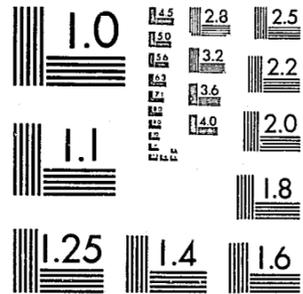


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ACQUISITIONS

A Proposal For An Evaluation  
Of A Tele Serve Unit  
In The Houston Police Department

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C. J. 692.02  
June 30, 1983

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## Introduction

The Houston Police Department has determined that with its current method of handling calls for service it is not utilizing its manpower resources to their full efficiency. Since calls for service are the primary service indicators for the Department and most of the Department's resources are dedicated to responding to these calls, it is essential that the Department effectively manage these calls rather than allow the calls to manage the Department. The Department has identified Tele Serve as being a viable option by which to manage these calls. Tele Serve is a diversionary process by which specific calls for service can be taken over the telephone as opposed to dispatching a patrol car to the scene of the requested service. It is expected that this particular course of action will result in a more efficient use of patrol resources and free patrol officers for directed crime suppression activities.

Of the 20 largest metropolitan areas in the United States, Houston has been the fastest growing city with an annual growth rate of 4.54%. According to the 1980 Census Houston had a population of 1.6 million. In addition to its resident population, there is a substantially higher risk population that impacts the calls for service on a daily basis. This risk population includes convention visitors (100,000 weekly), commuting workers (250,000 daily) and an estimated 400,000 illegal aliens. The city is expected to grow to more than 2.25 million in population by the year 1990. Also impacting the management of calls for service is the total land area

that Houston encompasses. The city covers over 565 square miles, which is more area than the cities of Chicago and New York combined (Brown, 1982, p.2).

During 1982 the Houston Police Department received 1,540,213 calls by telephone in the Dispatchers Division, of which 601,005 were dispatched to patrol units (Weaver, p.6). It is estimated by this Department that approximately 25% of the calls dispatched to patrol units could be taken over the telephone through the use of a Tele Serve unit. It is expected that by diverting these calls to such a unit that a substantial cost savings can be achieved for the city (Weaver, p.5).

The Department also expects to increase the visibility of police units as a result of freeing police officers from the responsibilities of taking minor reports. The Department has placed a high priority on increasing visibility and Tele Serve is one method by which to achieve this objective (Brown, 1983 p.15). Directed patrols will also be utilized in order to make officers more effective in reducing the incidence of crime.

The Houston Police Department has historically followed a traditional model of police service delivery. Now that it has been determined that this form of service delivery has not brought satisfactory results, the Department must look to new and innovative methods by which to deliver its services. If the Department is to be successful in its attempt to reduce crime and make Houston a safer place to live, it must find new ways to create the kinds of conditions that will bring about more commitment to law abiding conduct and respect for the law (Brown, 1982, p.23). Since call response is at the very heart of this new mission, it is appropriate that

the Department start with this important component from which a foundation can be built to engage the entire Department in pursuit of this goal.

Since the Tele Serve concept is new to the Houston Police Department, it is necessary to design a program appropriate to the uses of the Houston Police Department. In any program development, the first step is to evaluate the work demands on the Department. This is done by determining the call load temporally and numerically. Once this step is completed, then objectives must be developed that are realistic and measurable. Upon completion of this step, then a program must be developed that is capable of achieving the goals and objectives of the Department. Finally, the program must be evaluated and adjustments made to it (Vaughn, p. 413). The stage that this grant is concerned with is the evaluation phase, which is probably one of the most important, yet often forgotten, aspects of program development.

The Houston Police Department intends to evaluate the Tele Serve Unit when the pilot Tele Serve Unit becomes operational. Based on this evaluation, the Department will be able to determine whether or not Tele Serve is a viable call management alternative in terms of effectiveness and efficiency. Any alterations that need to be made to the program design will be documented through this evaluation.

