



Bulletin

Bureau of Justice Assistance

The Systems Approach to Crime and Drug Prevention: A Path to Community Policing

The Bureau of Justice Assistance (BJA) announced in 1985 that it would issue grants for a “law enforcement–based crime prevention program . . . to demonstrate the importance of crime prevention as a major police activity of equal professional stature to patrol and investigative activities in the country’s major police and sheriff’s departments.”¹ The initiative led at least two of the demonstration sites²—Knoxville, Tennessee, and Tucson, Arizona—into what today can be characterized as a community-based, problem-oriented style of policing.

In a draft Implementation Guide it submitted in 1991,³ the Knoxville Police Department cited two examples of the success of this approach:

■ In a public housing community there was a street called “Deal Street” to which 1,200 cars daily would come to buy or sell drugs, “driving through as they would at a fast-food restaurant.” Through teamwork and environmental design techniques, the city installed speed bumps, concrete barriers, and additional lighting; closed streets; and gave the neighborhood a general

cleanup. Now only 50 cars a day come into the neighborhood and children play outside once again.

■ When another Knoxville neighborhood became notorious for prostitution and its accompanying problems of drugs, armed robberies, and theft, interagency teamwork shut down the motel around which the prostitution centered. Criminal activity dropped by 75 percent.

Three-phase program

The first phase of the demonstration program in each city was to integrate crime and drug prevention activities into all law enforcement operations.

In phase two, each police department developed working partnerships with its city’s other government agencies, community groups, churches, and schools. The communities learned what tools they had at their disposal and developed plans of action specific to the needs of individual neighborhoods.

Phase three saw the programs swing into high gear and into new neighborhoods. Citizen volunteers operated drug demand reduction programs. Architects were challenged to develop continuing programs of crime prevention through environmental design (CPTED) or Safe by Design techniques. Police also expanded the activities of their crime analysis units to support local problem-solving efforts.

1. *Federal Register*, July 26, 1985.

2. The four demonstration sites were Jacksonville, Florida; New Haven, Connecticut; Knoxville; and Tucson.

3. Knoxville Police Department, *The Systems Approach to Community Crime and Drug Prevention: Implementation Guide*, July 1991. (NCJ 132541)



Every six months, BJA held "cluster meetings" for the four sites participating in the demonstration. These meetings were designed to:

- Monitor program performance.
- Provide training and technical assistance.
- Provide a forum for the exchange of information among the sites to improve their programs through peer technical assistance.

In addition, the sites were used to share information with other BJA-funded demonstration program sites.

Phase one: Integrated prevention effort

The phase one objective was to integrate crime and drug prevention activities into all law enforcement operations. Although in Tucson, this new policy concentrated first on the Midtown police district, one of four police districts, crime prevention was declared an emphasis of the entire police department, a part of (rather than apart from) patrol and investigation. No longer shunted to a small, specialized unit, prevention became a goal of all officers, uniformed and plain clothes, and the subject of specialized training for all.

This first phase began for Tucson in April 1987. By April 1988, the Tucson Police Department was able to adopt a new mission statement:

The mission of the Tucson Police Department is to serve the public by furthering a partnership with the community to protect life and property, prevent crime, and resolve problems.⁴

4. Tucson Police Department, *Safe by Design, Enhanced Crime Prevention Program Final Report*, December 1991. (NCJ 136042)

In Knoxville, the Police Department said, "For law enforcement, involvement with this process means:

1. Emphasizing a proactive response toward residents' fear of crime and victimization.
2. Enriching line officers' jobs with greater community interaction.
3. Emphasizing the police officer's role in a general human service network rather than as someone who appears only when there is a problem.
4. Sharing the burden of solving neighborhood problems with other community agencies and community groups.
5. Improving citizen/police interaction.
6. Expanding the scope of traditional crime prevention activities.

7. Elevating the professional stature of crime prevention activities.

8. Providing a simple, straightforward process to effect systematic improvements in the delivery of services.

9. Developing police strategies based on interagency information-sharing and on research findings—rather than belief or myth—to verify the effects of community involvement on levels of fear and victimization. Many elements of the systems approach described above are found in community- and problem-oriented policing."⁵

5. *Systems Approach*, note 3 above.

