maintain a dedicated unit for transit crimes?

Yes ☐   No ☐

Comments/details:

What is the transit agency's total budget for police/security **personnel?**   **$_____ per year**

Does the transit agency's police/security department have formal interagency procedures or committees for interacting with any of or all the transit agency's internal departments? Describe:

> **Consultant will request copies of procedures and other relevant documentation.**

Does *the transit agency have formal interagency agreements/committees for interacting with any or all of the external emergency response organizations that serve the agency's service area? Describe:*

Local Police Department(s):

Local Fire Department(s):

Emergency Medical Service Agency/Agencies:

Other:

Consultant will request copies of procedures and other relevant documentation.

PROBLEMS ENCOUNTERED BY TRANSIT AGENCY:

Over the past six months, please describe the most serious incident that has occurred at the agency:

Rate the following offenses in terms of the police/security time and resources required to manage them:

	Requires Least Time/Resources		Requires Most Time/Resources		N/A
Arson	1	2	3	4	❑
Assaults on Drivers	1	2	3	4	❑
Assaults on Passengers	1	2	3	4	❑
Bomb Threats	1	2	3	4	❑
Burglary	1	2	3	4	❑
Disorderly Conduct	1	2	3	4	❑
Drug/Narcotic Offenses	1	2	3	4	❑
Drunkenness	1	2	3	4	❑
Fare Evasion	1	2	3	4	❑
Forcible Rape	1	2	3	4	❑
Gang Activity	1	2	3	4	❑
Graffiti/Vandalism	1	2	3	4	❑

(Continued)	Requires Least Time/Resources		Requires Most Time/Resources		N/A
Hate Crimes	1	2	3	4	❑
Homicide	1	2	3	4	❑
Motor Vehicle Theft	1	2	3	4	❑
Objects Thrown at Bus	1	2	3	4	❑
Prostitution	1	2	3	4	❑
Public Urination/Expectoration	1	2	3	4	❑
Robbery	1	2	3	4	❑
Sex Offenses (excluding Rape)	1	2	3	4	❑
Smoking/Eating/Loud Music	1	2	3	4	❑
Pickpocketing/Purse Snatching	1	2	3	4	❑
Theft from Vending Machines	1	2	3	4	❑
Theft from Motor Vehicles	1	2	3	4	❑
Theft from Facilities	1	2	3	4	❑
Trespassing	1	2	3	4	❑
Vagrancy/Homelessness	1	2	3	4	❑
Weapon Law Violations	1	2	3	4	❑
Other _____	1	2	3	4	❑
Other _____	1	2	3	4	❑
Other _____	1	2	3	4	❑

What are the five biggest security problems (in order of importance) at the transit agency?

#1: _____

#2: _____

#3: _____

#4: _____

#5: _____

PROCEDURES:

Does the security/police department have a written plan documenting its security procedures?

If so, what is the nature of this plan (a formal system security plan, written policies, etc)?

If possible, the consultant will obtain a copy of this plan.

What deployment techniques are used at you transit agency? Please circle the triangles for the tactics used on each mode. Also, comment on the effectiveness of these techniques:

Deployment Tactic	Rail	Bus	Other	Effectiveness
Fixed Post - Uniformed Presence - Plain Clothes Surveillance	▲ ▲	▲ ▲	▲ ▲	
Riding Patrol - Uniformed Vehicle Boardings - Undercover Vehicle Boardings - Vehicle Stops - On Board Fare Inspections	▲ ▲ ▲ ▲	▲ ▲ ▲ ▲	▲ ▲ ▲ ▲	
Mobile/Random Patrol - Zone Patrols - Foot Patrol at Key Fixed Post - Mobile Random Foot Patrols - Mobile Vehicular Patrols - Patrol for a Specific Crime Issue (pickpocket/tagging)_____	▲ ▲ ▲ ▲ ▲	▲ ▲ ▲ ▲ ▲	▲ ▲ ▲ ▲ ▲	
Saturation Patrol - Uniformed Saturation - Saturation Sweeps (homeless, fare evasion, etc.)	▲ ▲	▲ ▲	▲ ▲	
Decoy Operations - On Board Vehicles - In Station/Stops - Parking Lots	▲ ▲ ▲	▲ ▲ ▲	▲ ▲ ▲	
Covert Surveillance	▲	▲	▲	
Canine Patrol	▲	▲	▲	

Response Techniques
- Immediate Response to All
  Incidents
- Delayed Response based on
  Severity
- Referrals
	▲
	
	▲
	
	▲
		▲
		
		▲
		
		▲
			▲
			
			▲
			
			▲	

Community Outreach Programs	▲	▲	▲	

Describe the activities of members of the security/police department on a typical day (number or percentage of employees performing each type of activity):

In general, how are police/security personnel deployed on the system?

