

Women and Transit Security: A New Look at an Old Issue

Dorothy Schulz Susan Gilbert

Interactive Elements, Inc.

WOMEN AND TRANSIT SECURITY: A NEW LOOK AT AN OLD ISSUE

The research from which this paper is drawn was supported by the United States Transit Cooperative Research Program, Project F-6, "Guidelines for the Effective Use of Uniformed Transit Police and Security Personnel." The TCRP was established in 1992 to provide a continuing program of applied research on transit issues. It is sponsored by the Federal Transit Administration (FTA) and is carried out under a three-way agreement among the National Academy of Sciences (NAS), acting through its Transportation Research Board (TRB); the Transit Development Corporation, an educational arm of the American Public Transit Association (APTA); and the FTA.

There is no better way to introduce the topic of women and transit security than with the experiences of one rapid transit system in attacking head-on the issues of women's fears of using public transit. Only three years after its initial opening, this transit system was forced to organize a special police force to deal with the problem of crowding. Within eight years of its opening, the transit system was being criticized for the sexual harassment of women and girls, who, although they accounted for only about a quarter of all peak hour passengers, were forced to endure jostling and unwelcome sexual contact. The cross-class nature of these incidents was viewed as "a violation of the laws of decency."¹

One solution the transit system rejected was cars solely for women, although years later the system would embrace the idea of cars for students travelling between school and home in the afternoon hours. The transit system, though, continued to receive criticism about the safety of women riders. A few years later, women police officers worked as decoys to contain the behavior of men who made it "their business to insult and annoy women and girls."² More than fifteen* new mass transit systems have opened during the last 20 years. Would anyone like to guess which system we are describing? Good guesses all, but none are correct. In fact, we are describing New York City's first subway, the Interborough Rapid Transit, which opened in 1904, and was viewed as a sensation for its underground travel, its extremely high speeds, and its unprecedented crowding.³ It was this last attribute that led to concerns about women's safety on the system. This contrasts sharply with today's concern about women's safety, which more often revolves around dark and deserted stations and parking lots, rather than problems of too many people in too little space.

As early as 1909—only five years after the IRT opened—a prominent leader of the Women's Municipal League proposed that it reserve the last car of every rush hour train for women. At a time when women's separate spheres in most aspects of public life were taken for granted by men and women, Julia D. Longfellow advocated this male-free space to assure that women were not forced to cope with "the fearful crushes," and with sexual insults, and that they would not have to safeguard themselves from men's sexual aggression. A secondary purpose of her demand for segregated cars was less benevolent. Longfellow, representing the views of many upper-class women of her time, believed that some working-class women were willing participants in this subway rowdiness, and that creation of women's only cars would lead to more ladylike behavior by those who needed such reforming.⁴

[•] The fifteen new transit agencies referred to include, in the United States, Baltimore, Atlanta, St. Louis, Denver, Dallas, Metro-Rail and Tri-Rail in south Florida, San Diego, two systems in Los Angeles, Sacramento, San Jose, and, in Canada, Vancouver, Edmonton, and Calgary. There are others.

The IRT rejected the idea, but women's safety—or lack of it—whether real or perceived—remained a public concern. In 1918, when the first policewomen entered the New York City Police Department under a new, female fifth deputy commissioner, one of their first assignments was to attack the problems of white slavery and men who annoyed women on the streets, in the subways, and on the elevated trains—problems that were seen, at least in part, as related.

Those familiar with Progressive Era concerns about white slavery know that creation of such groups as the Traveller's Aid Society were directly related to demands that women be present in train stations to protect young women, often runaways or working-class immigrants, from the clutches of those perceived as ready to lure them into lives of prostitution. Early policewomen, too, spent much of their time patrolling train stations, with the expressed aim of saving women from the perils believed awaiting them there.⁵ Thus concern about women and their safety in and around transit systems has a long history and plays an important role in women's demands for public positions in both the social service and criminal justice fields. Many of us here for this conference are picking up this thread of women and transit, issues that have been linked before and which continue to arouse the interests of government officials, researchers, crime prevention specialists, and women community activists.

