

# Executive Summary

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## Assessment of Connecticut's Implementation of E-Government

The Legislative Program Review and Investigations Committee (PRI) voted in June 2010 to conduct a study to assess Connecticut's implementation of e-government (meaning electronic government). E-government is described in different ways, but a general meaning is the "use of information technology to support government operations, engage citizens, and provide government services."<sup>1</sup> The committee in particular was interested in Connecticut's efforts to ensure citizens and businesses have online access to desired information and services.

As directed by the study scope, the study examined the organizational structure in place in Connecticut to prioritize, design, implement, manage, and evolve e-government services. Best practices based on existing literature were evaluated and states considered leaders in applying e-government principals were compared. An inventory of e-government features available on Connecticut's state agency websites was also developed.

### Best Practices

There are a number of best practices discussed in the literature reviewed that impact the success of a state's e-government project, including:

- *strong executive branch leadership* to cultivate an ongoing e-government culture within state government;
- *a strategic planning process* in order to ensure planning, coordination, and prioritization among individual agencies, given the limited financial resources available to state government in developing new e-government initiatives;
- *attention to the design of the state's main portal* because it often serves as the main entry into the various state agency websites;
- *collection and review of performance measurement data* to better gauge visitor satisfaction with a state's web presence; and
- *commitment to funding* since IT projects tend to be costly.

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<sup>1</sup> Sharon Dawes, *The Future of E-Government*, Center for Technology in Government University of Albany, State University of New York, 2007. [Http://www.ctg.albany.edu/publications/reports/future\\_of\\_egov](http://www.ctg.albany.edu/publications/reports/future_of_egov) (April 2010).

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## **Connecticut's E-Government Implementation Structure and Planning Process**

E-government initiatives involve both a technical aspect (e.g., hardware, software, and other technological design and support) and a substantive government business aspect (e.g., business planning and assessing client needs). Each is equally important and must work harmoniously to produce a successful e-government project. While the technical aspect is handled by either Department of Information Technology (DOIT) and/or other agency IT staff, all substantive business decisions for e-government initiatives remain with the individual agency.

The program review committee found Connecticut's governance structure for planning, developing, and implementing e-government services is ineffective. E-government improvements and initiatives appear ad hoc and sporadic rather than systematic. Primary decision-making responsibilities are fragmented across agencies without focus or direction. There is not a single recognizable statutory authority for all e-government functions.

Further, the committee found Connecticut's information technology strategic plan, prepared by DOIT, to be overly broad, provide limited guidance for strengthening the state's e-government presence, and not wholly accessible to the public. The existing planning process is weakened by inadequate agency IT plans, limited involvement by the executive steering committee, and minimal cross collaboration efforts.

### **Connecticut's Web Presence**

The committee found that states considered leaders in e-government concentrate efforts on enhancing their main state portals as the gateways to online services for website visitors. Connecticut's current web presence is the state's main web portal (CT.gov), and a series of government branch and agency websites. Currently, there is no effective mechanism in Connecticut, formal or informal, to guide e-government in a deliberative, purposeful way that includes all stakeholders—such as agencies, municipalities, businesses, citizens, and customers. Rather, most web-based service improvements arise from individual departmental interests instead of an overall e-government strategy that prioritizes online services through executive branch leadership efforts.

The committee found Connecticut's web presence replicates the organizational structure of the state, and thus is not particularly user friendly. Both CT.gov and agency websites in general fail to achieve consistently high levels of sophistication through the use of extensive, coordinated offerings of online services.

In addition, an examination of executive branch agency websites revealed that while they generally have some usability features (e.g., links to the state homepage, contact information), they lack others (e.g., help features, site map). Furthermore, there are many technologies that are established in the private sector and used extensively by other state governments (e.g., social media, mobile technology), but are not a systematic part of the Connecticut web presence.

Best practices regarding website design suggest that there should be an opportunity for website visitors to provide input about the website to a webmaster, the individual(s) responsible for maintaining a website. There are key tools available that help measure how well a state's

main portal and individual agency websites meet citizen and business user needs. These tools include: 1) the use of web traffic statistics; 2) feedback links on a state's main portal and agency websites that allow users to electronically submit comments to a webmaster about the website; and 3) the use of online surveys to solicit users' opinions. States that use these tools target site content to meet user need and hone marketing of online services to increase citizen and business satisfaction with online experiences. No web traffic statistics have been collected on the state's main portal since 2005.

Connecticut's main portal, CT.gov, serves as a gateway to all three branches of state government, not just the executive branch. Marketing the state portal is an important part of a state's overall strategy because it increases individuals' knowledge of the types of information and services available in a single location. Promoting "CT.gov" without analyzing its use does not give a clear picture of whether citizens are finding the information they need or completing the online tasks they want to perform.

