# The Impact on Crime of Street Closures and Barricades: A Florida Case Study

Randall Atlas* and William G. LeBlanc+

*Atlas Safely and Security Design, Inc., Miami, FL and +Department of Information Resources, University of Miami, Miami, FL

*Since the mid-1980s, hundreds of neighborhoods and communities have barricaded their streets to curb traffic, speeding, and crime problems. The City of Miami Shores is the only known municipality to have used road closures on a city planning level, as compared to just a neighborhood. Miami Shores voted for 67 street closures and barricades in 1986. This paper evaluates the crime and environmental conditions of Miami Shores before and after the implementation of street closures and road barricades. Burglary, larceny, and auto thefts decreased. Robbery and aggravated assaults did not decrease, but remained unchanged over 7 years of the study, while the surrounding municipalities have shown increases. There has been a reduction in the perception of Miami Shores as a high-crime area and there is a visible sense of residential territoriality that extends beyond the front door to the street and a noticeably improved sense of community.*

**Keywords:** Crime prevention; road closure; barricades; CPTED; defensible space.

## Introduction

Urban planners have used barricades and road closures to control traffic and crime for years, and in the last two decades, this strategic use of street design has gained popularity in the United States and elsewhere. The City of Miami Shores, however, is the only city known to the authors to have used barricades citywide rather than just in selected neighborhoods.

Being troubled with drivers speeding through their side streets to avoid traffic lights during rush hours, and perceiving that these traffic patterns encouraged criminals to cruise the streets looking for easy targets to burglarize or rob, the residents of Miami Shores in 1986 voted to raise their taxes for the purpose of constructing 67 street closures and barricades.

This paper evaluates the change in Miami Shores' crime rate following the implementation of street closures and road barricades. As the trend for crime prevention by street design grows throughout the country, the authors attempt to determine whether this crime prevention policy is an effective urban planning and crime prevention strategy.

Address reprint requests to Dr. Randall Atlas at the Atlas Safety and Security Design, Inc., One Palm Bay Court, Miami, FL 33138.

## Theoretical Context

Newman (1972) suggested that/by its very nature, the single-family house is its own statement of territorial claim. Ownership is defined by the home's positioning on a piece of land, and it is buffered from other houses and public streets by intervening grounds. Newman's "Defensible Space" theory contends that certain physical features in the environment encourage residents to exercise territorial control, which therefore reduces the opportunity for, and fear of, crime.

Territorial control takes the form of both real and symbolic barriers. Real barriers are physical features that restrict access, such as gates, fences, high walls, and barricades. Symbolic barriers do not physically restrict entry, but rather define the transition from public space to private space. Symbolic barriers include gardens, low railings, material changes, and landscaping. These mechanisms allow the residents to develop a heightened sense of responsibility toward care of the environment and control of its penetration by outsiders (Atlas, 1991).

Crowe (1991) discussed the concept of territorial control in the context of Crime Prevention Through Environmental Design (CPTED). CPTED suggests that physical design can create or extend a zone of influence so that residents develop a sense of proprietorship, or territorial control; potential offenders perceive a greater risk of being caught and are therefore deterred by that zone of influence.

Taylor *et al.* (1980) studied the strengths and weaknesses of defensible space theory and found that the presence of both real and symbolic barriers was associated with lower crime and fear levels. A 1988 study by Taylor concluded that the absence of territorial control accounted for almost half of the explained variance in the fear of crime (Taylor, 1988). A subsequent study found a negative correlation between territorial markings *(e.g.,* plants and yard decorations) and perceptions of crime and disorder (Taylor *et al.,* 1992).

Crowe (1991) suggested that barricades may control the flow of traffic, producing quieter, less congested streets. A simple street closing creates a cul-de-sac that eliminates through traffic and establishes boundary control. Flowers or bushes may be used to increase the perception of closure. Such landscaping improvements can serve to make streets more appealing for pedestrian activity.

Experiments using barricades and street closures to battle crime have taken place in manyjurisdictions. In Los Angeles, police launched "Operation Cul-De-Sac," in which gang-infested streets were blocked to through traffic and police patrolled the area on foot. It is reported that the program brought an immediate 40% drop in drive-by shootings and drug-related arrests (Communities, 1993).

Jordon (1993) documented the effects of the Phoenix Project, for which city planners strategically placed concrete barriers at more than 2 dozen intersections in the residential areas of Bridgeport, Connecticut. The project's purpose was to create a series of residential loops, each containing fewer than 100 households. The loops impeded through-traffic and blocked escape routes for both drug dealers and buyers. Initial results have included an increase in calls for police service, which is an indication of the residents' desire for police intervention. The frequency of serious felony arrests has decreased, and the decreased traffic has reduced drug-related incidents.