Before we move ahead some 85 years to our present issues, it is interesting to note that although the IRT rejected the women's-only cars, the plan was adopted by the Hudson and Manhattan Railroad, which ran under the Hudson River from New York City to Jersey City, New Jersey. (Those from the New York/New Jersey area may know this rail line by its current name of PATH, or the Port Authority Trans-Hudson line).

The experiment was not a success; it lasted only from April 1 to July 1, 1909, and immediately became enmeshed in the class-based politics of the times. The ladies' cars was favored by upper-middle class women returning from shopping expeditions to New York City's popular Ladies Mile. They particularly appreciated the red-capped attendants who carried their packages to the evening rush hour trains. According to <u>The New York Times</u>, working women and those under 25 were noticeably absent. Other women were concerned that such "special privileges" would erode the rights they had only recently achieved. This early debate over the definitions and dilemmas of equality ended quickly, since the H & M decided that the passenger loads did not justify the special service.⁶

Despite activities in New York and other cities aimed at protecting women in stations and on rolling stock, interest in women's safety on public transit waned after the 1920s, at least in part in conjunction with the return of middle class women to their homes. The Depression made it unpopular—and in some cases illegal—for women, particularly married women, to work. Although women returned to the workplace in the 1940s, particularly during World War II, there are few reports of their being harassed on public transit or of their being victims of crimes. Possibly this had to do with the large numbers of women travelling to and from work at all hours and with the small number of young, healthy men around the cities to cause them any problems.

Although there were certainly enough men around in the 1950s, the G.I. Bill and other government programs, especially massive road building projects, led to the American fascination with suburbanization and the return of women to the home. There is, of course, a certain irony that today's concerns about women's spacial separation from many job markets and their dependence on the private car have developed at the same time we have become concerned about air pollution. Both are related to policies that originated in the 1950s but whose ultimate outcome could not have been predicted. It is

not too surprising that concerns for women's safety in the transit environment all but disappeared for the decades of 1930-1950, reappearing in the 1960s along with women's visibility in the workplace.

Concurrent with women's renewed visibility alone in public places, the 1960s saw renewed concerns about safety in public spaces; concerns that have led to parallel developments in crime prevention through environmental design and, more recently, involvement of community groups in planning for their own safety. Despite the fact that crime rates fell in many large cities in the United States in 1995 and 1996, citizens have not reported feeling substantially safer on their streets. This does not bode well for transit agencies, which have learned within the past 20 years that citizens are far more fearful of their transit systems than they are of their city streets.⁷

To combat these fears, transit agencies have embraced principles of crime prevention through environmental design while also devising their own versions of community policing, many of which focus not only on enhanced patrol techniques but also on community outreach programs.

Crime prevention through environmental design, today commonly referred to as CPTED, grew out of the concept of defensible space formulated in 1969 by Oscar Newman, an architect and urban planner, who was then an "idealistic," recent graduate of Montreal's McGill University. Simply put, his theory states that "the design of the physical environment…can create opportunity for people to come together and can remove opportunity for criminals to act freely."⁸ Newman's work, which has been translated into a number of venues, including transit systems, public and private housing developments, shopping malls, and similar areas where large numbers of people gather, has been an accepted theory since the late 1960s, gaining momentum after the Washington, DC-based National Institute of Justice funded a number of projects gauging the relationship between the physical design of a facility and citizen vulnerability to crime at that location. Additional studies informed us that design features not only contributed to actual crime, but even more so, contributed to the public's perception of safety.

Another urban planner who drew attention to this issue was Jane Jacobs, who, in <u>The Death and Life</u> <u>of Great American Cities</u> (1961), stressed that people felt frightened when they were alone in dark places, particularly when they could not be observed by those they trusted and when they felt they could easily be trapped by those they did not trust.

