

Implementation Elements

Chapter II

This section of the evaluation asks the following questions about 3-1-1 in Austin:

- How did APD choose its call routing and call-management systems?
- Who was involved and how did critical partnerships shape 3-1-1?
- How successful was APD in developing call-tracking systems and related databases?
- How well did APD integrate customer relations management (CRM) software into the system?
- How effective was the staffing and training for 3-1-1?
- How did APD change public behavior through education and marketing?

We discuss the steps that the Department took – what worked well, how APD addressed obstacles, and the lessons learned during implementation. Our research methods included interviews with key stakeholders throughout the process; observations of weekly implementation meetings (June-September 2001); and observations of daily work meetings, especially during the critical implementation months of July and August 2001. The 3-1-1 stakeholders we interviewed included emergency operations executives and managers, Information Technology Department staff, technology vendor staff, Capital Area Planning Council (CAPCO) executives, Greater Austin Crime Commission (GACC) executives, call takers and dispatchers, Research and Planning staff, and APD police officers (although contact with the latter was limited).

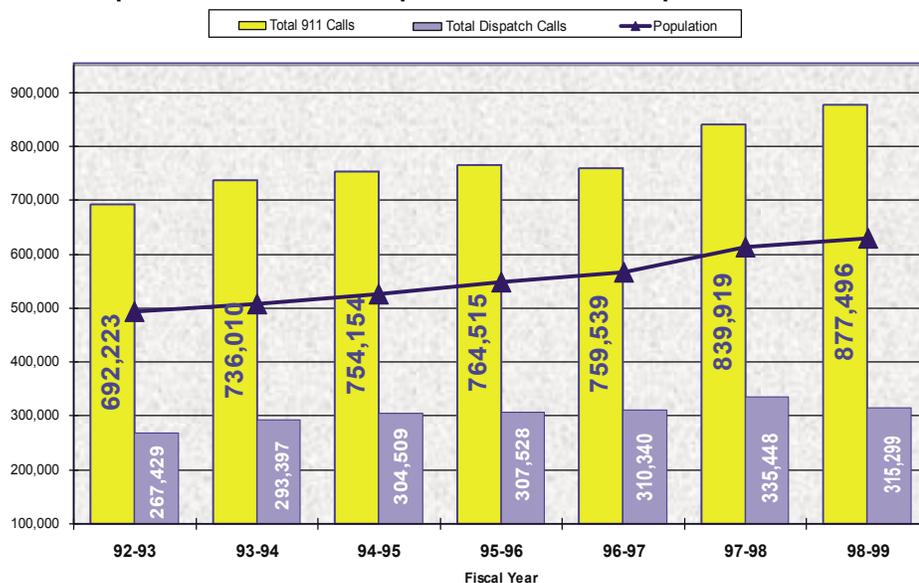
We participated in four training sessions, including vendor trainings on the telephony equipment and the customer relations software. We observed Teleserve, 9-1-1, 3-1-1, and dispatch workers on the job before, immediately after, and 6 months following 3-1-1 system implementation. We monitored actual calls and observed operations during complete shifts across each of the three shift periods. We also conducted two surveys of call takers and dispatchers – the first survey immediately followed the 3-1-1 kick-off, and the second occurred six months after implementation.

Finally, we reviewed documents generated during planning and implementation, including:

- APD policies and procedures for taking and dispatching calls
- APD COPS grant application
- Capital Area Planning Council (9-1-1 oversight organization) rules and regulations
- Research materials concerning 3-1-1 operations in other locations
- 3-1-1 technology implementation project plan, including timeline
- Vendor publicity materials for call management and telephony systems
- System design models
- Procurement evaluation documents
- Software and hardware contracts with selected vendors
- Telephony equipment specifications
- Staffing charts for the emergency communications division
- Vendors and APD training documentation
- Physical space blueprints
- Vendor maintenance and support plans and agreements
- Information Technology Department, City of Austin, maintenance and support plans and agreements
- Public education and marketing research materials
- Public education and marketing implementation plan
- Press releases and press release support materials
- Media coverage
- Daily call statistics
- Internal and external operations briefing materials

Exhibit 1: Call Loads - FY 1993 to FY 1999

Population Increases Compared to 9-1-1 and Dispatch Call Loads



Choosing a System

APD executives started the project by conducting a thorough assessment of Austin's need for a non-emergency system. Based on the assessment, they were able to develop and communicate a clear, complete vision of their goals for the new system.