Although the installation of street barriers alone is no panacea for crime-plagued areas, there is reason to believe that creating defensible "zones of influence" can help begin the process of restoring fear-ridden neighborhoods into safe and cohesive social environments.

## Background

The quality of life in Miami Shores, Florida, once a quiet haven for affluent suburban families, dropped dramatically following the population boom of Dade County in the 1970s and early 1980s (Almond, 1991). Urban sprawl spread to the suburbs, and Miami Shores fell victim to increased traffic and higher crime rates. Residential streets became shortcuts for motorists, in route to downtown Miami or North Dade County, who were trying to avoid heavy traffic. Motorists were accompanied by criminals, and by the 1980s, burglar bars and high-tech alarm systems were the norm rather than the exception and increasingly more police officers were deployed in response to residents' rising fear of crime.

Initially, the idea of street closures to combat the traffic and crime problem was suggested by a group of residents living in the portion of the city near Biscayne Bay. The proposal was rejected by the city council due to a great deal of opposition from residents throughout the rest of the city who felt that they would become "second-class" citizens, suggesting that such barricades were elitist (Canton, 1991).

In 1986, the barricade issue was revived. A city election campaign was underway, and street closures became an issue tied to crime prevention and safety. Although many residents were in favor of barriers, others, who lived on the city's main arteries, opposed them. Despite the vocal minority, the city council

began planning for the installation of barricades. Meetings took place with police, fire, emergency medical services, and public works representatives to consider access to neighborhoods and ensure that response times would not be reduced by any changes made in street design.

To finance the barricades, a referendum was placed on the city election ballot, providing for a $0.5 million assessment on property taxes of residents that would generate the funds needed to install the first phase of barricades (67 closures). The funds would last 5 years and would also cover the financing of phase two of the program, during which interior barriers would be considered. Despite tremendous negative publicity, threats of litigation, and powerful lobbying, barricades passed with 57.8% of voters supporting the referendum. The referendum drew close to 80% of registered voters to the polls.

The city council hired a construction company to pull up blacktop and plant grass, trees, and low-maintenance flora in selected areas throughout the city. Temporary clusters of bright orange barrels filled with sand were employed as barricades during the transition period. The first set of street closures and road barricades was implemented in July 1988. The last barrels were taken away from phase one and all landscaping was complete by March 1991.

In August 1992, another referendum was voted on by Miami Shores residents, this one to provide for an additional 28 street closures as part of the second phase of the program, which focused on street closures on interior streets within Miami Shores. Each of the 28 street closures was voted upon separately: Only eight were approved by the voters.

The following sections outline the research methods and quantitative findings supporting the effect the Miami Shores street closures had on crime rates.

## Data Collection

Incident data were collected through statistics that are gathered by the Florida Department of Law Enforcement (FDLE) for submission to the Federal Bureau of Investigation's Uniform Crime Reports.

The crime data were examined on a city-wide basis. The phase one barricades were installed gradually throughout the city over a 2½-year period beginning in July 1988. Phase two implemented an additional eight street closures on interior streets; this second phase was completed by the end of 1993. For the purposes of the study, therefore, the prebarricade period was created from taking an average of 1986 and 1987 data, and the postbarricade period which consisted of an average of the 1991 and 1992 data.

Crimes of interest for this study were robbery, burglary, larceny, aggravated assault,[1] and auto theft. Rape and murder were omitted due to the low base rates for these two crimes in Miami Shores; from 1986 to 1992, there were only three murders and 18 rapes known to the police. Reported crimes were computed into crime rates by dividing the average number of incidents by the populations for both the pre- and postbarricade time periods.

The reported crime statistics from the City of Miami Shores were compared to those from Metro Dade County and the City of Miami. Since changes in crime within communities was the focus of this study, statistical comparisons between prebarricade data and postbarricade data were performed within each of the three municipalities. Direct statistical comparisons were not made among the three municipalities. Metro Dade County and the City of Miami crime trends are included to illustrate the overall movement in crime trends in South Florida.

## Findings

The pre- and postbarricade crime rates were compared using a multiple range test (with two sample rates for each test) on the arcsin-transformed rates (Levy, 1975). An alpha level of 0.05 was used for each comparison.

*Figure 1* shows the pre-post-barricade robbery rate comparison among the three municipalities. There was no significant change in the robbery rate for Miami Shores. Both the Miami and Metro Dade County experienced significant increases in the robbery rate.

*Figure 2* shows the pre-post-barricade burglary rate comparison among the three municipalities. Both Miami Shores and Metro Dade County experienced significant decreases in the burglary rate. The burglary rate increased significantly in Miami.