Based on the study findings, the committee makes a number of recommendations. First, some short-term changes are recommended to improve the functionality of the state's main portal, CT.gov, by implementing best practices related to website usability. The committee believes, however, to be a leader state, a long-term strategy must be adopted. The strategy should be guided by an e-government board and an e-government director within DOIT so that long-term opportunities can be implemented. Such a focus could replace how services are currently accessed (i.e., on an agency-by-agency basis) and help develop a better approach to delivering "one-stop" online services for those functions that cut across agencies.

The intent of the other recommendations concern ensuring a customer-centered focus to the development of e-government in the state by improving website design and content.

## **Committee Recommendations**

### **1. DOIT should amend the state web template to include:**

- **a site map;**
- **translation services for foreign language accessibility;**
- **general and program specific "frequently asked questions" pages; and**
- **user help features.**

### **2. The list of online services on CT.gov should be expanded through the inclusion of all agency transactions and selective inclusion of informational features, such as downloadable guides. In addition, the following features should be made available on the state's web portal, CT.gov:**

- **downloadable databases; and**
- **downloadable forms.**

### **3. The services, databases, and forms features should be aggregated lists from agency online offerings and should be, at a minimum, searchable by keyword and indexed by customer, by function, by agency, and alphabetically. Where possible,**

presentation of new and existing features on the web portal should allow for user customization and/or personalization.

4. All executive branch state agencies, except those exempted by statute or the Department of Information Technology, shall use CT.gov for web hosting services and adopt the Department of Information Technology-created template for state websites.
5. The Department of Information Technology should establish a webpage of policies that includes the state's privacy, security, and accessibility policies as well as any other policies deemed necessary. A link to this policy page should be included as part of the website design template, in place of the separate links to the state privacy policy and website accessibility policy. All state agency websites should contain a link to the state policy page.
6. The Department of Information Technology, in collaboration with the E-Government Board, should review and revise the state's website policies not less than once a year. The review and adoption date of the latest version of the website policies should be clearly published with the policies along with a summary of any major changes.
7. The Department of Information Technology should review the social media policy annually and revise it if deemed necessary.
8. Connecticut must establish a governance structure to facilitate the development, implementation, and evolution of e-government.
9. An e-government board shall be established, with 19 members consisting of mandatory representatives from the executive branch and constitutional offices, and appointments made by the governor, legislature, and judicial department.

Specifically, the board membership shall consist of:

- Four mandatory board members: the DOIT CIO; the Secretary of the Office of Policy and Management, or designee; the Secretary of the State, or designee; and the State Librarian, or designee.
- The governor shall appoint one executive state agency representative from each of the following eight state service areas:
  - Human Services;
  - Health;
  - Transportation;
  - Regulation and Protection;
  - General Government Administration;
  - Conservation and Development;
  - Education; and

- **Judicial.**
- **The legislature shall have six appointments:**
  - **The Speaker of the House, the House majority leader, and the House minority leader shall appoint a municipal representative, one representative from the business sector who is not an information technology vendor for the state, and one member of the public, respectively.**
  - **The Senate Pro Tempore, the Senate majority leader, and the Senate minority leader shall appoint a municipal representative, one representative from the business sector who is not an information technology vendor for the state, and one member of the public, respectively.**
- **The Chief Court Administrator shall appoint one representative from the judicial department.**

**The Governor shall appoint the chair of the board. The chair, in consultation with the members, shall establish the board's by-laws. The legislative and judicial appointments shall be non-voting board members. The term for appointed members is three years. The board shall meet no less than on a quarterly basis. Vacancies shall be filled in the same manner as the original appointments. A majority of the board shall constitute a quorum.**

**The board may form subcommittees on specific topics as necessary for either ongoing, major activities (standing subcommittees) or short-term activities (ad hoc subcommittees) that cease when the activities are completed. The board chair shall task the specific mission, charge, or set of issues to be addressed by the subcommittee(s).**

**The board shall provide advice on the development of Connecticut's e-government visions and goals, and provide input for strategic direction and priorities. The board shall annually report its recommended strategic proposals and priorities for e-government to the CIO for inclusion in the strategic plan.**

**10. Among the board's responsibilities are to identify business and customer service needs and develop recommended strategies and actions to the CIO for guiding e-government initiatives. Specific board responsibilities shall include to:**

- **develop and adopt an e-government definition;**
- **provide input to DOIT on the use of CT.gov as the centralized source for state government information and services;**
- **generate priorities for new online services;**
- **recommend common functions among state agencies that could be shared;**

- consider whether to propose convenience fees for any online services;
- assist in the selection and development of web traffic statistics to be compiled; and
- develop and adopt an annual strategic plan for e-government.