The assessment sought to determine how citizens currently placed calls for service to the Police Department. Initially, they found that people could call 9-1-1, or they could call personnel within the Department using a non-emergency telephone number (974-5000) that forwarded to a private business exchange (PBX), with two civilian operators answering calls between 8 a.m. and 5 p.m. Then in 1996, APD implemented the Teleserve system to reduce some of the burden on 9-1-1 call takers; operators now could accept non-emergency police reports over the phone at any time. Teleserve was well accepted by the public as a viable alternative to a dispatched officer, and its call load steadily grew. Teleserve quickly helped to reduce the average number of calls handled by 9-1-1 operators by almost 50 percent, but the absolute number of 9-1-1 calls continued to grow faster than the population in Austin. Exhibit 1 shows that 9-1-1 call volume increased by an average of 2.4 percent in the first 5 years represented; in FY 1998, call volume increased 10.6 percent. In subsequent years, 9-

1-1 call volume steadily increased at the rate of 4.4 percent annually - about 2 percent faster than population growth was forecast for the city. In FY 2001, Austin 9-1-1 was on track to receive more than one million calls, 13 percent more than in FY 1999. The increase was partially attributed to population growth and partially to an explosion in cell phone use. Each call taker was fielding an average increase in calls of 10 percent per year. The added load threatened their ability to continue meeting their organizational service goals: to answer 90 percent of 9-1-1 calls within 10 seconds.

APD managers began measuring the impact of the heavy 9-1-1 call load on dispatch times. The Assistant Chief for Operations Support was concerned about the length of time it was taking officers to respond to emergencies and the amount of time that was elapsing from when a caller placed a 9-1-1 call to when an officer arrived on the scene. System congestion due to non-emergency calls was a critical factor affecting this performance measure.

Meanwhile, the Manager of the Emergency Communications Division had another set of concerns for the near future. Population growth and peak call loads related to community crisis points (e.g., severe weather) could be predicted to overwhelm the existing 9-1-1 system's capacity before long. Analysis of daily statistics showed that peak call loads were occurring on Fridays and Saturdays. Call volume started from a low around 5 a.m. and steadily increased throughout the rest of the day, peaking around rush hour (5-6 p.m.), and then steadily decreasing through the evening. Weekend (noon on Friday through 11:59 a.m. on Sunday) call loads peaked between 11 p.m. and 3 a.m., and were about 56 percent higher than for the same period during the week. Managers were accumulating anecdotal evidence that during extreme peak times, 9-1-1 callers were already being placed on hold and receiving busy signals, at the same time that non-emergency calls were being answered.

The managers recognized that trying to address these problems within the existing 9-1-1 system framework would be challenging, at best. The Texas State Commission on State Emergency Communication provides funding, guidelines, and

regulations for the state's 9-1-1 systems, and the Capital Area Planning Council (CAPCO) serves as a regional coordinator, monitoring the APD 9-1-1 system. CAPCO knew that Austin had an escalating problem, but interoperability issues between emergency agencies in the Austin metropolitan area prevented CAPCO from allowing APD to alter its system hardware or software. As a result, several potential solutions, such as different call interface systems, call-routing mechanisms, and call-tracking databases, were struck from APD's list of possibilities.

APD could, however, develop a completely new 3-1-1 non-emergency call system, designing it to be compatible with the area wide 9-1-1 upgrade that was already underway. In 1998, Austin voters had approved a bond issue to pay for a Combined Emergency Communication Center. The Center would include a new 9-1-1 call handling system, a new 800-MHz trunked voice radio system, computer-aided dispatch (CAD), mobile data terminals, automatic vehicle location, and transportation and transit services; it was opened in Winter of 2003-04. Once it adopted the strategy of moving forward with a new non-emergency call system, APD began creating the vision for 3-1-1. APD sought to:

- Provide citizens with a viable non-emergency reporting alternative
- Maintain service standards as the population grew
- Maintain service standards during peak call loads
- Maintain appropriate staffing levels
- Transfer non-emergency public safety calls to the correct city service agency

APD needed to select a model for 3-1-1 that would wean the public from using 9-1-1 to report non-emergency concerns, but still encourage citizens to assist the Department with problem-solving, continuing to provide what the Chief called "another set of eyes and ears." The Department decided early that it could not afford to assume lead responsibility for all of the City's non-emergency public service calls; accordingly, they set conservative goals as they considered the staffing and budget requirements for the various 3-1-1 models. Eventually, APD

selected the most basic “police-only” option. Once this decision was made and funding was assured by the COPS Office, APD executives began to establish critical partnerships that would help them implement the project.

