

N-1-1 Information Delivery for Citizens

Prepared by the NECCC N-1-1 Work Group



NATIONAL ELECTRONIC COMMERCE COORDINATING COUNCIL

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Preface

In the future, governments across the United States and for that matter globally, will be forced to change the way they interact with their constituents. Citizens have new expectations from their government – they want to interact with government on their time, in the manner that they desire. They will expect to conduct business with their government in the same way that they interact with their banks and their retailers, having services and information available to them when they want it, wherever they want it and in whatever format they want.

Governments that recognize this and embrace the technology, process and organizational changes needed to revolutionize the way they interact with their constituents will be successful not only in meeting citizen satisfaction expectations but also be recognized by citizens who believe that their government remains relevant. Those governments that do not embrace such changes will be considered laggards and might face the result of a society of citizen non-interaction and complacency.

This handbook is intended for government leaders who are searching for ideas on how N-1-1 solutions (2-1-1 information and referral, 3-1-1 non-emergency local government solutions and 5-1-1 traffic information management) can be an effective solution in strengthening their constituent relationships. It is written by thought leaders from both the public and private sectors with experience in strategizing, leading or being involved with, an N-1-1 deployment. The handbook is divided into the key areas of focus for government leaders when they seek to build and deploy their N-1-1 solution: strategic goals and objectives, governance, technology, communication and outreach, and deployment. In addition, case studies have been included to illustrate each of these topics.

NECCC believes that this topic is an important one and that this handbook is part of a journey, rather than a destination. In our hopes of a continued NECCC focus on this topic, we are creating an N-1-1/Shared Services Virtual Work Group in collaboration with Cisco Systems, Inc. This work group shall be open to all individuals who have an interest in pursuing N-1-1. We hope to be able to leverage this work group as a means to provide periodic updates to this handbook as an aide to N-1-1 implementers and those considering its benefits. We certainly hope you enjoy the product of our collaboration.

Mary Kiffmeyer

Secretary of State, State of Minnesota

President, National Electronic Commerce Coordinating Council

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Introduction

In the United States, federal, state and local governments are facing a challenge. How do they continue to deliver government services while keeping taxes down? Citizens' expectations of their governments have never been higher. They expect to interact with government in the same manner that they interact with local banks or retailers – via online self-service capabilities and with the ability to do what they want, when they want and however they want. The challenge does not end there. In addition to meeting citizen service expectations, governments must find a way to do this in a cost effective manner. Government budgets are strained comparatively to past years and scrutiny has never been higher surrounding the concept of raising taxes as opposed to cutting costs and driving organizational efficiencies to deal with budget deficits. So, the question facing governments is “How do we provide greater care for our constituents in a cost effective and efficient manner?” More simply stated, “How do we do more with less?”

E-Government is Government

Governments have allocated a tremendous amount of time and resources to develop their e-government capabilities. In the majority of the cases, e-government focus was intended to provide better access to existing services by providing them online. This sometimes met citizen needs to interact with government on their own time, as well as reduced the cost for executing that transaction. In some cases, e-government initiatives were undertaken as a “me too” project – everyone else was doing it, and the lack of a Web site, portal, search engines and self-service transactions online meant that that government was a “technology laggard.” What has evolved and has become apparent is that e-government - providing self-service capabilities which include online capabilities, self-service kiosks and interactive voice response (IVR) solutions - **is** government and is not just another way “to do government.” It has become the primary method that governments use to deliver value-add services at lower costs.

For all of its benefits to the constituent and to the government, self-service and e-government also created a new challenge. Too often e-government became simply an exercise in creating a virtual copy of existing government services. Multiple systems were created, multiple architectures were supported, and new/more resources were required to support both the traditional and the new “virtual” or self-service transactions. This was certainly not the intention of e-government. To solve this problem, governments realized they needed an approach allowing them to leverage both channels – legacy and self-service, with one architecture, standardized processes, one copy of the “single source of data truth” and one standardized presentation layer to the citizen – regardless of how the citizen was interacting with the government.

However, there remained one additional challenge. Now that the self-service channel was in place, the government needed to ensure the adoption and usage of the self-service model. The key here was to be able to provide a consistent process with a consistent presentation layer to the customer, regardless of the channel being used. Whether a citizen decides to conduct a transaction online, at a kiosk, over the phone or in-person, their experience with the Government must be the same. This ability to provide ubiquitous and consistent delivery of services to the citizen with just one infrastructure to support has been instrumental in increasing the adoption of meeting the citizen expectation while lowering the cost of service delivery.

N-1-1 Defined

2-1-1 Simple to remember and easy to dial three digit dialing codes such as 4-1-1 for phone number information access and 9-1-1 for emergency response are valuable public resources. In July 2000, the Federal Communications Commission (FCC) assigned a three-digit dialing code—2-1-1—to be used exclusively for community information and referral purposes. This easy-to-remember, universal number is intended to connect individuals with community resources throughout the nation. The FCC mandated that, by 2005, the 2-1-1 service must achieve widespread public access, or the number may be reassigned for other purposes. The National 2-1-1 Initiative was formed to pull together state coalitions, nonprofit organizations, telephone companies, and federal and state government leaders. Working closely, the team will help ensure that this limited window of opportunity results in the implementation of a national system characterized by shared vision, commitment to standards, and collaboration.

3-1-1 In 1997, the Federal Communications Commission designated the 3-1-1 dialing code as a means of quick access to non-emergency police and other governmental services. The commission stated that use of the 3-1-1 code could improve the effectiveness of 9-1-1 emergency services by alleviating congestion on 9-1-1 circuits.

The Order did not obligate any entity to adopt 3-1-1, rather it ensures that any local entity that wishes to use 3-1-1 has the option to do so. Wherever 3-1-1 was in use for other purposes, that use would be allowed to continue until the local government in that area was prepared to activate a non-emergency 3-1-1 service. The commission required that when a provider of telecommunications services receives a request from an entity (for example a local police or fire chief) to use 3-1-1 for access to non-emergency police and other governmental services in a particular jurisdiction, that provider must ensure that, within six months of the request; it takes any steps necessary (for example reprogramming switch software) to complete 3-1-1 calls from its subscribers to a requesting 3-1-1 entity in its service area.

5-1-1 On March 8, 1999, The U.S. Department of Transportation (USDOT) petitioned the FCC to designate a nationwide three-digit telephone number for traveler information. This petition was formally supported by 17 state departments of transportation, 32 transit operators, and 23 metropolitan planning organizations and local agencies. On July 21, 2000 the FCC designated "5-1-1-" as the single traffic information telephone number to be made available to states and local jurisdictions across the country.

The FCC ruling leaves nearly all implementation issues and schedules in the purview of state and local agencies and telecommunications carriers. There are no Federal requirements and no mandated way to pay for 5-1-1-; however, USDOT and FCC expect to see some type of nationwide deployment. In 2005, the FCC will review progress in implementing 5-1-1-.

While the flexibility provided in the FCC ruling is highly desirable, it also presents a challenge. There is a great deal of interest in using 5-1-1- throughout the U.S. It is expected that there will be multiple requests for 5-1-1-, at least in some parts of the U.S., from DOTs, transit agencies, regional and local transportation agencies, as well as private service providers who will offer to implement 5-1-1- services for some sort of compensation. If not carefully planned, 5-1-1- services could devolve into an inconsistent set of services widely varying in type, quality and cost.

The Value of N-1-1

In the FCC's assignment of these three dialing codes, governments have been provided an exceptional vehicle to continue to meet their constituent's expectations for self-service information and service access. The ability for citizens to interact with their government by calling into a call center has long been an integral method by which citizens conduct transactions. For years, governments have been taking advantage of technological advancements and the sophistication of IVR as a means to not only reduce the number of face-to-face interactions but as a mechanism to reduce live call center assistance by enabling self-direction by the caller. Governments such as the city of New York with their 3-1-1 initiative, the state of Texas with their statewide 2-1-1 initiative and the state of Arizona's 5-1-1 capability have clearly discovered how to leverage this valuable resource as a means to delivering four key outcomes

- Provide new information and services to their citizens not previously available or easily accessible.
- Further increase the capabilities and adoption of self-service solutions.
- Further reduce the per transaction cost of information and service delivery.
- Adopt creative models such as public-private partnerships, shared-services and core-context for cost avoidance and investment into new and innovative government solutions.

While 2-1-1, 3-1-1 and 5-1-1, each with their own specific application and goals, developed as individual customer relationship management (CRM) applications for government, another model began to evolve. How could each of these three-digit dialing codes be developed and deployed as a virtual N-1-1 solution or as a shared service. In a close geographic proximity, a city, county and state might each have their own solutions for different N-1-1 solutions. A city might have a 3-1-1 solution, a county may have 2-1-1 and a state may have a statewide 5-1-1 solution in production. Would it be of value for these three entities to collaborate and look at developing a shared N-1-1 service, rather than having multiple, silo-ed and redundant solutions? This sharing can be done through two methods – either by sharing a common network, data and application infrastructure so that resources are being used once but leveraged across multiple solutions. However, if one infrastructure backbone is not available across all jurisdictions, shared services can be deployed via a “network of networks” approach – where each specific entities infrastructure can be connected or networked with the others and applications can be extended across jurisdictions. Key to this approach is the ability to reach consensus on standards across data infrastructure, process approach and network infrastructure.

Handbook Overview

This handbook is written for the government executive who is considering an initiative to deploy either one or many N-1-1 solutions. It is the authors’ goal to provide best practices, lessons learned, and specific case studies as background and valuable information as the executive begins to undertake such an important initiative. We believe there are five key areas which government executives must plan for, manage, and execute against in order to have a successful N-1-1 deployment. Accordingly, this handbook is divided into the following areas:

1. Strategic Goals and Objectives
2. Governance
3. Technology
4. Deployment
5. Communications and Outreach

In order to demonstrate key concepts and understand their potential application, each section is supported with N-1-1 case studies from across the United States. As an appendix, we have also included some high-level information on 2-1-1, 3-1-1, and 5-1-1, along with quick descriptions of existing deployments.

Strategic Goals and Objectives

This is a story about the ability of citizens to readily access a customer-centric government through a single, easy to remember number -- N-1-1. Many governments realize that citizen expectations have increased in a time of economic uncertainty. Budgets are under increased strain as they seek to meet unmet citizen needs in a time of deficit spending. These same governments now realize that becoming an easily accessible customer-centric government is in their self-interest and have made progress to improve service delivery via a single, easily recognizable phone number. In this section, the reader will be presented with three goals that N-1-1 systems provide and the goals that any future N-1-1 deployment should provide.

Improving Customer Delivery

Governments in the recent past seldom delivered citizen services as a single city, county or state enterprise. They have been fragmented and composed of partially autonomous agencies and semi-independent departmental units. Each organization brought with it virtues of its own culture and often did not have shared values or sense of purpose with other departments within that government. Citizens had been left with service delivery that is hard to access, slow, expensive and most often was conflicted in its execution. Often those citizens who most needed the government's assistance were those who were least likely to be able to access it.

An example of this could be in instances where citizens, especially those who were destitute, in poor health, didn't speak English or otherwise had limited access to government assistance sought help but were unable to access the services that they really needed. The Texas 2-1-1 project is an excellent example of an N-1-1 solution to this problem. The state, with a population roughly equivalent to Canada or Australia, is comprised of both highly populated urban areas (three of the top ten U.S. metro areas) and expansive rural areas with their own unique challenges in delivery of health and human services. In addition, there is a huge socio-economic gap between the haves and have-nots.

A series of non-profit organizations across the state provided assistance to the poor but awareness of how to access the help was low, the hours of operation were inconsistent, and the ability to access services outside the immediate area was limited. The Texas 2-1-1 project linked the services of the various non-profits, the capabilities of the Texas Health and Human Services Commission and local care-givers in a state-wide system with a single access number. Now citizens across the state know that a single number can provide them access to critical services no matter where they live or when they are calling.

In Arizona, along the border with Mexico, hundreds of people, migrant workers crossing the border to find work, lose their lives each year for lack of the most basic of human needs: water, food and shelter. In this state, access to assistance for these people was available through a non-profit in Tucson but the phone number was obscure, not widely published or publicized and the call center operated with limited hours. Now an Arizona proposal to link call centers across the state with a similar 2-1-1 model to that operational in Texas will provide ubiquitous access to critical services and has real potential to save lives.

In the area of economic development, many city and county governments have required business developers to own the burden of getting a building or business permit without city/county assistance. However, this is despite the fact that it is in the government's best interest for the business to be successful in obtaining the permit. Placing the burden solely on a small business owner, developer, or the citizen to manage the permitting process can increase the cost of business and increase the potential that the customer will take a business or development to another jurisdiction.

In an increasingly global economy cities compete with each other internationally. When it has become apparent that a city is not easy to work with, another city that is more readily accessible will be more competitive with others for the business. This is not, as some might think, a matter of acquiescing to all business demands at the expense of other government objectives. It is a matter of providing equal and consistent access to business and regulatory services and co-owning the issue with the developer. The combination of a single enterprise economic development center accessible through an N-1-1 number is a competitive advantage to this city and any jurisdiction that adopts this approach and mindset of ready N-1-1 access and customer centric service delivery.

In one California city there was no single place, in an inwardly focused government service delivery process, where a citizen could go to start a new business, get a permit or a license without stepping through a maze of disparate agencies. In this example it used to take up to nine months for a developer to work through a process of engaging with nine different city agencies and then repeat these with similar agencies in the county and state before a building and business permit could be approved.

The delay had an immediate impact of delaying the collection of property and income taxes the new business could otherwise be paying but also delayed the employment of new workers who would otherwise pay sales and property taxes. The delay made this city less competitive with cities in Asia, in Europe and North America where other similar industries were being attracted.

Now that city has started a unique (enterprise-wide) economic development center, accessible through either the city's 3-1-1 single access number, a parallel single website or a single physical location in city hall. How to access these services is up to the citizen, but whether the access is via phone, the Web or in person, the city government's customers have a single point of access for all the services needed to start a business, enhance a neighborhood or open a new center for the arts.

This government realized that in order to meet customer expectations, previously unsatisfied, and concurrently manage its budget; an enterprise-wide refocus of resources on customer need was required. The ability to address customer needs first required that this city government reduce or eliminate the impact of inwardly focused silo-ed agencies and departments, while minimizing the negative impact change can have on employee morale and organizational culture.

There was a realization that by serving citizens, businesses, non-profit organizations, and the educational community, government can achieve – by partnership – more than it can do alone. The city's N-1-1 access enables any citizen or business to start a process that will accelerate economic and neighborhood redevelopment and improve the lives of its citizens while improving the tax base and consistency of tax collections in the city.

A new culture and new approach to conducting government business is leading the way with seamless communications and operations, clear roles and responsibilities; and, improved organizational accountability. These actions foster cross-departmental and agency work groups to improve service delivery and further the government goals of economic and neighborhood development.

Government employees once acclimatized to customer-centric values and objectives will now ask themselves, when approached by a constituent, how can we, the government help, rather than to whom do I need to divert or refer this person. Government employees will not require the constituent to engage with multiple agencies to achieve an economic or neighborhood objective when it is the government's best interest and responsibility to collaborate within its own sub-organizations to solve customer issues.

Improving Organizational Productivity

The concept of creating a customer-centric virtual government has replaced the concept of a "bricks and mortar" physical reorganization. In a virtual government, the capabilities of disparate, silo-ed departments and agencies can become aggregated without negative employment and/or agency prerogatives serving as an obstacle. This is truly one time when government can "have

their cake and eat it too.” A new enterprise view of government seeks to share resources to improve citizen services.

The partnership begins internally, within government, with the realization that the government needs to share with itself. That is, each department and agency must be willing to eliminate duplicative functions and resources by viewing itself within the context of a larger enterprise or team. This process starts with examination of “core versus context” functional concepts in agency and departmental operations.

One government, for example, had determined that the secretary of state was the single agency that would collect money, specifically taxes and other revenues, for all other departments and agencies in the state. But over time, 13 different compartmentalized agencies/departments developed redundant revenue collection capabilities that employ over 3,300 persons, housed in state office buildings with duplicative cash collection infrastructures.

Now by creating an enterprise-wide perspective, these resources can be refocused on the customer by creating a virtual government cash collection capability that can be linked by the use of the state’s Intranet network and to the customer via the Internet and integrated call center to create what we will call a networked virtual organization or NVO. The human resources, physical office locations, and cash collection infrastructure, can be shared without forcing the individual agencies/departments to re-assign or reduce headcount.

Participants in an NVO determine what represents a *core* business function and what is *context*. In other words, mission-critical and “differentiating” functions are defined as *core* operational requirements. These are essential capabilities that must be owned or retained by each organization participating in the NVO.

Mission critical functions are those activities that, if performed poorly or not at all, would pose an immediate risk to the organization. Likewise, functions that are differentiating capabilities in that they contribute to uniqueness of the organization are to be considered *core*. Differentiating functions are those capabilities, which constituents, citizens, employees, and management believe are unique and distinguishes one jurisdiction or governmental unit from another.

Context capabilities are those functions that are neither mission critical nor considered to be differentiating to a particular agency or department. A *context* function would be for most agencies non-essential but otherwise needed to fulfill customer needs. These capabilities would

be shared by agencies for which this function is core, thereby reducing redundancy, operational overhead and cost.

Participant cooperation is expected and supported by mutual wins. The organization has a shared mission, values and purpose. Policies and procedures well defined and are less formal. Common vocabulary and definitions are specified. The basic NVO business model provides for mandatory services by sharing *core* functions. Organizational units are responsible for resource allocation. The virtual organization is not vertically integrated; the NVO doesn't own all competencies required to produce a product or deliver a service. Information is shared by all of the virtual organization's participants.

Reducing Government Costs

In a society where cost reduction and doing more with less have become the norm, governments everyday are looking for new and innovative approaches to enable hard dollar cost takeout, while increasing operating efficiencies and enhancing employee productivity - all while sustaining even higher standards of constituent satisfaction. This can be a significant task, but one made easier with the right tools, products, services, best practices, and methodologies all working in combination.

Over the past ten years, a number of leading Global 500 companies and governments have undertaken significant and innovative efforts to drive cost out of day-to-day operations. Three initiatives have come to the forefront in achieving this cost takeout - the migration from disparate data, video and voice networks to a converged network, the deployment of collaboration applications, and Web-enabling key business functions. In a recent study sponsored by Cisco Systems (*Net Impact Study* – available at <http://business.cisco.com>), it was found that these capabilities have helped the two thousand U.S. organizations surveyed to reduce costs by \$155 billion in the past three years. This astonishing discovery was attributed to improvements in customer care, back-office Web-enabled solutions and collaboration tools and applications that introduced production and distribution efficiencies, reducing both logistical and labor costs.