The objectives that will be met through this evaluation include: (1) to assess the impact of the Tele Serve Unit on police practices and procedures; (2) to assess the impact of a Tele Serve Unit on the citizens of the community; and (3) to assess the transferability of the program to system wide use (National Institute of Justice, pp.148-152). The successful completion of this evaluation will insure the successful development of a viable program.

### Background

The constantly increasing pressures and demand for police services have caused the Houston Police Department to assume an almost totally reactive style of operation. This has resulted in a traditional mode of policing for the Department that has been difficult to change. The traditional model of policing is characterized by the following processes and assumptions (Pindur, pp. 3-4).

1. Random patrol is a successful strategy for coping with crime problems.
2. Crime suppression is of a higher priority than crime prevention.
3. Every request by a citizen for police services must be responded to.
4. A uniformed officer must take a report of every incident.
5. Every crime, no matter how minor, must be investigated.
6. The detective and patrol function should be kept separate.
7. The crime rate will be reduced through the addition of additional manpower.
8. Officers should be deployed equally on all shifts.
9. Citizen involvement is impossible to achieve.

The above summary is characteristic of the method by which the Houston Police Department is delivering services with few exceptions. A new program that shows promise for the future of the Department is the Directed Area Responsibility Team (DART). DART is a form of policing specifically designed to meet the future needs of the Department through increased

interaction with citizens and the efficient utilization of field personnel (DART Task Force, pp. 5-6). Tele Serve is directly in line with the aims of the DART Program.

Police department budgets have not been spared from the need to cut funding for local government services (Pindur, p.1). With this in mind, police Departments now have the responsibility to utilize their resources in a more efficient and effective manner. In order to accomplish this objective the number one priority should be the efficient management of radio calls. The Los Angeles Police Department instituted the STORM (System to Optimize Radio Car Manpower) Program a number of years ago in order to cope with the growing demand for police services (Chronkrite, p.51). The STORM concept involves assigning a small percentage of the patrol units to handle a large number of minor calls on a scheduled basis.

The citizens of Houston perceive the city as being unsafe. In this rapidly growing community, a number of factors - congestion, media attention - have created the perception among many residents that crime and public order are not under control (Brown, 1982, p. 14). With this perception of danger on the streets the Department must utilize its resources to their fullest extent. While the response time has been equated with feelings of safety, major studies have not correlated perceptions of response time with feelings of security (Pate, p. 5). Response time is largely a product of citizen expectations. The public must be educated as to what to expect from the police and when to call (Chronkrite, p. 52). Houston has the lowest number of officers per capita ratio of most major U.S. cities (Brown, 1982, p. 43). As a result, the efficient utilization of police manpower is the

primary concern.

There are three types of calls that police departments receive. Type A calls involve crimes in progress and other emergencies which require the immediate presence of a police officer. Type B calls require a police response but it does not have to be an immediate one. These calls involve significant crimes and situations where the police response is to reassure the citizens and to obtain information. Type C calls are minor report calls and requests for information (Farmer, p. 19). The Type C call is the type of call that is conducive to handling by a Tele Serve Unit. Each police department must evaluate all calls for service and determine a priority category for each type of call (Gay, p. 87).

The Wilmington Police Department has undertaken a number of experiments to increase their efficiency in managing the calls for service demand. In the Split-Force Experiment the patrol division was divided into a regular reactive patrol force and a proactive structured patrol force (Nolan, p. 70). The regular patrol unit was responsible for handling all calls for service. The structured patrol unit is responsible for undertaking directed activities and responding to critical calls for service. The second component of this experiment was changes in communication procedures. All calls for service were classified into three prioritization schemes which governed the type of unit and type of response to the particular call (National Institute of Justice, pp. 126-127). The calls were then serviced on a first come first served basis based on the priority of the call. The non-critical calls were then delayed after the complainant was advised of the delay (National Institute of Justice, p. 127).