Although transit police did not initially heed her warnings, Jacobs' descriptions of dark city streets and the fear they engender are exactly what subway riders report feeling on deserted station platforms, in deserted trains, and in large stations overrun with panhandlers, drunks, and homeless people, what bus riders report feeling in isolated shelters, and what virtually all transit riders report feeling when they walk to their cars through dimly lit, poorly fenced parking facilities.

Today we also know that women and the elderly fear such situations more than do adult males, a factor that is certainly important for transit agencies, which carry large numbers of elderly people who do not drive and a growing number of women who commute to jobs that often require them to arrive early and remain late if they are to compete with their male colleagues in the race up the corporate ladder.

Although S. Rosenbloom and E. Burns,⁹ studying the impact on women of programs to reduce dependence on commuting by car, confirmed a number of international studies that found that women particularly low income women and those who are mothers—have a disproportionate need to use a car, John J. O'Connor, chief of the Long Island Rail Road Police Department, earlier this year noted that part of his department's efforts at controlling parking lot crime were based on the realization that 40 percent of the commuters were women, who more often than men complained about the unsafe conditions in the lots.¹⁰ These findings are hardly contradictory; Rosenbloom and Burns' study took place in Tucson and Phoenix, where destination parking is not the same concern as it is for suburbanites travelling into midtown Manhattan. Long Island Rail Road commuters, too, while not all well-to-do, are most likely earning higher salaries than are the women in Tucson and Phoenix and may be able to depend on household help to chauffeur children and complete chores, or they may have older children who are less dependent on them for efficient transportation.

A Toronto Transit Commission study undertaken in 1976 discovered the phenomenon that O'Connor was witnessing. Responding to the concerns of the Metro Action Committee on Public Violence Against Women and Children (METRAC) and the Metro Toronto Police Force, the Transit Commission undertook a safety audit that stemmed from concerns about the vulnerability of women to sexual assaults on the system. The audit documented that despite a very low crime rate, the Toronto subway was perceived as unsafe by many women, causing them to limit "their lives very dramatically by stopping their use of the public transit system altogether or at certain times, especially at night."¹¹

Despite these lifestyle limiting fears, the majority of the women had never publicly expressed their safety concerns. The interviews, focus groups, and CPTED-influenced safety audits undertaken by METRAC and the Police Force resulted in such changes as installation of passenger assistance alarms on subway cars and emergency access telephones on platforms. Today, these and similar safety steps, such as off-hours waiting areas and identification of cars in which conductors ride, are standard practice at transit systems in North America and around the world. Better lighting, emergency phone systems, more and better directional signs, and the closing off of dead-end passages in which riders could become lost, or trapped by assailants, are today built-in features of new systems and receive high priority when old systems undertake renovations. The importance of landscaping for safety is also well known.

It is highly unlikely that planners of a new transit system would neglect these issues. Newer systems are also making use of surveillance technology not only at passenger stations, but also in parking lots and employee facilities. More surprisingly, a number of bus systems have added surveillance cameras not only on their vehicles, but outside them to cut down on crime and vandalism, and along the rights of way to alert operators to suspicious activities.¹²

Automatic Vehicle Locator systems are also being placed on buses in a number of cities not only to enhance on-time performance, but as a safety measure. In Houston, where it was anticipated that drivers would see the AVL as a management inspired means of checking up on their performance, drivers warmed to the system when they viewed it as a means of police to find their buses if a departing passenger or outside observer noticed and reported that a crime was in progress. Tom Lambert, Assistant General Manager and Chief of Police for Houston's METRO, noted that the AVL was especially helpful in minimizing both driver and passenger concerns about assaults and rapes, a few of which occurred within the last decade, but none within the last few years.¹³

A large variety of crime prevention programs are also strongly influenced by situational crime prevention theories. The first of these situational crime prevention theories, known as opportunity theory, was advanced in the late 1970s by L.E. Cohen and M. Felson.¹⁴ The theory argues that offenders will commit crimes wherever there are suitable targets and an absence of protection. D.B. Cornish and R.V. Clarke¹⁵ extended this theory through the "rational choice" perspective, which states that offenders are rational and self-serving individuals who will weigh the pros and cons of committing crimes in any particular area. Obviously, a major "pro" is the ability to commit a criminal

act and escape unseen and unharmed. A major "con" is the opposite, having no victim that one can approach or no assurance of a safe escape route.

