



A. Cover Sheet

NASCIO 2008 Award Nomination

- **Nomination:** OneNetNYS project (CIO/OFT)
- **Category:** Cross-Boundary Collaboration and Partnerships
- **State:** State of New York

B. Executive Summary (May not exceed one page in length)

In 2006, the New York State Chief Information Office and Office for Technology (CIO/OFT) embarked on an ambitious initiative, known as [OneNetNYS](#), to greatly improve local government user's access to state applications in a streamlined, secure and cost effective manner.

The project fosters a cooperative working relationship among state and local government entities providing greater interoperability among disparate networks and more seamless delivery of government services for residents of the State of New York.

Historically, the necessity of sharing information and application access between state and local governments has been accomplished on a program or agency-by-agency basis. This approach has resulted in fragmented, inconsistent and insecure exchange of information between state and local governments' networks.

Sharing of data and applications at a local level was not satisfying the basic needs for secure and sanitized computing, leaving the threat of virus or data loss as a legitimate concern. Additionally, each state agency would provide their own solution for local governments to access their applications, leaving the local governments and their limited networking staffs to keep track of different circuits and routers for each state agency application accessed. Typically, these connections would be in different locations within the county (one for the court house, one for the sheriff, one for human services, etc) due to the program areas being serviced.

CIO/OFT saw the opportunity and serves as the lead organization to provide a solution by developing a standard one network connection model into the county for users to access any state resource or application. [OneNetNYS](#) is the "branded" solution to provide this access. It leverages the use of the NYeNet* as the network transport to provide a common gateway for each county or local government entity to communicate with potentially any state agency.

[OneNetNYS](#) provides local governments a model that incorporates the use high-speed circuits, redundant state data centers, firewalls, intrusion prevention sensors, and virtual private networking (VPN) tunnels, along with streamlined processes, to deliver a fast, secure and robust networking solution for all participants.

Centralizing the gateway for each county to access state resources frees up duplicative circuit and router costs from individual program offices within the county network and offsets the cost of the new core infrastructure which hosts the consolidated services. To date, 30 counties in the State of New York have converted to [OneNetNYS](#).

* NYeNet – a network of private sector telecommunications carriers and State-owned fiber optic cables that connects State and local governments. This network is operated by NYS CIO/OFT.

C. Description of the business problem and solution, including length of time in operation.

The Problem:

The main business problem was that local government entities were faced with multiple models for how they accessed state applications, along with security concerns where the connections did exist. However, these technical issues were only the beginning of the problems that this project team would face.

The evolution of the state's and counties' networks throughout New York State grew from individual program and/or agency needs. This often resulted in disparate and isolated networks in each county and among state agencies. In the area of Human Services, this evolution resulted in a hybrid of the two networks at a county level, the state's and the county's, often with separate LANs (Local Area Networks) in the same building, each with its own WAN (Wide Area Network) connection. Each network facilitated the basic needs for sharing information at that level of government, but provided very little in terms of an overall vision for sharing information securely in a structured and streamlined manner among levels of government.

The complexities of the networking model of the time strained the working relations of both state and county IT staff, as well as LAN administrators. Furthermore, many counties had IT operations and networks within its Human Services agencies that were separate from the county's IT operation and network.

The Goal:

In order for the project to be a success, CIO/OFT and the [OneNetNYS](#) project team needed to devise a networking model that would provide benefits to both sides of the environment. They needed to provide a solution that was more streamlined to simplify administration; one that provided fault tolerance, adequate security, bandwidth, and scalability for future applications.

The [OneNetNYS](#) project team worked diligently meeting with county CIOs and IT Directors to share their vision and the potential benefits it offered to both sides of the network. The response was overwhelmingly positive. The counties shared the CIO/OFT's vision of [OneNetNYS](#) and shared their own plans for unifying their own county infrastructures. This shared vision of application access by CIO/OFT and local governments across the State of New York has helped the initiative come to fruition and made the [OneNetNYS](#) project successful.

The Solution:

The [OneNetNYS](#) architecture entails two high-speed, high-capacity circuits provisioned via the NYeNet from the [OneNetNYS](#) core site to each county. Based on that design, the network security implementation is focused on the single point of entry or gateway between each county and the [OneNetNYS](#) core. The [OneNetNYS](#) solution provides a high quality of service, availability and security.

The [OneNetNYS](#) core environment is distributed between two State Data Center sites and operates in a high-availability mode at each data center location and between the sites. The solution features the use of secure tunnels between central and remote firewall appliances. Security includes Intrusion Detection and Intrusion Prevention Systems (IDP and IPS), anti-virus protection and other security features including port-level security on hardware switches. Alert thresholds and notifications are standardized, and optimized for maximum availability. Security is

provided at the point of access into the core by configuring and centrally managing VPN tunnels to each customer network.

This project is a new approach to networking for the state agencies and counties; it shares facilities and eliminates circuits. [OneNetNYS](#) replaces county-state social service network integrations that have provided limited access to state applications from county LANs and limited access by county workers on state networks to county applications. [OneNetNYS](#) shifts this inter-networking to the counties' and state's networking cores, leveraging investments in enterprise security solutions while expanding access to more applications.

The project team considered several alternatives, such as implementing a client VPN solution and keeping the existing model while striving to increase security on a case-by-case basis. However, none of the options met all of our goals in a long-term, structured and cost effective manner.

