

# State Portal Report



*Information Technology*

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## Legislative Request

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This report is submitted pursuant to 143B-1338, which states that “The Department shall plan, develop, implement, and operate a statewide electronic web presence, to include mobile, in order to (i) increase the convenience of members of the public in conducting online transactions with, and obtaining information from, State government and (ii) facilitate the public's interactions and communications with government agencies. The State CIO shall have approval authority over all agency Web site funding and content, to include any agency contract decisions. Participating agency Web site and content development staff shall be transferred to the Department in accordance with the schedule for their agency.”

The full text of the legislation can be found in Appendix A.

### Executive Summary

In late 2013, the DIT Digital Services team, along with partners in Cabinet agencies, and the Innovation Center (iCenter), initiated the Digital Commons project. The purpose of the Digital Commons project is to deliver a better experience to citizens seeking information and services from State government, increase efficiencies by delivering digital content on a unified platform, and reduce costs by aligning to a common toolset, design, development and content management process.

Based on requirements gathered from cross-agency web content and digital technology committees, a contract was awarded in July 2014 for a vendor to assist in design, user experience, information architecture, and content management strategy for Cabinet Agency primary websites. In October 2014, an additional contract was awarded to a second vendor to assist in developing and deploying the primary agency websites through an enterprise Content Management System (CMS) that enables non-technical users to manage site content in an efficient and user-friendly manner.

The new websites enable a consistent user experience across desktops, tablets, and mobile devices by using a responsive design. By sharing resources, the cost associated with agencies pursuing these efforts individually was greatly reduced. Digital Commons also consolidates the majority of Cabinet websites to the same enterprise CMS and underlying platform, providing for standardization and leveraging similar resources and skillsets.

As of November 2016, 27 websites were redesigned and re-architected, and are running on the new enterprise CMS (Drupal) and provide a consistent, cross-agency portal experience. In addition, the primary NC.gov website has expanded and evolved over the past year to include more citizen-focused features, resources, and services.

## Delivering a Citizen-Focused Web & Digital Presence

Digital Commons has transformed the way digital content is created, published, and managed. For example, the project has introduced new principles and methodologies to ensure that State websites are optimized for a good end-user experience. Examples of these changes include:

- Leveraging web analytics to understand web traffic and performance
- Optimization of websites for common search engines (websites display higher in search result rankings)
- Incorporating web accessibility practices into the development process to ensure that users with disabilities have a good experience.
- Enabling easier ways for citizens to provide web feedback.

In addition, the CMS removes IT from the content management process, allowing sites to be updated and refreshed more frequently. The project – which has now become an ongoing program – has streamlined service delivery and laid the foundation for delivering more services electronically going forward.

The program has received national and international recognition for delivering a 21<sup>st</sup> Century web and digital experience to North Carolina citizens. Awards and recognition includes:

- Center for Digital Government “Digital States” Survey  
In 2016, North Carolina greatly improved its grade, climbing a full letter from a C+ to a B+. The state is now recognized by the Center for Digital Government Digital States as number **five** in the country for exemplary work in Citizen Engagement. Digital Commons contributed to this improvement as a part of a broad range of web and digital services.
- Digital Commons was recognized by *Net Magazine’s* [Creative Blog](#), [StateScoop](#), [Government Technology](#) and [Technology Tank](#).
- Digital Services Director Billy Hylton had the honor of speaking about the Digital Commons Project at Red Hat’s [All Things Open](#) conference last fall.
- State CIO, Keith Werner, and Hylton were invited to participate in a FedScoop webinar on “Mobilizing the Workforce” in December 2016. More than 100 participants from state government, and abroad, learned about the North Carolina’s accomplishments in the mobile space. The Digital Commons program was highlighted by FedScoop staff as a part of the webinar.

# Current Year Accomplishments and Activities

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## Ten New Websites Transformed by Digital Commons

By the end of 2015, eight sites had been added to the Digital Commons platform. In 2016, we added **ten** more for a total of 18 websites on the Digital Commons platform. Several of which were sub-sites of the Department of Natural and Cultural Resources, effectively consolidating the look and feel of four disparate websites.

In addition, the Office of the State Controller launched its Digital Commons site in December 2016. It can be viewed at <https://osc.nc.gov/>

## NC.gov Services Catalog

DIT Digital Services implemented a major improvement to NC.gov this past year. The [Services section](#) of the site, which is a catalog of all services that state government offers to citizens and businesses, was made much more user friendly. A new filter was introduced that is inviting to site visitors, encouraging exploration. The improved Services section may be viewed at [www.nc.gov/services](http://www.nc.gov/services).



We have seen a **30% increase** in the use of this catalog following these updates.

## Citizen Feedback

Digital Services conducted a proof-of-concept (POC) to gather specific, actionable user feedback on NC.gov. The POC included an implementation of a “Voice of the Customer” solution by a vendor (Usabilla). This added an easy-to-find button on NC.gov that enabled citizens to dynamically select parts of the website to add feedback. A two-week feedback campaign was also incorporated to gather survey type data.

#### Results:

- One hundred thirty-nine Responses
  - Sixty-four users (46 percent) found what they were looking for
  - Seventy-five users (54 percent) did not, or “not exactly”. Many of these responses provided insightful feedback to help us understand how to better deliver content more effectively.
- Sixty-seven respondents were in the “How to Start a Business” Section. Fifty-three of these respondents (79 percent) said they found what they were looking for.
- Twenty submissions to general feedback were submitted through Usabilla’s feedback tool. This fairly low number suggests that the site’s existing feedback form is probably more effective for general feedback. The best ROI from the product appears to be the campaign functionality.

