

MICHIGAN



Certificate of Need (CON) e-Serv

**Nominating Category: Digital Government:
Government to Business**

State of Michigan

Contributors

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Section B: Executive Summary

Accessible healthcare is a top priority in Governor Jennifer M. Granholm's Cabinet Action Plan (CAP) and represents \$12 billion in Michigan's state budget. The CAP calls out the healthcare sector as a key arena in which to attract investment as well as to diversify and bolster Michigan's economy. No information technology (IT) project has had a bigger impact on expanding investment and improving access to affordable, quality health services than the Certificate of Need (CON) e-Serv Program. This first-of-its-kind Web e-service automates and accelerates decision making and brings transparency to determining how and where millions of dollars in healthcare infrastructure are invested each year.

The continued dependence on paper-driven processes has exacerbated healthcare costs in Michigan and the United States. While government is not the only source of paper, some paper-driven regulatory functions that the State of Michigan administers have certainly contributed to time-consuming processes, delays in decisions, and added costs to the state, its citizens, and Michigan businesses. The CON program is an example of a regulatory function of that nature. Under Part 222 of the Michigan Public Health Code, Certificate of Need is designed to promote and assure:

- availability and accessibility of quality health services at a reasonable cost and within reasonable geographic proximity for all people in the state.
- appropriate differential consideration of the healthcare needs of residents in rural counties in ways that do not compromise the quality and affordability of healthcare services for those residents.

Every time a hospital or medical facility proposes significant changes, upgrades, or investments in facilities or to equipment, it must run through a gauntlet of complicated regional and state approvals, all of them paper driven. The number of complex hand offs and the manual nature of the process delayed some investments in new healthcare alternatives for Michigan communities. The e-Serv system is unique nationally in its ability to streamline this process while providing increased transparency and accountability. It will allow Michigan to respond with more agility to the demand for services that will be required by the projected 590,000 Michigan residents who will gain access to Medicaid as a result of the Patient Protection and Affordable Care Act.

The e-Serv system was developed to attract investment on the national stage, reduce the cost of healthcare, and improve service to Michigan citizens and businesses. The efficiencies generated by this system reduced CON processing time by eight staff hours per application, eliminated more than 440,000 pages of paper documents annually, reduced FOIA requests by 66 percent, reduced mailing costs to businesses and the state by \$8,700 annually, and saved the state and Michigan businesses \$365,064 annually. While Michigan has already seen the qualitative and quantitative benefits of the CON e-Serv system, the system is easily transferable to other states because of its architecture and ease of use for customers and continues to be demonstrated as a model to other states. If all 34 states used the Michigan application instead of developing their own, it would save a minimum of \$15,323,800.

Section C: Description

Affordable and accessible healthcare is one of eight priorities in the Governor's Cabinet Action Plan. Providing affordable, accessible healthcare for all Michigan citizens is key among these priorities. The CAP also calls out the healthcare sector as a key arena in which to attract investment, diversify and bolster the state's economy, and employ Michigan citizens. State healthcare spending currently represents \$12 billion (almost one-third) of Michigan's General Fund budget. In Michigan, the state with the highest unemployment rate in the nation and massive budget deficits, lowering healthcare costs while maintaining accessibility of care grows increasingly critical.

The CON program administered by the Michigan Department of Community Health (DCH) touches most healthcare services through 16 different review standards – from adding a cardiac program to providing air ambulance services to upgrading MRI equipment – because a CON review is needed before these services can be offered or expanded. In FY 2009, the DCH processed 335 letters of intent, 220 applications, and 90 amendments to approved certificates of need for proposed projects related to these services. Before implementing the online system, each request required submission of three copies by mail to DCH and appropriate regional review agencies. Each application averaged 125 to 150 pages. Delays were common, and applicants found it difficult to ascertain project status.

The Solution – A comprehensive online system

In 2005, the Departments of Community Health and Information Technology embarked on a project with the primary goals of streamlining and automating the CON program. No IT project has had a bigger impact on expanding investment and improving access to affordable, quality health services than the CON e-Serv program. This system is still the only one of its kind in the nation. It automates and accelerates decision making and brings transparency to determining how and where millions of dollars in healthcare infrastructure are invested each year. The initial system components were implemented in January 2006 with major functional enhancements in 2007, 2008, and 2009.