The applicability of these theories to transit environments has been shown in such diverse locales as BC Transit, the Vancouver Skytrain, the Newark, New Jersey, subway system, and the Los Angeles County, California, bus system¹⁶ among others in the United States, Canada, Great Britain, European nations, and Australia.

Hence, our earlier notions about environmental design blend with these theories to remind us:

- 1. that crime is often concentrated in only a few areas; and,
- 2. that these areas are not randomly chosen.

Factors that play a large role in the selection process are:

- 1. availability of victims;
- 2. availability of hiding places from which to stalk the victims, and,
- 3. low possibility of capture.

Although in fact transit agencies rarely provide all three requisites, the public perceives that they do. These theories, and recent work stemming from them, go a long way toward explaining why women have higher levels of fear of victimization despite the relatively small amount of crime that takes place on public transit when compared to city streets or at home, the latter, as feminist criminologists frequently point out, being the single most dangerous place for many women. V. D. Young, discussing the apparent paradox of women's high fear of victimization and reportedly much lower actual rates of victimization, theorizes that the high level of non-stranger violence that women face contributes to generally higher fear levels in all circumstances. She also posits that the knowledge that one can so easily be victimized is a major component of fear.¹⁷

More recently, R. B. Felson, in a paper entitled "Big People Hit Little People," also discussed interpersonal violence, arguing that women are not unwise in their fears. Returning to rationale choice theory, he notes that physical strength may encourage violent confrontations because the aggressor knows he can win and that this is often a forgotten factor in discussing sex differences in violent behavior, as well as in the ability to deter victimization. We can see the possibilities this raises for random violence in public spaces, including transit environments, and with these possibilities, the greater fears of women. As Felson notes:

The greater physical power of males should also deter others from attacking them. Females are probably a safer target than males because they are less likely to retaliate, and because the physical harm they produce when they do retaliate is likely to be lower. Therefore, attacks on females are likely to be more successful and less costly [for the attacker].¹⁸

With this discomforting noting in mind, what are some of the ways transit systems have devised to counter the greater fears of women?

Many, particularly some of the older systems which were not built with CPTED in mind, are enhancing traditional uniformed patrol presence, fare evasion enforcement, and surveillance capabilities. They are also turning to nontraditional ways to involve the community in its own safety. Most of these strategies have been developed within the last decade; with only a few predating the 1980s. Many are even more recent. One form of partnership that has become popular with local municipalities are Transit on Patrol programs. TOPs uses bus operators and supervisors to report criminal or suspicious activities along routes to local police via bus mobile radio systems. Companion programs include: Police on Board (POB), which allows local police to ride buses in high crime areas or during school release hours as an additional crime deterrent, and Request-A-Stop, which permits bus operators to let passengers off during nighttime hours at any safe location along the route that may be closer to their homes or cars than the regular bus stop. Request-A-Stop programs are as close as any transit system we know of as come to acting on the Rosenbloom and Burns' (1993, p. 68) recommendation that to discourage individual travel by auto, "government-mandated or employer-based travel reduction programs must...provide meaningful security for those working longer days or using alternative modes at night or in unsafe areas." New Jersey Transit, under the leadership of Mary Rabadeau, its new police chief, has published a brochure entitled "Safety Tips for Riding the Newark City Subway," a system that Chief Rabadeau calls the "best kept secret" in the state.¹⁹ While the majority of the tips are as appropriate for men as for women, both Rabadeau and NJT Executive Director Shirley DeLibero seem particularly sensitive to the safety concerns of women riders.