- ☐ Alone
- ☐ In pairs
- ☐ In teams of three or more

Details/comments:

Has the agency conducted any patrol deployment studies, passenger security studies, or other research evaluating the effectiveness of specific patrol tactics, strategies, or methods within the past 5 years?

Yes ☐

    Describe:

No ☐

Describe the methodology used to make patrol deployment decisions for the agency:

SECURITY EQUIPMENT:

What is the transit agency's total budget for police/security **equipment?** *$_____ per year*

Please describe security equipment used by the transit agency:

Facilities

Access Control Measures for Restricted Areas
Access Control Equipment for Revenue Areas
Alarms
Anti-Vandal/Graffiti Measures, Materials, and Coatings
CCTV
Computer Access Controls
Document Storage
Emergency Phones
Fence Lines
Guard Shacks
Inventory Controls
Lighting
Locks
Metal Detectors
Motion Detectors
Police Kiosks
Signs
Smoke Detectors
Special Measures for Counting Room
Temporary Barriers

Comments/Details:

Revenue Vehicles

Anti-Vandal/Graffiti Measures, Materials, and Coatings
    Seats
    Windows
    Hardware
    Other
Bumpers
Distress Signals
Emergency Alarms
Farebox
Public Address Equipment
Security Measures to Protect Driver
Signs
Vehicle Identification Number

Comments/Details:

Personnel Equipment

Communications Devices
Computer Equipment
Uniforms
Vehicles
Weapons

Comments/Details:

Other

Comments/Details:

AGENCY CRIME DATA

> **Consultant will request all relevant documentation regarding crime data for 1993 (and earlier, if possible).**

What internal sources of information are used to assess transit agency crime levels?

- ❏ Dispatch Records
- ❏ Trip Sheets
- ❏ Operator Reports
- ❏ Patron Complaint Forms
- ❏ Records of Citations/Fines
- ❏ Cost/Length of Service Disruption
- ❏ Risk Management/Liability Records

Describe:

> **Consultant will request samples of each type of record.**

Does the transit agency collect any crime data from local police?

<div align="center">Yes ❏   No ❏</div>

Comments:

> **Consultant will request samples of information collected.**

What external sources of information are used to assess transit agency crime levels?

- ❏ Incident Report Forms
- ❏ Supplemental Incident Report Forms
- ❏ Police Logs
- ❏ Incident Investigation Records
- ❏ Arrest Reports
- ❏ Disposition Reports
- ❏ Other (explain _____)

Describe these external information sources:

Consultant will request samples of each type of record.

What other information is collected by the police/security department?

How is crime data stored?

- ❏ Computer Records
- ❏ Annual Reports
- ❏ Monthly Reports
- ❏ Manual Filing System
- ❏ Other _____

Consultant will request data for 1993 (and earlier, if possible).

How long do you retain crime data? _____ *years*

Is all data retained for this amount of time or just summary information?

Is the transit system's crime data filed with the local police for the FBI Uniform Crime Reporting Program (UCR)?

Yes ☐   No ☐

Comments:

Consultant will request 1993 data.

Is it the general practice of the agency to use security data for any of the following?

☐ Crime Forecasting
☐ Deployment Decision-making
☐ Press Releases
☐ Reports
☐ Resource Allocation
☐ System Design/Modification
☐ Other (explain _____ _____)

Comments:

What methods are used to analyze system crime data?

Is it the general practice of the agency to use statistical analysis of crime data in order to alter deployment tactics or purchase new security equipment?

Yes ☐   No ☐

Comments:

Does *the police/security department have crime statisticians/analysts on staff? How many? What are their responsibilities?*

Are these analysts/statisticians involved in the development of data collection forms?

If not, who performs the analysis of crime data?

PATRON PERCEPTIONS

Does the transit agency poll ridership to measure patron fear?

Yes ☐
No ☐

Describe:

During the past five years, has the transit agency's marketing/advertisement department initiated any advertisement campaigns to address patron fear issues?

Yes ☐   No ☐

Describe:

During the past five years, has the transit agency initiated any public education campaigns?

Yes ☐   No ☐

Describe:

Does the transit agency provide support programs for patrons/employees who have been victimized?

Yes ☐   No ☐

Describe:

Does the Public Relations department handle public perception issues?

Describe activities:

Was *public perception been an especially big problem historically?*

Does ridership fluctuate due to patron perceptions (after highly publicized incidents)?

