Connecting government with the people.

## STATE OF NEW JERSEY: DELIVERING ON E-GOVERNMENT AT WWW.STATE.NJ.US



### **E-GOVERNMENT OVERVIEW**

New Jersey's e-government goals are ambitious: To fundamentally transform the ways in which our citizens and government interact, connect, and do business. To serve as a national model for e-government, providing citizens with an unparalleled level of access to State government services. To transform New Jersey into *The Online State*.

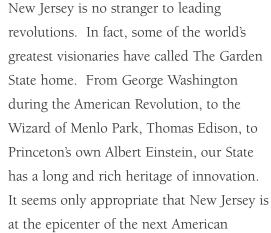
The State of New Jersey sought a way to bring seamless e-government services to its citizens. To accomplish this task, the State undertook a comprehensive research initiative involving a wide range of citizens. This research yielded a great deal of information about the role citizens want the Internet to play in their lives and their government. What we learned through this research will guide us in our journey to become *The Online State*.

The New Jersey portal is a major step towards the realization of our goals. Serving as a conduit from which citizens and businesses can access online government services and information anytime, anywhere, the New Jersey portal is poised to become the one-stop location for interaction with government. This self-service approach will make better use of staff resources, give users much sought-after choice, and allow State officials to spend more time with the people who need it most.

The success of New Jersey's e-government initiative will illustrate the new ways in which government connects with people and business. Thanks to innovations like the New Jersey portal, we will improve the quality of life for all the citizens of New Jersey — *The Online State.* 







Revolution—one that connects citizens with government in new and exciting ways...the revolution of e-government.

New Jersey has a deeply-rooted tradition of invention and innovation:

- More than 30 Nobel Prize winners have worked for New Jersey-based companies and research institutions.
- New Jersey currently ranks number one in the nation for private-sector spending on electronic research.
- One in every 10 workers throughout the State is currently employed by a high-tech firm.
- North Jersey alone has 3,000 more hightech firms than the entire Silicon Valley.

We are currently putting the technology in place for our most ambitious goal to date: A transformation to e-government that redefines the ways in which citizens and government interact. The source for this change will be the Internet. By harnessing the sheer scope and power of the Web, we will be able to do far more than simply deliver information to constituents. Ultimately, our objective is to give citizens a choice in how they transact State business. And, if they prefer electronic service delivery, they will be able to access services 24 hours a day, 7 days a week. This sweeping revolution will ensure that New Jersey is known as *The Online State*.

Significant progress has already been made towards achieving our goals. As we continue to advance, a new model for government will emerge. One that ensures that all agencies and departments are working together in harmony, empowering citizens with unprecedented levels of access, information, and communication with their government.

*The Online State* means different things to different people, and New Jersey's citizens will interact with this new technology in many different ways. To illustrate:

• The motorist who wants to renew his car registration can do so online at his convenience. With a few simple keystrokes, the renewal fee will be charged to his credit card in a secure, encrypted environment. When he completes the transaction, he will receive notification of his renewal, and his new registration will be mailed to him.

- The business owner can take advantage of online form filing, as well as paying taxes for her firm. In addition, within seconds she can access the State's resume database. There she can find prospective employees with the right qualifications to fill open positions in her company.
- The working mother who uses New Jersey's Virtual University can review an index of more than 1,300 credit and noncredit distance learning courses offered by 42 of the State's public and independent higher education institutions. Here, she can register for classes and take them online.
- A community's Emergency Management Director can use the State's

sophisticated Geographic Information System (GIS) to analyze a new evacuation route for her hurricane-ravaged town. The State's GIS also provides new alternatives if flooding has washed out parts of the initial route.

These real life examples serve as the inspiration for The Online State. With people and projects like this in mind, New Jersey will continue to revolutionize the ways government and citizens interact.

*Getting the geographic* information you need.

## custom CUSTOMERS, CONNECTED **BY COLLABORATION**

New Jersey's e-government strategies are the products of its IT strategic planning process. The State Chief Information Officer (CIO) and the Information Technology (IT) Leadership Team, made up of deputy and/or assistant commissioner members from all agencies, collaborated on the development of a comprehensive IT strategic plan. In the plan, we committed to undertake extensive research geared to both citizens and businesses. This research was an important step forward and was essential for us to determine the size, scope, and role e-government is to play in all our lives.