Digital Services will explore licensing opportunities with this vendor in the year ahead.

## Budget Transparency

In 2016, Digital Services, in collaboration with OSBM, Government Data and Analytics Center (GDAC), and other DIT teams, delivered a budget transparency website: <http://openbudget.nc.gov>. The new website is seamlessly incorporated into the NC.gov website to create a single portal for users to learn more about how the state spends tax dollars and other revenues to provide services to citizens. Budget data, including grants and contracts, data is stored and experienced through a SAS data visualization application managed by GDAC.

## Business Portal - 560 Percent increase in traffic

DIT Digital Services continued to evolve and improve the [How to Start a Business section](#) on NC.gov due to strong user interest in these resources. Anew “accordion” feature was introduced to the platform which helps make the long pages of information easier to navigate.

This section has received the most dramatic uptick in site visitors. In November 2015, it received 1,726 visits. A year later in November 2016, it received 11,388 visits, or a 560 percent increase in traffic over the previous year.

In December 2016, DIT surveyed these site visitors to see how well this site is performing for them. It received a virtual “thumbs up,” with 88 percent of respondents expressing appreciation for the information, saying that it was the exact information they needed to get their business started.

There are numerous opportunities to enhance this information and to create online services to help entrepreneurs start their businesses. DIT stands ready to work with the various agencies who play a role in new businesses.

## Web Platform Update

The backend hosting platform that runs Digital Commons websites (“OpenShift”) has reached the end of its life. A re-architected system will require significant technical updates and resource investment. A project has been chartered to assess multiple hosting options and determine the appropriate solution based on costs, scalability, security, “future-proof” aspects, and other variables. In addition, the Digital Services section is currently developing a hosting and code deployment POC solution in Amazon Web Services (AWS) which may offer valuable insights about the best path forward.

## Off-Platform Applications and Websites Styled

The unified look and feel of Digital Commons provides site visitors with a predictable user interface, helping citizens to learn and trust government websites. The Digital Commons [living style guide](#) has provided “legacy” state websites and websites that are not hosted by DIT and opportunity to align to a consistent design and template. A prime example is the Department of Agriculture and Consumer Services, which redesigned its site using the Digital Commons template and can be viewed at <http://ncagr.gov>.

Online applications are beginning to use the Digital Commons templates and styles as well. The Department of Administration has styled the Interactive Purchasing System and the Electronic Vendor Portal.

## Results

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The Digital Commons design, information architecture, and content strategies continue to yield dividends. NC.gov has seen the following results, comparing November 2015 to November 2016:

- **Overall traffic to NC.gov increased by 44 percent.** Mobile phone traffic increased 123 percent and tablet traffic increased 42percent.
- **User engagement is higher.** The bounce rate (that is, the percentage of users that entered and left the website from the same page) decreased by 15 percent.
- **More visitors came to NC.gov from outside of Raleigh.** Charlotte traffic increased by 119 percent, Greensboro by 72 percent, Winston-Salem traffic increased by 62 percent, , and Wilmington increased by 78 percent. Fayetteville saw a decrease in traffic, and Asheville held steady.

## Outlook for 2017

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In the year ahead, the DIT Digital Services team will continue striving to meet citizen, business and agency needs. Planned and potential projects for the year ahead include:

- In coordination with the Cooper Administration communication team, Digital Services transitioned the Governor’s Office website to the Digital Commons platform. In 2017, Digital Services will continue that collaboration to add more content, capabilities, and resources to the Governor’s Office website.
- Department of Revenue website migration to Digital Commons. This project is chartered, funded, and will kick-off in January 2017. The website is scheduled to be migrated to the platform by May 2017.
- Extending the Digital Commons platform and other web services to boards, commissions and Council of State agencies and other units. The Department of the Secretary of State has launched a redesign of their website and it will be developed to be consistent with Digital Commons objectives.
- Improved backend platform to optimize scalability, security, and performance.
- Ongoing optimization of training, consulting, and collaboration activities to ensure agency communications staff and IT staff are delivering high-value, citizen-focused content, services, and resources.

Digital Commons will also focus on high-value services and cross agency content, to possibly include the following:

- Creating a more seamless user experience between NC.gov and agencies’ online services.
- Further improvements to the Business Portal
- Open Data initiatives and dashboards
- Mapping and GIS capabilities



# Appendix A

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## Resources

[Digital Commons Project Site](#)  
[Style Guide](#)

## Legislative Request

"§ 143B-1338. Statewide electronic web presence; annual report. (a) The Department shall plan, develop, implement, and operate a statewide electronic web presence, to include mobile, in order to (i) increase the convenience of members of the public in conducting online transactions with, and obtaining information from, State government and (ii) facilitate the public's interactions and communications with government agencies. The State CIO shall have approval authority over all agency Web site funding and content, to include any agency contract decisions. Participating agency Web site and content development staff shall be transferred to the Department in accordance with the schedule for their agency.

(b) Beginning January 1, 2016, and then annually thereafter, the State CIO shall report to the General Assembly and to the Fiscal Research Division on the following information:

- (1) Services currently provided and associated transaction volumes or other relevant indicators of utilization by user type.
- (2) New services added during the previous year.
- (3) Services added that are currently available in other states.
- (4) The total amount collected for each service.
- (5) The total amount remitted to the State for each service.
- (6) The total amount remitted to the vendor for each service.
- (7) Any other use of State data by the vendor and the total amount of revenue collected per each use and in total.
- (8) Customer satisfaction with each service.
- (9) Any other issues associated with the provision of each service.