While N-1-1 initiatives are critical for governments to continue to remain relevant to their constituents and drive a higher level of customer information and service delivery, it has also proven to be a catalyst in enabling governments to either avoid new costs or remove costs from existing operations. If an N-1-1 initiative is designed and deployed to be able to take advantage of key technologies such as converged networks and applications such as collaboration tools, the ongoing operational costs of the N-1-1 solution can prove to be significantly less than if legacy based approaches to technology (e.g. separate data and voice networks, PBX solutions) are

utilized. This is demonstrated in the state of Texas 2-1-1 case study which appears at the end of this section. The Texas Health and Human Services Commission made a strategic decision that in order to meet their long-term goals, it had to implement a converged voice, video and data network and Voice over IP (VoIP), coupled with concepts of operating as a Networked Virtual Organization, to reduce their operational costs. Specific N-1-1 areas where costs can be avoided by leveraging the convergence and collaboration applications are shown in the table below.

Lowered Call Costs	Lowered Network Costs	Lowered Costs for Remote Locations	Lowered Real Estate Costs
Intra-State N-1-1 Call Center Long Distance Costs Reduced via VOIP	Lowered Network Administration Costs	Centralized Call Processing	Increased Space Utilization and Flexibility via Remote Worker Capability
Intra-State Incoming Toll Charge Reduction via local number utilization	Lowered Maintenance Costs	Centralized Voice Services	Reduced Operational Costs
Use of Extension Portability via Network Roaming or Home Office	Reduced Moves/Adds/Changes Costs		

Across the United States, a phenomenon is emerging where governments are realizing that their investment in N-1-1 can be leveraged for other capabilities and shared with other jurisdictions. Although clearly not the case with all N-1-1 deployments, governments who make a decision to leverage emerging technologies and applications are finding new opportunities to leverage their N-1-1 investment, including:

- Leveraging the converged infrastructure and collaboration applications to re-engineer legacy business processes or enterprise functions. Examples of this are being demonstrated in states where existing N-1-1 infrastructures are being considered as a backbone for additional health and human services functions.
- Taking advantage of the converged infrastructure as a vehicle for local or statewide VoIP and toll bypass communication – reducing ongoing telecommunications costs. This is being considered in some states where an N-1-1 converged network infrastructure is in

place. This infrastructure can be slightly expanded with greater capacity to leverage VoIP capabilities, taking advantage of toll bypass savings, and managing legacy in-bound 800 toll charges by leveraging the network to translate those calls into simple local calls.

- Leveraging the communications platform and end-point communication devices, such as Internet Protocol (IP) Telephony and SoftPhones, as a vehicle for homeland security and disaster preparedness. This is being demonstrated in areas where N-1-1 solutions are available 24/7/365 – providing the ability to provide near statewide or citywide information dissemination via IP phones and emergency broadcasting.

Washington State Attorney General's Office

One example is the state of Washington Attorney General's Office's (AGO) effort to address customer issues of consumer fraud, elder and child abuse. By working with customers in a series of unique focus groups focused on business, non-profits and citizen customers, the AGO determined it should triage complaints. When complaints are registered with the AGO they often involve shared jurisdiction with other government agencies. This can be confusing to users who do not know where to turn to get a complaint resolved.

Customers want to have confidence that once a complaint is submitted, it will be resolved, even if the AGO is not the right agency to handle the complaint. The AGO will enable a process whereby there will be a capability for other agencies to forward and receive complaints electronically to the AGO, in order to reduce the customers' feeling of "being passed around." The AGO has adopted a policy that it will refer the complaint, not the person. This does not mean that the AGO will handle every complaint through to resolution, but rather that the attorney general will refer the complaint to the appropriate agency and make sure that it is handled with one-voice.

The AGO will, via an "online triage" channel, refer users to the right agency by automatically forwarding certain types of complaints to the appropriate agency online. The AGO will partner with other organizations that will refer the complaints to them, not the people.

The Washington AGO believes that increased staff efficiency can be realized through Internet technology. The AGO's customers want to have confidence that government utilizes the best methods available to save time and money while providing the best service possible. The AGO will also make employee services available online. One focus group participant reported that his company's employee services are so heavily Web-based that they've adopted one answer for all their new employee questions – "It's on the Web."

The AGO will utilize a case management system for both external and internal customers. Since the data will be located in one place, management and maintenance of the data by both internal and external customers can be more efficient. As a result the AGO will have more time to focus on the customer and provide employees with better and more efficient tools to increase their own productivity. The time saved can be dedicated to cost savings, but more importantly to better service for their customers.

State of Texas Health and Human Services Commission (HHSC) 2-1-1

In July 2000, the Federal Communications Commission (FCC) assigned a three-digit dialing code — 2-1-1 — to be used exclusively for community information and referral purposes. This easy-to-remember, universal number is intended to connect individuals with community resources throughout the nation. The FCC mandated that, by 2005, the 2-1-1 service must achieve widespread public access, or the number may be reassigned for other purposes. The National 2-1-1 Initiative was formed to pull together state coalitions, non-profit organizations, telephone companies, and federal and state government leaders. Working closely, the team will help ensure that this limited window of opportunity results in the implementation of a national system characterized by shared vision, commitment to standards, and collaboration.

Under the direction of the Texas Information and Referral Network — a program of the Texas Health and Human Services Commission (HHSC), Texas set a goal of creating a cost-effective and efficient model. To help fulfill this goal, Texas became the first statewide adopter of the new 2-1-1 initiative using VoIP technology.

The HHSC team identified three primary success factors required to achieve their goal: area information center (AIC) access to shared resources, 24-hour availability year round, and funding.

Shared Resources: HHSC knew that the only way a statewide 2-1-1 system would be successful would be to enable each of the planned 25 AICs to communicate so that they could share resources. Each had access to a centralized database of local community, church, charitable, and state resources but no efficient and cost-effective way to communicate with one another. As with traditional N-1-1 lines, such as 9-1-1- and 4-1-1, calls to call centers were delivered over a 1-800-line, with carriers charging per-minute fees. The long-distance charges to the centers cost millions of dollars per year.

Availability: HHSC's goal was to provide 2-1-1 centers the capability to operate 24 hours a day, however not every center offers 24x7 service, so a solution to enable rolling over of calls from the smaller centers to the larger 24x7 centers at prescribed times was needed..

Funding: Funding came from a unique public-private partnership between state and local government, not-for-profit, and private organizations. In the Texas model, the state government provides 50 percent from local operating funds, while the remainder is generated from the cities and counties as well as from foundation grants and United Way funds, and other resources.

HHSC knew they needed to build a cost-effective program, which required creating an NVO in the form of a statewide virtual call center. The initiative began in March 2002, with implementation beginning in early October. By mid-December 2002 production was finished on more than half of the total call centers — a remarkably condensed timeframe.

HHSC also tied 2-1-1 to homeland security, which provides the opportunity for additional funding. As a result, 2-1-1 became part of Texas Governor Rick Perry's homeland security strategy.

Texas 2-1-1 clearly demonstrates the value of an NVO in extending services beyond what any single organization can provide. Through the collaborative efforts of the public, private, and not-for-profit organizations that have contributed to creation of the NVO, and through the VoIP technology that supports it, the Internet-based 2-1-1 communications system provides:

- Direct, transparent access to health and human services for all Texas citizens, 24 hours a day, 365 days a year.
- Anticipated savings of \$400,000 per year over the annual cost of a traditional call-center application.
- Additional cost savings by reducing the need for full-time, multilingual staff at all call centers through efficient call-routing capabilities.
- Elimination of incoming toll charges and outgoing long-distance charges.
- The ability to make call routing transparent to the caller.

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Governance

Among the first questions to ask in the planning of any project are: who are the stakeholders, who will lead the project, and who will be responsible for the completed product? These questions take on new significance in enterprise e-government projects such as the implementation of an N-1-1 system.

Using the city of Hampton Virginia's 3-1-1 initiative as a case study, we will discuss ideas for choosing a project team, creating buy-in across your organization, and fixing operational responsibility.

Recognizing the Driver of the N-1-1 Initiative

The impetus for the adoption of an N-1-1 system is likely to play the largest role in determining the leadership and composition of your governance team. A mayor or city manager recognizing constituent benefit for a centralized 3-1-1 system, a human services agency with a legislative mandate or initiative to provide a 2-1-1 service, or a department of transportation seeking to consolidate information from various transit and roadway infrastructure agencies into a regional 5-1-1 project can, and will, require different leadership models, given their inherent differences in business drivers and programmatic requirements.

When an N-1-1 project is publicly called for or launched by a senior elected/appointed official, the individual or team responsible for carrying out that mandate operates in an environment with perhaps more public scrutiny than one initiated by an agency seeking efficiencies. They must be careful to include broad representation from both the internal stakeholders and the external community, in order to mitigate the risk of criticism from those who may inadvertently be left out of the process.

Legislation instituting any system, whether from a state, county or city, commonly fixes the responsibility for establishing the system and also often identifies the community of interest to include in the process. Even when interested parties are not named explicitly in the requirements, the legislative history may be sufficient: who testified in favor of the measure and, perhaps more importantly, who was opposed?

An organizational recognition of the need for an N-1-1 service, which derives from regular strategic planning or is otherwise organic in nature, will more easily lend itself to identification of stakeholders and leadership. These projects have no less complexity or risk, but tend to be less controversial and volatile than those initiated by external stakeholders.

Beyond the first champion for instituting the service, are there other executive sponsors required or whose support would enhance your success? This may include department or agency heads whose organizations will be impacted by the service or relevant community leaders. An executive steering committee may also be formed to provide senior leadership and ensure appropriate cooperation from staff across the enterprise. A project management approach that is appropriate to the host organization's culture and any internal standards should be adopted.

After the executive sponsorship is cemented, the selection and location of the project manager/team will be the most significant selection that is made, as we will see in the following sections.

More examples of how governance is handled in specific N-1-1 projects can be found in the *Deployment* section further on in this handbook.

Funding Options and Models

The revenue source for your N-1-1 project may have a significant impact on the governance and funding model chosen. For example, funds may be set aside for all capital and operational costs, or in some cases, an N-1-1 system may need to identify new revenue generation capabilities in order to cover operational expenses. In addition, there may be relative freedom when the funds are the result of a new appropriation or new revenue source. Where projects funds are the result of redirection or diversion of existing budget allocations, it may be advisable to clearly delineate the return on investment, in dollars, resources, or enhanced service delivery, that will be generated as a result of the new service.

The type of N-1-1 initiative being deployed can make a difference in available resources and funding. A 3-1-1 system may rely on local general fund revenue, or fees/taxes imposed on telephone users; however, this can vary depending on state law. 2-1-1 systems may rely on state funds, redirection of local dollars from community-based information resource centers, and/or other sources. A 5-1-1 system may be able to leverage federal, state and local dollars from dedicated funds and in some cases, 5-1-1 systems are considering charging a fee for premium services such as having personalized traffic or transit information pushed to mobile devices.

For some projects, grant funding may be available for start-up and even operational expenses. It is recommended to research association and foundation Web sites (<http://www.capwiz.com/unitedway/home/>), as well as review case studies of other N-1-1 systems (<http://www.centerdigitalgov.com/cdg/?pg=search>). In any case, it is important to be creative and

open to a variety of potential funding sources, even if the funding is only for a portion of the project. For example, homeland security funds may be available if the initiative provides a central source to quickly and fully disseminate emergency information.

If there is a legislative mandate/initiative for the system, there is likely (but not always) to be a funding source identified. This certainly simplifies the life of the project sponsors and leadership team considerably, although it is still critical to assemble a coalition to support the project. By building a broad-based supporting team whose job is to ensure buy-in of the initiative, there is a decreased risk of disruption in progress from disenfranchised parties.

When budgets are redirected or diverted to fund an N-1-1 initiative, the project leadership needs to be sensitive to those adversely affected. The importance of the initiative for all the stakeholders must be illustrated in clear terms via an ongoing communication strategy, and each department or agency must know what they will gain. If there is a negative perception of the project's value, it will be hard to generate and maintain the support needed for a successful deployment.

Staffing Makes a Difference

In many e-government projects, there is a tension in balancing the needs of program and technical staff. While there are no simple answers to this common dilemma, it is important to note in developing the project team that appropriate representation needs to come from each area. Individuals with experience working successfully on cross-organizational teams are ideal, as there is less need to acculturate them.

One of the most significant elements of an N-1-1 initiative is recognition of the key content requirements from throughout the enterprise. It is in this area that a project manager be chosen for their ability to lead a cross-section of personnel and have a good understanding of all of the services provided by the jurisdiction. For example, a customer may call 3-1-1, but if they do not receive the information they are looking for, or the services they require, they may not use the service again. Furthermore, they may even find ways around utilizing the central number. Like portals before them, N-1-1 or CRM systems are only as valuable as their ability to provide accurate and reliable information; yet there is a similar tendency to design the project with an emphasis on the technology and the service delivery model over the content requirements.

Further questions may emerge on N-1-1 projects' specific technical requirements. Depending on how the sponsors answer these questions, personnel and focus may vary. For example, will the project be viewed as an information technology or a telecommunications project? Will the choice

of staff limit the choice of technical solution? What is feasible, given the existing infrastructure and staff capabilities? These factors must all be carefully weighed in the project pre-planning.

The Role of Governance in Operations

Early in an N-1-1 initiative project, it must be clearly decided what kind of ongoing role the governance team should have during production, if any. A formal governance structure is critical in the initiation and project phases of your N-1-1. There needs to be a clear decision making body that can be the final arbiter in the many issues arising during planning and deployment of the new system.

After the development phase of the project ends and the new system moves into its operational phase, the organizational structure can evolve in a number of ways. An advisory committee of stakeholders may meet or receive communications on a regular basis; program/agency clients may be convened to establish service level agreements with the operations team; ad hoc groups could be convened to address specific issues; or the program manager may simply report to his or her executive management.

The appropriate degree of enterprise involvement for your system is suggested in large part by how you structure and locate the operation. If the N-1-1 system will be located and managed by a telecommunications organization which has not traditionally provided a customer service function, it may be beneficial for the program project staff to maintain a significant role to reinforce and assure continuity of the services being delivered on their behalf. An existing call center that has been redeployed or expanded to handle an N-1-1 number may wish to have regular briefings by their “client” agencies for a similar reason. This is discussed in more detailed in the *Technology Section* further on in this handbook.

Regardless of who operates the N-1-1 system, clear methods for feedback and input from affected agencies are necessary. Building relationships with other agencies or departments is critical in the continued success of a service that crosses departmental boundaries, and agencies providing input become true stakeholders in the success of the operation.

Summary

Overall, once executive sponsorship has been established, the governance body has been determined, and a project manager has been selected, it is important to develop a clear understanding of three things, among all stakeholders:

1. What is the business case? Specifically, the stakeholders need to be convinced that there is a clear business challenge, problem or opportunity that should be addressed through an N-1-1 solution.
2. The solution has been articulated in business terms and appears credible and realistic. A list of important criteria to the governance committee has been established in order to guide the selection of the solution.
3. There are initial metrics established that will show the governance committee and stakeholders that the solution has been successful in addressing the agreed upon business challenge, problem or opportunity. These metrics don't need to be exclusively "hard metrics" – associated with cost savings or productivity improvements that are real; they can also include important "soft metrics" that are just as important, including customer satisfaction. However, you should always include a metric that can be measured. Even customer satisfaction can show point improvements on a survey.

The above three overarching elements are the responsibility of the executive sponsor and project manager to pull together. An example of how these requirements have been outlined as part of the project management process in place at the New York City Housing Authority follows.

1. BUSINESS CONTEXT

1.1 Business Problem

Briefly describe the business problem, challenge or opportunity to be addressed through implementation of the proposed project.

- problem
- problem
- problem
- problem
- problem
- problem
- problem
- problem

1.2 Project Objectives

Provide a brief statement of how this project will address the problem, challenge or opportunity described in the preceding section.

Business Goals
Goal
Goal
Goal
Goal
Goal
Goal
Goal
Goal

The objectives listed below become the key performance indicators (KPIs) or metrics against which the project will be measured at project close out. The metrics should match the state business goals of this project.

In the public sector the following areas could also be worth measuring: saving taxpayers time and trouble, supporting small business, encouraging participation in government, streamlining the bureaucracy, bringing in revenue at a faster rate or collecting money owed that you wouldn't ordinarily, encouraging tourism, encouraging people to move in to your area, encouraging business to relocate to your city, and the cost of transparency – discouraging corruption.

These measures can be quantified to see if the project has met the objectives.

Metrics - Hard Objectives

These relate to the time, cost and operational objectives to be improved and must be measurable (e.g., Reduce the time it takes to process 20 of NYCHA's forms by 50% by end of Year 1)

1. Quantitative Indicator
2. Quantitative Indicator
3. Quantitative Indicator
4. Quantitative Indicator

Metrics - Soft Objectives

These relate to qualitative benefits to be achieved by the proposed solution which may include attitude, behavior, expectations and communications (e.g., Enhance NYCHA's (internal and external) customer experience by enabling the organization to be more responsive to routine questions and procedures – customer satisfaction will be raised by 25% in a survey issued six months after deployment)

1. Qualitative Indicator
2. Qualitative Indicator
3. Qualitative Indicator

2. PROPOSED SOLUTION**2.1 Proposed Solution**

Provide a brief statement summarizing the proposed solution to the business problem, challenge or opportunity, in a concise, non-technical, management-oriented format. Please add what alternative solutions were considered as well as opposing arguments and responses.

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City of Hampton 3-1-1

A review of the Hampton, Virginia case study, demonstrates a good example of how to incorporate the issues of both internal and external stakeholders. Even before the commencement of their 3-1-1 project, their leadership recognized the value of conducting a community strategic planning process. During this review, they received a lot of feedback that their constituents were growing increasingly frustrated with local government service delivery. Specifically, interaction with city government was frustrating when trying to find the right person to help with their problem. A constituent might call one of 40 different city telephone numbers listed in the local phone directory yet experience a transfer between three or four offices before getting their question answered, if at all. Callers did not know – and did not care – what department or office was required to fulfill their request. In short, customers said they wanted (1) one easy to remember number, (2) to be helped by the first person they talked to, and (3) 24x7 access. With this feedback, Hampton Council adopted a strategic plan, including support for the implementation of a centralized call center around a single 3-1-1 telephone number. Although there was executive sponsorship and community support, a critical success factor needed was to create ‘buy-in’ from the City departments; however, when utilized properly, executive leadership is pivotal in overcoming obstacles and political issues within and across agencies.