Training programs

Although Louisville, Kentucky, is a fair distance from Knoxville, the training element in Knoxville's implementation was aided by the location at the University of Louisville of the National Crime Prevention Institute, which offers a 40-hour course in basic crime prevention, including the use of locks, lighting, alarms, and security surveys. This training was provided not only for line police officers, but for others in the community as well:

- Mayor.
- Chief of Police.
- Fire Chief.
- Housing Director.
- Juvenile judges.
- City council members.
- School board members.

Crime prevention was declared an emphasis of the entire police department, a part of (rather than apart from) patrol and investigation.

- Neighborhood leaders.
- Community action group leaders.
- School resource officers.

In addition to the basic course, selected individuals could seek specialized study such as the following:

- The National Crime Prevention Institute's class in CPTED or Safe by Design.
- The Office of Juvenile Justice and Delinquency Prevention (OJJDP) classes in the Serious Habitual Offender Comprehensive Action Plan (SHOCAP) and other policy and procedural courses on youth services.

When the Institute for Social Analysis conducted a national evaluation of the systems approach to crime prevention demonstration, it cited Knoxville's minimum of 40 hours training per officer as the most thorough training program of any of the four sites.⁶

For training in Tucson, the police department's video production unit prepared an introductory videotape, *The Enhanced Crime Prevention Program*, and five self-paced training modules for study during normal duty hours. A crime prevention specialist was available to answer questions. In addition, officers were required to attend program meetings such as those of Neighborhood Watch. By November 1987, all officers in the central patrol unit of the Operations Division Midtown were qualified for such duties as residential security surveys, formerly the province of a specialized crime prevention unit.

Meanwhile, Tucson created a crime analysis unit. In August 1987, a full-time crime analysis officer was assigned, supported by the existing planning and research unit, and computer hardware for crime analysis was installed. In rapid succession, the analyst took theoretical, software, and practical courses from the Institute of Police Technology and Management. The new unit set up six data bases—burglaries, suspects, offenders, field interviews, modus operandi, and pawn tickets—and trained officers in how to use them and how to help prepare the computerized "pin-maps" of burglaries.

At the same time, the department was encouraging initiation of documented positive contact with citizens during officers' uncommitted time. In this contact, the most popu-

lar citizen suggestions for improving police performance were for more patrols and faster response. When the crime analysis unit reported a rising burglary rate, however, instead of increasing patrols, police responded in a nontraditional way by calling a meeting with area residents. A mass meeting—attended by more than 400 citizens—was held, which was followed by a notable increase in the number of citizen-generated calls. The citizen calls resulted directly in 15 of 17 area burglary arrests, and the burglary rate dropped 30 percent virtually overnight. By the end of phase one, letters and phone calls of appreciation for police officers had increased between 300 and 400 percent in Tucson.

Phase two: Moving to partnerships

In progressing to phase two, Knoxville sought a citywide task force that would channel information and cooperation from, among others:

- All local agencies such as police, fire, schools, public utilities, housing, juvenile courts, traffic engineering, and community development.
- Political leaders.
- Nonprofit organizations.
- Grassroots citizens organizations.
- Private sector.

It was important, organizers felt, that the effort not be labeled "the mayor's program" or "a police program." All elements of the community had to be involved, and the most difficult task was to identify (and enlist spokespersons for) those groups that might otherwise feel left out or disenfranchised. Following formation of this task force, once its individual members were convinced that crime and drugs were everybody's problems, an assessment team—"the A-Team"—was formed to act as a clearinghouse for community problems.

An interagency information-sharing process was developed requiring agency policymakers, in interagency partnership, to profile individual neighborhoods in order to improve understanding of a neighborhood's problems and thus aid development of strategies to solve those problems through better allocation of resources.

In phase two in Tucson, creation of neighborhood task forces—community action teams (CAT's)—was the primary goal, with education in crime prevention another phase two emphasis.

To learn more about crime prevention techniques, two senior police command staff members together with top managers of the city's planning, transportation, and operations departments traveled to Orange County, California, to meet with representatives of other cities that were embarking on programs of crime prevention through environmental design. Later, a similar Tucson interagency group attended a CPTED training course at the National Crime Prevention Institute in Louisville, as did a crime prevention officer. In addition, the Tucson police video unit produced a new educational slide show about CPTED, *Safe by Design*.