Establishing Critical Partnerships

The project team included APD and City of Austin stakeholders, representing the various kinds of expertise necessary to make decisions and move the project forward. In addition, several external partners worked with APD to implement the call-routing and call-management systems. APD’s Emergency Communication Division was the system’s leading champion and end-user. The City’s Information System Department (ISD) and the Purchasing Department were also critical partners, as were system vendors Motorola, AVAYA, and Dell Computers.

ISD’s project manager was responsible for designing the system and for all related system research, procurement, installation, and debugging. The ISD team included a telephony system expert and a hardware and network system expert. ISD’s project manager also assumed the lead in designing the customer relations management (CRM) software.

The initial team met almost weekly for approximately one year, following standard information technology development procedures. The sequence of project management steps included project definition, analysis, design, procurement, construction, and implementation. The ISD project manager first developed a detailed project plan, including a timeline that listed each task, the staff responsible for completing it, start and end dates, and related tasks. At weekly meetings, the core team compared notes on the progress of each task,

reviewed upcoming tasks, problem-solved for any delinquent tasks, and added new tasks, as needed. The communication and collaboration that took place in these meetings was critical for maintaining focus and momentum.

APD’s 3-1-1 Goals

With 3-1-1, APD sought to:

- Provide citizens with a viable non-emergency reporting alternative.
- Maintain service standards as the population grew
- Maintain service standards during peak call loads
- Maintain appropriate staffing levels.
- Transfer non-emergency public safety calls to the correct city service agency.

Once the system was designed, the Purchasing Department became a crucial partner. Governments establish protective policies and procedures for obtaining goods and services with public funds. As a result, procurement is a perplexing maze to most of those trying to implement a concept. However, within each government are individuals tasked with understanding and enforcing procurement policies and procedures. Recognizing the complexities likely to be involved in procuring 3-1-1 system components, APD and the ISD staff sought help from the Purchasing Office prior to initiating the procurement process. With its expert advice, APD was able to use special public safety and other purchasing regulations to expedite their process. They were able to leverage existing contracts, which gave them access to bulk discounts on a relatively small IT purchase, and they avoided common pitfalls such as costs overruns and timeline slippage. In the state of Texas, agencies may use direct procurement (also known as “sole source” procurement) in place of the standard request for proposal (RFP) process for items that will improve the safety of citizens. The collegial partnership with Purchasing saved the team from three to nine months by introducing them to this alternative.

Having expert partners allowed the Department to expand and leverage much-needed expertise in order to deliver the 3-1-1 project on budget and on time. At the same time, the partnerships generated another set of challenges:

- Role-related conflicts over control of the project
- Problems integrating with other larger systems under development
- Lack of timely involvement by GIS experts
- Potential conflicts of interest among partners, e.g., the Local Exchange Carrier (LEC)

From early in the project, boundaries of authority between the APD Emergency Communication Manager and the ISD Project Manager were not always clearly articulated, and occasionally, rational decisions made by one inadvertently created problems for the other. As project champion and end user of the 3-1-1 system, the APD Emergency Communication Manager naturally assumed the lead in defining performance priorities and requirements for equipment and software. He also directed his staff's involvement in the planning phases; these staff were adding 3-1-1 to an already existing workload that would continue.

The ISD Project Manager also assumed leadership in determining equipment and software requirements, especially where dictated by the need for future integration with other developing emergency communication system upgrades. Trained as a project manager, she systematically established detailed timelines and responsibilities for all who were involved in the 3-1-1 process, including APD's emergency communication staff.

The 3-1-1 project was a relatively small sideline system, being implemented on a much faster timeline than the overall emergency communication upgrade. Tensions surrounding the conflicting decision making roles, as well the scope of 3-1-1 within the larger upgrade, surfaced quickly. The ISD Project Manager recognized the potential for problems and requested a meeting with APD to clarify roles and expectations. The meeting was attended by the ISD Project Manager, the APD Emergency Communication Director, and the ISD Director (the City of Austin

Chief Information Officer). Together, they agreed upon the need to build the 3-1-1 system with the potential for integration with other emergency communication system upgrades, but decided they could wait to specify exactly how that integration would occur. The other systems were complex and not yet clearly defined; trying to define integration requirements for 3-1-1 at this stage would have resulted in needless, costly delays for the smaller project.

During the meeting, both parties came to an understanding of one another's visions, expectations, and operational requirements and limitations. The APD Emergency Communications Director retained authority over the system's functional requirements, and the ISD project manager retained responsibility for deciding how to meet those requirements. They agreed to meet frequently to review the project timeline and discuss APD's workload issues. From this point, both sides reported that planning and implementation proceeded smoothly, and that the partnership between the two city organizations had been crucial to managing cost and timeline constraints successfully.