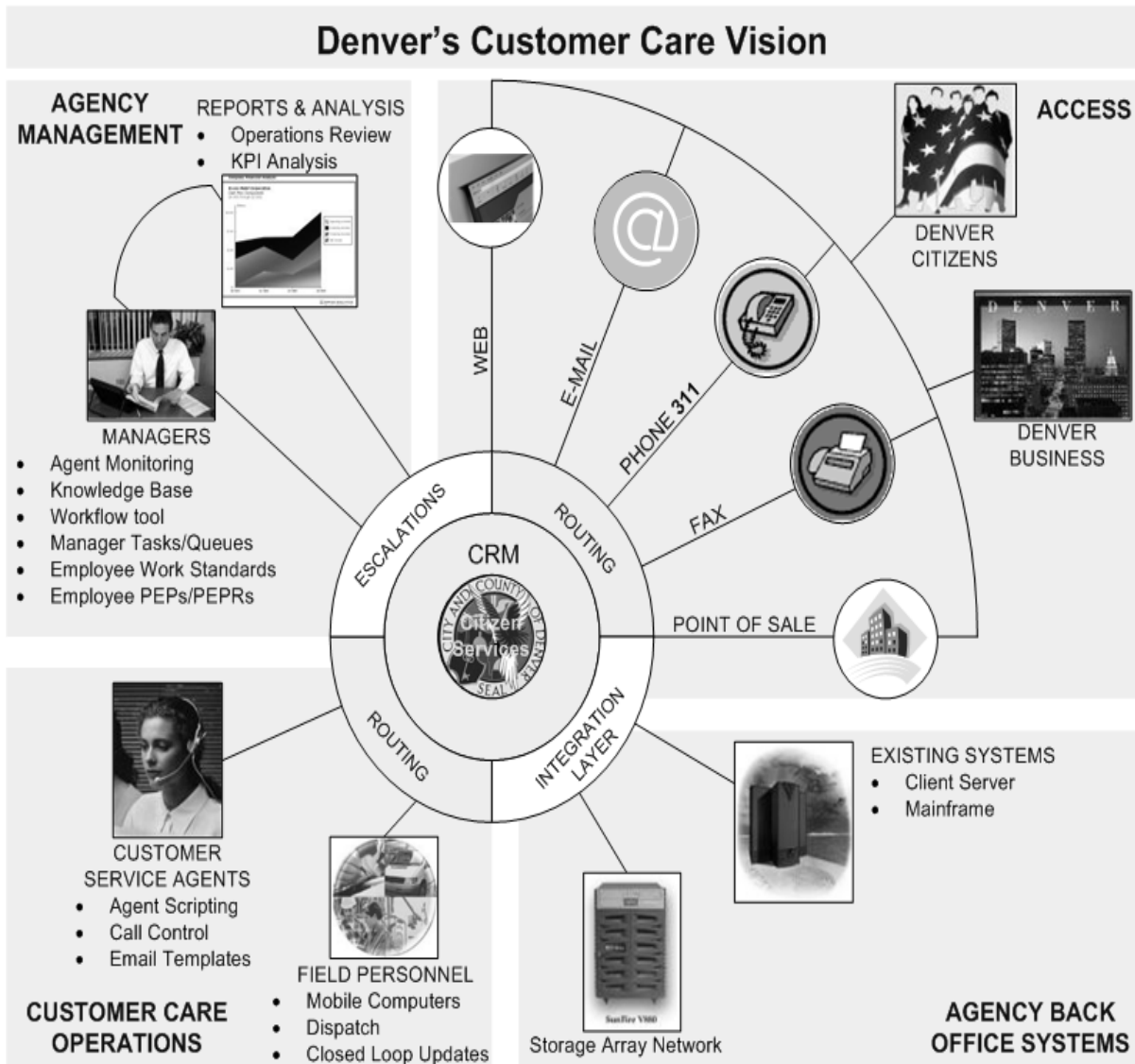
Hampton, Virginia’s model of 3-1-1 was strategically placed under the city manager’s office. Operating directly under upper management continues to give the call center visibility and political influence with other departments and agencies. Executive support and sponsorship for the project and for operations is critical to its success – particularly in the early stages of operations. Hampton’s call center is strongly supported by the mayor, council and the city manager’s office. This support and sponsorship can help overcome obstacles as needed.

The case study is available at <http://www.hampton.gov/311/>.

Technology

In the new age of computers and information technology, customer service expectations have risen. This new customer service expectation does not just tie back to consumers in the market place, but to citizens, businesses and other agencies across the different levels of government. Though improvements have been made in both Web access and in-person interaction, governments are increasingly looking to call centers to handle all types of issues, problems, services and transactions. A “one-stop shop” for citizens, businesses and other agencies, would provide one number for government services, regardless of the topic, and also Internet based self-service capability for the computer savvy to conduct transactions, such as pay bills. Customers would be able to search on frequently asked questions to find a solution instead of, or before talking to a live operator. With these types of requests now expected, government executives should consider topics, such as those below, when developing a technology strategy to accommodate an N-1-1 deployment.

- **Key Technology Requirements** – What type of technology is most cost-effective and practical in deploying an N-1-1 call center? Functional requirements, existing equipment that may be available with extra capacity or low-cost enhancement capability, and budget requirements will help define this.
- **Application Components** – What specific functional requirements are needed within the software application for N-1-1?
- **Call Center Telephony Components** – When moving to a call center approach for problem resolution, what types of telephony requirements are needed to provide both a good service and options to the customer, as well as work most effectively given the perhaps various locations of the call center operators?
- **Back-end Integration for “First Response” Services** – If this is a one-stop shop for customer service, what other systems or applications should be considered for integration with the call center application? What should the architecture look like given the locations of the data as well as the different platforms that the various applications from where the content resides, most likely reside on?
- **Business case**– What is the correct information to collect in order to demonstrate a reasonable Return on Investment for your jurisdiction?
- **Call Center Technical Operations** – As your call center will be the life line for your citizens, businesses and other agencies, what is the correct internal support needed for your systems to be operational 24 X 7? Should they be operations 24 x 7? How does this requirement conflict with the operational hours of the various systems and applications that hold the data that will be accessed in the knowledge database accessed by the call center agents?



Key Technology Considerations

Key factors that should be considered when identifying the technology approach for an N-1-1 system include:

- The design and development of a modular system and a robust application layer that can integrate with other existing or planned systems.
- A robust toolset to allow for as-needed customization and different types of integration points.

Modules can be defined as functionality within the application to handle different types of business processes within an organization. Specific modules can include:

- Interactive Voice Response (IVR) is a module that has quickly demonstrated its value in call center solutions. IVR solutions will typically prompt a caller to provide as much information themselves to this automated system – hopefully being able to allow the caller to get the information they need without having to talk to a call center agent. If the inquiry is a more complicated one, all of the information entered by the caller into the IVR can be stored and routed with the caller into the call queue.
- Computer Telephony Integration (CTI), which allows for integration between the software and telephone systems can be used to enhance the customer service experience and improve productivity for the N-1-1 call center. When a call is answered the identification number is passed through to CTI, which “pops” the screen with existing customer information to the call center representative providing the Call Center agent with all of the information they need to provide information quickly and correctly. This brings the solution closer to a CRM approach.

Once a call center agent has taken the call from the queue, “scripting” or “templates” can further enhance the customer’s experience. These scripts or templates will allow the agent to quickly find a solution for any type of call and take appropriate action. This way call center agents, even those from one agency can be provided with the content needed to respond to the caller’s request, without being an expert in another agency’s particular service.

Portal Capabilities The deployment of a call center portal solution designed for access by the call center agents can provide an additional value. A call center agent portal solution can provide a 360 degree view of various customer service solutions to enable a more holistic response to customer inquiries. Examples of portal capabilities can include announcements that can be posted “on the fly” using a whiteboard-like approach, ranking of customer service requests (CSR’s) in order of severity, or access to other systems with single sign-on capability. With a portal being a central starting point, information dashboards can also be created to provide real-time read-outs of gathered metrics and key performance indicators (KPIs), which can prove invaluable for managers as they manage against agreed to service level agreements (SLAs) on call handling.

The utilization and establishment of a robust toolset allowing for integration with other legacy or new systems is key to an N-1-1 initiative. The call center application must allow for multiple data and information sharing capabilities, whether it is by leveraging web services or through back-end

system integration. If these legacy or new applications adhere to open standards, they are typically quite configurable, simplifying the overall systems integration effort. However, even though integration might be simplified, there is typically a need to customize the application to meet specific needs. Having a system with a strong toolset will allow for key value-add solutions and capabilities, including the ability to develop a well thought-out and easily searchable knowledge repository, FAQ/Index engines and text-based search capability. Speech recognition and text-to-speech are additional solutions that, for a relatively modest cost, can be implemented quickly to significantly improve a caller's experience.

Back-End Systems Integration

As previously indicated, back-end integration is a critical part of an N-1-1 solution. Although there are citizens who will want to continue to interact with government via "live" representatives – either at a government center or by talking to a call center agent, the value of customer self-service has become apparent to the citizen and the financial value to governments is immense. In addition, by further expanding these processes and integrating across different disparate systems, governments have the opportunities to web-enable and automate an entire function or functions. This has the potential of reducing overall costs in the execution of these previously process-intensive procedures and will further enhance the overall ROI of the N-1-1 system. Although most municipalities implement 3-1-1 solutions and call centers to improve citizen service, there are clear financial and efficiency savings associated with N-1-1 systems. For example, with the technology of 311, cities can now clearly identify duplicate service requests submitted by their constituencies. The city of Chicago claims that their Streets Department realized a savings of over \$6 million in one year alone by avoiding duplicate service requests.

Another example where back-end systems integration can provide value is in applications that oversee parks or facility reservations. Although some N-1-1 systems can execute these transactions, others require integration to handle some of the complex business processes needed for reservations, especially those that require the completion and approval of permits. By including a robust toolset with a powerful back-end systems integration approach, the completion of a form requesting a special permit can be a self-service function.

By integrating traditionally manual back-end services, cities can save significant money and resources via the automation of self-service transactions that typically span across multiple legacy applications. Direct bill-pay of municipal functions such as parking tickets, property taxes, and licensing can improve the experience of the customer while helping cities lower their ongoing transactional costs.

During the city and county of Denver's visits to other cities and analyses of the types of services that are currently requested of the city by its citizens and business owners, a number of generic call types were identified that would need to be addressed:

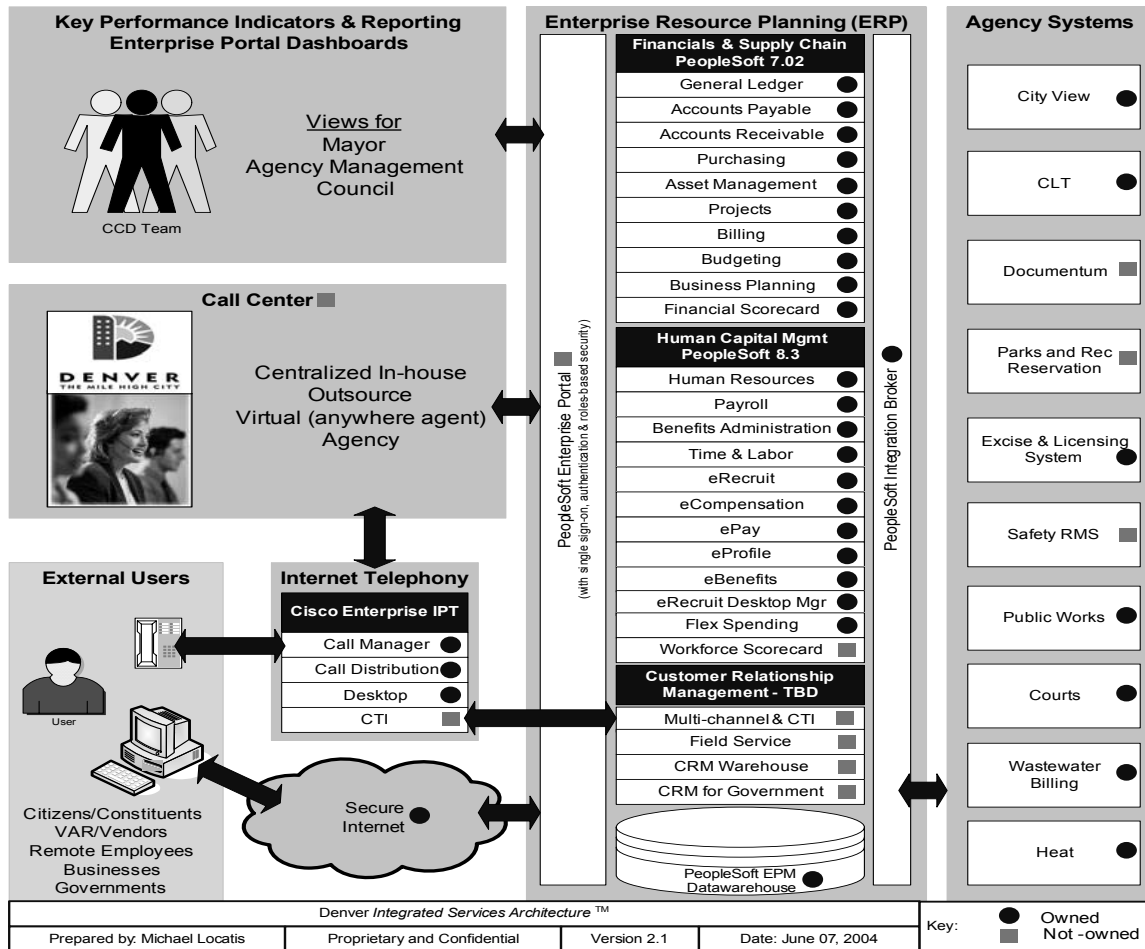
1. Standard information request applicable to all callers, i.e., permit requirements, city council meeting dates and times, etc.
2. Specific information applicable to that individual, i.e., court dates, property tax balances, etc.
3. Transaction services, i.e. paying a parking fine, borrowing a book, etc.
4. Status request, i.e., permit review, inspection, employment application, etc. -- any service transaction where time and processing was required of the city and then moved through a number of steps before an outcome could be reported.
5. Service Request, i.e., rescheduling of a missed trash pickup, pot hole complaint, etc or anything that requires the generation of a work order that is sent to the field for resolution.

From this list of call types, the city of Denver found it possible to identify and classify what transactions each agency was responsible for and the effort required to integrate these functions into the Denver 3-1-1 CRM system.

How To

So how do you get started in implementing the technological solution at the heart of the N-1-1 system? Numerous steps need to be completed to ensure a complete, robust and secure system that not only provides the level of customer service expected from government, but also reduces the on-going transactional costs for these services.

Understanding As-Is Systems One of the first steps in this process is to identify and inventory the existing installed tools and technologies of all systems that are likely to be included and interfaced with the N-1-1 system. This activity should include identifying the type of technologies utilized (operating system, software, database, etc.), the architecture and infrastructure these systems reside within, the data models and data types within each system and finally the approach to ensure effective exchange of information across these applications. Following is a diagram illustrating the city of Denver's current approach on those technology components necessary for an N-1-1 system to meet their requirements.



An important assessment that should be completed is to determine if you already have an application that can be leveraged as the potential starting point for the future N-1-1 system. If it is determined that an existing system cannot be utilized and customized, it is highly encouraged to move into a process where the vendor community can relatively quickly demonstrate and prototype the possibilities of how their specific tools and technology can meet the functional and technical requirements of the desired N-1-1 solution. These prototypes should not only prove to you that the application is the correct solution for your set of business issues and requirements, but also that it is flexible enough to allow for future modifications in business processes, workflows, and services. Additionally it should easily accommodate ongoing improvements when new tools and technology become available.

Procurement Process The value of a request for information (RFI) and request for proposal (RFP) can be quite substantial in projects the size of an N-1-1 initiative. Governments should approach the procurement process as an opportunity to acquire important information and vet assumptions. By distributing an RFI first, organizations can obtain up-to-date information to aide

in the development of a more specific RFP. This, however, does lengthen the vendor selection process, a critical issue for some groups with time constraints.

Production Technical Operations

Once an N-1-1 system goes into production, a detailed and highly process driven internal help desk and operational support process must be put into place.

As the N-1-1 system may be a 24 X 7 operation, desktop support services play a critical role in the overall success of your N-1-1 project. If the system needs to be taken down for any reason, appropriate communication should be given to allow for system users to develop alternate plans to complete transactions during the system down time.

An operations or production support team also will need to be in place. This team will most likely consist of key members of the implementation team and will have a similar team composition as that of the actual implementation. This will allow for ongoing client support and growth of process knowledge as your system grows and expands to other agencies.

Service level agreements with each agency as a service provider, should be established, and can use a three-tiered escalation process within the division responsible for N-1-1 systems operations. The help desk can serve the tier one support requirements and handle as many of the tier two requests as possible. Calls that are not closed at this point can be escalated to your organization's PC support group or to a tier three group depending on the nature of the issue. Finally, staffing of the help desk should reflect the hours of operations of the agencies providing the services that the N-1-1 center will be accessing.

Disaster Recovery

As previously stated, the technology components of this system will most likely to be expected to be up and running 24 X 7 (even if you choose not to have your call center operators functioning 24X7.) Disaster recovery is, thus, a key capability that cannot be overlooked and must be planned for. A thorough disaster recovery plan should be in place prior to the N-1-1 system moving into production. As technology can be complex, a disaster recovery plan should have a few options. For example, if you have a hardware failure it might or might not be best to restore from a backup. Depending upon how the backup strategy is used, there is a potential of losing data in the recovery process. As hardware can fail, many different options for replication or mirroring of data should be considered. If properly implemented, hardware and software failures should be transparent to the N-1-1 caller.

Leveraging N-1-1 Across Government

Governments are continually trying to identify new and innovative approaches to gain multi-use capability from existing investments. An N-1-1 call center should be considered an asset that should be leveraged. Most cities already have a 9-1-1 call center and often combine 9-1-1 with 3-1-1, as an option to take the stress off of the primary emergency services system. In today's world of terrorism targeting government facilities, backup centers for 9-1-1 and emergency operations centers (EOC) are becoming the norm. It is feasible that a 3-1-1 call center equipped with radio dispatch equipment could provide a backup if the operation of the 9-1-1 centers are interrupted. EOC's are expensive centers to staff for occasional use. By combining the backup needs for 911 and occasional EOC operations, it may become easier to justify a 3-1-1 call center. The city of San Jose, California, for example, has a model that differs from the common 3-1-1 center found elsewhere. San Jose's 3-1-1 call center is operated out of the police 9-1-1 call center by the same call center personnel. Depending on the shift that the operator is working, they log onto the 9-1-1 or 3-1-1 system accordingly. San Jose's 3-1-1 serves as a police non-emergency number and not as the city information line. San Jose has a separate 7-digit number and small call center for information about city services.