A vast number of bus systems—large and small—are instituting codes of conduct and working to guarantee compliance by having officers—either uniformed or in plainclothes—board buses at busy stops or ride targeted bus lines for a few stops in either direction. The codes of conduct are reinforced by school outreach programs conducted by officers, bus drivers, or public relations personnel. Printed palm cards serve as notice of the rules and reinforce to passengers that the systems take the rules seriously.

The King County, Washington, METRO's zero tolerance policy for minor violations is an example. Seattle and adjoining cities' police officers are encouraged to enforce the policies, which range from felony assault to disorderly conduct and "unlawful bus conduct"—which can be smoking, spitting, unnecessary noise, and other quality of life crimes that deter ridership—particularly among women and the elderly. METRO assigns a bus operator to follow up in court on cases originating on the buses in the belief that a high conviction rate will convince offenders that METRO buses are not the place to break the rules. This in itself is a form of rationale choice theory, assuming that a rational offender will not misbehave in a location where the conduct will be penalized.

Using a similar theory, Houston's METRO experimented with an officer riding selected buses from a transfer station that had received numerous complaints from passengers and drivers. The officer also worked closely with the school system to teach bus etiquette and to report to principals and parents students who misbehave on a regular basis. Crime on the bus line ridden by the uniformed officer dropped to zero within a very short time.

Obviously, it is not cost effective for a system to put an officer on every bus—or even every problem bus—but officers are spot-riding or boarding buses in Milwaukee, Minneapolis, San Francisco, and even New York, just to name a few. In cities where uniformed personnel ride the system to check for fare evasion, they are also being advised to enforce quality of life issues. A few systems are working with government officials to expand summonsing authority for their non-police personnel to enforce zero tolerance policies.

Zero tolerance is also found on rail systems. Washington, DC's, WMATA and the Los Angeles subway system are well-known for their well lit, wide open stations that are exceptionally clean and

graffiti-free. WMATA, since its 1976 opening, has been able to maintain a zero-tolerance police policy for even the most minor violations. The Los Angeles system, only a few years old, is at present underutilized, which may account for its immaculate physical conditions, but certainly the high level of uniformed patrol is a contributing factor.

Even the smallest systems are learning how to keep out loiters, often rowdy teens who are most frightening to women and the elderly. Five Seasons Transportation, a bus system in Cedar Rapids, IA, has discovered that classical music piped in over the speaker system deters young people from congregating in the station. Apparently the sounds of classical music is to teens what garlic is to werewolves! Tri-Met, in Portland, OR, has one of the most truly citizen-based programs of all the transit agencies. A Rider Advocate group, consisting of a supervisor and ten people recruited from a nonprofit neighborhood coalition, randomly ride buses that have a high rate of gang-related incidents. Different than the Guardian Angels, a group that has caused controversy in many cities, especially New York, where it was first formed, Tri-Met's community riders are paid and are readily identified with Tri-Met through their jackets and patches.

The success of the program has led to its expansion as part of the Crime Bill's AmeriCorp program. The additional riders are college age community residents who receive stipends and tuition benefits in return for their participation. They, too, are identified with Tri-Met jackets and patches, although their outfits are slightly different to recognize their funding source. The Advocates are selected and work in accordance with Security Department guidelines.

The fear enhancing qualities of graffiti and other signs of disorder are well-known.²⁰ Many transit systems in the western United States, where gang-related graffiti continues to be a major problem, have instituted tip lines which encourage citizens to call in when they observe taggers at work. These lines are sometimes run in conjunction with local police but other times are transit-specific.

Tip lines are also helping to nip in the bud the relatively new problem of etching on windows and doors that has replaced graffiti as the vandalism of choice in many parts of the country. Etching, which requires costly replacement of the entire window, is also often gang-related and is the latest form of turf-marking to strike transit systems.

