

## Reducing Non-Emergency Calls to 9-1-1: An Assessment of Four Approaches to Handling Citizen Calls for Service

### I. Introduction

The National Institute of Justice (NIJ), with support from the Office of Community Oriented Policing Services (COPS), is seeking proposals to assess alternative approaches to handling citizen calls for service. Four developed strategies are the focus of this assessment, including the implementation of 3-1-1 as a non-emergency telephone number alternative to 9-1-1. Request for proposals are being sought under authority of section 1705 (b) of the Public Safety Partnership and Community Policing Act of 1994.

NIJ is trying to streamline its process to accommodate the volume of proposals anticipated under this and other Crime Act solicitations. Researchers can help in a significant way by sending NIJ a nonbinding letter of intent by July 15, 1997. The Institute will use these letters to forecast the numbers of peer panels it needs and to identify conflicts of interest among potential reviewers. There are three ways to send these letters. You can fill out the mailer on the last page of this solicitation. You can reach NIJ by Internet by sending e-mail to [tellnij@ncjrs.org](mailto:tellnij@ncjrs.org) and identifying the solicitation and section(s) you expect to apply for. You can write a letter with the same information to Reducing Non-Emergency Calls to 9-1-1: An Assessment of Four Approaches to Handling Citizen Calls for Service, 633 Indiana Avenue NW, Washington, DC 20531.

### II. Background

The Office of Community Oriented Policing Services (COPS) has worked with police agencies, the Federal Communications Commission and representatives of the telecommunications industry to find ways to relieve the substantial demand on the current 9-1-1 emergency number.<sup>1</sup> Many police chiefs and sheriffs have expressed concern about the increasing demand placed on the 9-1-1 system

and that non-emergency calls represent a large portion of the overload problem. According to the National Emergency Number Association (NENA), there are 268,000 calls placed to the 9-1-1 number each day. In Los Angeles and Atlanta, it is estimated that 80% of the calls 9-1-1 receives are non-emergency requests. Though many of these calls remain police business, they are not calls requiring immediate, emergency response.

The reasons given for the increased volume of 9-1-1 calls are varied. Some attribute the increase to the expanding cellular phone industry. The cellular phone provides increased opportunity to request information and report incidents to 9-1-1 centers.<sup>1</sup> Others attribute the increase of 9-1-1 calls to the unresponsiveness of other city agencies and increasing trust of the police provided by the community policing strategy. Still others, however, suggest the main difficulty in some communities is locating the appropriate *non-emergency* telephone number to contact the local police. Regardless, it is claimed this increased demand for service through 9-1-1 is forcing police agencies to remain response oriented and to limit the extent officers can become more proactive to engage in effective problem solving.

### III. Areas of Research Required

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<sup>1</sup> One 911 center in California reported cellular phone calls increasing from 13,048 in 1985 to 516,000 plus in 1995.

Four cities have agreed to participate in a descriptive assessment of their respective calls for service approach: Baltimore, Maryland; Buffalo, New York; Dallas, Texas and Phoenix, Arizona. Three of the participating cities, Baltimore, Dallas, and Buffalo have recently implemented either a three (3) or seven (7) digit phone number to be used as a non-emergency, alternative number to access police or other city services.

#### Baltimore, Maryland Approach

In an effort to reduce the increasing number of non - emergency calls to the City of Baltimore Police Department 9-1-1 center, the police department adopted a three digit non - emergency number (3-1-1). In 1995, non-emergency calls accounted for 60% of the 1.3 million calls directed to the call center. Such non - emergency call demand was making it difficult for the police department to move from a reactive response strategy to that of a proactive response strategy that would give field police officers more time for community policing activities and prevention education to city residents. Under a grant from the Office of Community Oriented Policing Services (COPS), the Baltimore Police Department partnered with AT&T to install an Intelligent Call Processing Switch™ that allows the 3-1-1 call center to process the following types of calls for service:

- a) non - emergency calls direct dialed (3-1-1),
- b) non - emergency calls direct dialed to 9-1-1 that are transferred to the 3-1-1 call center,
- c) non - emergency calls made to other police department telephone exchanges ( i.e., gun

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and drug call hot lines) that are transferred to 3-1-1 call centers.

Calls dialed directly or transferred to the 3-1-1 call center are routed to a database where the caller's number is identified and the call is processed by the 3-1-1 call center in the following manner.