Collaboration and Business Process

Because Michigan businesses that provide healthcare services are the primary users of the CON process, their participation in building an automated system was critical to the success of the project. The DCH and Department of Technology, Management & Budget (DTMB) collected customer feedback and requirements through various support channels and formal steering committees, such as the Governor-appointed CON Commission comprised of healthcare administrators, organized labor leaders, physicians, businesses, and university experts from across the state.

The CON business process was fully documented by customer groups. Handoffs were defined and opportunities to streamline and automate the handling and processing of applications were identified. In addition to external feedback, the CON e-Serv design required extensive collaboration among the DCH's highly specialized and diverse

divisions, which has streamlined communication and implementation and increased process awareness.

Feedback and collaboration drove CON e-Serv's three-phase business approach (based on business criticality) and addressed significant barriers in the CON review and approval process.

- The first phase (implemented in January 2006) targeted process transparency through a management information module for all internal and external users, expedited and streamlined the application initiation process (known as Letters of Intent), and facilitated access to clear and current status.
- The second phase (implemented in March 2007) added modules to deal with time-sensitive emergency requests, expedited applications, and amendments.
- The third phase (implemented in April 2008) addressed substantive applications requiring the maximum level of oversight and review. Following the completion of all application modules, the update to the system in October 2008 allowed applicants to make online payments via connection to the state's online payment system.
- In 2009 enhancements to reports and screens improved data functionality for users.

Technology and Project Management Approach

Michigan has mature, documented standards for technical architecture, systems development life cycle, and project management. The CON e-Serv project team leveraged these standards throughout the development of the system. The well-documented and designed system can be sustained using DTMB resources with their consistent development tools and hardware architecture.

The system maximized Michigan's Technical Architecture, selecting commonly used languages and approved platforms that enhanced the ability to reuse the code. The Rapid Application Development Process was used to quickly prototype, model the processes, and gather end-user feedback from multiple stakeholders. The application was developed with a J2EE environment and Oracle Database back end. The system is delivered through common channels, accessible to customers via www.michigan.gov and built according to strict Web standards, ensuring accessibility to the majority of Michigan customers.

The use of standard tools and technologies in the development of the Michigan CON e-Serv system also enhances its applicability for use by other states. The Michigan system can be transported easily and has been demonstrated to more than 17 states for possible transfer and use.

While the CON e-Serv system does not contain citizen information, it must protect the business plans of healthcare providers. The system provides security through Michigan's standard single sign-on environment. Role-based security within the application controls access only to appropriate business-level data and functions. In addition, the system is segmented to provide appropriate separation of duties between administrators, developers, testers, and users.

Section D: Significance

This e-service is simply the best channel for obtaining CON approval. Since the release of the first module in January 2006, approximately 96 percent of all Letters of Intent and 91 percent of all eligible applications are now filed online with DCH, and the percentage of incomplete applications submitted has dropped from 95 percent to 65 percent. The state has eliminated more than 35 paper forms, and many of the remaining forms have been streamlined. The improvements in this process are tangible to both the state and Michigan's healthcare providers, and the results are transferable to other states with the same need. In addition, the system clearly fits within the parameters of key Michigan and national goal areas. The success of the system has been apparent. In 2009, it won the Best of Michigan Excellence in Technology Award from the Center for Digital Government.

The Priorities of Michigan

Governor Granholm's Cabinet Action Plan outlines eight key objectives for state government. The CON e-Serv system has helped Michigan achieve success in at least three of these:

Make Michigan's people healthier and our families stronger: By providing healthcare providers and communities with a streamlined and transparent system to establish and enhance costly services, Michigan is able to improve decision making, resulting in healthcare investments going where they will provide the most good. Appropriate decisions for these investments mean that Michigan can minimize cost and maximize the accessibility of services to citizens.

Sustain and create business investment and jobs in Michigan: An effective CON system is necessary for healthcare businesses in Michigan to plan, invest, develop, and expand. The state has a vested interest in the growth of the healthcare sector in Michigan, not only for the safety and protection of its citizens but as a major sector of employment growth. While Michigan continues to have the highest unemployment rate in the country, employment in health-related occupations is strong, and shortages in many career areas in the upcoming years are expected to create a sustained need for healthcare professionals.