**DOIT shall provide staff resources for the board.**

**11. E-government should be a recognized, dedicated function within DOIT. At a minimum, the responsibilities of statewide e-government services and functions should be assigned to a director. The e-government director must:**

- support the expansion of the delivery of state online services through the state's main web portal;
- advise the CIO on the resources required to develop and effectively administer electronic initiatives;
- recommend necessary changes related to strategies and priorities for e-government;
- promote innovative uses of information technology by agencies, particularly initiatives involving multiagency collaboration;
- coordinate with local and federal government when appropriate for collaborative online efforts;
- assist in establishment of policies and standards for e-government services;
- examine common performance measures and web trends to determine effectiveness;
- participate in DOIT's system development methodology process to become aware of ongoing and proposed e-government projects; and
- periodically examine other states who are noted as leader states for e-government to determine if Connecticut needs to revise its strategies.

**The director shall prepare an annual report of e-government projects and services, including a complete list of services offered through the state's main portal. The report should also include potential new online services and summarize results of performance measures and web statistics compiled for e-government. The results shall be provided to the e-government board.**

**12. There should be a strategic plan specific to e-government in addition to the statewide strategic plan for information technology. The CIO should prepare the e-government strategic plan in consultation with the new e-government director and board.**

**The state's overall e-government strategic plan should include a clear strategy for providing online services for different user groups according to their needs (citizens, business, visitor, government, etc).**

Connecticut's strategic plan should be developed in partnership with state agencies and other relevant stakeholders through the newly formed web board. Activities to inform and guide the plan should include:

- planning sessions and surveys with the web board and state agency officials;
- in-depth participation in and review of leading e-government issues, trends, and web analyses;
- strategic planning sessions, discussions, and surveys with Connecticut's IT staff and leadership;
- engagement with Connecticut citizens and businesses on preference and needs; and
- discussions and feedback from leading researchers.

Across the four-year planning cycle, annual updates and adjustments should be made, along with reports on progress to stakeholders.

13. C.G.S. 4d-7 (c) shall be amended to include a mandate for the annual submission of an agency IT plan by each executive branch agency. The agency IT plan must be prepared in compliance with the DOIT prescribed template unless the CIO has specifically authorized an exemption for the agency. At a minimum, the agency IT plan must include:

- the information technology priority objectives of the agency;
- major planned or ongoing initiatives related to information technology;
- specific IT projects to assist or provide service to the public;
- steps taken to conduct transactions electronically;
- a summary of web statistics compiled and how they are used;
- any IT initiatives to coordinate with other state and local governmental entities; and
- efforts the agency has taken to develop public and private partnerships to accomplish the information technology objectives of the agency.

14. There should be a cross boundary advisory group led by the new director of e-government. The director of e-government should solicit participation in the advisory group to foster various IT partnerships including: intra-agency (state agency-to-state agency), intergovernmental (e.g., state agency to municipal), and public-private (e.g., state and CERC). The group tasks should include to:

- facilitate collaborative agreements;
- identify opportunities, incentives and barriers;

- **develop strategic risk management of cross collaboration initiatives; and communicate potential cross collaboration strategies with the web board.**
- 15. DOIT should incorporate a staff resource impact analysis component into the SDM process. Similar to the guidance DOIT provides to agencies to develop cost-benefit analysis, DOIT should assist state agencies to develop criteria and common methodology to estimate resource impact for IT initiatives.**
  - 16. The newly established E-Government Board shall adopt performance measurement goals for the state's main portal. Such goals shall include targets for implementing new online services, and reaching specific web metric benchmarks, including but not limited to increasing the utilization of existing and new online services (i.e., adoption rates).**

**The Department of Information Technology, in consultation with the E-Government Board, should develop an online user survey that captures visitor experience and satisfaction with the state of Connecticut's online presence and offer the feature through the state's main portal and template.**

**The Department of Information Technology shall provide the E-Government Board with web analytics for the main portal, including those that measure progress toward achieving any identified benchmarks so the board may determine if goals set by the board for the main portal have been met. The Department of Information Technology shall also semi-annually provide the board with an aggregated report showing the results of the online survey.**

**Based on its evaluation of web statistics on the main portal and any feedback received through surveys or other methods, the E-Government Board shall recommend changes to the portal's design and/or content, establish new goals for the portal if previously established goals have been met, and use such information in assisting in prioritizing online service to be offered to the public. The Department of Information Technology shall consider the board's recommendations when making changes to the state portal, CT.gov.**

**The Department of Information Technology shall report web traffic statistics for all state agencies not less than annually and post them on its website.**

- 17. The Department of Information Technology should identify strategies for state agencies to consider in improving location of website content, when appropriate. Each state agency should have a website workgroup that meets periodically to discuss agency website content and presentation and how best to improve it based on web analytics or other feedback provided.**
- 18. The E-Government Board shall adopt a marketing strategy to brand "CT.gov" as the primary website to enter for information and services about state government. The Chief Information Office within the Department of Information Technology shall implement the strategy.**