- a) If the call is determined to be an emergency, the 3-1-1 Center can forward the caller to the 9-1-1 emergency center for police, fire or ambulance assistance;
- b) If the call is determined to be a "public works" need, it can be transfer to the city's control center;
- c) If a caller requests assistance for a "neighborhood" disorder issue, the 3-1-1 Center can forward the caller to the appropriate police Neighborhood Service Center;
- d) If the call is for assistance that is not immediately needed or does not require the dispatch of police units, the 3-1-1 operator can either provide the caller with immediate telephone assistance or complete an electronic report that will be forwarded to the appropriate police unit for later departmental action. With the assistance of a public education effort, non - emergency calls anticipated by the 3-1-1 Center will include: follow up information on property crime; animal disturbances; lost property; parking complaints; minor flooding, etc.

The Baltimore Police Department 3-1-1 system became operational October 2, 1996. It is anticipated the 3-1-1 call handling system will

restructure the demand on 9-1-1 emergency services and sustain a reduction in the number of calls directed to the 9-1-1 system. This anticipated restructuring may allow police officers to be less reactive and provide the time to be proactive in the delivery of police services.

### Dallas, Texas Approach

Dallas, Texas efforts at instituting an alternative, non - emergency number has been part of an effort to manage the 1.6 million 9-1-1 calls received annually. However, the primary impetus for developing an alternative three digit number was the desire of city government officials to provide better managed services overall to the residents of Dallas. In 1993, a city - wide survey found residents desired quicker response to requests from all city offices as well as services tailored to neighborhood requests. The City Manager saw these responses as an opportunity to use new technology to reengineer the organizational design and supporting structure of the city government's responses to citizen demands for all city services. One of the efforts undertaken was to consolidate city call taking and dispatch operations (including police and emergency 9-1-1) into a single call center under the direction of the fire department.

Prior to the consolidation, public works, animal control, water utilities, the action center, code enforcement, streets and sanitation as well as the police and fire 9-1-1 center each had their own call taking and dispatch functions.

Consolidating these independent call taking and dispatch services brought city communications

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services under two numbers, 9-1-1 and 3-1-1. The 9-1-1 number is for emergency service, police, fire and EMS. The 3-1-1 number is for all other non - emergency service requests.

Both numbers operate seven days a week, twenty four hours per day. All call takers and dispatchers are cross trained so they may operate either station. During emergency events or high volume emergency call periods, the cross training provides the option of temporarily halting 3-1-1 operations and focusing on emergency call taking and dispatch services.

Dallas officials believe the benefits of this consolidated arrangement will be to relieve the 9-1-1 call load as the 3-1-1 systems frees police to respond to emergency calls. During periods of increased emergency call requests, 3-1-1 call takers / operators can be switched to 9-1-1 operations, providing increased staffing flexibility. Further, Dallas residents have twenty-four hour, seven days a week access to city services without having to use a complex telephone menu to locate a particular city office. This non - emergency 3-1-1 number is expected to help citizens report a problem, request a service, or contact 9-1-1. Officials estimated that of the 1.6 million calls for 9-1-1 service received each year, 70% are for non-emergency services.

Through the use of “smart switch” technology and intelligent work stations that have ALI, ANI, TDD, call playback and CAD capability, incoming calls (either 3-1-1 or 9-1-1) are screened to ensure the call is properly directed

and the appropriate service provided. 9-1-1 calls are moved to emergency dispatch for either fire, police or emergency medical service. 3-1-1 are similarly processed, by a call taker for appropriate information about the service request. The information collected on the call screen is similar to the information collected for the 9-1-1 system and if it is necessary the “data” are passed on to the appropriate city agency. If the call is a simple information request, the information is provided by the call taker and the call concludes.

Dallas officials view the consolidation of dispatching services not only as a better way of utilizing resources, but also as the first step in providing community oriented government by offering a single point of contact to all city services through a three digit number.

### *Buffalo, New York Approach*

The Buffalo Police Department has for some time recognized, and attempted to find a means to manage an increasing call for service demand. In 1982, an internal departmental study recognized that the ability of the department to respond to all calls for service was becoming extremely difficult. Response delays to less than urgent calls were increasing, which generated concern about the public’s loss of confidence in the responsiveness of the police department. Continued response to all calls for service brought about increasing operational and fiscal difficulties in the department, i.e. delays in response to less urgent calls, ineffective use of personnel resources and the inability to institute current police management practices.

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In 1991, the police department installed computer aided dispatch (CAD) technology on the belief it would improve the management of and response to calls for service requests. While the CAD was able to improve the processing of call information and help identify areas of difficulty in call management policy, it was not able to reduce the number of calls received by the county call center. Calls for service continued to outstrip patrol staffing levels, continuing the delays in the dispatch of calls. Calls for service in 1991 were 358,696.