#### Listening to What Customers Want

How did we discover what customers and businesses were looking for from e-government?

The answer is deceptively simple. We asked them. During the second half of 2000. the State commissioned the Rutgers University Center for Government Services, in partnership with the Eagleton Institute, to conduct a major telephone survey

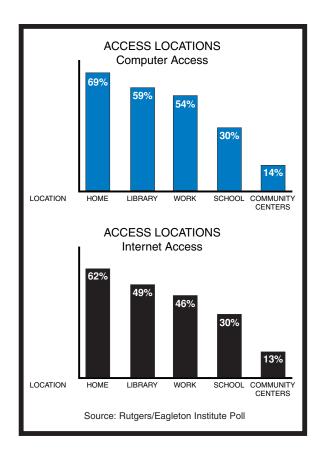


using a stratified random sample. The Center also conducted focus group discussions among several segments of the public. This research went a long way to help the State "put a face" on those who would benefit most from our IT efforts. Equally important, it provided valuable information about the impact the Internet has on the lives of New Jerseyans, in addition to useful feedback about what customers will expect from government in the future.

#### Here's What They Said

#### Many Use the Internet

Sixty-nine percent of survey respondents have access to computers in their homes, and 62% have access to the Internet in their homes. Eighty percent have Internet access at more than one location. Forty percent of the individuals who do not currently have Internet access from their homes intend to be online in the near future.



A 2001 Star-Ledger/Eagleton Institute Poll indicates that three out of five people in New Jersey spend time online at least once a week. This figure is allencompassing, cutting across ethnic lines.

From our research, it's clear that respondents now use the Internet in a multitude of ways. The Internet plays a crucial role in information gathering and communication, as well as in shopping, personal finance/investment service,

entertainment, and more.

#### They Expect Government Services on the Web

The Internet is not a trend, or a passing fad. In just a few short years it has become a necessity for many New Jerseyans. Without question, the Internet is here to stay. And, the demand for government services will continue to grow, as will our mandate to provide these services.

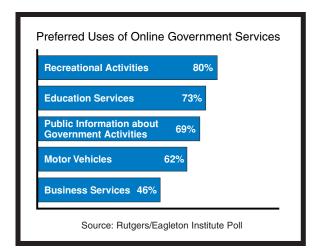
For example, many citizens now expect their government to offer the same convenient online services as provided by private business. Significantly, 76% of residents surveyed believe that State government should enable use of the Internet to obtain services.

These numbers are not just a New Jersey phenomenon. According to a January 2001 survey by pollsters Peter Hart and Robert Teeter, 73% of people across the nation believe that e-government should be a presidential priority. Moreover, 65% of those polled favor the appointment of a national e-government "czar."

#### They Know What They Like

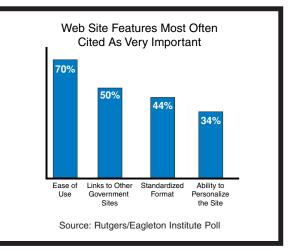
When asked to name the primary services and information most frequently desired from a state Web site, those surveyed mentioned recreational activities, education services, public information about government activities, motor vehicles, unemployment/employment services, and

business services.



## Ease and Convenience Are Major Incentives to Use E-government Services

Thirty-one percent of those surveyed reported that they have already used the Internet to obtain government services, information, forms or other types of assistance. Most of those respondents cited convenience and quick response as their primary reasons for using the Internet. Survey respondents most frequently mentioned ease of use as the most desirable feature offered by a Web site.



## Their Biggest Concerns Are Privacy and Security

While our research clearly illustrated the unlimited potential for e-government, it also highlighted the main concerns of respondents. Privacy and security issues may be the biggest obstacle in the way of e-government, adding a new dimension to the tension between the rights to privacy and to public access. Nearly 80% of those surveyed did not approve of giving State government the ability to acquire personal and financial information on the Internet. Concerns also existed about the way personal information would be shared among government entities at the state and federal levels.