The City of Denver

In July of 2003, Mayor John Hickenlooper was elected mayor of the city and county of Denver. At the beginning of his term, he created five clear goals for the city to be achieved by 2007:

1. Achieve the highest customer service rating in the country.
2. Create 25,000 net new jobs.
3. Have people say that Denver is a better place (to live, work and visit).
4. Have the workforce say that the city of Denver is a better place to work.
5. Denver city government will live within its means.

Denver's 3-1-1 initiative is the signature project of Mayor Hickenlooper and one that the city leadership believes will go a long way towards achieving their customer service goal.

Denver will be taking a phased approach to implementing 3-1-1. This approach will include the gathering of requirements through a facilitated process. The technical and agency level (client base) teams will be set up to complement each other. Denver will pilot the project through the Wastewater division as they have an existing call center and have needs that potentially cross all modules of the future 3-1-1 application. This pilot program will lead to a larger implementation that will be done once the assessment is completed.

The city of Denver has been looking to use its 3-1-1 project to not only improve customer service, but to also improve the processes used within the city to ensure that city staff are more accountable to its customers. Denver, like many other cities and counties has evolving and disparate levels of technology and it is clear that a number of systems that agencies currently use do not accommodate high levels of customer service. To this end, the implementation will be guided somewhat by the applications that are ready to be, or can be, upgraded to integrate into a 3-1-1 CRM system.

Denver is, however, in a great position to leverage many of its recent investments in technology. With two key projects, the Denver Institutional Area Network, "DIANE," and the INET, Denver has connected over 82 sites with high-speed fiber attached to highly redundant edge devices provided by Cisco Systems. Denver has installed a state of the art storage area network environment at two data centers. Denver has enterprise license agreements with partners such as Microsoft and Oracle and has standardized on Dell PC's, instituting a server and PC replacement strategy. Denver has standardized on a world-class enterprise resource planning system with PeopleSoft HRMS and financials.

Denver is also doing analysis on the call volumes that different agencies are receiving to prioritize agencies integration into the CRM. In addition to focus groups and interviews with current citywide and agency call takers, Denver used its PBX SwitchView software to extract the call volumes and grouped them by department or function, as different functions had different numbers, to help determine which functions were most requested by the public.

Denver is a city and county, so in addition to the typical city services, public health, jails, courts, airport, etc. are provided. Initial analysis showed that a majority of calls were made to the following:

- Property tax assessment office
- City information (although this number primarily transferred calls)
- Planning and permitting
- County courts for hearing and trial dates
- Solid waste
- Fire prevention
- Animal control
- Business licensing

Surprisingly, this preliminary information did not map well with other cities' top requested departments, used as benchmarks (New York, Baltimore and Chicago). Denver is currently assessing whether the initial data is correct and whether there are indeed substantive differences from other cities.

The phase-in of additional services is expected to take one to two years for the high volume services. Less popular services will be rolled- in as agencies look to improve their efficiency and begin to evolve the phone and self-service aspects of their business to 3-1-1 or the Internet.

State of Arizona Department of Transportation 5-1-1

Presently, the state of Arizona has over 6,600 centerline and 17,000 lane miles of roadway. The Arizona Department of Transportation (ADOT) is the principal statewide transportation agency and is divided into eight districts. It has responsibility for the construction, operation and maintenance of 6,172 miles of state roads. Cities and counties, Indian reservations and the National Park Service own the remainder of roads.

Providing information to travelers is a key element of the Arizona Department of Transportation's Intelligent Transportation Systems (ITS) programs. Further, institutional coordination in the state through programs and organizations such as the Maricopa Association of Governments, Pima Association of Governments and ITS Arizona have created the environment for providing information to travelers across jurisdictional boundaries through a single source. Five government sponsored phone-based traveler information systems have been identified to be operating in Arizona. The Voice Remote Access System (VRAS) toll-free phone system operated by Arizona DOT (ADOT) is the most relevant in terms of providing a single source for 5-1-1 services and will continue to operate the VRAS as the gateway to traveler information in the state. The service will continue to be free to callers. The VRAS is an automated interactive voice response (IVR) system that handled over 100,000 phone calls in 2000, more than a 100 percent increase from 1999.

As shown in figure 1, there are three primary components to providing a telephone-based service:

- Call routing – Arizona DOT funds toll-free access statewide through 888-411-ROAD. All calls are routed from the 888 number to a local Phoenix number that terminates at the VRAS in Arizona DOT's Traffic Operations Center (ADOT TOC),
- Telephone System – An interactive voice response (IVR) telephone system is operated by ADOT at the TOC. It is this computer system that is technically known as the VRAS.
- Information System – The Highway Closures and Restrictions System provides real-time information to the VRAS by uploading a Microsoft Access file to VRAS every five minutes.

Three main types of information are presently available to callers through VRAS:

- Roadway conditions on major state roads – Callers select the desired road by typing the route number on the telephone keypad.
- City specific information in urban areas – Callers select the desired city by typing the first three letters of the city name on the telephone keypad.

- Weather information from the National Weather Service -- Callers select by typing “NWS” on the telephone keypad.

Highway Closures and Restrictions System (HCRS)__The Highway Closures and Restrictions System (HCRS) is designed to collect statewide information from various authorized agencies for both local arterial streets and urban/rural highways. This information may include data from neighboring states that are with similar systems or connected to the in-state system.

The HCRS collects road information and provides a statewide central repository of real-time traveler information for the dissemination to the public. The HCRS gathers information about construction locations, traffic-related maintenance activities, weather-related road closures, and traffic accident information from various authorized agencies. The HCRS information includes:

- Current restrictions such as closed lanes and speed reductions
- Current and planned road closures and alternate routes
- Incident or accident location status
- Current roadway conditions, including weather information

Telecommunications Three different telecommunications infrastructures need to be considered when contemplating 5-1-1- services.

Landline There are nearly 20 Incumbent Local Exchange Carriers (ILECs) that operate in Arizona. While Competitive Local Exchange Carriers (CLECs) operate in the state, they carry a very small portion of traffic at present, and most of the CLECs resell ILEC capacity. Thus the ILECs are the principal organizations involved in landline 5-1-1- services. All landline calls are routed through Central Offices (COs). Collectively, the CLECs operate over 200 COs in Arizona.

Wireless Throughout the state, there are seven licenses to operate wireless phone services. In urban markets such as Phoenix and Tucson, it is likely that all seven licenses are operating. In non-urban areas, it is possible that not all seven licenses are yet in operation. No centralized source exists that readily compares wireless carriers coverage in the state. However, several of the nation’s major carriers offer wireless service in at least portions of Arizona.

Payphones There are many coin-operated phone vendors in Arizona. Routing of 5-1-1- calls made via payphones must be addressed by these coin operators, who in many cases are not the ILECs. At least in the near-to-mid-term, Arizona DOT will continue to operate the VRAS as the gateway to traveler information in the state. The service will continue to be free to callers.

Key elements of the Arizona 5-1-1 approach include:

- ***Reducing Ongoing Telecommunications Costs.***

By reprogramming existing switches to point 5-1-1 calls to the VRAS, calls originating from outside of Arizona are routed to the existing 1-888-411-ROAD number, incurring per minute charges as is done presently. Calls within the Phoenix metropolitan area would be routed through a local phone number, thus not incurring per minute charges and thereby reducing overall telecommunications costs for the 5-1-1 operation. By routing local calls through local lines, communications charges for the service would remain in the \$30,000 range as call volume increases.

- ***Improving Customer Service Delivery by Expanding System Capacity to Meet Anticipated Demand.***

The VRAS is being upgraded and expanded to support the anticipated increase in call volumes due to the introduction of 5-1-1. Prior to 5-1-1 deployment, one T1 line was added to increase the number of incoming lines from 8 to 24 support existing call volume. With the introduction of 5-1-1, a second T1 line was added to provide 48 incoming lines to support the expected increase in calls. The practice of periodic upgrades of the text to speech software will continue as will the practice of no live voice to receive calls.

- ***Improving Customer Service by Including a Call Forwarding Option.***

This allows for 5-1-1 callers to reach the appropriate transit agency and where available, dial-a-ride services. Call dropping would be invoked so when a call is transferred, the VRAS system can quickly accept another incoming call, reducing any potential increase in incoming call abandonment or call wait time – two critical performance indicators in call center self-service functions. This approach also allows Arizona DOT to minimize incurred toll charges.

DEPLOYMENT

Once a municipality has decided to pursue an N-1-1 project, has created its strategy and defined its objectives, established governance and considered technology issues, it is time to focus on deployment. How will the new capability get built and rolled out? How exactly will it operate? The good news is that many municipalities, large and small, have approached deployment in different ways depending on existing infrastructure, business imperative and resources. They have identified key considerations and formed creative approaches. A solid body of experience exists – we have included some highlights in this section.

Big Questions to Answer (Way Before Deployment)

Of course the strategy, mission, vision, objectives and initial conditions will impact N-1-1 deployment. However there are several questions that have a very direct impact on how complex the deployment will be. Below we have highlighted two of them:

- ***Question #1: Will the N-1-1 capability focus on front-end access or back-end delivery of services?***

Both are very important, but municipalities have typically focused on one or the other when deploying. Front-end focused deployments are less intrusive in agency/department operations, put a lot of emphasis on call center capability, and require more expectation setting with callers. For 3-1-1 projects, New York City, for example, focused its resources on building a new call center and implementing technology that would create the best caller experience. For back-end service delivery, they relied heavily on the agencies' existing processes for maintaining service levels. In most cases, this created extra work for the agencies in tracking and reporting disposition back into the N-1-1 software.

Chicago 3-1-1, on the other hand, was back-end focused. Their deployment was more agency-by-agency, building service levels in the major public works agencies and improving delivery. For example, their program to establish aggressive, published service levels for trash bin delivery was initiated far in advance of 3-1-1. Their 3-1-1 phone number was the last piece of the puzzle to be deployed instead of the first. Back-end focused deployments like Chicago's may take longer to roll-out the single customer-facing telephone number, but have very strong integration between agencies and N-1-1 when they do go live. Chicago was also able to use an existing call center instead of building a new one, in part because of their back-end focused approach to deployment. The public was steered towards calling 3-1-1 for the public works programs (like the trash bin delivery) that had already been assessed and updated. So they did not need to create a large, new call center up-front to handle a broader,

more informational body of calls. (Note: they did, only later, nearly double the size of that call center to handle increased volume.)

For 2-1-1 projects, the focus is mostly on front-end access, because the objective is information & referral (I&R) to human services. But some governments are shifting their 2-1-1 focus partially to the back-end by using 2-1-1 to create improved ways of delivering human services to citizens. For example, the state of Texas is looking to use 2-1-1 as an access point for human services eligibility processing - exploring “one-stop-shop” functionality (apply for multiple programs in the same place) and multi-channel functionality (application processing can occur by phone, Web, face-to-face, mail, etc.).

- ***Question #2: In creating a single public call-in number, how aggressive will the shut-down of other hotline numbers be?***

Different deployments have taken different approaches. Aggressive shut down of phone numbers, like in Miami Dade 3-1-1 where 3,300 phone numbers were reduced to 16, will require a significant effort in consolidating the existing functions. One way to reduce the deployment impact is to create logical consolidation instead of physical consolidation. For instance, the state of Texas, like many other states, has essentially created a logical, technical consolidation of I&R call centers by using the 2-1-1 telephony infrastructure to link the disparate I&R providers who actually answer the calls. Aggressive elimination of other phone numbers will also require more resources in marketing and educating citizens of the change. In New York City, for example, every taxi cab carries a bumper sticker alerting citizens to the number and explaining in just a few words what it is and when they should call it.

Key Deployment Considerations

There are many activities, decisions, and issues that are required in N-1-1 deployment, just as there are in any project that creates new capability. However, N-1-1 creates some very unique considerations. Three of them are highlighted below.

- Do not underestimate what it takes to create your N-1-1 operating model. The operating model is the work product that shows how calls flow through the N-1-1 capability: how they will act, who answers them first, how they get transferred, how much human/technology intervention there is, etc. The design of the operating model typically takes longer than designs for technical infrastructure or business applications.

In New York City, the new 3-1-1 had to deal with over 170 languages, and a huge spectrum of “easy” informational calls to “complex” multi-stage calls that required deep expertise. In the state of Texas, their 2-1-1 capability will front-end an integrated eligibility process. This integrated process could improve customer

service by helping to break down a lengthy in-person interview process into a series of smaller interactions using multiple, and more accessible channels, such as phone, Web, and mail.

Some municipalities are considering even more innovative operating models, which will take more effort to design and deploy. For example, Miami Dade and some other cities/counties are looking into virtual call centers, where calls can be routed to municipal employees no matter where they are sitting, perhaps even in their homes. This kind of approach, which has significant benefits in reduced call center operations costs, will also have a lower cost of coordinating call flows in a very distributed environment.

- Establish governance early and prepare for it in the project plan. N-1-1 creates a new capability but not necessarily a new agency – who should own it? Operate it? The governance or ownership question should be answered early, and the project's deployment should plan specific efforts for solidifying the new owner's position. For 2-1-1 systems, the I&R vendors have typically become the owners, but more and more states, like Texas and Arizona, are playing a larger role. For New York City 3-1-1, the city's central information technology and telecommunications agency was identified as owner, and the deployment took specific strides to prepare the agency for day one ownership, like the staffing of key managers and the creation of governing policies and procedures. This was done by creating a physical call center and relocating the call center staffs of those agencies whose hotline numbers were sunsetted into this central agency.

No matter what entity winds up governing a new N-1-1 capability, N-1-1 should be a tool for the mayor or city manager. There is significant evidence that successful N-1-1 projects are those that are used on a day-to-day basis directly by the mayor/city manager. In New York City, Mayor Bloomberg uses 3-1-1 on a day-to-day basis to do things like report his own requests, and he uses it during emergencies as well, such as the August 2003 blackout.

- Devote a specific team and significant portion of the work effort to content. N-1-1 relies on content to get people answers, referrals, and make service requests. Most of the content exists but needs to be mined. And once it is mined, it needs to be refreshed. N-1-1 projects in general create the first electronic searchable knowledgebase of municipality content that any municipality has ever had. Successful N-1-1 projects, like Baltimore, Houston, Chicago and New York, have all created content teams as part of their deployment.

These teams last far after deployment. In each of these cities, an ongoing content team works diligently to keep the information up-to-date. The next step in the evolution of N-1-1 is to make it easier, more accurate and faster for these teams to process new content. Some cities are investigating technology that scans their press releases automatically and populates their knowledge base. In addition, several cities have made efforts to utilize the content on their municipal websites, since they already have the human and technology resources to produce/maintain it. In the best scenario, content can be created once and published to both sources.

- Another aspect of content is GIS. More and more, N-1-1 is realizing the tremendous dependency on geographic sensitivity of data (i.e., the answer changes based upon where the caller is located). So a deployment's success or overall work effort will be based in part upon the municipality's existing investments in GIS. New York City recently introduced a mapping of their services to their GIS data in order to support a "facility finder" – a function that allows a call taker to tell a caller about specific services based upon where they are located.

Internal Customers

N-1-1 is clearly targeted at citizens and end users of municipal services. However, deployment of N-1-1 is impacted just as significantly by the approach in satisfying N-1-1's other customers: agencies/departments and data customers.

Regarding the existing agencies/departments that provide services, N-1-1 deployment typically introduces a "give and take". Agencies are probably giving up some or all of their phone channel capabilities. What do they get in return? For New York City and many other 3-1-1 operations, the promise to the constituent agencies is for consistent and well-organized service requests and the opportunity to shed the burden of call center maintenance. For 2-1-1 systems, the constituent I&R vendors may not be keen on giving up the control of how calls get to them; but the value back to them is better access to their services through 2-1-1, resulting in more calls and more efficient handling and dispositioning of calls.

Knowing about this "give and take" is one thing. Preparing for it is another. A consistent trait of successful N-1-1 deployments is that they very carefully appoint the person that will initiate and negotiate the N-1-1's position with agencies/departments. This person needs to have previous experience in the business of the agencies, and needs to be able to creatively incent the agencies to participate willingly.

The other internal customers to consider are the data customers. Any N-1-1 implementation will create the promise of increased data to certain stakeholders. The question becomes, how do you position yourself for these "data customers" (elected officials, community organizations, citizens, etc.) during deployment? In Baltimore, it was known that 3-1-1 data would support that city's well-known CitiStat program. So the 3-1-1 deployment included design, build and testing of the reports and feeds to CitiStat <http://www.baltimorecity.gov/news/citistat/index.html>.

Using the Press

Another player that will inevitably play a role in each N-1-1 deployment is the press. Because N-1-1 is a relatively new government capability, there is a lot of trepidation about how to deal with the press. Should there be a big splashy press release on day one, or is that too risky? Will press increase call volumes beyond our estimates? Will the press catch us off guard when they call our N-1-1?

In general, the theme of successful N-1-1 deployments is emerging as a slow, steady release of information to the press, in very measured steps. After go-live, the press is then used as a tool for education and driving usage. For example:

- For 2-1-1 initiatives, there is typically not a large budget for marketing/branding/communications. As such, it is imperative for 2-1-1 champions to get their message in front of the press. Many jurisdictions are promoting 2-1-1 as part of their broader homeland security plan. In Arizona, for example, the governor included 2-1-1 in her homeland security plan, which was published widely. This inevitably creates the media coverage required to help educate citizens on the benefits of using 2-1-1. And some of the larger I&R vendors for 2-1-1 have become good at getting the 2-1-1 message in front of political leaders and “letting them do the work”. And across the board, 2-1-1 initiatives have had their profiles heightened following 9/11 given the resulting need for information on and access to support services.
- A large Houston newspaper has a daily column on its city’s 3-1-1 capability. The column independently and indirectly promotes usage. And once in a while it will “ding” 3-1-1 for its handling of situations. This has an added effect of incenting the city to stay ahead on quality. In Chicago and Baltimore, the mayor’s offices have programs in place to keep one step ahead by having their own daily view into individual requests.
- In New York City, the launch of 3-1-1 was coordinated with the press in multiple incremental steps, in order to control initial uptake and calibrate public expectations. Once live, the city scheduled several press events (one involving Miss America) to help promote usage. Public advertisement of 3-1-1 was incremental as well, including ball fields, TV commercials, taxis, and police precincts. And the city leveraged its municipal services to get the word out, like on tax bills, information flyers, etc.