Crime prevention through environmental design involves the design or redesign of living or recreational areas through the use of natural and constructed barriers to reduce criminal opportunities in the community defined by these barriers. Barriers to criminal activity are created in several simple but important ways: by street redesign (closing streets, developing cul-de-sacs, or adding bumps, turns, or other obstacles to speed so as to eliminate drive-through drug markets), by improving lighting, by remodeling buildings, and by installing protective fencing—all contributing to territorial definition.

Meetings with the city planning department and building safety

6. Roehl, Janice A., George E. Capowich, and Robert E. LLaneras, *National Evaluation of the Systems Approach to Community Crime and Drug Prevention*, Final Report submitted to the Bureau of Justice Assistance by the Institute for Social Analysis, May 1991.



division resulted in the police CPTED specialist being added to the municipal building plan review process. In December 1988, the city's director of economic development requested police advice on planning a major expansion of the Tucson convention center.

Seeking to deter crime far into the future, police presented their *Safe by Design* slide show to a board meeting of the Southern Arizona chapter of the American Institute of Architects and to a design class at the University of Arizona College of Architecture—their hope and expectation being that the architects-in-training would carry crime-reducing principles into their active design careers and thus make countless neighborhoods safer.

Neighborhood analyses

In Knoxville at this point, newly acquired crime analysis capabilities were applied to a new area: neighborhood analysis. Whole Knoxville communities were described in terms of data such as:

- Crime rates and offender information.
- Physical features.
 - Street conditions.
 - Lighting.
 - Recreational areas.
 - Building conditions.
- School statistics.
 - Truancy.
 - Dropout rate.
 - Vandalism.
 - Violence.
- Social information.
 - Children and families at risk.
 - Poverty levels.
 - Welfare.
- Community conditions.
 - Crime underreporting.
 - Neighborhood concerns.
 - Social service needs.
 - Juvenile problems.

■ Demographic information (age, sex, ethnicity).

■ Land use.

This sophisticated, comprehensive data base covering the entire city was built around 33 small areas. The citywide assessment team would approve one neighborhood analysis, then move on to a new one. This proved to be a mixed

Street lighting. Dark streets and alleys had fostered a perception of contributing to increasing crime. The neighborhood successfully sought designation as a lighting improvement district, by which each homeowner would be assessed \$600 to \$700 payable over 10 years.

Street signs and traffic control. The city traffic engineer's office found

High school students who learned about the cleanup efforts during a crime prevention assembly volunteered their labor.

blessing. Although the analyses came close to the original analytic goal for the national demonstration, by the time the team finished all the analyses and began to design interventions for the first neighborhood, the original analysis was out of date.

Tucson at first chose only three community areas to be profiled, its first candidates from which to select its first target neighborhood. Police officers and commanders in the three areas, however, moved almost immediately to address problems uncovered in the preparation of their neighborhood profiles. As a result, rather than selecting target neighborhoods based on police concerns and profiles, Tucson sent more than 800 letters to neighborhood groups inviting them to *apply* to have their areas targeted. Twenty-eight groups did apply.

Profiles were prepared of each, and from the 28 the profile team recommended El Cortez Heights, which the management review team approved. Five citizens agreed to serve on the El Cortez community action team, which developed the following 12- issue plan:

that many street markings were missing or incorrect and many streets lacked adequate traffic signs, including stop signs and one-way designations. The engineer's office installed the needed control signs and the missing street designations as well.

Lack of a visible police presence. An informal neighborhood survey revealed that residents thought increased patrolling by uniformed officers would improve neighborhood safety and that Neighborhood Watch should be more active. The patrol district commander increased uniformed patrol of the neighborhood and assigned an officer to provide liaison with the CAT.

Burglary, gangs, drugs. Residents were concerned about what they perceived as a rising crime trend, particularly in residential burglary. The CAT recommended buying locks for those who did not qualify for a "Locks for the Elderly" program and establishing contact with the police department's gang unit, major offenders (burglary) unit, and metropolitan area narcotics traffick-

ing interdiction squad. Fifty dead-bolt locks were purchased, together with tools to install them, and police helped train neighborhood volunteers to install them.