A few systems, particularly in California, are following the lead of the Santa Clara County Transit District, where a restitution program involving the parents of juvenile offenders has been instituted, which has resulted in reduced recidivism rates. Interestingly, while transit systems have stressed restitution for property crimes for a number of years, municipal police agencies are only beginning to pursue this as a way of involving parents in their children's behavior. <u>The New York Times</u> recently reported that, according to the National Conference of State Legislatures, about half the states have passed laws in recent years either toughening existing sanctions against parents of young offenders or adding new sanctions. In 1995 alone, at least 10 states passed these parental responsibility laws, which call for fines or, in some cases, imprisonment of parents for their children's behavior. In cases where parents are unable to pay, youngsters are assigned community service equivalent to the cost of repairing the physical damage to the system.²¹

The San Diego Trolley, in conjunction with its end of the line community of Santee, has a deputy sheriff meet each trolley that arrives hourly. Santee also built a town law enforcement office, where a Community Service Officer and a department volunteer provide crime prevention literature and take all regular police reports. On and off duty deputies and local police are encouraged to use the computer and phones at the town center, thus assuring a police presence in the area, which is slated for additional development, including a shopping center.

Parking regulations are vigorously enforced to prevent overnight parking that can lead to thefts and related crimes.

The Trolley, as well as a number of other systems on the west coast, have encouraged local charities such as Goodwill Industries to locate and staff collection boxes in their parking lots. This assures that riders will see their neighbors using the lot and provides an "eyes and ears" function that keeps troublemakers away. Commuters also find it easier to donate goods that they can take directly from the trunks of their cars to a staffed collection point. Other area residents now have a reason to stop by the station parking lot, creating additional traffic and encouraging use of station shops and facilities. The Claremont, CA, Police Department, working in conjunction with the MetroLink commuter rail line and the Los Angeles County Sheriff's Department, which polices the line, has assigned a uniformed volunteer officer to its rail parking lot, which also serves as a bus transfer point.

Parking lots, not surprisingly, continue to be trouble spots for transit agencies. The Long Island Rail Road Police Department in New York has combined traditional and community efforts to control vehicle thefts. An auto theft unit, operating in plainclothes out of vehicles loaned to them by insurance agencies, has cut the stolen car rate in half.

To further involve commuters in theft prevent, the LIRR modified a municipal program known as CAT—Combat Auto Theft. Commuters who register have decals placed in their autos which inform a railroad or local police officer that the vehicle is not normally operated Monday through Friday between the hours of 9 a.m. and 5 p.m. due to its being parked in a station parking lot. The decal gives any officer who sees the car anywhere else but in a station parking lot the right to stop the vehicle and question the driver. Normally, a police officer would not have the right to do this unless there was probable cause to believe the car had been involved in a crime.

Atlanta's MARTA has introduced another strategy to combat auto crime and enhance passenger safety in parking lots, turning to bicycle patrol at its busy Lindbergh Station, north of downtown Atlanta. Two officers on bikes were responsible for a 53.3 percent decrease in serious crimes during a three-month experimental period. The greatest impact was in the parking lot, in which approximately 1,500 cars are parked daily. Based on the success of this cost-effective crime suppression technique, MARTA plans to add six additional bike officers in 1997 and has already contemplated additional expansion of this program in 1998.

These are only a few of the varied approaches by transit agencies to providing higher levels of security at their facilities. Many agencies are using a combination of the techniques described.

This is an exciting time. Across the United States and Canada, transit police agencies are finding ways to make their facilities safer and more inviting through environmental design as well as through strategies that involve the community in the policing effort.

Transit agencies understand that only in partnership with their ever-expanding constituencies particularly working women—will they be able to become vital links in community planning, community safety, and community development.