Those concerns, however, can and will be addressed. Close to 40% of respondents said they would be more comfortable with e-government if a State policy guaranteed the security of their information. But, nearly half of those surveyed admitted that the convenience offered by e-government offset their privacy concerns.

#### **Focus Group Preferences**

Preferences for more seamless e-government were cited by focus group members. These include:

• All groups indicated a strong desire for greater access to State government services and information online.

- Interest in a consistent look and feel throughout different State sites was strongly expressed, as was a desire for personalized State home pages which users could customize according to their interests.
- Representatives of every segment, particularly business, favored the ability to submit and file forms and "paperwork" online.
- The need exists for the elimination of redundant data, freeing businesses from having to submit duplicate information to various State agencies.



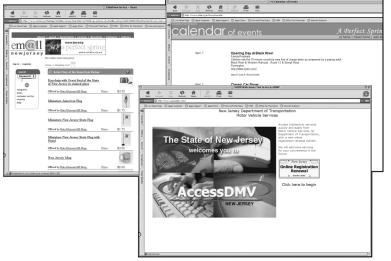
Spurred by the vision of creating a digital government organized around the needs of citizens and businesses, three key IT strategic directions were identified:

- An Internet portal that is simple to use and provides self-service options
- A state-of-the-art network that gives security, reliability, and scalability to customers
- A collaborative, cost-effective framework of data sharing and integration that places a premium on efficiency

These three IT strategic directions provided the impetus for a short-term action plan. Financial commitments were secured to foster progress toward digital government. The Eagleton Institute survey results confirmed our early thinking about what our customers would like to see from their government, and we focused our efforts on those Web site features most often cited as "very important" in our customer research.

Some highly requested services are already available via the Internet, including:

- em@ll newjersey purchase merchandise and products related to The Garden State
- Access DMV renew vehicle registrations
- Calendar of Events search for and view upcoming events
- Fishing in New Jersey purchase of fishing licenses
- NJDEP Online purchase environmental permits for minor sources of pollution
- GIS Spatial Data Clearinghouse access a library card catalogue of map products and analyses
- PC File file taxes online



These and other services can be accessed through the New Jersey portal at <u>www.state.nj.us</u>, the virtual door to State government. They can also be accessed directly through individual agency Web pages. Many more services are currently under development and will soon be available.

### New Jersey's Internet Portal: The Virtual Gateway to Government Services



New Jersey's Internet Portal has three key features.

First, the New Jersey portal was developed through a "build it once" approach that provides great savings. Once essential "reusable" components (*e.g.*, e-payment, public key infrastructure, shopping cart, user registration) have been developed, they can be used time and again across government agencies in the design of IT applications. This approach allows us to get interactive applications up and running more quickly, to accelerate e-government development for State agencies.

Second, we obtained feedback from the public by sharing early prototypes of the New Jersey portal, and we will continue to solicit input on the portal from all of our customer groups. Third, our ability to catalogue information and services into "service channels" has allowed us to target our development efforts to communities of interest. Today, we have channels on our portal for Citizens, Business, and Government. This approach helps visitors quickly locate the information and services they want without having to understand how government is organized. In addition, we have developed the *my* new jersey channel, which allows visitors to customize the content delivered to their own personal pages.

#### The Citizen Channel



#### new jersey people

This government-to-citizen channel offers a wide variety of information and services for the general public, organized into eleven easy-to-navigate service channels. They include:

- Ride, fly, drive helping you get to where you need to go
- Your town your house, your property, your environment
- Your schools education from A to Z

- Family time services and help for your family
- Be healthy health info to help you live life to the fullest
- Celebrate maturity special programs for seniors
- Work here take your career to new heights
- Visit us where to go, what to do, where to stay
- Have fun experience the fun in New Jersey



#### The Business Channel

#### new jersey...open for business

This government-to-business channel offers a variety of online services for business. Here, users can receive step-by-step assistance for start-up companies, as well as find valuable relocation advice for businesses considering a move to New Jersey. This is also where companies can file wage reports and pay business taxes online. **new jersey...open for business** offers a one-stop approach, allowing users to accomplish a multitude of tasks from one centralized online location.