Studies indicate that citizens are willing to accept a delayed response to a call. The most important factor is that the police inform the citizen when the response will be and then live up to that expectation (Gay, p. 65). Once the police have determined that a non-mobile response is in line with the objectives of the Department, then it has a choice of several alternatives. These alternatives include referrals, telephone reports, mail in reports, and station house reports (Gay, pp. 69-72). In 1977 the Fairfax County, Virginia Police Department discovered that upon critical review of the department's service delivery program, an inordinate delay in responding to critical calls was discovered (Buracker, p. 7). The Houston Police Department has identified this same problem. The average emergency call response time in Houston is just under 14 minutes which is unacceptable to both the citizens and the Department (H.P.D. Reponse Time Report). The goal of the Fairfax County Police Department was to reduce its patrol workload by 10%. This objective was to be accomplished through the use of a Tele Serve unit. During the first year of implementation this Tele Serve Unit reduced the patrol workload by 10.5% (Buracker, p. 8). The biggest problem in implementing this program was gaining the acceptance of the public to telephone reports. The continued success of a call diversion program is dependant on the ability of the dispatch personnel to effectively screen the incoming calls for service and to determine the appropriate response (National Institute of Justice, p 129).

Nashville, Tennessee decided that their patrol officers should become more involved in criminal apprehensions and less involved in activities unrelated to serious crime. In order to accomplish this objective they

settled on the concept of taking minor calls over the telephone as opposed to dispatching a car to these calls. The organizational advantage of call screening is based on two arguments: 1. No less useful information will be collected by telephone as opposed to in person; and 2. officers will have more time for more productive police activities related to criminal apprehension and crime deterrence (Schnelle p. 2). The results indicated that the program did produce a substantial time savings for the patrol officers but officer production did not increase. Citizens were less satisfied with the telephone response than with a mobile response (Schnelle, p.i). While there was a lesser degree of satisfaction on the part of the public, the majority of citizens were satisfied with the response that they did receive (Schnelle, p. 20). The Nashville study stress the importance of the police organization redirecting its patrol resources to take advantage of the increased manpower made available by Tele Serve.

Other cities have tried telephone adjustment of calls for police service with no adverse community feedback. For instance San Diego handles 45% of its monthly calls for service telephonically (Chronkrite, p. 54). In Saint Louis 10% of the calls are referred over the telephone to other agencies (Gay, p.62). The Portsmouth Tele Serve unit handled 40% of the eligible calls that were assigned to it (Pindur, p. 25). The non-acceptance of the Tele Serve alternative has been very low. In Washington D.C. the non-acceptance rate was 2% and in Fairfax County, Virginia the rate was 4% (Nolan, p. 72). Wilmington, Delaware experienced good results with its changes in the police role.

It is also very important that the dispatch personnel assigned to the

Tele Serve Unit be properly trained. Radio dispatch is one of the most neglected areas of law enforcement training but the communications link is the first and most essential link between the public and the police when calls for service demand are considered (Chete, p. 29). It is particularly important to note that this preliminary contact can influence citizen actions and subsequent behavior particularly expectation attitudes regarding the police response (Scott, p. 172). Nashville discovered that the decrease in satisfaction on the part of citizens was due basically to improper actions on the part of dispatch complaint clerks (Schnelle, p. 20). Operators enjoy considerable latitude in determining the proper police response to a caller's request (Antunes, p.173). Once the Tele Serve unit has been implemented it is necessary to closely monitor the performance of the operators and to encourage operators to be courteous and polite (Scott, p. 172). Operators must also inform citizens about what kind of response that the police will make. Observations of several departments indicate that complaint operators provide terse responses that provide little information on what the citizens can expect the police to do. (Scott, p. 169). The complaint takers must be informed of the importance of their job and educated on how to properly perform it. In Wilmington it was discovered that complaint takers did not understand the priority designations and as a result calls were not all classified properly (National Institute of Justice, p. 127). And thus call diversion techniques must be based on the proper training of the complaint takers.