Make government in Michigan more cost effective and efficient: The CON e-Serv system clearly makes the process more efficient by:

- reducing paperwork by more than 440,000 pages per year.
- shortening review time for state staff by almost 8,000 hours per year.
- reducing time spent on responses to FOIA requests by 600 hours annually.
- providing transparency to the process.
- enhancing access to application status.
- redirecting staff time from paperwork to the quality of the CON process and resulting decisions.

This project aligns with the Michigan Department of Technology, Management and Budget's Strategic Plan and Michigan's Health IT Plan and complements use of federal American Recovery and Reinvestment Act stimulus funds.

The Priorities of the State CIOs

State chief information officers (CIOs) are concerned about leveraging technology to improve efficiencies, lessen the impact of IT on the environment, and lower the cost of government. To do that, systems that have already been developed and successfully implemented are being leveraged. The CON e-Serv system can be transferred in whole or in part or can be used as a basic design and starting point for development in other states. This system benefits CIOs of other states in these ways:

Budget and cost control: As described in the quantitative benefits outlined in Section E, annual real savings to the state and Michigan businesses totals \$365,064. These savings become more critical every day in Michigan, where cutting budgets and reducing costs save businesses, jobs, and homes.

Transparency: Before implementing the new system, the CON process in Michigan was not only lengthy, but applicants had no way to track the status of their application. The new system allows applicants to see the real-time status and improves the state's accountability in meeting performance measures.

Shared services: This system is a model for showing the benefit of collaboration between state, local, and private-sector groups. It has streamlined processes, cut costs, and increased communication and cooperation for all involved.

Section E: Benefits of the Project

The CON e-Serv system has demonstrated quantitative and qualitative benefits to government, businesses, and the citizens of Michigan. Developed and implemented over a four-year period, this system utilizes proven technologies to deliver access, information, and process improvements with state-of-the-art technologies. The total project cost was \$450,700. As noted below, the annual savings to the state and healthcare businesses total \$365,064, giving the CON e-Serv a five-year return of \$1,374,620.

In 2010, CON e-Serv is receiving an average 11,000 visits per week from internal and external users. These hits include, but are not limited to, internal CON users reviewing a pending application file, other state agencies checking the status of a pending or approved CON, applicants working on new applications or checking the status of pending applications and approvals, other interested parties such as the local regional review agency reviewing or checking the status of a pending application, and vendors researching the type of projects being planned in order to offer a competitive bid for the covered equipment or new construction.

Qualitative Improvements:

Benefits to Michigan businesses

- Businesses have real-time access to application status.
- Response time from the State of Michigan is improved.
- Users may access information online, reducing FOIA requests. The project reduced new requests by 66 percent.
- Response to FOIA requests is expedited, when necessary.
- Transparency and accountability is increased.
- Requests valued at more than \$1,110,493,175 were reviewed and approved in FY 2009.

Benefits to the State of Michigan

- State staff time is rededicated to the review process and application quality.
- Decisions on healthcare investments are improved.
- Access to information on the CON review process and decisions to both businesses and citizens are improved. Process transparency is improved.

Benefits to Michigan citizens

- The rate at which new healthcare capabilities are made available is expedited.
- Accessibility to healthcare for Michigan citizens is improved.
- The right services are placed in optimal locations for patient care.

Measurable Operational Improvements:

<u>Beneficiary</u>	<u>Description</u>	<u>Annual savings</u>
State		
* Mailing	Correspondence to applicants changed from paper and mail, to e-mail	\$2,000
* CON reviews	Reduction of 7,856 hours of staff time. Half used to improve qualitative reviews.	\$179,404
* FOIA requests	Reduction of 600 hours	\$27,360
Healthcare businesses		
* Mailing	3 copies of 150-page applications	\$6,700
* CON preparation & completion	Comparable reduction to state reviews, or 7,856 hours of staff time, half for preparation by experienced staff and half for clerical work	\$150,000
Total annual savings		\$365,064