In general, press across the USA for N-1-1 deployments has been supportive. One theory is that N-1-1 is still in its “honeymoon” phase, where there is more forgiveness and credit for the effort to initiative it. Another theory is that the press sees N-1-1 as a useful tool for itself and does not want to see N-1-1 deployments fail. In any case, consider the relationship carefully and early.

Expect the Unexpected

Because N-1-1 deployments are relatively new, and because they introduce an innovative, untested way of combining existing capabilities, they have created some unanticipated outcomes over the years. For the benefit of future N-1-1 deployments, here are some of the unique outcomes learned:

- N-1-1 creates its own demand. Don’t make the mistake of adding up disparate call volumes from constituent agencies and expecting their sum to be the call volume for N-1-1. The new access and press coverage will uncover pent-up demand that was previously untapped. This can wreak havoc on your operating model if you have not accounted for it.
- Call times are shorter than anticipated. This may be for a number of reasons, including: narrower spectrum of call types than anticipated, or caller education on usage greater than anticipated.
- N-1-1 can have an adverse effect on citizen self-service traffic on a municipality’s website. Rather than encouraging multi-channel traffic, as many project teams plan for, the opening of an easy-to-use phone channel has been seen to pull web users to the phone.

- N-1-1 creates a real-time source of information. In Chicago, nearly 50 percent of all 3-1-1 calls are from cell phones. That city has realized that it is getting a faster, more mobile indication of issues. It has hence become an “early warning system” for agencies.
- In public emergencies, N-1-1 plays a critical role:
 - In New York City, over 150,000 calls were fielded by 3-1-1 during the Northeast Blackout of 2003. The channel became the mayor’s communication line with the city’s citizens. 3-1-1 also showed its value as the non-emergency counterpart to 911 (which is one of the original concepts behind 3-1-1). A significant number of potential 911 calls that were really non-emergencies were handled by 3-1-1 instead.
 - After 9/11, Connecticut’s 2-1-1 channel handled a huge spike in requests for human services, and Arizona has for this reason included 2-1-1 in its homeland security plan.
 - N-1-1s become the “war room” in certain municipalities, because they are an excellent source of the community’s needs in real-time allowing elected officials to respond on a timely basis and plan accordingly.
 - From a deployment perspective, the unanticipated degree of N-1-1’s role as emergency channel means: definition of this role and the procedures/communications protocols that go with it; greater emphasis on disaster recovery/business continuity; and an absolute requirement for contingency plans in the call center(s).

A Thought for After Deployment

As soon as N-1-1 is deployed, people begin to understand more fully its touch points with the agencies/departments that deliver services. They start to see the true CRM picture: requests going from intake channel all the way through resolution, with ample information and attention to the citizen through the whole transaction.

There will be many opportunities for integration. For example, a 3-1-1 system that captures call information and perhaps service requests could be extended to help an agency manage the field service crews that respond to the requests. The question in this example becomes: How much do you extend 3-1-1 into agency business? There are advantages and disadvantages to any approach. For instance, if the 3-1-1 software and system was extended to help manage field service, the agency may feel constrained by using only the system tools and processes that 3-1-1 has to offer. They may inevitably feel that, based upon unique business rules, they need their own data, their own systems, and their own operations.

A few recommendations for dealing with this challenge include:

- Create the dialogue with the agencies regarding this topic early – much earlier than N-1-1 deployment. You may discover economies of scale can be created. For example, if three or four agencies want to build complex case management capabilities on the heels

of N-1-1, then perhaps an “enterprise-wide N-1-1 case management function” can become part of the original business case.

- Establish a “Capability Map” during deployment. This map draws the “perimeter” of the N-1-1 solution, and draws how other capabilities (e.g., field service, case management, performance management) relate to it, both technically and from a process perspective. Having a map ahead of time will make it easier to deal with the onslaught of “customers” who want to interact more closely with N-1-1.
- Determine the infrastructure and application support organization for the N-1-1 solution and what it will look like in two years. If that organization is smaller and targeted for your N-1-1, then branching out into other capabilities may not be an option.

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Communications and Outreach

In society today, the attention span of constituents is continually decreasing. Between cell phones, traffic signals, signs, TV commercials, junk mail and Internet pop-up windows, citizens are becoming immune to many of the ways organizations are attempting to communicate and connect with them. This is even more difficult when that organization is a local, state or federal government agency. Government has traditionally been considered a technology adoption laggard and slow to adapt to meet constituent needs. In some cases, this has left a bitter feeling with constituents and in fact has created a new paradigm – questioning the relevancy of government. It has become increasingly clear that enterprise initiatives such as e-government initiatives and N-1-1 not only leverage the latest in technology emerging trends, but have identified new means to provide value to the constituent. So, how does government get the word out and connect with their constituents? The following section provides some suggestions to explore to connect with constituents when deploying an N-1-1 initiative. There are countless ways to accomplish this goal; it is up to the N-1-1 team to determine what best suits your needs.

Well-developed communication, outreach and marketing plans are invaluable to marketing success. Before developing a communications plan, it is highly recommended to explore the various plans developed by other governments that have implemented similar systems. Specifics may vary based on the system being implemented and some marketing mediums are likely to be better suited for one budget compared to another. For example, some governments with smaller budgets may decide only to use radio advertising and newspaper ads in addition to internal efforts such as media releases. Whereas those with larger budgets will do direct mailings, advertise on buses and subways, put up road signage and use as many marketing mediums as possible.

Regardless of the type of N-1-1 system being implemented, the traditional and likely goal is to communicate the new service to as many people as possible. The following information provides some guidance on how the N-1-1 service can be communicated and presents best practices from previous deployments.

Communication Strategy, Mission Statement and Logo

Experiences have shown it imperative that the initiative have an identity, one that can and should include an effective communication strategy, remindful logo and a mission statement that concisely describes what the value of the system and its intent. The communication strategy is explained as *“the right people delivering the right message to the right audience at the right time.”* This strategy should spell out who your audience is and how you intend to share this valuable

information with them. The mission statement (1-2 sentences) should be communicated on all marketing materials with the chosen logo. Some national N-1-1 initiatives such as 5-1-1 have established a logo that is preferred nationally. Examples include:



Dial 311 for Non-Emergencies



As can be seen above, San Antonio has included additional text beneath its logo to explain the number's purpose; while Iowa has included the explanation within the logo. The preference of one to another all depends simply on the logo design you find most aesthetic.

Examples of mission statements include:

- "To enhance the quality of life in our Village and provide a safe environment by raising the level of public safety and reducing the fear and incidence of crime."
- "To provide an N-1-1 service assisting with information and human service referrals that is accessible and usable by all people in California."

- “Responsive to diverse information needs, X County is committed to a supportive lifelong learning environment empowering individuals personally, professionally and culturally to contribute to a global community.”

Focus Your Efforts! Customer Segmentation?

Once a concise mission statement, logo and service message have been established, the actual population to be communicated with must be identified. Only on the road travelers? People with medical conditions? People in crisis situations? Everyone possible? These questions are critical when determining the marketing mediums to leverage in communicating the message.

Some organizations have found different mediums more or less valuable depending on the individual city/state and type of system being implemented. In larger cities with a formalized bus or subway system, banner advertisements are very effective, especially for human services hotlines. But ideally, the message needs to reach the people at the time they need it. For instance, 5-1-1 systems are effectively advertised using billboards, flyers at rest stops, and DOT signage along major interstates.

The following is an example of an outreach model provided by the state of Minnesota’s DOT for their 5-1-1 initiative. They choose to primarily use billboards and radio advertisement to communicate their message.

High-volume users of the roadways both out-state and metropolitan, will be the targeted end-users of the system, and thus the targeted audience for this campaign. This will include, in rank order:

1. *Commuters (especially individual occupants) traveling during peak travel times.*
2. *Individual travelers (i.e., leisure).*
3. *Those people involved in the transit of large numbers of commercial vehicles on the roadways statewide.*

In addition to the targeted end-users, there are targeted facilitators of traveler information. These are individuals and organizations that communicate with many of the end-users. For this reason, the campaign will also target them. Facilitators of information include (not in rank order):

1. *MN/DOT communicators (PACs, etc.)*
2. *Media*
3. *Office of Tourism / Travel Information Centers*
4. *Telecommunications providers*
5. *DNR/Parks Services*
6. *Chambers of Commerce*
7. *GMCVA/CVBs*
8. *AAA*
9. *Transit providers*
10. *Commercial Trucking Services*

Effectively Broadcasting the Message

Below is a list of marketing mediums that governments have utilized to communicate their marketing messages for their N-1-1 initiatives. Internal approaches are those which were executed internally, while external are those where the N-1-1 team outsourced the delivery of the message.

Internal

Media Releases w/ information packets

Excellent approach for national efforts that have a lot of information. This approach will typically include:

- Sample audio tape of N-1-1 phone call
- Detailed news release that will be distributed after news conference
- National N-1-1 deployment map
- CD and information sheet offering the N-1-1 logos for your use

Sample Costs:

- Bright yellow, glossy cover **folders**: \$34.25 for 25 or a total of \$205.50
- **CDs**: \$.82 each x 100 = \$82.00
- **CD Jewel cases** - \$.29 each x 100 = \$29.00
- Voice grade **audio tapes** - \$.70 each x 100 = \$70.00

Regional New Conferences

Excellent approach for all initiatives, small or large. This approach allows for the Conference to discuss the new service and highlights its benefits. This is typically a free advertisement utilizing media coverage.

Political Figure Endorsement – Ad Campaign

Excellent approach for all initiatives, small or large. This approach will typically coincide with a news conference. This is typically a free advertisement utilizing media coverage.

Utility / Tax Bill Insertions

This approach is used for city/county initiatives. This typically contains a small postcard highlighting the services.

Costs are estimated at \$32/1,000 11x17 80# gloss text, 2-up on 11 x 7. However, if there is real estate available on the actual bill, a message can be printed on it.

Brochures - Direct Mail

This approach is used for all initiatives large or small. This typically contains the delivery of a small postcard highlighting the offered services. Costs are similar to Utility / Tax Bill Insertions plus postage.

E-Mail Distribution List (citizens must sign up)

This approach is used for all initiatives large or small. This communicates information to public as needed, e.g. in the event of rough weather or public emergency. Costs are typically associated with Web support.

Internet/Web Site – with recorded news conference and other supporting info.

This approach is used for all initiatives.

DOT Roadway Electronic Signs

These are removable signage along highways that communicate the desired message (typically 5-1-1).

Road Signs

These are permanent signage along highway that communicates available services. Costs are estimated at: 20 signs, 30 sq. ft. at \$25/sq. ft

Rest Stop signage and brochures

These are signs that are similar to those used for road signs. These signs should be strategically placed – typically at rest stops.

Costs are estimated at: 10” tall x 8” wide; 40 signs, 1 square foot at \$25/square foot.

Travel kits with other information / safety items

Travel kits include coloring book and crayons, N-1-1 window cling, N-1-1 rack card, and transportation map) to be placed in the merchandise trays.

Costs include:

- Window clings - 5,000 quantity of 6-10 square inches, clear, 1 color, \$.12 each = \$600 per lot
- Color sheets – none
- 5,000 crayons/\$.42 each - \$2,100.00

External

Billboards

This is an excellent approach for 5-1-1 initiatives. Prices vary depending on region of the state/country.

Radio Advertisement / Public Service Announcement

This is a cheap, effective way to reach the public. Typically used for all types of N-1-1 systems.

Newspaper / Newsletter Advertisement

This approach can be an excellent free marketing medium to advertise any type of system

Television Advertisement

Televisions are used for all types of N-1-1 systems. Prices vary but this approach is typically fairly costly.

Bus / Subway Banner Advertisements

This approach can be leveraged for all N-1-1 initiatives but obviously more feasible in metropolitan areas. Costs vary.

Partnerships with organizations such as Trucking Association Newsletters

This is an extremely effective way to market 5-1-1 systems. Typically there are no fees associated with this approach.

Bumper Stickers

This is an excellent approach for communicating all N-1-1 initiatives. In New York City, bumper stickers can be found on almost every Taxi and City Official vehicle.

State of Minnesota 5-1-1

The Minnesota Department of Transportation implemented a 5-1-1 system and used the following approaches to communicate the availability of the service:

- Radio was their primary medium for communication. Research shows that radio is the most effective way to reach highway drivers.
- In addition to radio, they used newspaper advertisements
- Billboards along major highways throughout the state
- Direct mail campaign
- Minnesota 5-1-1 Web site

Funding for their launch campaign was \$200,000. For more information on Minnesota 5-1-1 please visit <http://www.deploy5-1-1-.org/marketing.htm>

City of Baltimore 3-1-1

Baltimore was the first city to implement a 3-1-1 system. Since its implementation in 1996, they have redesigned their system to continue to meet citizen needs. The city of Baltimore continues to communicate with its citizens leveraging a number of the internal resources we previously mentioned. In addition, to the internal resources, Baltimore also leverages radio and newspaper advertisements to reach a broader audience.

For more information on Baltimore 311 please visit <http://www.ci.baltimore.md.us/services/>

Idaho 2-1-1

The state of Idaho launched their 2-1-1 service in 2002. Their outreach model focused on building awareness through partnerships with state organizations as well as national 2-1-1 organizations. They also leveraged radio advertisement, public service announcements, press releases and took advantage of an endorsement by Idaho's First Lady Patricia Kempthorne.

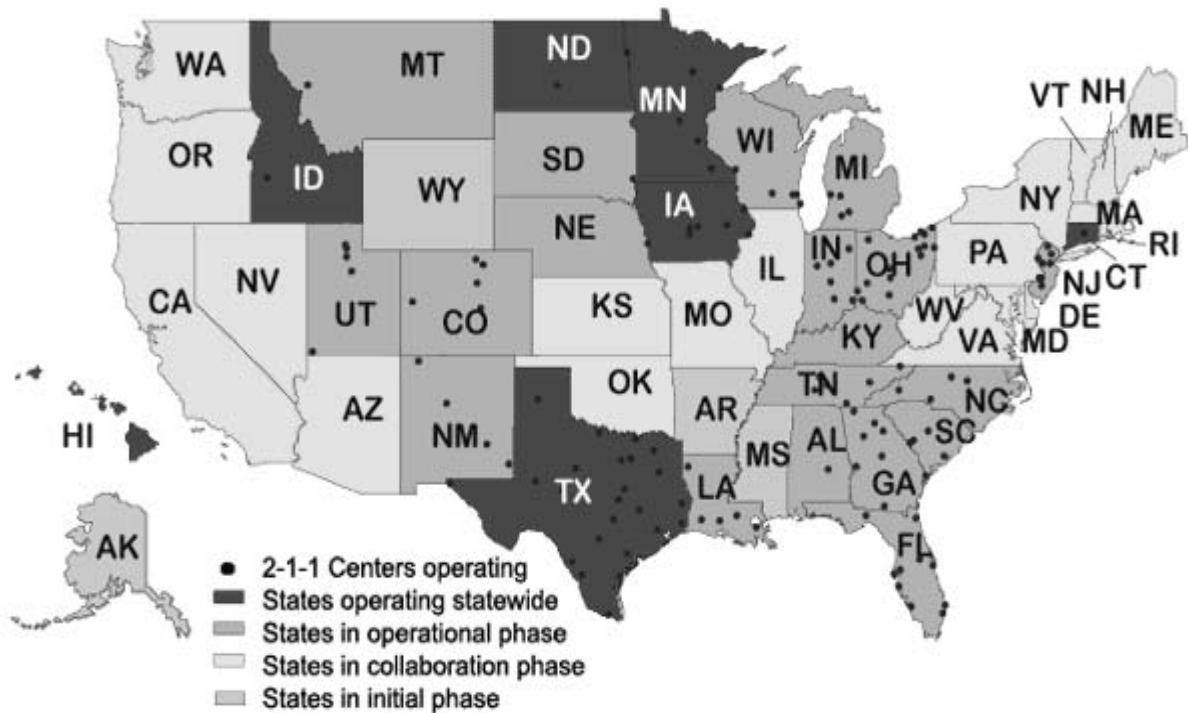
For more information on Idaho 211 please visit <http://www.211idaho.com/>

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Appendix A: N-1-1 Overview

2-1-1

2-1-1 serves approximately 90 million Americans - over 32% of the US population. There are 134 active 2-1-1 systems in 26 states. In Canada, the Metropolitan Toronto 2-1-1 serves an additional 4.5 million people.



The following is a list of 2-1-1 implementations identified by the authors. However, this research is not intended to be all encompassing. For a more detailed profile of the 2-1-1 implementations identified below, please go to <http://www.2-1-1.org/status.html>. For a status report and detailed discussion of 2-1-1 implementations as of spring 2003, go to: <http://www.2-1-1.org/tipiSpring03.pdf>

Alabama

The Volunteer and Information Center partnered with Montgomery Area United Way to create 2-1-1 Connects in Montgomery, Alabama. The call center, established in January 2002, is staffed by eight workers who take calls and provide information 24 X 7.

2-1-1 service is available in Montgomery, Autauga, Elmore, Dallas and Lee counties, and in parts of Lowndes County. In addition, Alabama has a state business plan to create more centers (see <http://www.volunteer-info.org>).

Arizona

Through an Executive Order issued on February 19, 2004, Arizona Governor Janet Napolitano created the Governor's Council on 2-1-1 to plan and build a statewide 2-1-1 system to facilitate the public's access to community, social service and homeland security information and referrals (see <http://www.az2-1-1.gov/>).

California

The California Public Utilities Commission (CPUC) unanimously approved, on Feb. 13, 2003, an order to implement 2-1-1 dialing in the state. The decision established regulatory policies and procedures necessary to implement 2-1-1 dialing to provide easy access to information about community service organizations in California. Eight State Information and Referral (I&R) providers have applied to be 2-1-1 service providers for their respective counties: Los Angeles, Alameda, Contra Costa, Orange, San Francisco, Ventura, Riverside and San Diego. INFO LINE of Los Angeles, Eden I&R in Alameda County, Contra Costa Crisis Center and Info Link Orange County were granted use of the 2-1-1 dialing code by the CPUC. Northern California Council for the Community (HELPLINK), the Volunteer Center of Riverside County, and INFO LINE of San Diego County all have applications currently in the review process at the CPUC. The California Alliance of Information & Referral Services (CAIRS) projects that 67% of the state will be served by 2005 (see <http://www.cairs.org/2-1-1.htm>).