### Issues

The foremost issue to consider is whether or not responding to citizens calls for service should be the most important function of a police department (Farmer, p.1). The current operations of the of the Houston Police Department are clearly orientated towards this pursuit. The patrol division is the backbone of the police department and receives the greatest amount of resources and manpower. It is estimated that patrol officers spend 40-60 percent of their work hours repoding to citizen's calls for service (Farmer, p. 1). Public expectations regarding calls for service must be gauged to determine whether expectations about police performance will be affected by changes in service delivery that result from the implementation of a Tele Serve Unit (Levine, p. 183). It has been assumed that the rapid response to calls for service is of sufficient to importance justify the spending of considerable amounts of money (Pate, p. xiii). While calls for service are important, the rapid response to these calls has resulted in a lower amount of resources being spent on other police related problems such as traffic control and community relations. Houston has justified their expenditures for calls for service on public expectation but has failed to fulfill the public expectations for effectiveness.

Calls for service have traditionally been the primary resource allocation measure for police departments. Response time is perceived by the media and the public as a criteria of efficiency for the police department (Farmer, p. 1). The Houston Police Department has suffered some

in credibility because of its inability to bring response times down to an acceptable level. Tele Serve in conjunction with prioritization of calls is a tool by which emergency responses to calls can be reduced. Public education regarding call priorities and the resultant police behavior must be developed in conjunction with the call divergence project.

The public's acceptance of the speed by which the police respond is largely based on expectations communicated by the police themselves either directly or indirectly. Both the public and the police must ask the question of how effective is a rapid response? Studies indicate that arrests result from a rapid response in only 3.6 percent of sample cases (Farmer, p. 21). Further more only 15 percent of all police calls for service studied involve a crime in progress or a medical emergency (National Institute of Justice, p. 121). Thus police agencies often forget about the other 85 percent of the calls when managing their calls and the response to all calls suffers because of the attention given to just the emergency calls. A certain amount of risk does go along with the changing of the response to citizens calls but police chiefs are indicating a willingness to accept these risks in order to provide better police services (Gay, p. 2).

Police departments throughout the country are discovering that they are unable to send a police officer to every citizen's call for service. The police are faced with the choice of either cutting responsibilities or better managing their calls for service (Farmer, p. 2). Many police chief's have taken on a "tooth fairy mentality" in that they believe that the impending crisis over providing more services with less resources does not affect them (Levine, p. 181). It is time to take responsibility for greater

responsibility for the efficient utilization of resources and provide solutions as opposed to excuses to the public. Police departments must become more community orientated and develop improved techniques to improve service delivery to the community (Boydston, p. 5).

It is time for the Houston Police Department to take the lead of other police agencies and develop innovative and efficient tools through which police services can be improved in the City of Houston. The allocation of resources, of which calls play a major role, is one the the most basic and routine decisions made by a police administrator (L.E.A.A., p. 119). The key to the managing of calls is priority screening. The dramatic increase in the level of service demand has resulted in unattended emergencies and failures in apprehensions due to dispatching calls on a as-received basis (Schell, p. 35). Over the past few years, the municipal allocations to police departments have decreased while the number of calls for service have risen (Farmer, p. 2). This fact highlights the need for greater responsibility and efficiency on the part of police administrators. Despite the fact that the Houston Police Department has been steadily increasing its manpower over the past few years, the number of citizen calls per officer has not decreased (Brown, 1982, p. 60). Now that the Department is demanding more time from officers in order to begin handling directed patrol assignments, this time must be taken from the time available for handling calls for service. As time constraints become more critical Tele Serve is the instrument through which patrol officers time can be optimized and utilized in the best interests of the Department and the public.