Another problem arose due to a costly oversight in forming the project team. All too frequently in such projects, geographic information system (GIS) expertise is overlooked - something the Austin project team learned too late. The intricacies of GIS considerations and technologies would prove far more complicated and mission critical than the rest of the stakeholders recognized. Austin's 3-1-1 system was designed to rely on address information to filter incoming calls, to track calls for immediate response and future analytical purposes, and to transfer calls to computer aided dispatch (CAD) systems. Address validation was critical for these functions.

However, the address fields and geographic planes in each of the systems differed, creating serious interoperability conflicts. By the time Austin's team recognized the problem, they could only develop alternative means of accomplishing the tasks that involved a series of complicated steps and data manipulations, referred to as workarounds. APD agreed to accept the CRM system missing one of its "must-have" functions. Consequently, lack of

GIS interoperability precluded the use of valuable functions of CRM. If Austin had included a GIS expert on its original planning team, it is likely that the person would have foreseen and addressed this during the project's design phase.

Finally, APD had difficulty with its LEC partner. Among other things, the LEC decided to charge a 5-cent tariff for each 3-1-1 call it handled; that created significant additional work for APD during the solution development phase, not to mention the tariff's impact on the City's budget. (In other jurisdictions, LECs have not charged for 3-1-1 routing.) APD faced a series of challenges working with this LEC. The carrier continually switched its liaisons with APD throughout the installation, resulting in confusion and frequent renegotiation of the service agreement. Contacting other agencies, we learned that LEC issues can be the Achilles heel of 3-1-1 systems. The apparent unwillingness of these private corporations to work cooperatively with various law enforcement agencies has stifled the introduction of 3-1-1 in some locations.¹ To Austin's credit, they did endure and survive these problems, eventually negotiating tolerable, if not favorable, tariff agreements. However, the project time and effort expended working around and resolving these issues were considerable.

We address these issues within the evaluation to help other jurisdictions recognize potential obstacles to 3-1-1 implementation. We commend the Austin team for its determination and ability to work through these issues during the design phase, as well as to avoid many of the other problems frequently encountered in similar technology projects. The Austin 3-1-1 team leveraged their strengths and partnerships to design and select 3-1-1 systems in a timely and effective manner.

Developing Call-Tracking Systems and Related Databases

Project definition took approximately four months, during which the team reviewed the scope of the project and the resources available. During the visioning process, APD had selected the most basic police-only 3-1-1 system model for Austin, and that determined the parameters of the hardware and

software components. The Department wanted the system to support 24-hour/7-day operation. Call volumes were projected to reach 50,000 to 100,000 calls per month. Eleven operators or concurrent users and two managers needed to be connected at any one time. This service level translated into 11 new workstations and a dedicated server, with appropriate wiring between the server and workstations. The budget had to cover an array of computer equipment including soft phones with observing capabilities, as well as the LEC's unexpected 5-cent per call tariff. APD estimated that they spent \$260,000 to implement 3-1-1, and budgeted \$44,000 annually in recurring equipment and service costs.

APD purchased call management software that added capabilities to existing call center software on the PBX switch. The new software would give APD supervisors the ability to track key statistics for monitoring 3-1-1 usage, call taker job performance, and overall system performance. Installing and customizing the call-tracking and customer relations management software was a major undertaking.²

Calls to the 3-1-1 service can be generated from several sources:

- Users dialing 3-1-1 from a residential or business phone (land line phone)
- Users dialing 3-1-1 from a cell or pay phone through a competing local exchange provider
- Users dialing the seven-digit APD main number (formerly, the PBX number), typically requesting information or specific APD staff
- Users dialing the seven-digit Teleserve number
- Wrecker and impound services calling APD about vehicles towed and impounded, as required by city ordinance

Call-tracking software collects certain call data as calls are being handled by the phone switch. This allows managers to view the number of calls waiting, the origination points of calls, the length of time that the longest caller has been waiting, how many call takers are immediately available for incoming calls, and other information about each call taker station. The latter information includes the status of

the call taker's current call and the amount of time the call taker has been on that call. The software also provides access to a series of standardized report forms, with historical data recorded call-by-call or in aggregate forms, by date, point of origin, and call taker.

Customer Relationship Management (CRM) Software Challenges

The back-end requirements of the “off the shelf” CRM software proved challenging.

The vendor installed the call-tracking software as an upgrade to the existing phone switch, working with the telephony expert, and provided training for managers and supervisors. In general, afterward, we observed supervisors using only the most basic functions of the software – monitoring the number of calls holding and the time spent by subordinates in various call statuses (i.e., available for a call, in report mode, and so forth.)