#### The Citizens' Channel to Government



#### government information

This channel provides citizens with an easy-touse gateway to government information organized into three main areas:

- New Jersey State government
- New Jersey local government (county and municipal)
- Federal goverment and other state information

Here citizens will be guided to a wealth of information on a range of subjects such as executive orders; state holidays; state, county, and muncipal addresses and phone numbers. In addition, there are links to Web sites for the Library of Congress, the U.S. Postal Service, and the Council of State Governments.

#### The Government Intranet

**GovConnect** is the State's Intranet for government-to-government information. It is an efficient, low-cost connection that links State government and municipal, county, and other agencies in a closed, secure network. **GovConnect** empowers users with e-mail, Web pages, file transfers, mailing lists, mainframe access, newsgroups, message boards, online database updates, forms completion, document filing, online manuals and documents, online chat, and ultimately, audio and video transmission.

State agencies will have access to the entire **GovConnect** network, in accordance with basic protocols and standards. Nonprofit organizations such as the New Jersey State League of Municipalities will also have access to **GovConnect**.

#### Your Personal Channel



#### my new jersey

One of the premier functionalities of the New Jersey portal is *my* **new jersey**, the ultimate in personalization where users can create a customized page according to their interests and preferences. All users of *my* **new jersey**, which

include State employees as well as members of the public and businesses, must register as members. User access to informational and transactional services is managed through security levels assigned upon registration.

#### **Assuring Security**

Our user registration approach, combined with state-of-the-art digital certificate technology, is critical to the State's efforts to alleviate security concerns about its Web site.

For added privacy and security, we utilize a

variety of applications Online securityto better as important implement to us as it is to you. a set of security services. The use of cryptographic software allows for increasing levels of trust/registration based on identified security needs. Once a visitor's identity has been authenticated, he or she can move from application to application within a given level of security.

> The security concerns of our citizens must be addressed before we can truly accomplish our goal of seamless e-government. Citizens expect to have access to all the information and services the State provides in a secure, private

environment. To streamline the State Web site, however, certain information must be shared across agencies so that users will not be forced to supply the same information over and over again.

Therefore, we must enhance public awareness of the highly refined security safeguards that are already in place for *The Online State*. In time, the public will come to realize that the State Web site is both secure and private. They will also realize that the site is convenient to use and an incredible time-saver.

#### Strengthening our Digital Highway

The State has made great strides in providing seamless e-government since its IT strategic planning efforts began in mid-1999. The pent-up demand by State agencies to Web-enable their services could have choked the digital highway. With consensus for the IT Strategic Plan and support of the network architects from the Office of Information Technology (OIT), the State's Central IT organization, as well as the State agencies, the State's network was reengineered. Much needed fiscal support was provided from the Governor's Office. Today, New Jersey's Internet bandwidth has been increased Working

hard to keep things moving along the digital highway. to nearly five times the capacity of mid-1999, and critical infrastructure components have been upgraded at key geographical locations throughout the State. Network redundancy has also been implemented at key segments to maximize uptime. As a result of these efforts, the State has consistently met or exceeded the industry standard for availability.

To assist State agencies with their infrastructure needs, the Chief Information Officer disbursed one-time grants aimed at upgrading departmental hardware and wiring. In addition to network upgrades, OIT strengthened its statewide help desk by integrating enterprise systems management tools to help staff proactively monitor the network and accelerate trouble-shooting and problem resolution. Today, the State's help desk is a comprehensive call center, available 24 hours a day, 7 days a week, processing close to 10,000 calls per month.

# Fostering Collaboration Through a Data Management Framework

To best provide easy access to timely and accurate information, New Jersey must treat all data as an asset and a State resource. We will make every effort to manage data so that it can be productively shared and integrated, while maintaining security and privacy for all users. For the most part, government programs come into contact with three different entities:

- 1. People *e.g.*, taxpayers, benefit recipients, business contacts
- 2. Places *e.g.*, regulated facilities, job sites, residence locations
- 3. Organizations *e.g.*, New Jersey businesses, vendors, other government agencies

Traditionally, each government program has its own database; often more than one. These databases store records that describe the entities that interact with the government, such as names and addresses. Since most entities are of interest to multiple programs, this results in redundancy. Further complications occur when multiple databases store the same information several times over, with varying degrees of accuracy and currency.