### Methodology

Evaluation of any program is a vitally important management tool which allows the police administrator to determine the effectiveness of any program and also to determine the extent to which a program has actually been implemented in light of the program's goals and objectives (Gay, p. 155). And so it is essential to the effective implementation of the Tele Serve alternative that this program be evaluated in an empirically comprehensive manner. The evaluation of the Houston Police Department's Tele Serve call diversion strategy will be conducted by means of a time series design. The implementation and evaluation will be facilitated through the conducting of a pilot program before the diversionary process is implemented on a Department wide basis. A series of measures will be conducted just prior to the implementation of the program. The criteria by which the success or failure of the product will be judged are response time, resources expended, volume and types of calls, and citizen satisfaction (L.E.A.A., p. 120). The experimental design of the evaluation will be divided into three distinct phases; the pre-implementation phase, the pilot program phase, and the post pilot program phase. The evaluation will rely on both process and outcome measures to gauge the extent that the program is effective and is achieving its objectives (Gay, pp. 156-157).

The pre-implementation phase will involve the compilation of base call volume data and a random survey of citizens who have requested police services during the pre-implementation comparison period. The pre-implementation data will be collected for a three month period immediately

prior to the initiation of the pilot program. The data to be collated will include the following elements:

1. Number of calls by time of day and day of week;
2. Types of calls by time of day and day of week;
3. Number of calls per complaint operator;
4. Number of calls that are eligible for diversion.
5. Workload statistics based on the daily activity reports submitted by the officers working the pilot area;
6. Response time in the experimental area.

A survey instrument will be developed to measure the amount of citizen satisfaction in regards to the police handling of calls for service. This citizen sample will be composed of a random sample of 1 percent of the citizens who requested police services in the experimental area during the pre-implementation phase. Police officers who are assigned to the Dispatcher's Division will be assigned to work the Tele Serve consoles. A short educational seminar will be provided to these officers in order for them to be familiar with the Tele Serve option and capable of manning the positions.

The pilot phase will then be run for three months in order to evaluate whether the Tele Serve alternative is a viable strategy as designed in the concept report. The pilot program will involve either the North Shepherd or the Southwest dispatch areas. These areas were chosen because of: (1) high rates of calls for service activity; (2) high level of officer concentration; and high level of bi-directional communication between the

dispatcher and the field units (Weaver, p.9). During the period that the pilot program is being run the same data units that were collected during the pre-implementation phase will continue to be collected and collated.

The post implementation phase will be a period during which the data collected during the pre-implementation phase and the pilot phase are compared. A survey to determine citizen satisfaction levels with the police response to calls for service will be conducted on a random basis of 1 percent of the citizens requesting police services in the experimental area during the pilot phase. In addition, a detailed analysis of those citizens who were serviced by the Tele Serve Unit will be conducted to determine their satisfaction with the use of that particular call diversion alternative.

A detailed cost analysis will be completed on the program upon completion of the pilot phase. This analysis will involve computing the actual costs of operating the Tele Serve Unit and comparing that cost to the costs of dispatching a patrol unit to the eligible diversionary calls. It is projected that the Tele Serve Unit has the potential of saving the Houston Police Department in excess of \$ 300,000 per year of the costs to respond to the minor calls for service that the Tele Serve Unit would handle (Weaver , Appendix 2).

Once the evaluation is completed, then any particular problems that are identified will be addressed and the necessary adjustments to the program made. The pilot program is seen as a refinement of the development process from which a viable and workable program will emerge that will serve both the best interests of the police and the public.

### Objectives

The primary objective of the Tele Serve option is to manage the Department's calls for service. The current system is inefficient and does not permit adequate control over field officers activities (Brown, 1983, p. 57). This will result in a priority being assigned to every call and minor calls that are diverted being handled in the most efficient manner possible. Response times will be reduced in the city due to the fact that more patrol units will be available to respond to citizen's calls for service. The Department has identified a dissatisfaction among the citizens of Houston with the current departmental response time to emergency calls for service. It is expected that the satisfaction level will rise with the implementation of the Tele Serve Unit.