Execution:

This project has required a great deal of design, testing, planning and coordination. CIO/OFT has presented [OneNetNYS](#) to various state and local governments, IT steering committees, and conducted workshops at technology conferences. This all pales in comparison to the level of detail in project coordination for the actual migration of customers to [OneNetNYS](#), in order to ensure a seamless transition.

Beginning in mid 2006, a pilot group of five counties was established. The core [OneNetNYS](#) infrastructure (which CIO/OFT manages and administers) was built to validate the feasibility of the model and identify any short-comings in the architecture of the solution. The pilot spanned one year. The team learned a great deal from this phase of the project. It identified the need to strengthen the help desk processes, and was the catalyst for the creation of a more comprehensive communications plan. This plan highlighted the following key documents:

- Information Packet: Introduces the customers to the [OneNetNYS](#) solution and communicates the technical architecture and conversion process;
- Help Desk Workflow: Establishes Desk-to-Desk processes for transferring trouble tickets;
- Quality Plan: Establishes guidelines and best practices for intended use, maintenance and administration; and
- Migration Document: Identifies the steps required by both state and county IT organizations to migrate to the [OneNetNYS](#) solution.

The [OneNetNYS](#) team schedules bi-weekly meetings with each county to review the status of the county migrations. These meetings cover items such as application inventories, detail design activities, test plan, tracking schedules, and resources requirements.

CIO/OFT has managed the [OneNetNYS](#) project from its inception using formal portfolio project management guidelines. This included a business case, scope statement, project plan, project tracking, and status reports. From its initial phases to its current deployment, there has been a high-level of contact with state agencies and the counties, using CIO/OFT's Customer Relations organization as a focal point. Adherence to strong project management principles was required due to the scope of this project. This initiative will ultimately involve over 50 counties and hundreds of sites that would be included in the migrations to the [OneNetNYS](#) solution.

D: Significance

This solution aligns with Governor David A. Patterson's "Program to Eliminate the Gap" (PEG). It establishes a more cost effective way to deliver services, avoid outages and provide a seamless delivery of service.

The [OneNetNYS](#) solution has had a positive impact on government operations, as follows:

- It has strengthened the security of communications between state and local government;
- It has improved access to information;
- It has reduced points of failure and increasing availability of network resources; and
- It has standardized the connectivity model, easing administration.

The cooperative deployment of [OneNetNYS](#) is taking the IT investment of state and local governments and leveraging them to their fullest potential. New applications are easily made available to a greater population. State agencies are no longer required to deploy circuits and equipment to provide application access in sites serviced by [OneNetNYS](#). Furthermore, CIO/OFT is planning to utilize this common infrastructure to provide VoIP and streaming media solutions. The New York State Department of Health is planning to make its New York Early Intervention System (NYEIS) available over [OneNetNYS](#). The Integrated Justice Advisory Board (IJAB), which is a consortium of criminal justice agencies, is expanding the applications they deliver over [OneNetNYS](#) to include the New York State Police Information Network (NYSPIN).

The beneficiaries of the [OneNetNYS](#) solution are the state and local governments, but more importantly, the residents of the State of New York. The foundation laid by [OneNetNYS](#) enhances the cooperative relations between the state government and local governments by offering better integrate delivery services.

The overwhelming success of the [OneNetNYS](#) project is demonstrated by how well the team has met all of the goals identified in the project scope statement.

E: Benefit

The measurable benefit of [OneNetNYS](#) can be seen in the participation of both state agencies and local governments. There are currently 30 counties and eight state agencies participating in [OneNetNYS](#), which went into production in early 2007. By the end of 2008, CIO/OFT plans to have every county within the State of New York migrated to [OneNetNYS](#), and add more state applications each step of the way.

The participants utilize a common facility, not only to share data at a local level in a more structured and secure manner, but also to access multiple state resources through a single gateway to the NYeNet. This translates into qualitative outcomes of increased security and application access, which facilitates the delivery of critical government services.

Currently, there are over 70 state and county applications and/or resources available through the [OneNetNYS](#) solution. They include state applications such as e-Justice, IJAB Portal, eMedNY, Unemployment Insurance, CONNECTIONS, Welfare Management System, NYSeMail, Asset\$, STARS, Trade Act Tracker and the OHIP Website.

Additionally, this new model for local government access to state resources proves to be functional for state entities to access local government applications as well. The New York State Police now access computer aided design (CAD) drawings in a county Sheriff's Department. County employees on state networks can access local government programs like KinderTrack, FraudLog Database, County Intranet portals, Trips Adept, CC4K + OnBase, Treasury Server and network cameras.

The availability of [OneNetNYS](#) within a county simplifies access to county and state applications. When new state or county applications are deployed, the audience can be much broader and is not restricted to a state or county LANs.

Traditionally, staff moves within a county require circuit and equipment redeployment which may take months and requires substantial resources. The increased network integration provided by [OneNetNYS](#) reduces this time to days with the completion of a few network changes were LAN infrastructure can be installed.

[OneNetNYS](#) leverages the state's and counties' investments in enterprise solutions, including networking components, security solutions and applications. The design of [OneNetNYS](#) establishes a county core, usually the county's data center, which centralizes support and results in a single gateway for access to state applications.

State entities can avoid circuit and equipment costs when deploying a new application by making use of [OneNetNYS](#). Further cost savings are realized through the use of county infrastructure for "last mile" network connectivity to remote state offices. This results in the elimination of duplicative network circuits to these locations. As this project evolves, the potential municipalities (cities, towns, villages) to share applications becomes more viable. Local jurisdictions can share applications as they choose using [OneNetNYS](#).