Colorado

2-1-1 is now live in 15 Colorado counties and serves approximately 80 percent of the population. People utilize 2-1-1 to find or give help through call centers serving Denver and the 10-county **Mile High Region**, as well as call centers in **Larimer**, **Mesa** and **Weld** counties. The newest call center is now available in the **Pikes Peak Region** and serves the communities of Teller and El Paso counties. The public can also access services online directly via www.2-1-1colorado.org. Statewide 24 X 7 coverage is expected by 2005. The Colorado 2-1-1 Collaborative has been working on statewide implementation for two years. The Colorado Public Utilities Commission approved the plan October 16, 2002. To learn more about Colorado 2-1-1, please visit <http://www.2-1-1colorado.org/> and see also: http://news4colorado.com/topstories/local_story_276161145.html

Connecticut

United Way of Connecticut implemented 2-1-1 statewide in 1999. Since switching to 2-1-1 from a 10-digit, toll-free number, the volume of calls have increased from 200,000 calls in 1999 to over 320,000 calls in 2003. The top service requests were: utilities/heat, housing, mental health services, financial assistance, and health care. For more information, visit www.2-1-1info.org

Florida

There are currently ten active 2-1-1 call centers serving Florida.

- **2-1-1 Brevard, Inc.** Cocoa. Area Served: Brevard County.
As part of Florida's Space Coast, 2-1-1 Brevard, Inc. launched its 2-1-1 service on May 1, 2001.
- **2-1-1 Big Bend, Inc.** Tallahassee. Area Served: Franklin, Gadsden, Jefferson, Leon, Liberty, Madison, Taylor and Wakulla Counties. 2-1-1 Big Bend is accredited by the Alliance of Information and Referral System (AIRS) and certified by the American Association of Suicidology (AAS).
- **2-1-1 Tampa Bay Cares Inc.** Area Served: Pinellas and Hernando Counties
2-1-1 Tampa Bay Cares, Inc. initiated the 2-1-1 service for Pinellas County in April 2001; the 2nd 2-1-1 call center in Florida and 8th in the United States. 2-1-1 Tampa Bay Cares, Inc. extended its 2-1-1 coverage to Hernando County in August 2002 which increased the 2-1-1 service population to a total of 1,052,284 people.

- **Center for Information & Crisis Services, Inc.** Area Served: Palm Beach County and Treasure Coast
 - **Crisis Center of Tampa Bay** Area Served: Hillsborough County.
 - **First Call for Help of Broward** Fort Lauderdale. Area Served: Broward County
 - **First Call Jacksonville** Jacksonville. Area Served: Duval, St. Johns, Clay, Nassau, Baker, Putnam, Columbia, Suwannee, Hamilton and Bradford Counties
 - **2-1-1 Community Resources and Elder Helpline** Orlando. Area Served: Orange, Osceola and Seminole Counties
- Today, life is easier for people in need. With the touch of three numbers, Central Florida residents can obtain information on thousands of health and human services. 2-1-1 came about because several caring organizations recognized the challenges faced by residents in need. Three years in the making, Central Florida's 2-1-1 launched in July 2003.
- **2-1-1 Help Line Fort Myers** Area Served: Lee County
 - **United Way 2-1-1 of Manasota, Inc** Area Served: Manatee and Sarasota Counties.

Georgia

- **United Way 2-1-1 of Metropolitan Atlanta** implemented 2-1-1 in 1997 and serves 13 counties. In 2002 they took in approximately 270,000 calls.
- **CONTACT-Helpline**, serving five counties in the greater Columbus area, started 2-1-1 in January 2000.
- **Community Connections** of Northeast Georgia, serving 11 counties around Athens, started service in April 2001.
- **United Way of Northwest Georgia** began its 2-1-1 service in July 2001.
- **United Way of Central Georgia** in the Macon area launched its 2-1-1 services in August 2001. United Way 2-1-1 serves 15 counties in central Georgia.
- **United Way of the Coastal Empire** in Savannah started its 2-1-1 service in August 2001. The 2-1-1 service covers Chatham, Effingham, and Bryan counties. In 2004, Liberty and Glynn counties will be added.
- **United Way of Hall County** welcomed its new 2-1-1 service in October 2002.
- **South Central Georgia** was approved as a 2-1-1 service provider in January 2003. 2-1-1 of South Central Georgia, a program of the Georgia Coalition to End Homelessness Inc., serves an 18-county area including: Atkinson, Bacon, Ben Hill, Berrien, Brantley, Brooks, Charlton, Clinch, Coffee, Cook, Echols, Irwin, Lanier, Lowndes, Pierce, Tift, Turner and Ware counties.
- **2-1-1, United Way of the CSRA** in Augusta launched 2-1-1 on February 24, 2004. Area serves includes Richmond, Columbia, Lincoln and Burke counties.

Hawaii

Aloha United Way launched 2-1-1 in July 2002, making Hawaii the second state in the nation with statewide service. People can call 2-1-1 from all islands 24 hours a day, 7 days a week for information on more than 4,000 government and non-profit programs and services. For more information, please visit [**www.auw.org/2-1-1**](http://www.auw.org/2-1-1)

Idaho

Through a unique public-private partnership with the Idaho Department of Health and Welfare (IDHW), 2-1-1 Idaho began service in September 2002 covering the eastern portion of the state. Statewide 2-1-1 service was initiated on July 21, 2003. For more information please visit [**www.2-1-1idaho.org**](http://www.2-1-1idaho.org)

Illinois

Illinois is still trying to implement 2-1-1, and is moving toward pilot projects. Despite resistance from the governor, the Illinois General Assembly passed legislation unanimously in November 2003 that authorizes the use of 2-1-1 by up to six local information & referral sites on a pilot basis. The legislation requires the Governor to establish an Illinois 2-1-1 Collaboration Board with representatives of state government agencies to identify process to select the six pilot sites and

oversee implementation. However, the legislation does not appropriate state dollars for 2-1-1, but requires local Information and Referral agencies to fund 2-1-1 sites with local and private dollars. For more information please visit <http://www.illinois2-1-1.org/>

Indiana

2-1-1 is available in a number of Indiana communities, providing access to over 40% of Indiana residents as of February 11, 2004. On Feb. 20, 2002, the Indiana Utility Regulatory Commission designated Indiana 2-1-1 Partnership, Inc. (IN2-1-1) as the sole authorized user of the 2-1-1 dialing code. In 2004, the Indiana General Assembly passed a law supporting 2-1-1. IN2-1-1 is actively working to implement a 2-1-1 system to serve all Hoosiers through linked IN2-1-1 Centers by 2006. For more information please visit www.in2-1-1.org

Iowa

Seven regions in Iowa began 2-1-1 programs in Fall 2003. Eighty-seven of Iowa's 99 counties will have access to the system when these regions implement their programs, with other regional organizations looking for partners or additional funding to implement programs in Iowa's other 12 counties.

- *United Way of East Central Iowa* (based in Cedar Rapids) rolled out the program in a 24-county area [Appanoose, Benton, Black Hawk, Bremer, Buchanan, Butler, Cedar, Davis, Grundy, Henry, Iowa, Jefferson, Johnson, Jones, Keokuk, Lee, Linn, Mahaska, Monroe, Poweshiek, Tama and Van Buren, Wapello and Washington].
- *United Way of the Quad Cities and InfoLINK* (based in Davenport) established a program in Scott County, and is looking to expand in Clinton and Muscatine counties.
- *United Way of the Midlands* (based in Omaha, Nebr.) has a program for the eight Iowa counties it serves. *First Call for Help* (based in Onalaska, WI.) offers the program in five Iowa counties. *Iowa State University Extension* (based in Urbandale) offers the program in 32 counties.
- *American Red Cross Central Iowa Chapter* (Des Moines) offers 2-1-1 service in 12 counties.
- *United Way of Central Iowa* (Des Moines) offers the program in three counties.

For more information see <http://www.unitedwaydm.org/help.html> and <http://www.iowaairs.org/iowa2-1-1/>

Kentucky

United Way 2-1-1 Care Connection serving Boone, Kenton, Campbell and Grant counties in Kentucky (and Hamilton, Clermont and Brown counties in Ohio) was officially launched on Feb. 11, 2003. It was the first call center activated in the state. For more information please visit http://www.cinergy.com/Community/default_3494.asp

Louisiana

The Louisiana Association of United Ways (LAUW), the six Louisiana Alliance of Information and Referral Systems (LAAIRS) members, and the Louisiana Association of Non-profit Organizations (LANO), collaborated on the creation of a statewide 2-1-1 business plan, successfully introducing legislation in 2003 that authorized the Louisiana Public Service Commission to institute statewide 2-1-1 24 X 7 service. The Louisiana PSC is meeting with a representative eleven member design commission that will review and possibly amend the proposed business plan. Legislation is expected to be introduced in the 2004 session of the state legislature which will define funding for a Statewide Eight Region Call Center 2-1-1 system. Current and planned 2-1-1 services include:

- In July 2000, Lafayette's **232-HELP** became 2-1-1 operational.
- **VIA LINK**, a New Orleans United Way affiliated I&R, became 2-1-1 accredited in June 2001.
- The 10-parish area served by **Capital Area United Way in Baton Rouge** has had 2-1-1 access since January 1, 2003.

- **310-INFO**, a Program of The Volunteer Center SWLA in Lake Charles has been approved by the Louisiana Public Service Commission for 2-1-1 start up and has started operating.
- **Centerpoint**, a project of Shreveport SRO Inc., is expected to become a regional call center (see <http://www.2-1-1louisiana.com/affiliates.htm>).
- First Call for Help in Monroe has the 2-1-1 license for their area and is in the process of becoming fully functional.
- The United Way in Houma is working with several hotlines and is in the planning stages for 2-1-1/I&R services covering the final four parishes of the state: Assumption, Lafourche, St. Mary and Terrebonne. The Houma I&R service would become the eighth regional call center of Louisiana's proposed 2-1-1 system (see www.2-1-1louisiana.com).

Maine

The United Way of Greater Portland, with United Ways across Maine and Ingraham, have established 2-1-1 Maine, Inc. as an efficient and cost effective response to the growing complexities and needs in health, social, economic and human services. The United Way hopes to launch 2-1-1 Maine statewide in 2005. For more information please visit <http://www.unitedwaygp2.org/2-1-1.asp>.

Maryland

Eighty organizations came together to form 2-1-1 Maryland in 2000. In January 2003, 2-1-1 Maryland was designated by the Maryland Public Service Commission as the organization responsible for planning, coordinating and implementing a 2-1-1 pilot in Maryland. 2-1-1 service in Maryland will begin operations in 2004. Four 2-1-1 Pilot Centers have been selected. They are currently preparing for the activation of the 2-1-1 Pilot, which will cover 70% of the state. The regions directly served by the 2-1-1 pilot are Metropolitan Washington and Baltimore, parts of Western Maryland and the Lower Eastern Shore. These areas are extremely significant to homeland security. The four Pilot Centers are:

- Community Crisis Services, Inc.
- United Way of Central Maryland-First Call For Help™
- Frederick County Hotline
- Life Crisis Center, Inc.

Massachusetts

The Council of Massachusetts United Ways (COMUW) and the Massachusetts Association of Information & Referral Services (MAIRS) formed Mass2-1-1, Inc. for the purpose of creating a statewide 2-1-1 information and referral system that is cost-effective, of high quality, and community-based. Mass2-1-1 has already helped create an online statewide database. In May 2003, Mass2-1-1 signed a 5-year contract with the Massachusetts Executive Office of Health and Human Services (EOHHS) to collaborate on an online statewide database that is part of MassCARES, an eGovernment project. Mass2-1-1 call centers are not currently operational due to lack of funding, but a deal is in place to enable a fast start-up once funding is secured. In June 2003 the Mass2-1-1 Board approved a revised business plan and a \$1.5M annual startup budget that includes up to \$1,000,000 of Massachusetts United Way support.

Michigan

2-1-1 service is currently available to 12% of Michigan's population with service available in Calhoun, Kent, Kalamazoo and Ottawa counties. Michigan's 2-1-1 Collaborative is working toward statewide coverage through a network of existing call centers that are building the capacity to meet standards for becoming 2-1-1 operational. Under current plans, 70% of Michigan's population will have 2-1-1 service by the end April 2005 and statewide coverage will be achieved by 2006. Current and Planned Implementations (see http://www.uwmich.org/membership/2-1-1_fr.htm):

Volunteer Center of Battle Creek	Calhoun	now active
Heart of West MI United Way	Kent	now active
Gryphon Place	Kalamazoo	now active
First Call of Ottawa Co.	Ottawa	now active
United Way of Midland Co.	Midland	2004
United Way Community Services	Wayne	9-2004
United Way of Jackson County	Jackson, Hillsdale	9-2004
United Way of Monroe Co.	Monroe	9-2004
Senior Resources	Muskegon	9-2004
United Way of Southwest MI	Berrien, Cass, VanBuren	9-2004
UPCAP Services, Inc.	Upper Peninsula counties	10-2004
Third Level	Northern Lower 21 counties	10-2004
UWCS & Partner agencies	Macomb, Oakland	12-2004

Minnesota

In January, 2003, Minnesota became the third in the nation to offer statewide 2-1-1 service. The Minnesota 2-1-1 Statewide System is operated by the Greater Twin Cities United Way and six partners in greater Minnesota; First Call for Help LaCrosse, First Call for Help of Itasca County, Tri-Valley Opportunity Council, United Way of Greater Duluth, United Way of Central Minnesota and United Way of Olmsted County.

For 2-1-1 community resource information in Minnesota, visit the United Way 2-1-1 website at www.2-1-1unitedway.org. For more information about United Way 2-1-1, visit www.unitedwaytwincities.org. For Minnesota's 2-1-1 Web portal, please visit <http://www.firstcallnet.org/queries/keysearch.htm>

Missouri

In June 2004, the Missouri Public Service Commission approved an agreement authorizing the Kansas City-based Heart of America United Way to provide 2-1-1 calling service to that city and the 16 western Missouri counties.

The commission approved an application by Heart of America United Way to provide the 2-1-1 service to SBC Communications Inc. exchanges in 16 western Missouri counties. The United Way hopes to have the service running by Feb. 11 2005 - a date representing the 2-1-1 number, said Ron Howard, spokesman for the Heart of America United Way. "If it works well here, we would hope that it would be expanded," he said. But despite its growing national acceptance, the so-called 2-1-1 phone service appears at least several years away from coming to the St. Louis area (see <http://www6.lexisnexis.com/publisher/EndUser?Action=UserDisplayFullDocument&orgId=641&topicId=15778&docId=I:215092691&start=3> and <http://archive.columbiatribune.com/2004/Jun/20040609News019.asp>).

Montana

The Montana 2-1-1 Coalition was formed last fall and has made progress toward bringing 2-1-1 to Montana:

- **First Call for Help** provides 2-1-1 services to three counties (Missoula, Ravalli, and Mineral).
- Partnerships with stakeholders across the state have been created. Groups involved include Regional Community Mental Health Centers, local domestic violence and sexual assault centers, the Montana Library Association, local United Ways, and the Department of Public Health and Human Services Coalition.
- A statewide 2-1-1 process plan has been created which includes designations of four existing call centers and their geographic coverage.

"The 2-1-1 phone number is slow in spreading across Montana and may take a few years to develop and fund a statewide system, said Susie McIntyre, coordinator of the Montana 2-1-1 Coalition. The Montana plan calls for four 2-1-1 call centers based in Missoula, Kalispell, Great Falls and Bozeman. A local partnership between United Way and Missoula Aging Services' First Call for Help, the 2-1-1 number provides a one-stop source for a wide variety of assistance, for everything from substance abuse to housing to prescription help." For more information, please visit

<http://www.missoulain.com/articles/2004/07/17/news/local/news08.txt>

Nebraska

The Nebraska Health and Human Service System (NHHS) and United Way of the Midlands (UWM) facilitated a voluntary, grassroots effort to implement 2-1-1, which resulted in the formation of the NE 2-1-1 Coalition in 1999. NHHS and the Public Policy Center at the University of Nebraska at Lincoln both have received grants that have addressed aspects of a statewide information and referral system.

The Omaha-Council Bluffs area's pilot 2-1-1 call center was formally launched on February 11, 2004. The call center serves Eastern Nebraska and Southwest Iowa. For more information please visit <http://www.uwmidlands.org/assistance.htm> and http://www.uwmidlands.org/news/jan_30_04.htm.

New Jersey

On October 3, 2002 the New Jersey Board of Public Utilities approved the use of 2-1-1 dialing for community information and referral purposes and recognized the NJ 2-1-1 Partnership as the sole administrator of 2-1-1 in New Jersey. Implementation of 2-1-1 is now available in 12 Counties throughout New Jersey. Following pilot testing in 2003 of three call centers in four counties including Camden, Hunterdon, Morris and Passaic Counties, 5 additional call centers became active since February 2004. Currently, 2-1-1 is available in twelve counties serving 57% of New Jersey's residents. For more information please visit <http://www.nj2-1-1.org/>.

New Mexico

United Way of Central New Mexico launched its 2-1-1 service on Oct. 1, 2001 in the four-county Albuquerque area. The PUC is supportive of 2-1-1. A statewide group is currently in the early phases of collaboration and identifying stakeholders. Other 2-1-1 Centers are in Farmington, **Hobbs** and Roswell. For more information please visit <http://www.uwcnm.org>.

New York

The 2-1-1 New York Collaborative has developed a statewide plan for 2-1-1 which envisions regional call centers built upon enhancements to existing information and referral services. The statewide collaborative, co-chaired by NYSAIRS and United Way of New York State was given the 2-1-1 designation by the state's Public Service Commission in January 2002. Three regional pilots (Western New York, Finger Lakes & Taconic Region) covering 26 counties, which serve 5.25 million people (27% of the State), are ready to go online in 2004 once full funding is secured.

- \$2.34 million is needed for start-up (capital costs) and one-third of the first year's operating costs. United Ways and other private sources will be responsible for the remaining 2/3 operating costs.
- Funding will also support a statewide oversight and technical assistance group to assist the remaining regions come online in 2004-05.

United Way and foundation funding have been pledged to support that implementation. It is hoped that state or federal funding will complete the public - private partnership required to support 2-1-1 over the long-term. The collaborative has an application for regional designation of 2-1-1. The regional designations will be awarded to local collaborations that document their capacity to deliver quality services that meet national AIRS standards, following a comprehensive review and site visit by a team, which includes United Way and NYSAIRS representatives. For more information please visit <http://www.uwnys.org/pdfs/2-1-1.pdf> and <http://www.2-1-1ny.org/index.html>.