Speeding vehicles. The CAT recommended closing a major road on the boundary of the neighborhood to through traffic. When residents learned that they, too, would lose use of the thoroughfare, they withdrew their support for closing the road, so instead, the city traffic engineer installed several new stop signs and yield signs.

Identification and cleanup. Signs identifying the neighborhood were purchased to help instill pride in it. The neighborhood set up a tool bank of shovels, rakes, and the like, and high school students who learned about the cleanup efforts during a crime prevention assembly volunteered their labor at about 20 homes, working through the summer and receiving school credit for their work. In addition, more than 60 abandoned vehicles were found and removed.

Street names and numbers. Many buildings had addresses shown incorrectly or confusingly—"North" when it should have read "East" or street names other than the correct ones. The traffic engineer surveyed the problem and added or changed several signs. A troop of Boy Scouts painted address numbers on the curbs of 145 buildings.

Pedestrian crosswalks. A busy thoroughfare bordering the neighborhood lacked any pedestrian crosswalks by which residents could reach nearby shopping centers; therefore the CAT recommended one be built. The city traffic engineer studied traffic patterns on the thoroughfare and reported there was not sufficient pedestrian activity to justify a crosswalk. Because of the continuing citizen interest, however, the project remained under consideration. After further investigation, the city traffic engineer found that,

unfortunately, there was not sufficient visibility along the thoroughfare to build a safe crosswalk. As a result, none was built, but evaluators found that citizen dissatisfaction with neighborhood traffic and street problems had declined, many of the problems having been solved.⁷

Drug-haven apartments. Use of a large apartment complex for drug dealing and other activity created a public nuisance that disturbed many citizens. Several agencies advised the complex owner of health and safety violations, and the police and other agencies helped correct the

neighborhood association was successfully formed, although it replaced the Neighborhood Watch group that originally had asked for implementation of the systems approach in El Cortez Heights.

An under-utilized park. The CAT found a park under-utilized except for drug- and gang-related activity. So that the park facilities might better respond to the needs of the community, the police department initiated a dialog with the parks and recreation department and with neighborhood residents. As a result of this dialog, the parks officials set

The police department in partnership with other agencies mobilized to take action.

violations through inspections and cleanup efforts.

Lack of sidewalks. Neighborhood residents sought a more adequate system of sidewalks. The CAT recommended they seek an "improvement district" to build the sidewalks in much the same way they petitioned for a street lighting district. The residents accepted the advice and petitioned for a district that could assess the cost of the improvements. Installation of new sidewalks began two years later, with the city paying half the cost and assessing the residents for the remainder.

Lack of representation. Residents of El Cortez Heights felt unorganized and unrecognized in city politics. The CAT recommended that residents form a neighborhood association for representation in all matters of concern to the neighborhood. The

up a series of exercise stations to increase legitimate activity in the park and reduce the crime problem through the natural surveillance provided by those participating in this activity.

"Crime prevention through environmental design"—a Knoxville example

Knoxville offered this example of how its crime prevention through environmental design partnerships worked: an area was experiencing major drug activity against which enforcement efforts alone were futile. When the pushers saw increased police activity, they would simply move to another nearby street corner. The police department in partnership with other agencies mobilized to take action:

■ The service department picked up piles of garbage and debris and

7. Roehl et al., cited previous note.



also replaced burned-out and shot-out street lamps.

■ Traffic engineers changed the traffic flow. They designated areas to be closed or to become cul-de-sacs; they added speed bumps and barriers as needed.

■ Codes enforcement personnel determined which building and merchandising codes were being violated and acted to enforce them.

■ Fire Department inspectors made sure that, with all the various changes in place, their firefighters still could reach all the apartments in an emergency.

■ Parks were changed to encourage appropriate use; in one park an exercise walking trail was installed that deterred inappropriate use of the park almost completely within six weeks.

Faced with this focused attention to the environment, drug dealing dwindled. In addition, CPTED led to the following:

■ Training of volunteers to conduct security inspections.