> With *The Online State*, such redundancies will be a thing of the past. The State will collect

information once and consolidate all common information into a single environment, accessible to each agency. Accuracy will be assured. Redundancy and information duplication will be eliminated. Most importantly, citizens and businesses will receive better service.

To address its data management needs, the State formed a Data Management Council consisting of representatives from State agencies and the legislative branch. The work of the Council to date has resulted in the adoption of standards for naming, exchanging, and managing data in a consistent fashion across government, to ensure privacy, protection, and confidentiality.



#### **Increasing Access For All**

It is clear from our customer research that large numbers of New Jerseyans have access to the Internet, and their feedback suggests that our initial efforts to move government services to the Web are on target. But our work will not be complete until everyone who desires to access e-government has the means to do so.

To that end, we are marshalling all of our resources, particularly within our public library and school systems, to bridge the digital divide. Our objective is to provide Internet access and e-government services to citizens who have yet to benefit from the technological revolution.

#### Library Links to the Web

Our greatest ally in bringing the Internet to every citizen is our public library stystem. More than 98% of New Jersey libraries have at least two terminals with Web access. In all, we have more than 2,600 public Internet-access PCs throughout our State.

The overwhelming success of public libraries' providing Internet access is due to a statewide network of 15 Hub Libraries. These specially-equipped libraries provide Internet access to surrounding public libraries and offer technical support for connection to the Hub.

New Jersey libraries do much more than simply provide Internet access. They help to narrow the digital divide by addressing many of our citizens' lack of computer skills Thirty-five public libraries throughout the State operate free computer training centers, providing adults with hands-on training in basic computer literacy. Other libraries provide on-demand training. Additionally, many municipalities offer adult education classes in computer skills.

Assuring e-government access to everyone.

#### Education Efforts—An E-government Edge

New Jersey's School Technology 2001 Survey indicated that our State public schools are another major contributor towards bridging the digital divide throughout New Jersey. Among its findings are:

- 99% of the schools are currently wired for the Internet.
- 90% of public schools within the State have their own Web site.
- More than 75% have up to 80% of their students using the Web on a daily basis as part of the curriculum.

These numbers reflect an encouraging growth in technology infrastructure that enables the educational community to benefit from e-government services and distance learning activities. Further access to digital resources are provided through New Jersey's Video Portal, a statewide education-centric video network which accelerates seamless e-government for anytime, anywhere learning via interactive services.

However, national reports indicate that students from poorer households are less likely to have computer access at home. To combat that trend, the State initiated the Access-Collaboration-Equity (ACE) program. ACE is designed to bridge the digital divide by creating community-based ACE Centers where students and their families in economically disadvantaged areas can get the computer and Internet services they want and need. The State has also established Distance Learning Network Aid as a per pupil entitlement for all school districts. This aid allows the local school districts to acquire technology resources that enable them to share projects and teacher training via videoconferencing, Web sites, and online services.

The State will continue efforts to expand public access to the Internet and other distance learning services through libraries, schools, community centers, and other locations.

#### Advancing E-government

The future of e-government in New Jersey holds immense promise for bringing citizens closer to their government and blurring the dividing lines between all branches of State and local government. Strategic use of the Internet has and will continue to allow this type of evolution



It is imperative that the State address the internal cultural changes necessary to realize the full potential of e-government. Through the effective use of current technologies, the State can increase productivity and operational efficiencies and provide enhanced service delivery to its customers.

In the coming months, we expect to explore ideas, develop working prototypes, or see full implementation of the following concepts:

#### Universal Content Management Tool

Web content management is effectively collecting, managing, and making information available on a Web site to a variety of customers. By automating the process and establishing a universal tool, each department and agency will be able to offer "owners" of content the ability to create and publish highquality, timely information directly to the Web. Automated publishing will be made available for the Internet, department Intranets, and for Web sites developed for specific audiences. Such a tool will facilitate collaboration among department units and will assist in maintaining a consistent look and feel to all State Web pages. Productivity and efficiency will be increased, and users will benefit from an enhanced array of online services.