North Carolina

The United Way of North Carolina (UWNC), representing 67 United Ways throughout the state, was designated as the "holder" of the 2-1-1 number by the North Carolina Public Utilities Commission on November 18, 1999. Currently, 40% of North Carolinians in 15 of the 100 counties have access to 2-1-1 through four regional call centers. Services are available through the Triangle United Way covering Wake, Durham, Orange and Chatham Counties; United Way of Central Carolinas covering Mecklenburg, Union, and Cabarrus Counties; United Way of Asheville and Buncombe County in partnership with United Ways of Henderson County and McDowell County; and services being provided through the United Ways of Greater Greensboro, Greater High Point, Forsyth County, Randolph County, Rockingham County and Davie County through the Piedmont Triad United Way Services partnership. Statewide implementation is in the planning process. For more information see:

- <http://www.callunitedway2-1-1.org/index.htm>
- http://www.unitedwaytriangle.org/new_home.asp
- <http://www.callunitedway2-1-1.com/>
- <http://www.uwcentralcarolinas.org/>
- <http://www.2-1-1wnc.org/>

North Dakota

On September 24, 2003, the North Dakota Public Service Commission awarded the Mental Health Association (MHA) in North Dakota the designation as the state's 2-1-1 provider. The MHA has more than 30 years of experience operating the HELP-Line, a statewide crisis intervention, information and referral service. The 2-1-1 service made its debut on Feb. 11, 2004 and will go statewide on August 1, 2004. For more information please visit <http://www.mha-nd.org/news/index.asp>.

Ohio

The Ohio Council of Information & Referral Providers (OCIRP) and the 2-1-1 Ohio Collaborative are leading the effort to implement 2-1-1 Ohio statewide. Currently, 17 community-based information and referral organizations serving 31 Ohio counties have been approved to operate as 2-1-1 centers. Fifteen of these organizations serving 28 counties are now fully operational. More than 7 million Ohio residents (61% of the State population) now have access to 2-1-1 services. OCIRP and the 2-1-1 Ohio Collaborative anticipate that a total of 17 organizations serving 7.7 million Ohio residents in 31 counties will be operational by the end of 2004 (see <http://www.2-1-1ohio.net/>).

- **United Way 2-1-1 Cincinnati.** Area Served: Clermont, Hamilton & Brown Counties
- **HelpLine of Delaware & Morrow Counties, Inc.** Area Served: Delaware and Morrow Counties

- **ACQUIRE (Ashtabula County Question, Information & Referral Experts)** Area Served: Ashtabula County
- **Butler County 2-1-1** (Community Counseling and Crisis Center) Oxford. Area Served: Butler County)
- **United Way's 2-1-1 Portage** Ravenna. Area Served: Portage County
- **Info Line, Inc. 2-1-1 Summit** Akron. Area Served: Summit County
- **United Way of Greater Cleveland/First Call for Help** Cleveland. Area Served: Cuyahoga County
- **United Way of Lake County - LINK** Mentor. Area Served: Lake County
- **Stark County United Way: Information & Referral** Canton. Area Served: Stark County
- **First Call for Help**, Napoleon. Area Served: Defiance, Fulton, Henry, and Williams Counties
- **United Way of Geauga, Infoline and Volunteer Center**, Chardon. Area Served: Geauga County
- **Scioto Paint Valley Mental Health Center Crisis Line**, Chillicothe. Area Served: Fayette, Highland, Pickaway, Pike and Ross Counties. 740 773-4357
- **Help HotLine Crisis Center**, Youngstown. Area Served: Mahoning and Columbiana Counties
- **HelpLink Dayton**, Dayton. Area Served: Montgomery, Greene, Preble County

Oklahoma

In July 2003, Governor Henry signed Chapter 55: Telecommunications Services Permanent Rules which established 2-1-1 regulations. This document describes and defines 2-1-1 services, requires compliance with all National Standards for 2-1-1 call centers, and assures that all telephone companies in Oklahoma have to provide 2-1-1 access where the service is available. In February 2004, the State House and Senate passed SB 1405, authored by Senator Penny Williams, stating: "the Oklahoma 2-1-1 Advisory Collaborative, created pursuant to Oklahoma Corporation Commission Rules (OAC 165:55-7-2.1, dated July 15, 2003), is hereby designated the official state coordinating entity for all 2-1-1 Call centers in Oklahoma. The Collaborative shall serve as the vehicle to develop an integrated 2-1-1 service map for the state and the certifying body for information and referral providers who wish to become 2-1-1 call centers."

In June 2004, the governor designated the Oklahoma 2-1-1 Advisory Collaborative as the official state coordinating entity for 2-1-1 call centers. The hope is to make 2-1-1 service available in metro areas by July 2005, then spread to smaller communities. Nationally, the 2-1-1 movement is affiliated with United Way and the Alliance of Information and Referral Systems. In Oklahoma City, CONTACT Crisis Helpline, which has served central Oklahoma since 1971, has a leading role in getting the service implemented. For more information please visit

<http://www.csctulsa.org/Tulsa%202-1-1%20Helpline1.htm> and
http://www.contactcrisishelpline.org/2-1-1_test_pages/2-1-1%20Docs/June%207_Release.htm.

Oregon

In the Portland Metro Region under the leadership of the United Way of the Columbia Willamette, the 2-1-1 system is on-track to go live in 2004. 2-1-1info is a result of the collaborative efforts of the comprehensive information and referral (I&R) agencies in the four-county region – Clackamas County Social Services, Community Action of Washington County, Guide Line, Inc. of Multnomah County, the Human Services Council of Clark County - Oregon SafeNet, and The United Way of the Columbia-Willamette.

For Oregon's 2-1-1 business plan as of May 2004, click here:

http://www.or2-1-1.org/files/OR2-1-1_Business_Plan.doc
<http://www.or2-1-1.org/>

Pennsylvania

By year's end or early 2005, 2-1-1 callers in southwestern Pennsylvania will be connected to a call center in downtown Pittsburgh that will serve as an information clearinghouse for people in need of community and human services. The 2-1-1 phone number initiative is one of United Way of America's national public policy priorities for 2004, according to Philip Jones, a spokesman with the national non-profit. Already, the 2-1-1 program is active in 23 states. And Pennsylvania is expected to soon come on board. While the program will be phased in gradually throughout the region, the 2-1-1 number in southwestern Pennsylvania will ultimately handle inquiries from 12 counties. For more information please visit

<http://www.bizjournals.com/pittsburgh/stories/2004/01/12/story8.html> .

South Carolina

Aiken, Lexington, Richland and Newberry counties launched 2-1-1 service in June 2002. The Charleston area launched 2-1-1 in February 2003. In July 2002 the governor signed the state homeland security bill requiring the State Budget and Control Board to establish a statewide 2-1-1 system in South Carolina. 2-1-1 supporters are now in the initial phase of writing the statewide system design plan. For more information please visit: <http://aiken2-1-1.org/> and

<http://www.uway.org/2-1-1.asp>

South Dakota

2-1-1 was implemented in the Sioux Falls metro area on October 18, 2001 by the HELP!Line Center. The 2-1-1 number has met with great success in the metro area and as of January of 2004 a statewide task is developing an implementation plan to bring 2-1-1 to the entire state of South Dakota. For more information please visit <http://www.helplinecenter.org/2-1-1.php>.

Tennessee

- 2-1-1 East Tennessee Information & Referral, Inc. (formerly 2-1-1 Knoxville Information & Referral) was the 3rd 2-1-1 center in the country and the 1st in Tennessee. ETI&R currently serves Knox, Loudon, Roane, Anderson, Union, Grainger, Jefferson, Sevier and Blount Counties (see <http://www.2-1-1easttn.org/>).
- Kingsport 2-1-1 is run by CONTACT-CONCERN of Northeast Tennessee and serves Hawkins, Johnson, Sullivan, and Carter Counties.
- Chattanooga 2-1-1 is a first call for help that operates from the United Way building in downtown Chattanooga and serves Hamilton, Bradley, and Rhea Counties.
- Middle Tennessee 2-1-1 is collaboration between Crisis Center in Nashville, First Call for Help in Murfreesboro, and The Family Center in Columbia. Middle Tennessee 2-1-1 covers 14 counties: Davidson, Williamson, Rutherford, Sumner, Wilson, Maury, Dickson, Cheatham, Robertson, Cannon, Macon, Smith, DeKalb, and Trousdale.
- Memphis runs a comprehensive I&R from its library and plans to upgrade to 2-1-1 in November 2004. Memphis currently covers Lauderdale, Tipton, Shelby, & Fayette counties in West Tennessee.
- United Ways of Tennessee and Tennessee AIRS have drafted a memorandum of understanding to work together for statewide implementation of 2-1-1. The MOU created a State Director position and Doug Fluegel is working on statewide coverage by December 2005 (see <http://www.2-1-1tn.org/findhelp.html>).

Texas

2-1-1 is a partnership with the Texas Health and Human Services Commission, and local information and referral agencies. There are currently 24 active 2-1-1 call centers operating in Texas. This represents 100% statewide coverage (see

<http://www.hhs.state.tx.us/tirn/tirnhome.shtml>). 2-1-1 is currently available in the following regions:

- The Gulf Coast Region (Houston)
- Southeast Texas Region (Beaumont), South Central Texas (Austin)
- North Central Texas (Dallas and Fort Worth regions)

- Panhandle (Amarillo)
- Bryan/College Station
- South Plains (Lubbock)
- Tip of Texas (Weslaco)
- Texoma (Sherman)
- Permian Basin (Midland)
- Central Texas (Belton)
- Alamo (San Antonio)
- Coastal Bend Region (Corpus Christi)
- Heart of Texas Region (Waco)
- North East Texas Region (Sulphur Springs)
- North Texas Region (Wichita Falls)
- West Central Texas (Abilene)
- Golden Crescent (Victoria)
- East Texas (Tyler)
- Concho Valley (San Angelo)
- Deep East Texas (Jasper)
- South Texas (Laredo)
- Middle Rio Grande (Carrizo Springs).

Utah

Almost 80 percent (1,780,050 people) of the Utah population is able to dial 2-1-1 as of February 2003. The counties with 2-1-1 access are: Salt Lake, Tooele, Summit, Davis, Utah, Weber and Morgan. Wasatch, Washington, Kane, Garfield, Cache, Rich, Box Elder, Iron and Beaver, Emery, Grand, Daggett, Duchesne, Uinta, Carbon and San Juan counties expect service in 2004. For more information please visit

<http://www.csc-ut.org/2-1-1infobank.htm> .

Vermont

United Way GET INFO is a free and confidential service, serving people all over Vermont. This statewide service was formed in 2002 by the merger of two county-based comprehensive Information & Referral services and began statewide service with the addition of calls from the former Agency of Human Services Parents Assistance Line. The service is managed by the United Way of Chittenden County and the United Way of Windham County.

United Way GET INFO is a part of the Vermont 2-1-1 Collaborative, a statewide team including the State of Vermont Agency of Human Services, area agencies on aging, Vermont Department of Libraries, Vermont E-911 and information and referral assistance providers statewide. The target date to bring 2-1-1 service to Vermont residents is September, 2004. A 2-1-1 business plan has been developed, to expand and enhance the existing United Way information and referral program. United Ways of Vermont will submit a petition to the Public Service Board in the fall of 2003. A marketing plan and plan for resource development are already in progress.

Vermont 2-1-1 will be a single Information and Referral Center, providing statewide I&R services in accordance with national standards. For more information please visit

http://www.vermont2-1-1.org/about_us.htm .

Virginia

The Virginia Alliance of Information and Referral Systems (VAIRS) is spearheading the 2-1-1 effort in Virginia. A business plan has been developed and plans are in motion to begin 2-1-1 first in Southwestern Virginia and then roll it out over the state before the end of 2004. Funding sources are being researched for personnel, telephony and capital costs. The six regional information and referral services that make up the current statewide information and referral system will become the initial providers of the 2-1-1 system in Virginia. For more information please visit <http://www.vairs.org/>.

Washington

The state legislature passed and the governor signed comprehensive 2-1-1 enabling legislation that went into effect on July 1, 2003. The legislation:

- Creates 2-1-1 as the official state number for people to call for information and referral for health and human services and to get information about accessing services after a natural or non-natural disaster;
- Directs WIN 2-1-1 to study, design, implement, and support a statewide 2-1-1 system;
- Authorizes WIN 2-1-1 to select and approve local 2-1-1 service providers;
- Creates a 2-1-1 account in the state budget when state or federal money becomes available; Directs state agencies and departments to consult with WIN 2-1-1 about using the 2-1-1 system before creating any new public information telephone line or hotlines;
- Requires that WIN 2-1-1 make an annual report on 2-1-1 to the legislature.

United Ways of Washington and United Way of King County are providing funding to the Washington Information Network 2-1-1 (WIN 2-1-1) for a director to support statewide development of a 2-1-1 network.

Washington State's 2-1-1 business plan can be viewed at:

<http://www.win2-1-1.org/BusinessPlans/WIN%202-1-1WABusinessPlan.pdf> or
<http://www.win2-1-1.org/2-1-1inWA.htm>.

West Virginia

In June 2001, the Public Service Commission of West Virginia (PSC) established the 2-1-1 Task Force to draft a report on the implementation of 2-1-1 in West Virginia. In March 2004, the PSC approved final rules for the statewide 2-1-1 service and will submit them to the State Legislature for approval.

Wisconsin

2-1-1 service was activated in Waukesha, Dane, Racine and Milwaukee counties on June 11, 2002. All the 2-1-1 call centers are independently operated. Public Service Commission approval was given to First Call For Help-La Crosse to provide 2-1-1 service to the counties of Buffalo, Crawford, Grant, Jackson, Monroe, Richland, Trempealeau, Vernon and La Crosse Counties.

In August, 2003, 2-1-1 Wisconsin was established to support statewide implementation. Membership includes the existing approved 2-1-1 sites, the Division of Public Health, United Way of Wisconsin, Wisconsin AIRS, the Wisconsin State Telecommunications Association and the PSC as an ex-officio member.

The Wisconsin Public Service Commission approved a petition submitted by 2-1-1 Wisconsin on March 11, 2004. The Public Service Commission designated 2-1-1 Wisconsin with the authority to assign 2-1-1 in Wisconsin and as the body to insure compliance with AIRS Standards.

2-1-1 Wisconsin is working with the Department of Administration and the Department of Health and Family Services to explore funding, telecommunications and service collaborations. In Milwaukee County the operating name of the 2-1-1 service is "2-1-1 Milwaukee" and is located at <http://www.impactinc.org/> and is operated by IMPACT Alcohol and Other Drug Abuse Services, Inc. ADD. In Racine County, <http://www.2-1-1racine.info/> the 2-1-1 service is a collaboration of the Racine County Human Services Department, United Way of Racine County and SAFE Haven, a social services agency in Racine. In Madison/Dane County the 2-1-1 service is offered by United Way of Dane County's United Way 2-1-1 (see http://www.uwdc.org/Get_Give/get_2-1-1.htm). In Waukesha County, <http://www.mhawauk.org/> the 2-1-1 service is a program of the Mental Health Association in Waukesha.

3-1-1

The following is a non-comprehensive list of municipalities that have deployed a 3-1-1 system, as well as an identification of who is answering and who is handling their incoming calls.

City	Who Answers	Who Handles
Akron	Pending	city service calls, using Motorola CSR software
Austin	police call takers	non-emergency police incidents since 2001, city service calls starting Feb. 2004; Motorola CSR software Austin has implemented a 3-1-1 system that will process all city service requests.
Baltimore	311 call takers	non-emergency police incidents, city service calls, using Motorola CSR software. Baltimore was the first city in the nation to begin using 3-1-1 as a police only non-emergency number. It was initially designed to offload non-emergency calls from the 9-1-1 system to reduce delays in answering times. Within 2 months, 42% of the calls from 9-1-1 were effectively transferred onto the 3-1-1 system. Baltimore is currently changing the 3-1-1 police-only system into a total citywide one number system. This number will handle all non-emergency calls for all city agencies.
Bethel	police call takers	non-emergency police incidents, city service calls
Broward County, FL	sheriff's call takers	being implemented, non-emergency sheriff's calls new
Chattanooga	311 call takers	city service, using Motorola CSR software http://www.chattanoogachamber.com/newsandvideo/311_on_internet_7_17_03.asp
Chicago	311 call takers	city service calls, using Motorola CSR software Chicago uses 3-1-1 as "one call to city hall" for all city services. The number is answered at a call center that is separate from the police or fire communication centers and processes all requests for city services. http://www.cityofchicago.org/cp/Contact/311.html

		http://www.fcw.com/geb/articles/2003/0310/web-awards-03-12-03.asp
Columbia, SC	311 call takers	city service calls
Dallas	fire dept. call takers	city service calls, using Motorola CSR software Dallas uses 3-1-1 as the means to contact all city agencies. The number is answered at the Fire Department Communications Center and call takers place service requests into a central database. http://www.dallascityhall.com/dallas/eng/html/3-1-1.html
Detroit	311 call takers	city service calls
Dukes County, MA	sheriff call takers	implemented June 16, 2003 for non-emergency police services and town information (6 towns and the county Sheriff's office)
Hampton	311 call takers	city service calls Hampton uses 3-1-1 for all city services.
Houston	311 call takers	city service calls, using Motorola CSR software Houston has established the 3-1-1 number as a means to contact all city services. http://www.fcw.com/geb/articles/2002/0527/web-email-05-27-02.asp http://www.ci.houston.tx.us/opsdp/311.htm
Las Vegas	police call takers	non-emergency police incidents
Los Angeles	311 call takers	city service calls Los Angeles has a 3-1-1 system for all city services. http://www.lacity.org/call311/pdf/What_Is_311.pdf
Miami-Dade	Pending	pending, using Motorola CSR software Miami is currently implementing a 3-1-1 system for all city services.
New York City	311 call takers	non-emergency city service calls using Siebel software, operators work for the city's Department of Information, Technology and Telecommunications; started March 2003.

		NYC's 311 Hotline received 6,542,240 calls during its first year in operation and dramatically improved the oversight and tracking capabilities of city agencies. 311 is available 24 X 7, and can translate calls in more than 170 different languages. http://www.govtech.net/news/news.php?id=89650 http://www.govtech.net/magazine/story.print.php?id=57827 http://www.fcw.com/fcw/articles/2003/0804/tec-311-08-04-03.asp
Orange County, FL	county call takers	county service calls (being implemented) ‡
Rochester	police call takers	non-emergency police calls Rochester uses the 3-1-1 number for all police non-emergency calls for service. As part of the process, Rochester has implemented a comprehensive differential police response model. Currently, it is the only city in New York using the number.
San Antonio	311 call takers	city service calls http://www.sanantonio.gov/customer/311.asp?res=1024&ver=true
San Jose	police call takers	non-emergency police incidents, using Motorola CSR software
Washington, DC	police call takers	non-emergency police calls Washington uses the 3-1-1 number for all police non-emergency calls for service. The city is currently evaluating the feasibility of using the number for all city services.
Winston-Salem	311 call takers	pending, using Motorola CSR software http://mpdc.dc.gov/info/phone/311.shtm

The following is a non-comprehensive collection of other municipal 3-1-1 initiatives which are either under way or are in production.