Two APD managers attempted to use the software for complex reporting and management. Unfortunately, they were frustrated in their attempts to obtain key data from the system and to extract it systematically.³ The data were being captured by the application, which apparently was capable of being programmed to extract and report it, but programming required more expertise than these users had. The software training had been limited in scope, and the managers responsible for generating management reports from the system had been unable to attend.

The partnership with ISD appears to have effectively ended once the 3-1-1 system was transferred to APD. APD managers requested support to resolve the reporting problems, but neither ISD nor the vendor

appeared to have been able or willing to invest this effort. Although not quite a failure, implementation was diminished by the gap between the software's capabilities and the users' ability to take advantage of it, seriously limiting the productivity of the call-tracking software for problem analysis and management purposes.⁴

Integrating Customer Relations Management Software (CRM)

APD executives recognized that achieving success with 3-1-1 would require a shift in public attitudes toward 9-1-1. They also knew that 3-1-1 call takers would require advanced technological tools in order to resolve caller issues effectively and efficiently. Most 3-1-1 callers would not need an officer to be dispatched, and their calls would not be entered into the Computer Aided Dispatch (CAD) system. Customer relations management (CRM) software was procured to help call takers manage and track these calls.

APD relied on ISD to research and select the CRM software within the project management process. ISD approached the task by conducting internet searches and requesting product demonstrations, hoping to identify an off-the-shelf solution that would allow them to meet the original project schedule, although remaining within their own staffing limitations. Technically, they succeeded; the CRM software selected was installed and functioning on time, but the installation suffered from problems caused by the rush. Because APD used the direct procurement process (described on page 8) and did not conduct a fuller review of the CRM software, they did not realize the complexities of the product. Ultimately, these problems coupled with a lack of user training contributed to an implementation failure.

Attempts have since been made to resolve these problems, but at present, APD 3-1-1 call takers cannot use the software to capture, track, resolve, and analyze 3-1-1 calls that are not recorded in CAD. As a result, little is known about the content and nature of non-CAD 3-1-1 calls.

We briefly discussed the problem of incompatible GIS components within the CRM system, above. GIS compatibility was a “must have” that should have been considered during software selection, yet the system was accepted in spite of its interoperability deficits. Otherwise, APD call takers could have tracked calls by area, validated that calls were within APD’s jurisdiction, and identified duplicate calls resulting from multiple reports of incidents such as traffic accidents. In addition, GIS compatibility would have supported integration of 3-1-1 call data for analytical and problem-solving purposes. This will be discussed in more detail in the impact evaluation.

Even apart from GIS incompatibilities, the CRM software was difficult to use and user training was inadequate. That generation of CRM systems had been plagued by ease-of-use problems in every industry.⁵ APD and ISD managers thought they had found a way around this, since the software they had chosen was designed specifically for non-emergency call systems and it had what seemed like a simple graphic user interface (GUI). In addition, the vendor was already involved in APD’s overall emergency system upgrade and was familiar with 3-1-1 requirements. In spite of all of these advantages, the back-end requirements of the off-the-shelf software proved extremely challenging.

Screens, tables, and relational structures were built and customized by the vendor. APD Emergency Communication staff were then made responsible for populating the tables with APD’s unique call types, questions, and resource materials. This involved entering detailed data into thousands of fields and tables. Populating the tables required only adeptness with the software, and extensive knowledge of APD’s calls and informational needs. The staff working on the project had both the Department expertise and the technological skills, but too few of them were assigned to complete the mammoth task in the short time available. Also, they needed to operate the software with the data in real time to complete and refine its capabilities, and this was not possible.

Implementation problems were made worse by the call takers’ inexperience with graphic user

interfaces (GUI). From our observations during training sessions and the call takers’ initial attempts to use the system, it appeared that the majority of them were not only inexperienced with GUI-based systems, but also with the underlying logic and methods for basic functions such as moving from screen to screen.

A train-the-trainer session was conducted for about a dozen call takers who were viewed as leaders on their shifts. This 12-hour vendor training occurred approximately 2 weeks before deployment of the system. At the time, the software was populated with limited simulation data. The trainer reviewed each function of the CRM software, menu-by-menu, screen-by-screen, and button-by-button. The training was conducted in a computer training room with three monitors at each station. The middle monitor displayed the trainer’s screen, although attendees learned hands-on at the other two terminals. Too much time elapsed between this training and the time when the trainees were to pass on what they had learned to their colleagues. When it came time for the user-trainers to teach other call takers, no one except those who were regularly entering data into the system could recall how the functions worked.