■ Installation, free or at a reduced rate, of security hardware such as locks.

■ Provision of low-interest loans for security improvements.

■ Training of police officers to work with architects, builders, and planners.

■ Surveying of areas for lighting requirements.

■ Encouragement of residents to improve alleyways and paths that police may need to use.

■ Removal of garbage and abandoned vehicles.

■ Clear identification of neighborhood boundaries, enhancing cohesiveness and safety.

Phase three: Coordinated delivery

Having completed crime prevention training in only one of its four patrol divisions during phase one, Tucson next extended the program to the other three divisions and, to ensure that training would continue, incorporated crime prevention into its field training program for all future officers.

A bigger effort was required for *community* education. Both to stress neighborhood improvement and to encourage volunteerism, the term "Team Tucson" was widely used in brochures, newspaper ads, public service announcements, and "information guides" that promoted improvement districts, removal of abandoned vehicles, street repair, and traffic signs. The demand-reduction brochure *Don't Get Tied Up With Drugs* featured bright orange shoelaces that unexpectedly became a teen fashion hit. "Team Tucson" pins became so familiar they were even permitted on police uniforms.

An amended ordinance enabled the police to use civilian volunteers (of whom they had 81) to ticket drivers for violating handicapped parking restrictions. So successful was this effort that the traffic division and fire department started examining the possibility of having frequent and flagrant violations of fire lane restrictions enforced by using volunteers also.

The most common use of volunteers was for office work, thus freeing paid employees to take on other assignments. However, a student helicopter pilot helped out at the heliport, a certified public accountant volunteered to work in the police budget section, and a retired Royal Canadian Mounted Policeman worked in the "Park Watch" program.

Neighborhood targeting

To extend its successful phase two efforts, Tucson decided to target at least one more neighborhood for Safe by Design activities in phase three, while continuing its phase two efforts in El Cortez Heights. Again, 800 applications were sent to neigh-

Doing their part, residents, too, worked to build closer relationships with their neighborhood police for a drug-free neighborhood.

Seeking volunteers to augment salaried personnel in both drug demand reduction and crime prevention, Tucson also stressed existing crime watch programs such as Cab on Patrol (taxi drivers calling in tips to police) and McGruff Homes (scattered safehouses where children could take refuge).

borhood groups. Nine areas felt they had problems enough to submit requests for participation. The police crime prevention unit prepared "neighborhood profiles" of each of the nine.

The Wakefield neighborhood was selected. In addition to five neighborhood residents who made up the

CAT, officials of the Tucson Unified School District and the City of Tucson joined in identifying problems and developing strategies.

Drug activity

A survey of Wakefield residents named drug use and sales as the biggest problem in the neighborhood and its schools. Pueblo High School, just outside Wakefield, already had a Drug-Free School Zone program, and the Wakefield CAT suggested that the Wakefield Middle School start one also. Monthly meetings were held at the Wakefield Middle School to train residents in drug-reduction tactics. To demonstrate their commitment, two city council members, the city manager, and high-ranking school and police officials attended the Neighborhood Watch "National Night Out" at the school.

Doing their part, residents, too, worked to build closer relationships with their neighborhood police for a drug-free neighborhood. For example, one Tucson resident had been documenting activity at a suspected crackhouse for four months, but did not know what to do with the information. He eventually passed it along to a police beat officer. The house occupants shortly thereafter realized the house was known to police as a crackhouse and all drug activity there ceased. The neighborhood congratulated itself on solving the problem.

Neighborhood identity

The Drug-Free Zone program at Wakefield Middle School helped convince the CAT that more needed to be done to give the neighborhood a sense of identity. A contest was held at the middle school and the high school to develop a neighborhood logo, which was then posted on 10 signs placed around the neighborhood perimeter.

Graffiti also was a problem, often on walls adjacent to paved areas with insufficient space for landscaping.

At one of the worst sites, an art class from the middle school painted a mural with a religious and ethnic theme. The city's operations department, street division, and sanitation division joined neighborhood residents on seasonal cleanup days in the fall and spring to make the neighborhood look better.