*Figure 3* shows the pre—post-barricade larceny rate comparison among the three municipalities. There was a significant decrease in the larceny rate for Miami

[1]In 1989, the FDLE began classifying forcible fondling and forcible sodomy within forcible rape. Previously, these two offenses were classified under aggravated assault. For the purposes of this study, forcible fondling and forcible sodomy were counted within aggravated assault after 1989 so that comparisons of aggravated assault rates could be made between the prebarricade period of 1986/1987 and the postbarricade period of 1991/1992.

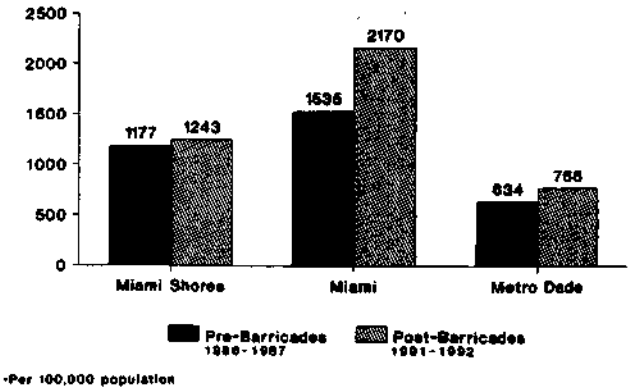


**Figure 1.** Miami Shores, Miami, Metro Dade Pre–Post-Barricade Comparison: Robbery.*

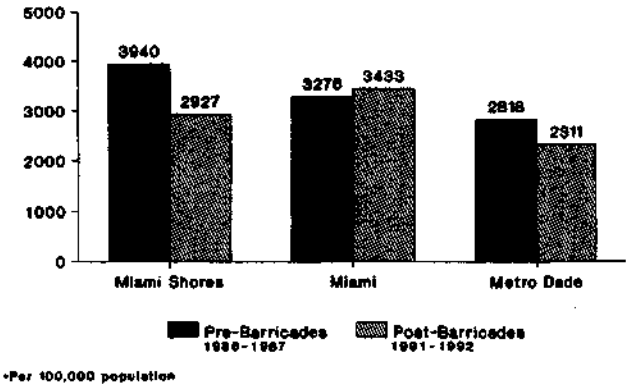


**Figure 2.** Miami Shores, Miami, Metro Dade Pre–Post-Barricade Comparison: Burglary.*

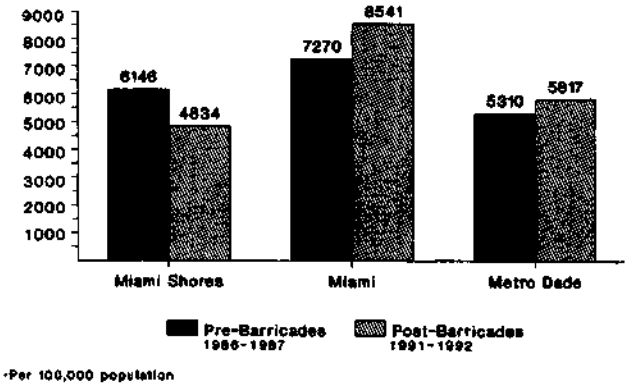


**Figure 3.** Miami Shores, Miami, Metro Dade Pre–Post-Barricade Comparison: Larceny.*

Shores. Both Miami and Metro Dade County experienced significant increases in the larceny rate.

*Figure 4* shows the pre-post-barricade aggravated assault rate comparison among the three municipalities. Neither Miami Shores nor Metro Dade County experienced a significant change in the aggravated assault rate. The aggravated assault rate increased significantly in Miami.

*Figure 5* shows the pre-post-barricade auto theft rate comparison among the three municipalities. The city of Miami Shores experienced a significant decrease in the auto theft rate. Both Miami and Metro Dade County experienced significant increases in the auto theft rate.

*Table 1* summarizes the pre- and postbarricade comparisons of the changes in crime rates for five major crimes. The City of Miami showed significant increases in each of the five crime categories from the period 1986/1987 to 1991/1992. In Metro Dade County, there were significant increases in the rates for robbery, larceny, and auto theft; burglary rates decreased and aggravated assault rates remained stable. However, in Miami Shores, all five categories of crime