The training manager eventually met one-on-one with other call takers to go over the system. All received an APD customized training manual, and were given a chance to practice with a simulated database, three weeks prior to 3-1-1’s kick-off date. Lack of familiarity with the system, combined with limited training and a shortage of APD-specific data entry screens, made call takers reluctant, at best, to use the software. Supervisors supported staff in this, concerned that the numerous problems they confronted would interfere with their ability to handle calls in accord with time efficiency standards. In the end, it proved to be too challenging for call takers to learn and operate the new technology at the same time that they were expected to begin performing new job functions, assisting 3-1-1 callers.

Recognizing this, those responsible for populating the software with data quickly developed acceptable workarounds. For example, to replace the operator resource material in the software, they created a

simple on-line resource document for call takers, with internet links to city phone books and important resource web sites. They established a set of working policies and procedures for handling the different types of information calls, including tips on how to give callers realistic expectations about the potential for resolutions to situations that were outside the scope of the Police Department.

Without functional CRM software and links to other agencies, APD was left without a way to track calls or to assure that they were resolved, but fortunately, the workarounds have sufficed, and in some cases, have worked quite well. Although short of information for analysis and management purposes, so far APD has not especially missed functionalities that they never really had. CRM software applications have vast promise, but if they remain so difficult to install, customize, and use, their benefits may not be realized.

Staffing and Training for 3-1-1

Regardless of the technology used, the success of 3-1-1 would be determined by the quality of the interactions between the citizens who used it and the call takers responding to their calls. APD implemented 3-1-1 by reassigning existing staff from the Teleserve unit and the PBX operation. In total, 33 full-time equivalent staff were assigned to 3-1-1, which was designed to operate 24 hours a day, 7 days a week. Shifts were 8 hours in length. 3-1-1 did not lower the 9-1-1 staffing level, which remained at 72 call takers.

Using existing staff to fill 3-1-1 call taker positions saved on training, but it also created some challenges that required management skills in organizational change. Call takers had to adjust to differences in their job descriptions, skill requirements, and performance objectives. For example, on average, each Teleserve call taker handled between 40 and 70 calls per shift, and in a few cases, the duration of a single call could approach 20 minutes. Teleserve call takers were expert in gathering detailed information for detectives, asking a range of questions. When they started taking 3-1-1 calls, however, they had to complete calls much more quickly. The primary goal of 3-1-1 was to protect 9-1-1 from callers

with non-emergencies. If callers were unable to reach a 3-1-1 operator because the lines were busy, they would be likely to resort again to calling 9-1-1.

Managers also worked with detectives, who were accustomed to more comprehensive support from Teleserve, to explain that 3-1-1 call takers would support them, but would not assume their responsibilities. 3-1-1 call takers gather essential information on Teleserve type 3-1-1 calls about incidents such as thefts, burglaries, and forgery calls. With the implementation of 3-1-1, call takers had to handle an average of 80 calls per shift, averaging less than 2 minutes each. During peak periods, when the line was busy, 3-1-1 callers could choose to leave a message on an answering machine or wait for an operator. Leads and supervisors returned voice mail calls within an hour. The duration of some Teleserve type calls was longer than the average 3-1-1 call. However, with training, call takers also took less time to fill out the Teleserve questionnaire.

APD Emergency Communications personnel were cross-trained to work in three major units: 9-1-1, teletype, and 3-1-1. Every 6 months, call takers rotated between divisions, allowing for shift changes. Rotations built the skill levels of everyone in the division, promoted understanding and cooperation between the units, and improved staffing options for peak times and overtime requirements. Most important, 3-1-1 call takers were also certified 9-1-1 emergency call takers. If a 3-1-1 call escalated to a 9-1-1 emergency, the call takers were trained to handle the call appropriately and to forward it to dispatch. Providing this level of service was critical to APD's vision of 3-1-1. It ensured that if callers dialed 3-1-1 by mistake in an emergency situation, highly trained call takers would be handling their call.

With the introduction of 3-1-1, Teleserve call takers were wary of their changing roles. They enjoyed the depth of their Teleserve jobs, as fact finders who completed police reports. They were less interested in taking general purpose calls, like those made to the phone company's 4-1-1 service. To mitigate their concerns, the managers took a number of steps. First, they involved call takers in

the procurement process for the CRM software. Call takers questioned vendors during the demonstration about how the system would handle different day-to-day situations. The changes would be significant, but 3-1-1 managers were able to reassure call takers about their new jobs, build excitement about the changes, and address negative rumors quickly. They also set new standards for performance and aligned the 3-1-1 call taker position with department priorities.