The Tele Serve option will allow the Department to increase the number of directed patrol activities which will in turn cause the Department to assume a more proactive posture in its enforcement activities. This process will work in harmony with the expansion of the DART Program. The primary objective of the DART concept is to establish a more positive relationship between the patrol officer and the community (DART Task Force, p. 5). The Tele Serve option will allow patrol officers the time to engage in more community orientated activities. The second objective of the DART Program is the efficient utilization of field personnel which is facilitated through the efficient management of calls for service (DART Task Force, p. 6).

Tele Serve will result in greater officer satisfaction regarding their job. When officers are released from the mundane routine duties of taking

minor reports they will have more time for enforcement and investigative activities. This will also result in greater job enrichment for patrol officers. The purpose of job enrichment is to relieve the stress of job dissatisfaction and motivate the officers to be independent, responsible and confident (Souryal, p. 2). Since officers are more orientated towards enforcement activities as opposed to secretarial duties, they will be challenged and satisfied in their new roles.

The visibility of the Houston patrol force will be enhanced through the implementation of the Tele Serve option and the subsequent restructuring of officers time to accommodate this increased availability of officers for proactive enforcement strategies. It is incumbent on the Department that it develop a plan to direct the activities of patrol officers so that they become more effective and productive. Random patrol needs to be replaced with pre-programmed activities that are focused on specific crime, traffic, and neighborhood problems (Pindur, p. 12). Crime prevention will be enhanced through the availability of patrol officers to participate in community meetings and to enlist the aid of the public in the suppression of crime.

### Organization

The Houston police Department's Tele Serve Unit will be assigned to the Dispatch Division. The unit will be referred to as D.I.R.E.C.T. (Direct Incident Report Expiditor Control Team) and will operate between the hours of 7 AM and 11 PM (Weaver, p. 3). It is recommended that the unit be housed in the complaint operator's room of the Dispatch Division. This location would facilitate the passing of information from the complaint operator to the Tele Serve Unit and would combine the supervision of the complaint operators with that of the unit. The Tele Serve Unit would be staffed with police officers who are currently assigned to the Dispatch Division. Four unused complaint positions will be converted for use by the Tele Serve Unit. The only capital outlays for the Department will be the cost of four chairs and two time clocks to stamp complaints. The total expenditure is estimated to be approximately \$ 800.

To be eligible for diversion to the call must meet the below listed criteria (Weaver, p. 4).

1. No personal injury has occurred.
2. The offense is not in progress.
3. No weapons are used in the offense.
4. The complainant is at a safe location.
5. The complainant is currently not in danger.
6. There are no suspects at the scene.
7. There is no identifiable physical evidence.
8. Complainant has not demanded a police unit respond.
9. The report is required for insurance reasons only.

The above criteria were developed based on solvability factors. In order to manage calls for service in an efficient manner, the call prioritization must be based on solvability factors (Nolan, p. 72). Solvability factors determine when it is fruitful for the Department to investigate crimes and when it is not. By directing resources towards solvable offenses the clearance of those offenses will increase.

Based on the above described selection criteria the followed offenses have been identified as being potentially divertable for the pilot project.

1. Criminal Mischief.
2. Theft From Motor Vehicle.
3. Theft
4. Burglary of a Motor Vehicle.
5. Shoplifting (No suspect).
6. Found Property.
7. Telephone Harassment.

When a call is received it will be screened by the complaint clerk to determine whether or not the call meets the diversion criteria. The call will then be referred to the Tele Serve Unit. If the unit is available for calls the complainant will be transferred directly, if the Tele Serve Unit is busy at the time the call is received, the complainant will be called back at a agreed time when the call will be disposed of.

The actual evaluation of the Tele Serve Unit will be conducted by the Operations Planning and Analysis Section of the Houston Police Department's Planning and Research Division. This section will also be responsible for developing all measurement instruments and collecting, collating and analyzing all pertinent information.

**END**