Durham, North Carolina

Durham, NC officially opened its own 311 call center, Durham One Call, in June 2004.

<http://www.ci.durham.nc.us/news/NewsDisplay.cfm?vNewsID=641>

Martha's Vineyard, Massachusetts

In June 2003, the island of Martha's Vineyard, MA went live with a 311 service that automatically directs non-emergency calls to the local police departments.

<http://www.fcw.com/geb/articles/2003/0616/web-mv311-06-16-03.asp>

Columbia South Carolina: On August 5, 2002, the City of Columbia opened its doors to the first 3-1-1 Call Center in the state. The 3-1-1 Call Center handles non-emergency request for information and City service from city departments. The Call Center is designed to address the citizen's quality of life concerns and providing our citizens with easier access to its government. Request for service are handled by trained call-takers who ask specific questions to determine needed service, the request is then routed automatically to the appropriate department or division responsible for handling the request(s).

http://www.columbiasc.net/cofc_communications_311.html

Toronto, Ontario: A comprehensive report outlining the "3-1-1" customer service strategy for non-emergency services has been sent to the City's eCity Committee. The proposed strategy is similar to models currently operating in the cities of New York, Chicago and Los Angeles and builds on the success of "9-1-1" and "2-1-1" services.

"This initiative will transform the City's whole approach to customer service," said Mayor David Miller. "When fully implemented, residents will no longer have to know which department to call to get assistance or access to services. Instead, they will be able to call '3-1-1' and reach a live human being who can give them information, guide them to the right City department, or provide an update on a previous request."

<http://wx.toronto.ca/inter/it/newsrel.nsf/0/8ae1f65f56de65d285256ec9006ec7cc?OpenDocument>

Birmingham, Alabama

Birmingham has implemented a 3-1-1 system for all city services.

<http://www.informationbirmingham.com/pressrele/june/311.pdf>

<http://www.informationbirmingham.com/pressrele/311.jsp>

5-1-1

On March 8, 1999, The U.S. Department of Transportation (USDOT) petitioned the Federal Communications Commission (FCC) to designate a nationwide three-digit telephone number for traveler information. This petition was formally supported by 17 State DOTs, 32 transit operators, and 23 Metropolitan Planning Organizations and local agencies. On July 21, 2000 the Federal Communications Commission designated "5-1-1-" as the single traffic information telephone number to be made available to states and local jurisdictions across the country.

The FCC ruling leaves nearly all implementation issues and schedules to state and local agencies and telecommunications carriers. There are no Federal requirements and no mandated way to pay for 5-1-1-; however, USDOT and FCC expect to see some type of nationwide deployment. In 2005, the FCC will review progress in implementing 5-1-1-.

While the flexibility provided in the FCC ruling is highly desirable, it also presents a challenge. There is a great deal of interest in using 5-1-1- throughout the U.S. It is expected that there will be multiple requests for 5-1-1; at least in some parts of the U.S., from DOTs, transit agencies, regional and local transportation agencies, as well as private service providers who will offer to implement 5-1-1- services for some sort of compensation. If not thoughtfully planned, 5-1-1- services could devolve into an inconsistent set of services widely varying in type, quality and cost. For more information please visit:

<http://www.fhwa.dot.gov/trafficinfo/5-1-1--What.htm>.

As of April 30th 2004, 21 services in 20 states are operational. Having grown in 2003 from 13 deployments to 20, 5-1-1- is now available to over 56 million Americans, or more than 19% of the nation's population. New states that came online in 2003 were Montana, Vermont, North Dakota, Alaska, Maine, New Hampshire and Oregon. December 2003 saw the first time that monthly calls nationwide reached 1 million. Several resources aimed at helping potential and current 5-1-1- deployers were developed and released during 2003. A website dedicated to collecting 5-1-1- specific information was launched (www.deploy5-1-1-.org). Regional Interoperability, Weather, Transit and Roadway Content Deployment Assistance Reports were released as well. The second national 5-1-1- conference, attended by over 150 transportation officials, took place in October in the Cincinnati metropolitan area (see http://www.deploy5-1-1-.org/docs/5-1-1-_NPR_2004.pdf).



<http://www.deploy5-1-1-.org/docs/5-1-1- NPR 2004.pdf>

METROPOLITAN AREA SERVICES

Metropolitan area 5-1-1 deployments since 2001 are: Cincinnati/Northern Kentucky, Orlando, Southeast Florida and the San Francisco Bay Area. Currently, there is a metropolitan area deployment planned for Tampa, Florida. The service is planned to be operational in August 2004. An overall Advanced Traveler Information Service (ATIS) including a 5-1-1- component, the

Tampa Bay system will include content such as incident reports, congestion and transit schedule and route information. Voice recognition and concatenated speech will be utilized in the design of this system.

CORRIDOR SERVICES

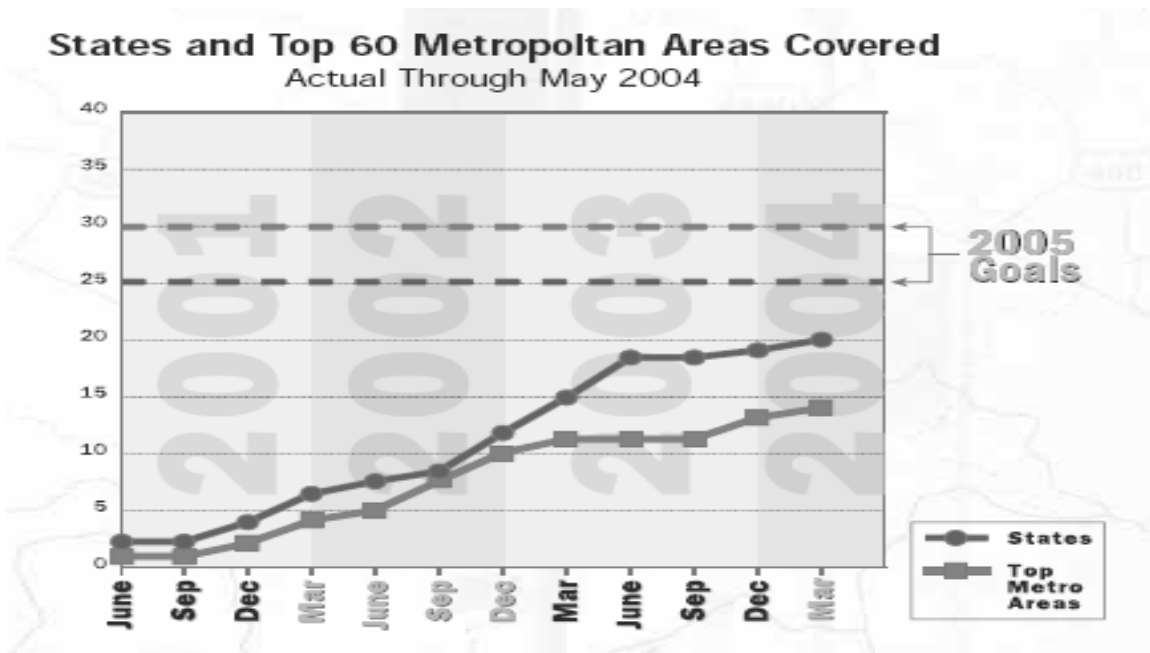
The first travel corridor to deploy 5-1-1 was along I-81 in Virginia and it was launched by Virginia DOT in February of 2002. Covering the length of I-81 in the state, the service is one of two today (along with Kentucky) offering enhanced 5-1-1 content with the provision of extensive travel services information on hotels, tourist attractions and current events throughout the region. During 2003, Missouri's I-70 corridor entered the planning stage for deployment of 5-1-1. While the service is planned to go statewide eventually; the system will launch in 2004 and will cover I-70 between Kansas City and St. Louis.

2004 LAUNCHES

- Kansas DOT launched 5-1-1 on January 15, 2004, providing route-specific current and forecasted weather, road conditions and construction and detour information. KDOT also provides alert information, including AMBER Alerts, Homeland Security Alerts and general transportation alerts. The system, accessible via voice recognition or touchtone, offers users information on Kansas' Turnpike and state highways, as well as links to neighboring states.

The following locations are planning to launch 5-1-1- services in 2004:

- North Carolina
- New Jersey
- Sacramento/Northern California
- Tampa
- Baton Rouge
- Missouri (I-70 Corridor)
- Massachusetts
- Nevada
- Colorado



<http://www.deploy5-1-1-.org/docs/5-1-1- NPR 2004.pdf>

The following is a non-comprehensive list of 5-1-1 deployments or initiatives under way along with key contact information for each system.

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
June 11, 2001	Cincinnati/Northern Kentucky	Metro area	Mark Pfeiffer Office of Public Affairs, Kentucky Transportation Cabinet, 502-564-4890, mark.pfeiffer@mail.state.ky.us	Leon Walden, Transportation Engineer Specialist, Kentucky Transportation Cabinet, 502-564-4556, leon.Walden@mail.state.ky.us
October 1, 2001	Nebraska	Statewide	Jaimie Huber, ITS Project Coordinator, Nebraska Department of Roads, 402-471- 1810, jhuber@dor.state.ne.us	Paul Cammack, Transportation Technology Engineer, Nebraska Department of Roads, 402- 471-1808, pcammack@dor.state.ne.us

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
December 18, 2001	Utah	Statewide	Nile Easton, Public Information Officer, Utah Department of Transportation, 801-965-4387, neaston@utah.gov	Bryan Chamberlain, ATIS Project Manager, Utah DOT, 801-965-4222, bchamberlain@utah.gov
February 15, 2002	I-81 Corridor in Virginia	Regional	Sandy Myers, Community & Public Relations Officer, Virginia Department of Transportation, 540-332-9201, sandy.myers@virginiadot.org	Todd Kell, Travel Information Program Manager, Virginia DOT, 804-786-2451, William.Kell@VirginiaDOT.org
March 20, 2002	Arizona	Statewide	Donna Ayers, Public Information Officer, Arizona Department of Transportation, 602-712-6086, dayers@dot.state.az.us	Tim Wolfe, Assistant State Engineer, Arizona DOT, 602-712-6622, twolfe@dot.state.az.us
June 24, 2002	Orlando	Regional	Steve Homan, Public Information Officer, Florida DOT District 5, 386-943-5479, steve.homan@dot.state.fl.us	Anne Brewer, Assistant District Traffic Operations Engineer, Florida DOT District 5, 386-943-5319, anne.brewer@dot.state.fl.us
July 1, 2002	Minnesota	Statewide	Sonia Pitt, Principal Account Executive, Minnesota DOT, 651-296-8895, Sonia.Pitt@dot.state.mn.us	Ginny Crowson, ATIS Coordinator, Minnesota DOT, 651-284-3454, ginny.crowson@dot.state.mn.us
July 16, 2002	South Florida	Miami, West Palm Beach,	David Rosemond; FDOT District 6; 305-	Rene de Huelbes, Freeway Operations

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
		Dade, Broward, and parts of Monroe Counties	470-5349, david.rosemond@dot.state.fl.us	Engineer, FDOT District 6; 305-470-5341, rene.dehuelbes@dot.state.fl.us
September 16, 2002—pilot only	Washington	Statewide	Linda Mullen, Public Information Director, Washington State DOT, 360-705-7076, mullenl@wsdot.wa.gov	Eldon Jacobson, Washington State DOT, (206) 685-3187, eldon@u.washington.edu
November 22, 2002	South Dakota	Statewide	In the process of hiring PIO for 5-1-1.	Jon Becker, SDDOT; 605-773-6242; jon.becker@state.sd.us
November 22, 2002	Iowa	Statewide	Dena Gray Fisher; (515) 239-1922; Iowa DOT, Office of Media and Marketing Services; dena.GrayFisher@dot.state.ia.us	John Whited, Iowa DOT, Research and Technology Bureau; (515) 239-1411; john.whited@dot.state.ia.us
November 27 2002	Kentucky	Statewide	Mark Pfeiffer, Office of Public Affairs, Kentucky Transportation Cabinet, 502-564-4890, mark.pfeiffer@mail.state.ky.us	Leon Walden, Transportation Engineer Specialist, Kentucky Transportation Cabinet, 502-564-4556, leon.Walden@mail.state.ky.us ; Wayne Bates, P.E., Kentucky Transportation Cabinet, Division of Operations; 502-564-4556, wayne.bates@mail.state.ky.us
December 6, 2002	San Francisco Bay Area	TravInfo	Carol Kuester, 5-1-1-Marketing Manager, Metropolitan	Michael Berman, TravInfo Project Manager, Metropolitan

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
			Transportation Commission, (510) 817-3253, ckuester@mtc.ca.gov ; Kevin Dadian, (510) 817-3246, kdadian@mtc.ca.gov	Transportation Commission, 510-817-3282, mberman@mtc.ca.gov
January 8, 2003 live; January 14, 2003 public launch	Montana	Greater Yellowstone / Statewide	Lisa Vander Heiden, PIO, Montana DOT 406-444-7205; lvanderheiden@state.mt.us ; Brandi Tesch, Traveler Information Specialist, Montana Department of Transportation; 406-444-7220; btesch@state.mt.us	Mike Bousliman, Operations Manager, Montana DOT – Maintenance Division; 406-444-6159; mbousliman@state.mt.us
Feb-June, 2003 acceptance test; public launch TBD	Kansas	Statewide	Barbara Blue, ATIS Coordinator, Kansas DOT, 785-291-3818; bblue@ksdot.org	Barbara Blue, ATIS Coordinator, Kansas DOT, 785-291-3818; bblue@ksdot.org
February 10, 2003	North Dakota	Statewide	Paul Braun, Public Information Officer, NDDOT; 701-328-4444; pbraun@state.nd.us	Ed Ryen, NDDOT, 701-328-4272; eryen@state.nd.us
April 25, 2003	Alaska	Statewide	Jill Sullivan, Alaska DOTPF, (907) 465-8592; Jill_sullivan@dot.state.ak.us	Jill Sullivan,, Alaska DOTPF, (907) 465-8592; Jill_sullivan@dot.state.ak.us

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
March, 2003	New Mexico	Statewide	Ray Herne, Public Affairs Officer New Mexico State Highway and Transportation Dept, District 3 ITS Program; (505) 841-4898, Ray.Herne@nmshtd.state.nm.us	Terry Doyle, District 3 ITS Engineer, New Mexico., 505-841-4891, terrence.doyle@nmshtd.state.nm.us
May 15, 2003 IVR system launch; March 10 Web page launch	Maine	Statewide	Sue Moreau, Maine DOT, Office of Passenger Transportation (207) 624-3239, Susan.moreau@maine.gov ; Gregory Nadeau, Director of MaineDOT Office of Policy and Communications; Gregory.nadeau@maine.gov , 207-624-3004	Russ Charrette, Manager, Planning & Development Office of Passenger Transportation Maine DOT, Russ.Charette@maine.gov ; 207-624-3238
Early 2003	New Hampshire	Statewide	Bill Boynton, New Hampshire DOT, (603) 271-6495, wboynton@dot.state.nh.us	S. Sharma, New Hampshire DOT, (603) 271-1625, SSharma@dot.state.nh.us
Early 2003	Vermont	Statewide	Nick Marro, Vermont DOT, 802-828-3508; nick.marro@state.vt.us	Dan Grahovac, Vermont DOT, (802) 828-5751, Dan.Grahovac@state.vt.us
Summer/Fall 2003	Boston	Metro area	Michelle Maffeo, Massachusetts Highways, (617) 973-7315, Michelle.Maffeo@MHD.state.ma.us	Michelle Maffeo, Massachusetts Highways, (617) 973-7315, Michelle.Maffeo@MHD.state.ma.us

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
Fall 2003	Oregon	Statewide		Galen McGill, ITS Manager, Oregon DOT (503) 986-4486, galen.e.mcgill@odot.state.or.us
Fall 2003	Nevada	Statewide	Richard Sheldrew, Nevada DOT, rsheldrew@dot.state.nv.us	Richard Sheldrew, Nevada DOT, rsheldrew@dot.state.nv.us
November, 2003	North Carolina	Statewide 2003	Sherri Creech Johnson, Public Information Officer, North Carolina DOT, 919-733-2522, sjohnson@dot.state.nc.us	Kelly Hutchinson, ITS Operations Engineer, North Carolina DOT, 919-233-9331, khutchinson@dot.state.nc.us June-Sept. 2003 Joann Oerter; Traffic Operations Planning Engineer; North Carolina DOT; 919-250-4154x210; joerter@dot.state.nc.us
2003	Tampa	Metro area		Jerry Karp, Florida DOT; 813-975-6413; jerry.karp@dot.state.fl.us
2003-2004	Michigan	Statewide	Jim Schultz, Manager, MITS Center, Michigan DOT; 313-256-9880, SchultzJ3@michigan.gov	Jim Schultz, Manager, MITS Center, Michigan DOT; 313-256-9880, SchultzJ3@michigan.gov
2004	California	Rural statewide		David Lively, Senior Transportation Planner, Caltrans, 916-653-4575, david.lively@dot.ca.gov
2003-2004	Missouri	Initially I-70 Corridor; eventually	Steven McDonald, State Traffic Engineer, Missouri DOT; 573-	Steven McDonald, State Traffic Engineer, Missouri DOT; 573-526-0117;

Launch Date	Location	Description	Public Information Contact	Technical/Project Manager Contact
		statewide	526-0117; mcdons@mail.modot.state.mo.us	mcdons@mail.modot.state.mo.us
2004	Illinois	Statewide	Mike Monseur, Deputy Director - Public Information, Illinois DOT, 217-782-6953, monseurmj@nt.dot.state.il.us	David Zavatterro, ITS Program Manager, Illinois DOT, 847-705-4800, zavatterroda@nt.dot.state.il.us
mid-2004	Florida	Statewide		Gene Glotzbach; ITS Engineer Administrator Florida Department of Transportation 850-410-5616; gene.glotzbach@dot.state.fl.us
2005	Virginia	Statewide	Lynda South, Director of Community and Public Relations, VDOT, 804-786-2715, Lynda.south@virginiadot.org Sandy Myers, Public Relations Manager, Staunton District, VDOT, 540-332-9201, Sandy.Myers@VirginiaDOT.org	Todd Kell, Senior Policy Analyst, ITS Division, Virginia DOT, 804-786-2451, William.Kell@VirginiaDOT.org
2005	Idaho	Statewide		Robert Koeberlein; ITProgram Manager Idaho Transportation Department; 208-334-8487; rkoeberl@itd.state.id.us

Appendix B: Acknowledgements

The NECCC would like to thank the following individuals for their outstanding contributions to the development of this handbook.

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