



## **Certificate of Need (CON) e-Serv**

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

### **State of Michigan**

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## **Section B: Executive Summary**

Accessible health care is a top priority in the Governor's Cabinet Action Plan (CAP) and represents \$12 billion in Michigan's state budget. The CAP also calls out the health care sector as a key arena in which to attract investment as well as to diversify and bolster our economy. No 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, accelerates decision making and brings transparency to determining how and where millions of dollars in healthcare infrastructure are invested each year.

One factor that has exacerbated health care costs in Michigan and the United States is the continued dependence on paper-driven processes. While government is not the only cause of the 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 both the State, the citizens and to Michigan businesses. The Certificate of Need 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 all of the following:

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

Every time a hospital or medical facility proposes significant changes, upgrades or investments (facilities or equipment), they must run through a gauntlet of complicated regional and state approvals, all of which were paper-driven. Due to the number of complex hand-offs and the manual nature of the process, major investments in new health care alternatives for Michigan communities have been delayed. This new system is unique nationally in its ability to streamline this process while providing increased transparency and accountability.

The CON 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. Implemented in January, 2006, this system has reduced the processing time for CON by eight staff hours per application, eliminated over 440,000 pages of paper documents annually, reduced FOIA requests by 66%, 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 transferrable to other States due to its architecture and ease of use for customers. Over seventeen states have seen demonstrations of the system and could leverage it for their own use, saving critical money on development and implementation.

## **Section C: Description**

Affordable and accessible health care is one of eight priorities in Governor Jennifer Granholm's Cabinet Action Plan (CAP). Key among these is to provide affordable and accessible health care for all Michigan citizens. The CAP also calls out the health care sector as a key arena in which to attract investment, diversify and bolster our economy, and employ Michigan's citizens. The State of Michigan spending on healthcare currently represents \$12 billion (almost 1/3) of Michigan's state General Fund budget. In Michigan, the state with the highest unemployment rate in the nation and massive budget deficits, the importance of lowering healthcare costs while maintaining the accessibility of care grows increasingly critical every day.

The Certificate of Need (CON) program administered by the Department of Community Health, touches most healthcare services through 16 different review standards - from adding a cardiac program, providing air ambulance services, to upgrading MRI equipment – because a CON review is needed before these services can be offered or expanded. In FY 2008, the Michigan Department of Community Health (DCH) processed 521 letters of intent, 388 applications, 5 emergency applications and 68 amendments to approved certificates of need for proposed projects related to the services above. Prior to the CON on-line system, each of these requests required 3 copies submitted by mail to DCH and to appropriate regional review agencies, and each application would have contained an average of 125 to 150 pages. Delays were commonplace and status was difficult to ascertain by the applicants.

### **The Solution – A comprehensive CON on-line system**

In 2005, the Michigan Departments of Community Health and Information Technology embarked on a project with two primary goals – to streamline and automate the Certificate of Need program. No 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 system is the first-of-its-kind in the nation. It automates, accelerates decision making and brings transparency to determining how and where millions of dollars in healthcare infrastructure are invested each year.

The initial components of the system were implemented in January 2006, with completion of the final module in October of 2008.

### **Collaboration & Business Process**

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

The current CON business process was fully documented by customer groups. Handoffs were defined and opportunities to streamline and automate the handling/processing of applications were identified. In addition to external feedback, the new CON e-Serv design required extensive collaboration between the DCH's highly-specialized and diverse divisions, which has streamlined communication, implementation and increased process awareness.

Feedback and collaboration drove CON e-Serv's three-phase business approach (based on business criticality) and addressed significant pain points 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 stream-lined 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 last update to the system (implemented in October 2008) allowed applicants to make online payments via connection to the State's online payment system.

## **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 was able to leverage these standards throughout the development of the system, resulting in a well documented and designed system that is sustainable by MDIT resources due to the consistency of development tools and hardware architecture.

The system was developed maximizing Michigan's Technical Architecture, selecting commonly used languages and approved platforms that enhance 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 infrastructure utilizes component clustering, load balancing and application state replication, maximizing the system's availability and scalability. The system is delivered through common channels, accessible to customers via 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 easily transported and has been demonstrated to more than seventeen states for possible transfer/use.

While the CON e-Serv system does not contain citizen information, the business plans of health care providers must be protected; 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% of all Letters of Intent and 93% of all eligible applications are now filed online with DCH, and the percentage of incomplete applications submitted has dropped from 95% to 71%. The State has eliminated over 35 paper forms and many of the remaining forms have been streamlined. The improvements in this process are tangible to both the State and healthcare providers in Michigan, and the results are transferrable to other states with the same need. In addition, the system clearly fits within the parameters of key Michigan and National goal areas.

### **The Priorities of Michigan**

Governor Granholm's Cabinet Action Plan outlines eight key objectives for Michigan 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 a streamlined and transparent system to establish and enhance costly services, Michigan is able to improve decision making – resulting in health care investments going where they will provide the most good. Appropriate decisions for these investments means that we can minimize cost while maximizing 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 also 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 expected shortages in many career areas in the upcoming years is 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 CON process more efficient by

- reducing paperwork by over 440,000 pages per year
- shortening review time for State staff by almost 8,000 hours per year

- reducing State staff 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 is aligned with the Michigan Department of Information Technology's Strategic Plan and Michigan's Health IT Plan, and compliments the utilization of Federal ARRA/stimulus funds.

### **The Priorities of the State CIOs**

State CIOs are concerned about leveraging technology to improve efficiencies, lessen the impact of IT on our environment, and lower the cost of government. One way of doing that it is to leverage systems that have already been developed and successfully implemented. 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. The benefits of this system to other State CIOs are:

**Budget and Cost Control:** As evidenced in the quantitative benefits outlined in Section E below, the 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 saves businesses, jobs and homes.

**Transparency and Accountability:** Prior to the implementation of 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 real-time status to be seen by applicants and improves the accountability of the State in meeting performance measures.

**Green IT:** Because the old CON process was very paper intensive, applicants had to submit three paper copies of all submissions, averaging 150 pages per copy. All correspondence between the State and the applicants was also done via paper. In total, the new system has reduced the volume of paper documents by over 440,000 pages per year.

### **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 cost of this project was \$450,700. As noted below, the annual savings generated to the State and healthcare businesses totals \$365,064 – giving the CON e-Serv a 5-year return of \$1,374,620!

**Qualitative Improvements:**

Benefits to Michigan businesses

- Immediate real-time access to the status of their applications
- Improved timeliness of response from the State of Michigan
- Most information requests can be completed online by users, thereby reducing FOIA requests – 66% reduction in new requests
- Expedited response to FOIA requests when necessary
- Increased transparency and accountability

Benefits to the State of Michigan

- State staff time is re-dedicated to the review process and the quality of the application
- Improved decisions on healthcare investments
- Improved access to information on CON review process and decisions to both businesses and citizens – transparency of the process is improved

Benefits to Michigan Citizens

- Expediting the rate at which new healthcare capabilities are made available
- Improved accessibility to healthcare for Michigan citizens
- Insuring the right services are in the optimal location for patient care

**Measurable Operational Improvements:**

<b><u>Beneficiary</u></b>	<b><u>Description</u></b>	<b><u>Annual Savings</u></b>
<b>State</b>		
* 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
<b>Healthcare Businesses</b>		
* Mailing	3 copies of 150 page applications	\$6,700
* CON Preparation & Completion	Comparable reduction to State reviews, or 7,856 hours of staff time – ½ for preparation by experienced staff and ½ for clerical work	\$150,000
<b>Total Annual Savings</b>		<b>\$365,064</b>