#### Virtual Card Catalogue

New Jersey recently installed a new search tool on the State's Web site to facilitate finding information on the thousands of available pages. To assist with search and navigation through the site, the State is creating a content classification system, based on the traditional system of finding information in the library—in effect, a virtual card catalogue. With the help of the New Jersey State Library and the New Jersey Library Association, the State is categorizing information into logical topics. At the same time, this process will create a standardized, statewide keyword list to further assist citizens to find what they are looking for quickly and easily.

#### Dynamic Personalization

Today, visitors to the State's Web site have the option of customizing their own Web page at *my* new jersey. By selecting from a list of available content channels, users can organize specific information to meet their specific areas of interest. In the future, users can complete a profile that outlines their preferences, such as keywords of interest and key events. Once a profile has been completed, the user's personal Web page is populated to satisfy his or her preferences.



#### **Inference Engine**

Integrating an inference engine into the New Jersey portal will provide the capability to intelligently guide customers through a series of questions and answers to assist them in finding information or applying for a service.

#### Tool Kit

New Jersey is also exploring the development of an e-government tool kit to enable a quicker and



digital government applications. The tool kit will provide a step-by-step guide to building and implementing new e-government applications and would include information on required policies, reusable components, other useful technologies, and project management, all integrated into one place.

Providing the IT tools that count.

As part of the tool kit and as a general practice, we will obtain feedback on our customers' experiences with Web-based applications. We will have a standardized questionnaire that can be activated automatically at the end of a one-time use program, such as obtaining a fishing license. It can also be activated on demand if the application is used repetitively.

We plan to continue to conduct research on these and other concepts. We will also look at best e-government practices in other states, as well as in private industry.

Several IT applications, such as e-Public Health, a virtual licensing capability, and an employment channel, are under development and are expected to be available to the general public during fiscal year 2002 (July 2001 to June 2002).

#### **E-Public Health**

E-Public Health binds together several IT initiatives under one conceptual framework. It is designed to enhance the ability of the State to collect, analyze, disseminate, and react to health-related data. One of the primary benefits is to allow for the timely analysis of hospital, nursing home, and other institutional data to identify and respond to early instances of communicable diseases. Some services are currently available through this framework. Key services now under development include disease reporting, an immunization registry, and electronic birth certificates. The framework will continue to be expanded to comprise other services aimed at protecting and promoting the health and well-being of New Jersey citizens.

> Get the health information you need online.

#### Statewide Licensing and Permitting Project

As part of the State's advancement toward e-government, New Jersey has begun development of a statewide licensing and permitting effort. The State Web page will contain a link which will provide citizens with the ability to apply for and renew various licenses, permits, and certifications from the comfort of their homes. Users will be able to access license and permit requirements, fees, and other related information 24 hours a day, 7 days a week, and make application or renewal payments via the Web with a credit card.

#### **Employment Services Project**

Recruitment and succession planning for the workforce of the future are critical issues facing the State's private sector employers as they try to adapt to a new, technology-based economy. They are also critical issues for New Jersey government. Although several State agencies currently provide employment services and information through the Web, there is no central place where users can access employment information. The Employment Services Project will allow job seekers, employers, and counselors to access comprehensive employment and training information from one place: The New Jersey Employment Channel. This Web site will enable job seekers to look for jobs, employers to find skilled employees, and career explorers to access the necessary information and resources to achieve employment goals.



### THE REVOLUTION OF E-GOVERNMENT CONTINUES...

From Washington to Edison to Einstein and beyond, New Jersey has a proud tradition of innovative thinking that has forever changed the way we live, work, and learn. E-government is another revolutionary advance. It is not about incremental change; it is about a far-reaching transformation that the Internet has made not only imaginable, but also achievable.

Our e-government plan aims to make State government accountable to the needs of our citizens. The goal is to deliver an e-government that is easy to use, available to everyone, private, and secure, and that will improve the way government and citizens interact.