ENDNOTES

- 1. C. Hood, Changing Perceptions of Public Space on the New York Rapid Transit System, Journal of Urban History 22, no. 3 (March 1996): 320.
- 2. K. Segrave, <u>Policewomen</u>: <u>A History</u> (Jefferson, NC: McFarland &Co., 1995), p. 54.
- 3. Hood, Journal of Social History, p. 315.

4. Ibid., p. 320.

- 5. D. M. Schulz, <u>From Social Worker to Crimefighter</u>: <u>Women in United States Municipal Policing</u> (Westport, CT: Praeger, 1995), chapter 2.
- 6. Quoted in Hood, Journal of Social History, p. 321.
- 7. V.R. Del Castillo, <u>Fear of Crime in the New York City Subway</u> (Ann Arbor, MT: University Microfilms International, 1994).
- 8. J.R. Clark, LEN Salutes its 1995 Man of the Year, Architect & Urban Planner Oscar Newman, Law Enforcement News, Dec. 31, 1995/Jan. 15,1996, p. 4.
- 9. S. Rosenbloom and E. Burns, <u>Do Environmental Measures and Travel Reduction Programs Hurt</u> <u>Working Women</u>? (Tucson, AZ: Roy P. Drachman Institute for Land and Regional Development Studies, 1993).
- 10. John J. O'Conner, Interview with authors, 1996.
- Moving Forward: Making Transit Safer for Women (Toronto, Can.: Toronto Transit Commission/Metro Action Committee on Public Violence Against Women and Children [METRAC]/Metro Toronto police Force, 1989).
- 12. S. Gilbert, Surveillance Technologies; Electronically Leveraging Transit Security Forces, Police Chief, July 1995, p. 22.
- T. Lambert, General Session Comments, South West Transit Association Operations & Maintenance Seminar, Houston, TX, July 21-23, 1996.
- 14. L. E. Cohen and M. Felson, Social Change and Crime Trends: A Routine Activity Approach, <u>American Sociological Review</u> 44, 1979, pp. 585-605.
- 15. D.B. Cornish and R.V. Clarke, <u>The Reasoning Criminal</u> (New York: Springer-Verlog, 1996).

- 16. P. Brantingham, P. Brantingham, and P.S. Wong, How Public Transit Feeds Private Crimes: Notes on the Vancouver Skytrain Experience, Security Journal 2, no. 2, 1991, pp. 91-95; M. Felson et al., Preventing Crime at Newark Subway Stations, Security Journal 1, no. 3, 1990, pp. 137-142; and N. Levine, M. Wachs, and E. Shirazi, Crime at Bus Stops: A Study of Environmental Factors, Journal of Architectual & Planning Research 3 (Nov. 1986) ; 339-361.
- 17. V.D. Young, Fear of Victimization and Victimization Rates Among Women; A Paradox?, Justice Quarterly 9, no. 3 (September 1992): 420-441.
- R.B. Felson, Big People Hit Little People: Sex Differences in Physical Power and Interpersonal Violence, <u>Criminology</u> 34, no. 3 (August 1996) : 435.
- 19. Mary Rabadeau, Interview with D. M. Schulz, 1996.
- 20. J.Q. Wilson and G.L. Kelling, Broken Windows, <u>Atlantic Monthly</u>, March 1982, pp. 29-38; Del Castillo, <u>Fear of Crime in the New York City Subway</u>; and H.I. DeGeneste and J.P. Sullivan, <u>Policing Transportation Facilities</u> (Springfield, IL: Charles C. Thomas, 1994).
- 21. P. Applebome, Parents Face Consequences As Children's Misdeeds Rise, <u>The New York Times</u>, Apr. 10, 1996, p. 1:1-2.