Changing Public Behavior through Education and Marketing

From the conceptual phase of the 3-1-1 project, APD understood that changing citizen perceptions about 9-1-1 was at the crux of the effort. In the original concept paper presented to the APD Chief, the Emergency Communications Division Manager said, “Success or failure of this program will heavily depend on the public embracing and using 3-1-1 for legitimate non-emergencies.” He believed that \$375,000 for education and marketing would be needed to succeed. Yet APD’s public education and marketing campaign secured the success of 3-1-1, despite the technology challenges discussed above, with only \$45,000 for publicity.

The first step in marketing 3-1-1 involved leveraging the support of community leaders. APD approached the Greater Austin Crime Commission (GACC)⁶ about becoming APD’s marketing partner. Enlisting the assistance of these well-known community leaders opened doors to the print and television media. The Commission was able to reach corporate funding decision makers and to garner support from area marketing experts. The marketing team consisted of APD staff from the public information office, the community outreach office, and the emergency communications staff. Representatives from CAPCO and the City of Austin public information office were also involved.

The team leader conducted a two-phased research effort to draft a marketing plan outline, reviewing 3-1-1 materials from other jurisdictions. The marketing team began meeting 4 months prior to the planned 3-1-1 start date. Team members reviewed the marketing plan and samples of

marketing materials from other 3-1-1 sites. The plan documented the following:

- Target launch date
- Objectives for the marketing effort
- Control points for decision-making and financial oversight
- Key milestones and dates
- Budget estimate for the effort by media category
- Evaluation measurement tools
- Special media news events
- Orientation materials to be developed
- Potential community partners

By the end of the first month, Austin’s 3-1-1 initiative had a logo and slogan, *Austin’s Answers*. They also had draft brochure materials. By the middle of the second month, production of all kinds of printed materials had begun - a tri-fold brochure, wallet cards, bookmark cards with guidelines for calling 3-1-1 versus 9-1-1 and, on the reverse side, a quiz (with answers) that tested the ability to distinguish between appropriate 9-1-1 and 3-1-1 calls, pencils, bumper stickers, logo T-shirts, and logo balloons. Designed in English and Spanish, the brochure provided a description of 3-1-1 as “a toll-free telephone number that allows people within the city limits to request police services in non-emergency situations.” From donations, \$45,000 was raised for these items. APD did not run paid radio, television, or print advertisements. They did obtain significant free television and print coverage for 3-1-1. Television coverage of APD’s plans for 3-1-1 began on July 31, 2001. The GACC President held a media briefing. The media advisory stated:

The 3-1-1 launch is the city’s largest public safety initiative in recent memory. The Austin Police Department and the Greater Austin Crime Commission need your help to educate the public concerning the importance of this new system.

GACC’s President invited 86 editors and station managers to the 11 a.m. briefing, but entire crews arrived with them, bringing cameras and reporters. Despite GACC’s best efforts, the briefing evolved

into a press release for 3-1-1 rather than a discussion about how to garner future media coverage. During the 6 o'clock news that evening (July 31), 3-1-1 was announced to the public. Fortunately, the Emergency Communication Manager anticipated this possibility; the 3-1-1 number had been connected. On August 1, 3-1-1 calls began trickling into the Teleserve system.

Following this announcement, APD received editorial reviews in print media. In addition, APD executives received numerous requests for interviews. Over the next month, members of the marketing team began handing out the printed brochures and attending community meetings to announce 3-1-1. The school district provided every student with printed brochures about the system, integrating the new information into educational efforts related to 9-1-1.

Terrorism Strikes. On the morning of September 11, 2001, APD Emergency Communication staff were preparing to participate in a media event highlighting 9-1-1 Day at the Texas State Capitol. According to the plan, at the end of this event, CAPCO staff were to foreshadow the announcement of 3-1-1 as an alternative to 9-1-1. Then the terrorist attacks in New York City and Washington, D.C. took place. Along with every other police department in every community and city in the U.S., APD quickly refocused its activities. Calls into 9-1-1 and Teleserve surged. The entire 3-1-1 team realized that it was even more imperative now that public announcements about 3-1-1 occur the following week.

On September 17, the Mayor, Chief, and other city and APD executives gathered to officially announce the 3-1-1 service during a media briefing. APD seized the opportunity to remind everyone that “public safety is a community concern” and that “9-1-1 was endangered” by the growing number of non-emergency calls. All of the major media carriers attended the briefing. The three leading networks carried the 3-1-1 announcement, spending from 45 seconds to 3 minutes on the story.

This was a remarkable level of coverage, especially given the amount of time needed for extensive coverage of national events.