> **Consultant will request all relevant patron surveys or advertisements relating to patron fear.**

Appendix C:

Typical Agenda for On-Site Visit

Itinerary for On-Site Visit to
San Diego Metropolitan Transit Development Board
FTA Transit Crime Data Assessment Study
April 20 - 21

Thursday. April 20

9 a.m. -10 a.m. Meeting with C. Lacy

Boyd, Maier & Associates Overview of Study
Discussion of SDMTDB's Transit Security Program
Overview of SDMTDB's Transit Security Issues

10 a.m. -1 p.m. System Tour

Visit Bus Stops
Visit Trolley Stations
Communications/Command Centers
Maintenance Areas
Cash Counting Facility
Problem Areas

1 p.m. - 2 p.m. Lunch

2 p.m. - 5 p.m. Meeting with Representative(s) of SDMTDB's Security Department

Security Responsibilities
Jurisdictional Issues
Department Organization and History
Daily Deployment/Scheduling
Types of Crime Experienced
Particular Crime Problems (e.g., Homelessness, Vandalism)
Security Budget
Interface with Local Police
Handling of Special Events

Friday. April 21

9 a.m. -12 p.m. Meeting with Person(s) Responsible for Crime Analysis and Representatives of SDMTDB's Security Department

Types of Crime Experienced
Current Levels of Crime on System (including recent trends)
Data Collection (including sources of information, data collection forms)
Data Storage
Crime Data Reporting (including Section 15 Data)
Information Received from Local Police

12 p.m. -1 p.m. Lunch

1 p.m. - 3 p.m. Meeting with Representative(s) from Bus Operations and SDMTDB's Security Department

General Overview of Bus Operations
History of System's Security Issues
Security Measures: Daily/Special Events
Bus Stops/Terminals (architecture/locations)
Operator Training
Homelessness/Other Special Issues
Data Collection/Storage/Reporting
Communications (radio/dispatch)
Bus Revenue Collection
Parking Lot Security Issues
Technology Usage (CCTV, bus alarm systems, AVL)
Budget Issues

3 p.m. - 5 p.m. Meeting with Representative(s) from Trolley Operations and SDMTDB's Security Department

General Overview of Trolley Operations
History of System's Security Issues
Security Measures: Daily/Special Events
Trolley Stops/Stations (architecture/locations)
Operator Training
Homelessness/Other Special Issues
Data Collection/Storage/Reporting
Communications (radio/dispatch)
Revenue Collection
Parking Lot Security Issues
Technology Usage
Budget Issues

Appendix D:

List of Transit Agency Abbreviations Used in this Document

Abbreviation Complete Agency Name Nearest Major Metropolitan Area

BARTBay Area Rapid Transit District, San Francisco, CA
Bi-StateBi-State Development Agency, St. Louis, MO
Capital MetroCapital Metropolitan Transportation Authority, Austin, TX
CTAChicago Transit Authority, Chicago, IL
DARTDallas Area Rapid Transit Authority, Dallas, TX
Denver RTDDenver Regional Transportation District, Denver, CO
GCTRAGreater Cleveland Regional Transit Authority, Cleveland, OH
GPTCGary Public Transportation Corporation, Gary, IN
GRTCGreater Richmond Transit Company, Richmond, VA
HARTHillsborough Area Regional Transit, Tampa, FL
Houston MetroMetropolitan Transit Authority, Houston, TX
LACMTALA County Metropolitan Transportation Authority, Los Angeles, CA
LIRRLong Island Rail Road, New York, NY
MARTAMetropolitan Atlanta Rapid Transit Authority, Atlanta, GA
Maryland MTAMaryland Mass Transit Administration, Baltimore, MD
MBTAMassachusetts Bay Transportation Authority, Boston, MA
MCTOMetropolitan Council Transit OperationsTwin, Cities, MN
MDTAMetro-Dade Transit Agency, Miami, FL
MetraNortheastern Illinois Regional Railroad Corporation, Chicago, IL
Metro-NorthMetro-North Commuter Railroad, New York, NY
MetroLinkMetroLink Commuter Railway, Los Angeles, CA
MuniMunicipal Railway, San Francisco, CA
N. Indiana CTDNorthern Indiana Commuter Transportation District, Chicago, IL
Niagara FrontierNiagara Frontier Transit System, Inc., Buffalo,, NY
NJ TransitNew Jersey Transit Corporation, Newark, NJ
NYCTNew York City Transit Authority, New York, NY
PA TransitPort Authority of Allegheny County, Pittsburgh, PA
PATCOPort Authority Transit Corporation, New York, NY
PATHPort Authority Trans Hudson Corporation, Garden City, NJ
SamTransSan Mateo County Transit District, San Carlos, CA
SCATSouth Coast Area Transit, Oxnard, CA
SCMTCSt. Cloud Metropolitan Transit Commission, St. Cloud, MN
SDMTDBSan Diego Metropolitan Transit Development Board, San Diego, CA
SEPTASoutheastern Pennsylvania Transportation Authority, Philadelphia, PA
SIRTStaten Island Rapid Transit, Staten Island, NY
WMATAWashington Metropolitan Area Transit Authority, Washington, D.C.

Appendix E:

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