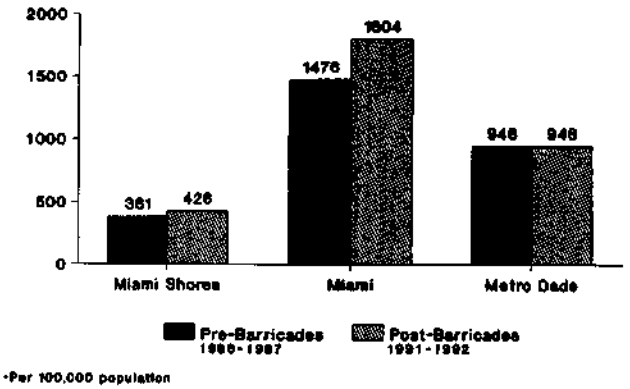


**Figure 4.** Miami Shores, Miami, Metro Dade Pre–Post-Barricade Comparison: Aggravated Assault.*

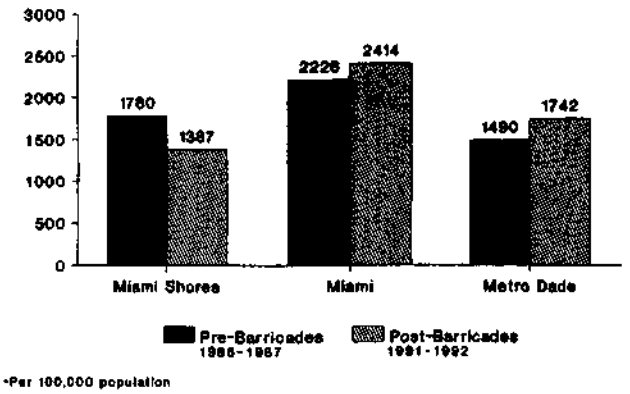


**Figure 5.** Miami Shores, Miami, Metro Dade Pre–Post-Barricade Comparison: Auto Theft.*

**Table 1.** Summary of Changes in Crime Rates between the Prebarricade Years of 1986/1987 and the Postbarricade Years of 1991/1992 (± are Significant at the 0.05 Level)

| Type of Crime | Miami Shores | City of Miami | Metro Dade Co. |
|---|---|---|---|
| Robbery | No Change | + | + |
| Burglary | – | + | – |
| Larceny | – | + | + |
| Aggravated assault | No Change | + | No Change |
| Auto Theft | – | + | + |

+ = significant increase at .05 level of significance; – = significant decrease at .05 level of significance.

either decreased (burglary, larceny, and auto theft) or remained stable (robbery and aggravated assault).

## Discussion

The findings illustrated above suggest that street closures and road barricades may have reduced burglaries, larcenies, and auto thefts in Miami Shores. The commission of each of these crimes involves the offender choosing an appropriate target; it appears that the change in street design in Miami Shores has reduced the attractiveness of this city as a place for promising crime targets.

From 1986 through 1992, robberies and aggravated assaults have steadily increased in the municipalities surrounding Miami Shores. However, the rate of frequency of these crimes in Miami Shores has not changed over the 7 years of study. This suggests that robberies may also have been deterred through the use of barricades and street closings.

The reduction in crime may not have been a direct result of the fact that barricades reduced traffic and discouraged nonresidents from cruising Miami Shores' neighborhoods. Rather, the barricades may have made residents feel safer and more comfortable walking around their neighborhoods, thereby increasing natural surveillance. This natural surveillance may have, in turn, deterred would-be criminals from victimizing residents (Atlas, 1991).

## Conclusion

The implementation of road closures and barriers in Miami Shores produced three positive outcomes: (1) residents perceive that the city is no longer a high-crime area; (2) an increased level of territorial control now exists; and (3) residents have an improved sense of community. Although critics will argue that the answer to crime prevention lies in fewer walls and more neighborhood watch programs, successful crime watch programs require people to know each other and take a vested interest in their neighborhoods. The use of barricades and street closings, by allowing people to reclaim their streets and use them for legitimate purposes, may set the stage for cooperative neighborhood watch programs to succeed.

For many communities, street closures will spark bitter debates, as some will view closures as vital to their peace and safety, whereas those who will experience the additional traffic flow of closures envision their property values plummeting. Indeed, it is incumbent upon local government officials to weigh the costs and benefits of implementing street closures in order to make a decision that is appropriate for the majority of residents in a given area.

The resurgence of barricades and street closures in American cities reflects the crises that these cities face today. In an earlier era, heavy traffic on residential streets was mostly an annoyance. Today, the disturbing possibilities of burglaries, street robberies, and auto thefts make the control of outside traffic seem, to many neighborhoods, to be a policy essential to an improved quality of life.

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Randall Atlas, a registered architect in Florida, has his national accreditation with N.C.A.R.B. Atlas is a Certified Protection Professional and received his doctorate of criminology from Florida State University, a master's degree in architecture from the University of Illinois, and a bachelor of criminal justice degree from the University of South Florida. Dr. Atlas is a national trainer in CPTED and security design as an instructor in a national facility security design workshop for the American Society of Industrial Security, Architecture and Engineering Committee.

William G. LeBlanc received his BS degree in psychology from Rensselaer Polytechnic Institute in 1973. Following 4 years as a U.S. Army officer, he returned to graduate school at the University of Miami, where he earned MS degrees in psychology and applied statistics and a PhD degree in experimental psychology. He is now employed in the Department of Information Resources at the University of Miami, where his primary role is to assist faculty and graduate students in research design and management and analysis of data.