The wide television coverage had a positive impact on the launch of 3-1-1. Following the official kick-off announcement, 3-1-1 continued receiving scattered coverage over the next 2 months. For example, 3-1-1 was featured in a story about a rash of flag thefts. APD’s public education campaign was innovative. They leveraged their contacts. They were prepared and poised to make the connection with 3-1-1 and 9-1-1 when the unforeseeable September 11 tragedies created media interest in public safety reporting. The success of the campaign was evident in the significant 3-1-1 call load immediately after kick-off. We confirmed its reach through targeted questions in our surveys. In our initial patrol officer survey, we verified the impact of widespread media coverage: 51 percent of APD’s own officers first heard about 3-1-1 through the media.

In the citizen survey, we learned that half of the respondents had heard about 3-1-1 from media reports. Nineteen respondents had learned about 3-1-1 from a friend or by word of mouth, and an additional 10 reported having learned about it from police department employees. Fourteen had heard about 3-1-1 during a call to 9-1-1. Eight reported having seen 3-1-1 advertised, most of these reporting that they had seen the number printed on police cars. Five individuals had learned about 3-1-1 at a community meeting, including two at commander forums.

Implementation Outcome

APD implemented 3-1-1 without delays and within budget.

Findings and Recommendations: Implementation Elements

APD implemented 3-1-1 without delays and within budget. APD staff partnered effectively with experts in key city agencies, community organizations and vendor organizations to build the system. Although they faced obstacles, none prevented the launch of the system and its use for its primary purpose – to reduce 9-1-1 call loads. The Austin 3-1-1 team leveraged their strengths

and partnerships to design and select 3-1-1 system components in a timely and effective manner.

Although all involved reported that they “nailed the implementation timeline,” on-time delivery of the front-end system may have come at the cost of essential back-end tools. These tools were important to the long-term management of 3-1-1 call loads. Considering the ultimate outcome - diverting calls from the 9-1-1 call load as quickly as possible - APD benefited from expedited procurement options; however, skipping the crucial in-depth software evaluation steps required by the standard RFP process may have allowed them to overlook complications that the off-the-shelf software would later pose for their small staff.

In this process evaluation, we detailed implementation problems as well as successes in order to help APD and other jurisdictions recognize potential potholes along the road to 3-1-1 implementation or expansion. We commend the Austin team for its determination and ability to work through these issues during the design phase, as well as to avoid the many other problems frequently encountered with complex technology projects.

APD successfully implemented a 3-1-1 solution. Their enthusiasm, focus, skill, and dedication across the board allowed them to create a system that provides a viable option to citizens for non-emergency policy calls. This system relies heavily on human elements rather than technological advances. First, the public education and marketing campaign won acceptance and wide usage of the system by Austin citizens. In-depth staff training and understanding of call resolution policies, procedures, and expectations ensured citizen satisfaction with this non-emergency alternative to 9-1-1.

We encourage APD to bring the technological components of the 3-1-1 system up to par with the human elements. By doing so, they will begin to reap the operational, management, and problem-solving benefits that this type of technology can provide. Specifically, we recommend that APD consider renewing the partnership and collaboration with ISD with the objectives of fully accessing data captured by the call tracking software, fully populating the CRM system, and

resolving outstanding GIS issues. Once the system is completely operational, we encourage APD to maintain system support staffing to manage the complex technology on a daily basis, including making system adjustments, creating management and operational reports, and partnering with the Research and Planning unit to analyze the data created by 3-1-1 call tracking, so that it can be used to troubleshoot, manage, and improve the operation.

End Notes

¹ During our interviews, agencies in Florida reported the inability to reach agreements between law enforcement agencies and the LEC as the most significant barrier to 3-1-1 implementation.

² Other back-end software needed for server management was also installed. This included server disaster recovery software, server defragmenter software, and Client PC emulation software.

³ Built-in reports can be saved as delimited text files that can be imported into spreadsheet programs, but these are quite limited. For example, the software will not create one report listing the number of calls taken by every call taker during a given shift. Instead, a built-in report for each call taker must be saved, one by one, to a spreadsheet in order to create an aggregate report.

⁴ As researchers, we took extensive time – time not available to APD Emergency Communications managers - to extract and convert the data manually for a one-year period. As the impact evaluation outlines, some of this data could be very useful for analyzing the new expanding 3-1-1 call load.

⁵ Gallagher, Sean, “The End of the Big Bang,” *Baseline*, June, 2003, p. 30.

⁶ GACC was formed in October 1997, to support law enforcement, raise public awareness about crime prevention programs, and promote a cooperative and coordinated anti-crime effort in the community. Its 32 members are recognized business and community leaders.