The Buffalo Police Department continued to seek ways to reduce the calls for service dilemma. In 1993, the Department began using a third radio channel to broadcast calls during peak periods. This had a limited effect, however, because the number of dispatchers was not increased, requiring dispatching staff to work overtime. This arrangement proved to be less than satisfactory and was subsequently discontinued. Efforts continued to resolve the calls for service workload. A differential response effort was developed in the form of a Telephone Reporting Unit to handle non-emergency calls for service. Police officers assigned to "light duty" were assigned to take reports and provide advice and assistance by phone to ease the backlog of non-emergency calls. While the Telephone Reporting Unit has helped to diminish the back log of calls, it has not resolved the centers dilemma of managing the calls for service.

The most recent application to manage non-emergency calls for service has been the department's effort to institute a seven digit,

non-emergency number. Granted \$30,000 in funding from the Buffalo Foundation, and assistance from a local advertising group, the Buffalo Police Department has set in place a seven digit non-emergency to help reduce the burden of non-emergency calls for service to the 9-1-1 system. This seven digit number was selected to be different from the emergency number of 9-1-1, giving the public indication there was an emergency number for urgent requests and another number for non-emergency request. Buffalo receives more than 2,000, 9-1-1 calls for service each day, and 60% of which are non-emergencies.

Emergency 9-1-1 operators will continue to receive the alternative calls, but will have the ability to transfer non-emergency requests to 22 city agencies. The Buffalo Police Department will utilize its Telephone Reporting Unit where non-emergency calls will be referred. Use of the Telephone Reporting Unit and an aggressive public education program and communications campaign outlined by the local advertising group for the alternative seven digit number are designed to gain public confidence and utilization of the alternative number.

### Phoenix, Arizona Approach

The Phoenix Police Department has used a well established seven digit police number for years as its non-emergency number, although it had originated as the emergency number before 9-1-1 was adopted some years ago.<sup>2</sup> Departmental

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<sup>2</sup> After the Phoenix Police Department adopted 9-1-1 as the emergency number, the seven digit

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officials credit careful planning, intelligent purchasing of improved technology, and the attentive use of the Callback System, as giving them the means of effectively managing emergency and non - emergency calls for service.

In 1978 the Phoenix Police Department installed a computer aided dispatch system (CAD). In 1980, mobile digital terminals (MDT's) were placed in all patrol vehicles adding to the capacity of the communications system. A capital improvement bond passed in 1988, which provided for the replacement of the 1980 system and by 1994 a new CAD / MDT system was in operation in a new police communications facility.

Total calls for service have steadily increased since 1986. However, the department reports it has been able to accommodate service increases due in part to the improved equipment and physical facilities. In 1988, a capital bond provided for the construction of a new communications facility giving the police department the capacity to anticipate

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number they had been using was identified as the "Crime Stop" number. Concern grew about the transition process, believing established behaviors by the public would be difficult to change over. Substantial public education was undertaken to make 9-1-1 known as the emergency number and to identify the seven digit number for other service / reporting requests. In 1996, "Crime Stop" accounted for 970,000 calls to the Communications Bureau seven digit system.

expansion.

The Phoenix Police Department's Communications Bureau is comprised of two sections -- the 9-1-1 Section and the Radio Dispatch Section. The 9-1-1 Section is responsible for answering thirty 9-1-1 incoming lines for police, fire and emergency medical assistance, recording correctly the caller's information and directing the call / request to the appropriate agency for dispatch. Additionally, 9-1-1 operators are responsible for answering the police department's seventeen, seven digit trunk phone lines. A Meridian Automatic Call Director™ Switch places 9-1-1 incoming calls as top priority, putting on hold non - emergency calls and so noting the caller to the actions. Nearly 6,000 calls per day are processed by the 9-1-1 call takers. In 1996, the 9-1-1 Section received 2,031,368 calls for service. Of these, 52.3% were received as 9-1-1 requests for service, the remaining 47.7% were received on the seven digit lines.

The 9-1-1 Section has thirty call taker positions. Each station is equipped with a phone; 9-1-1 ALI and ANI identification boxes; a computer interface to enter call information in to the CAD and a playback recorder to review incoming calls. The 9-1-1 operator enters caller information in to the CAD and either forwards information on to the Dispatch Section or sends the information to the department's Callback System. The Radio Dispatch Section of the Communications Bureau has six precinct positions, three emergency traffic positions and two positions which process information requests for patrol officers.

## IV. Research Design for Assessment

This solicitation requests proposals for an intensive eighteen (18) month research project of these four approaches to handling emergency and non - emergency calls for service.