Surveys by the traffic engineering division, aided by police traffic and community resources divisions, found that more traffic signs and better enforcement were needed. These were provided. The city engineer's office, however, found that it could not approve the recommended closing of an alley that bisected the entire neighborhood. A compromise led to closing one end of the alley to vehicular traffic, yet leaving the entire alley open to pedestrians, which brought a significant reduction in speeding and other traffic violations.

Efforts to enlist professional support from architects for the "Safe by Design" program continued—and continued to succeed. CPTED principles now are an intrinsic part of the coursework at the College of Architecture, University of Arizona. It appears that training and support of professional architects have a more significant impact on design than would legislation requiring "defensible space."

In addition to the targeted neighborhood activities in Wakefield and El Cortez Heights, a third Tucson neighborhood organized a CAT and implemented several improvements through funding provided by the Tucson city council. Beyond that, citywide anti-drug efforts had a large role in phase three activities.

Citywide drug efforts

Partly because of its location, Tucson is a major conduit for the flow of cocaine and other drugs from Mexico into the United States. Even before Wakefield Middle School and Pueblo High School, drug-free zones were established at the Amphitheater

High and Junior High Schools, the Flowing Wells High School, the Nailer Middle School, and the Cholla High School.

An evaluation of the drug-free zone program at Flowing Wells found a 43 percent reduction in drug-alcohol incidents and a 36 percent reduction in marijuana incidents. Flowing Wells had such a positive experience in its contact with officers that the school district requested an off-duty officer, paid by the district through a U.S. Department of Education grant, to work four hours daily as a campus safety officer—not to displace the assigned drug-free school zone liaison officer, but to promote campus safety.

Tucson police proposed to identify publicly a "known drug trafficking area," Mirasol Park, by posting signs, assigning officers full-time, and notifying by letter the registered owners of vehicles seen there that police had spotted their cars in the area. However, media attention was so great that the area residents and police took back the park from the drug dealers without any of the letters to vehicle owners ever having to be sent!

When drug activity from the park moved into houses in the area, the city's community services division took action to evict the drug-using tenants and provide the housing to new applicants.

Conclusion

As successful demonstration agencies for the Systems Approach to Crime and Drug Prevention grants, the police departments in both Knoxville and Tucson have welcomed their responsibility to share information with law enforcement agencies of other jurisdictions through documentation and through informal technical assistance.

It should be noted that the Knoxville police, having already developed explicit reciprocal agreements with other agencies, used both the term



The goal is to change . . . from a traditional role to one of community policing.

and the concept "systems approach" before BJA adopted them for the national demonstration. During the BJA demonstration program in Knoxville, its program director was promoted to chief of police, thereby adding impetus to cooperative efforts both within and beyond the police department.

Tucson developed its systems approach, on the other hand, from a background of long commitment, both by its chief and as a department, to the principle of community policing.

One message both departments have sounded consistently, however, is that the ideas of crime prevention and community partnership are related and that both ideas need to be woven into all aspects and activities of law enforcement. The goal is to change the entire culture of their law enforcement agencies from a traditional role to one of community policing.

Sources for further information

Publications cited in the footnotes and other crime and drug prevention reports are available from the Bureau of Justice Assistance (BJA) Clearinghouse. Contact the:

BJA Clearinghouse
Box 6000
Rockville, Maryland 20850
Telephone: 800-688-4252
FAX: 301-251-5212
EBB: 301-738-8895

Additional information on the systems approach to crime prevention as a path to community policing, crime prevention through environmental design, or both is available from the following sources:

Knoxville Police Department
800 East Church Avenue
Knoxville, Tennessee 37915
Telephone: 615-525-1020
FAX: 615-521-1344

Tucson Police Department
P.O. Box 1071
Tucson, Arizona 85702-1071
Telephone: 602-791-4441
FAX: 602-791-5419

New Haven Department of Police Service
One Union Avenue
New Haven, Connecticut 06519
Telephone: 203-787-6269
FAX: 203-772-7294

Jacksonville Office of the Sheriff
501 East Bay Street
Jacksonville, Florida 32202
Telephone: 904-630-2161
FAX: 904-630-2772

The National Crime Prevention Institute
The University of Louisville
Louisville, Kentucky 40292
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