REFERENCES

- Applebome, P. (1996) "Parents Face Consequences As Children's Misdeeds Rise", *The New York Times*, Apr. 10, p. 1:1-2.
- Brantingham, P., Brantingham, P., and Wong, P.S. (1991) "How Public Transit Feeds Private Crimes: Notes on the Vancouver Skytrain Experience", *Security Journal* 2, no. 2:91-95.
- Clark, J.R. (1995/1996) "LEN Salutes its 1995 Man of the Year, Architect & Urban Planner Oscar Newman", *Law Enforcement News*, Dec. 31/Jan 15, pp. 1+.
- Cohen, L.E. and Felson, M. (1979) "Social Change and Crime Rate Trends: A Routine Activity Approach." *American Sociological Review* 44, pp. 585-605.
- Cornish, D.B. and Clarke, R.V. (1986) The Reasoning Criminal. New York: Springer-Verlog.
- DeGeneste, H.I. and Sullivan, J.P. (1994) *Policing Transportation Facilities*. Springfield, IL: Charles C Thomas.
- Del Castillo, V.R. (1994) Fear of Crime in the New York City Subway. Ann Arbor, MI: University Microfilms International.
- Felson, R. B. (1996) Big People Hit Little People: Sex
- Felson, M.; Dickman, R.; Glenn, D.; Kelly, L.; Lambard, G.; Maher, L.; Nelson-Green, L.; Ortega, C.; Preiser, T.; Rajendrah, A.; Ross, T.; Tous, L. and Veil, J. (1990)
 "Differences in Physical Power and Interpersonal Violence", *Criminology* 34, no. 3 (August):433-453. Preventing Crime at Newark Subway Stations, *Security Journal* 1, no. 3:137-42.
- Gilbert, S. (1995) "Surveillance Technologies: Electronically Leveraging Transit Security Forces", *Police Chief*, July, p. 22.
- Hood, C. (1996) "Changing Perceptions of Public Space on the New York Rapid Transit System", *Journal of Urban History* 22, no. 3 (March):308-331.
- Interactive Elements (1995) "Interim Report, Guidelines for the Effective Use of Uniformed Transit Police and Security Personnel." Unpublished report prepared for TRCP.
- Jacobs, J. (1961) The Death and Life of Great American Cities. New York: Random House.
- Lambert, T. (1996) "General session comments, South West Transit Association Operations & Maintenance Seminar", Houston, TX, July 21-23.
- Levine, N., Wachs, M., and Shirazi, E. (1986) "Crime at Bus Stops: A Study of Environmental Factors", *Journal of Architectural and Planning Research* 3 (Nov.):339-361.

- Moving Forward: Making Transit Safer for Women. (1989) Toronto, Can.: Toronto Transit Commission/Metro Action Committee on Public Violence Against Women and Children (METRAC)/Metro Toronto Police Force.
- O'Connor, John J. (1996) Interview with authors at Long Island Rail Road Police Department headquarters, Hillside, NY.
- Rabadeau, Mary. (1996) Interview with D.M. Schulz at New Jersey Transit Police Department division office, Newark, NJ.
- Rosenbloom, S. and Burns, E. (1993) Do Environmental Measures and Travel Reduction Programs Hurt Working Women? Tucson, AZ: Roy P. Drachman Institute for Land and Regional Development Studies. (Final Report, DOL, J-9-M-1-0075)
- Schulz, D.M. (1995) From Social Worker to Crimefighter: Women in United States Municipal Policing. Westport, CT: Praeger.
- Schulz, D.M. (1987) "Holdups, Hobos and the Homeless: A Brief History of Railroad Police in North America", *Police Studies*, Summer, pp. 90-95.
- Schulz, D. M. and Gilbert, S. (1995) "Policing Public Transit: Developing Strategies to Fight Crime and Fear", *Police Chief*, July, pp. 20-26.
- Segrave, K. (1995) Policewomen: A History. Jefferson, NC: McFarland & Co.
- Young, V. D. (1992) "Fear of Victimization and Victimization Rates Among Women: A Paradox?", *Justice Quarterly* 9, no. 3 (September):420-441.
- Wilson, J. Q. and G. L. Kelling (1982) "Broken Windows", Atlantic Monthly, March, pp. 29-38.