Applicants should outline an overall research strategy that includes an intensive process analysis and a comprehensive assessment of the system in each of the four cities. It is reasonable to consider this assessment as a series of four case studies, of four approaches for managing emergency and non - emergency calls for service.

These analyses could become the basis for developing different models of how a community's demand for services, including police resources can be structured effectively. The **process analysis** should include, but is not limited to:

- a) description of the problem that precipitated interest in an alternative strategy;
- b) description of the nature and scope of public demand for police and other public services;
- c) various approaches considered by the site and its rationale for choosing the strategy selected;
- d) description of the types of resources, planning and coordination required to set up and implement the alternative call handling system;
- e) description of the types of barriers encountered in implementing the alternative call handling approach;

- f) lessons learned that may be useful for others interested in installing a non - emergency number.

The **assessment analysis** should include, but is not limited to compiling and / or developing data on the following questions:

- a) what is the effect of the non - emergency number on the types of calls handled by the police department and other city agencies;
- b) what is the effect of the non - emergency number on the volume of calls handled by the police department;
- c) what is the effect of the non - emergency number on changing the nature of calls for service;
- d) what is the effect of the non - emergency number on changing the nature of officer workloads;
- e) what is the effect of the non - emergency number on the departments community policing effort;
- f) what is known about the public's response to the new system and to its satisfaction with police response to calls for service.

This project will require the grantee to work closely with the local police department and other city agencies. During the assessment period periodic feedback will be required to the study sites, NIJ and to the COPS Office. We anticipate reasonable on-site presence due to the intensive nature of this assessment and the requirement for periodic feedback to the involved parties. Multiple publishable reports are anticipated both during and at the conclusion of the project for local and national

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dissemination.

The deadline for submission will be close of business, Tuesday, July 29, 1997. For purposes of this solicitation, applicants should concentrate their efforts in the program narrative on the assessment strategy, a dissemination strategy and a management plan. The submission of a detailed evaluation design will be required in thirty (30) days following selection of the evaluator. **The page limit for this solicitation is 30 pages.** Up to \$250,000 will be available to conduct this evaluation.

### V. How to Apply

Those interested in submitting proposals in response to this solicitation must complete the required application forms and submit related required documents. (See below for how to obtain application forms and guides for completing proposals.) Applicants must include the following information/forms to qualify for funding:

- Standard Form (SF) 424 Application for Federal assistance
- Assurances
- Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements (one form)
- Disclosure of Lobbying Activities
- Budget Detail Worksheet
- Negotiated indirect rate agreement (if appropriate)
- Names and affiliations of all key persons from applicant and subcontractor(s),

advisors, consultants, and advisory board members. Include name of principal investigator, title, organizational affiliation (if any), department (if institution of higher education), address, phone, and fax.

- Proposal abstract
- Table of contents
- Program narrative or technical proposal
- Privacy certificate, as appropriate
- References
- Letters of cooperation from organizations collaborating in the research project.
- Résumés
- Appendixes, if any (e.g., list of previous NIJ awards, their status, and products [in NIJ or other publications]).

**Due date.** Completed proposals **must be received** at the National Institute of Justice by the close of business on, Tuesday, July 29, 1997. Extensions of this deadline will not be permitted.

**Award period.** One grant will be awarded for up to eighteen (18) months.

**Number of awards.** NIJ anticipates supporting one (1) grant under this solicitation.

**Award amount.** Awards totaling \$250,000 will be made available for this NIJ solicitation.

**Guidance and information.** The National Institute of Justice contact is: Dr. Steven M. Edwards, at (202) 307-0500. Potential applicants are NOT to contact the Office of Community Oriented Policing Services (COPS), or the study cities listed in this solicitation.



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**Obtaining application forms.** To obtain application forms (including a sample budget worksheet) and guidelines for submitting proposals (including requirements for proposal writers and requirements for grant recipients), applicants can:

- Access the Justice Information Center on the World Wide Web:  
<http://www.ncjrs.org/fedgrant.htm#nij>. At this site, the NIJ application forms and guidelines are available as electronic files that may be downloaded to a personal computer.
- Request hard copies of the forms and guidelines by mail from the National Criminal Justice Reference Service at 800-851-3420.
- Request hard copies of the forms and guidelines by mail from the Department of Justice Response Center at 800-421-6770 (in the Washington, D. C., area, at 202-307-1480).

<sup>1</sup> On February 19, 1997 the Federal Communications Commission acted to provide cities and town with access to 3-1-1 as a non-emergency telephone number for public safety agencies. Each community will be able to choose whether to use 3-1-1 or not.