

NASCIO State IT Recognition Awards Submission

2018

Mass.gov

Building a Wicked Awesome New Website
for the Commonwealth of Massachusetts

Category: Digital Government (Government to Citizen)

State: Massachusetts

Project initiation: July 2016

Project completion: September 11, 2017 (Phase 1)

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Executive Summary

As of 2016, our legacy website – our digital front door – had become inadequate for providing a modern, secure, and user-friendly experience to constituents seeking information and services from the Commonwealth.

Similarly, the back-end content management system was complicated and unreliable for our authors. Combined with legacy servers and sunseting technology, it was essential for the Bay State to open a new chapter in digital government.

At the initiative of the Governor,
we set out to rethink and rebuild Mass.gov entirely.

We aimed to adopt industry best practices and leading technologies by making our work open-source and embracing an iterative and data-driven approach to create a site that would serve as the **single face of government** for Massachusetts.

We wanted Mass.gov to inspire confidence that people could get what they needed, when they needed it, digitally.

Since we officially launched, **overall user satisfaction** with Mass.gov increased by 15 percent, from 53 out of 100 on the legacy site to 61 today.

Content performance experiments yielded a large impact: 14 of 15 pilots showed significant improvements in the last quarter of 2017.

These changes are making a difference for more and more users as we hit 77 percent of Web traffic being served by the new site as of the last week of December 2017, from just over 20 percent in September.

On any given week, around 1.2 million visitors generate over 2.5 million pageviews on the new Mass.gov.

With **Phase 1 completed**, we are shifting to focus on expanding access to data dashboards in Phase 2, which is currently underway.

Over the longer term, Phase 3 will see us focus on digitizing services, expanding into business process redesign, integrating our core applications, implementing single sign-on across our digital ecosystem, and incorporating open-data tools to Mass.gov.

Origins

[Mass.gov](#) is the Commonwealth's front door.

A McKinsey study found that 76% of constituents interact with Massachusetts state government through the website, with channels like phone (55%) or in-person (39%) trailing far behind.

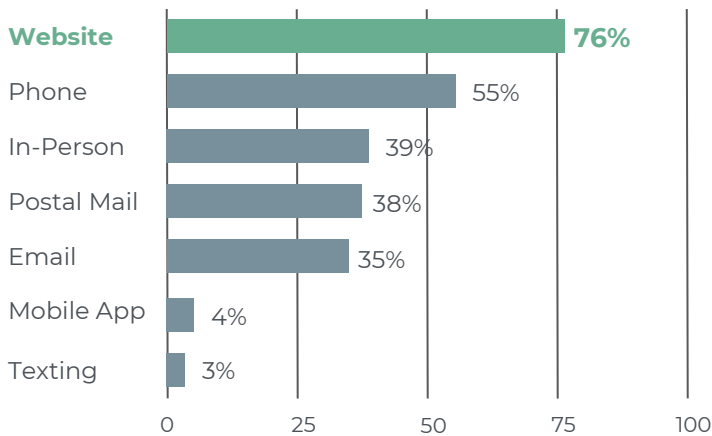
This amounted to more than 235 million pageviews in 2016.

At the same time, users were dissatisfied: in the same study, the old Mass.gov scored 32 out of 100, while the best-ranked states – Texas and Virginia – were in the low 40s. Our private-sector competition was in a different league at 79.

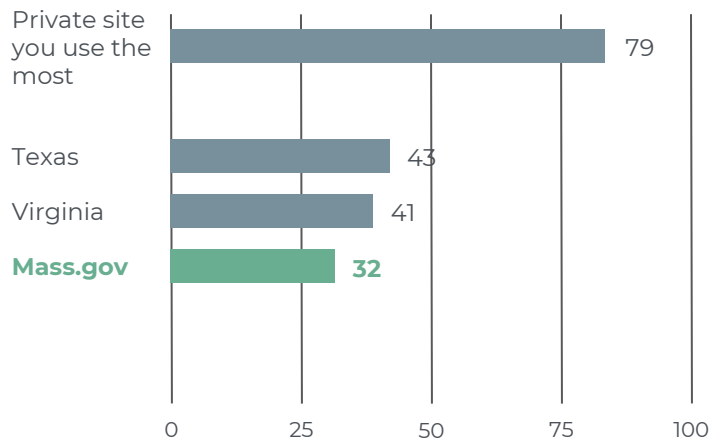
The site's content also was in poor shape. Mass.gov hosted more than 250,000 pages and documents, including decades-old toilet recall notices that were getting in the way of users finding what they were looking for. New technology wasn't going to be sufficient – we also needed a new approach to content.

If Massachusetts had a reputation for being at the cutting edge of technology, its state website was certainly not keeping up.

Modes of Interaction with State Government



Sample Comparative Satisfaction Scores



We knew we had to radically rethink Mass.gov.

Governor Charlie Baker challenged us to build a modern, constituent-centric, service-focused website in just one year. With leadership and support from Mark Nunnally, the secretary of the Executive Office of Technology Services and Security, we accomplished just that and created the foundation for the future of digital services in Massachusetts.

Vision:

We began to lay the groundwork for **Phase 1** with five key goals in mind:

1. **Improve user experience for top services:** Invest the bulk of our resources on ensuring that the services that serve the largest number of constituents do so effectively.
2. **Make Mass.gov constituent-centric:** Shift from an agency-centric structure (e.g. you have to know that business licensing is under something called OCABR) to intuitive navigation that assumes no knowledge of government on the user's part.
3. **Improve findability:** Implement a new, Google-powered search tool that reliably provides relevant results.
4. **Audit our content to clean up distracting, confusing, and out-of-date information:** Eliminate content that no longer serves a purpose and only gets in the way of users.
5. **Empower state entities to transition themselves onto the new system:** Provide a scalable solution that allows more than 100 state entities and hundreds of content authors to adopt the new content management system with ease and independence.

To accomplish this, we embraced the industry's **best practices** and technologies.

Open source We built our new site with Drupal 8 to take advantage of an established ecosystem of modules and contributors. We chose to make our project [open-source](#), making it available for anyone in the civic tech community to add to and learn from, and enabling us to get feedback on potential bugs or security issues. As a significant investment of taxpayer money, we also wanted to provide other states undertaking similar projects in the future with a **codebase** that they could rely on without having to reinvent the wheel.

Try, test, iterate We structured our work to develop the new website using Agile methodology. This meant experimenting with different solutions, testing, and iterating on our product extensively until we were satisfied with it and our users validated it through their feedback. We have reached out to hundreds of people for feedback at different parts of our redesign process, from our 500-volunteer user panel to more than 50 one-on-one interviews.



Data-driven We could not work based on our hunches, or what we – sitting on the 8th floor of a government office building in Boston – thought was best for Bay Staters of all backgrounds from Cape Cod to the Berkshires, and everything in between.

For instance, we discovered that 10 percent of our content generated close to 90 percent of all the traffic, making it easy to focus on improving those critical pages as opposed to spreading ourselves thin over tens of thousands of low-volume ones.

Vision con't

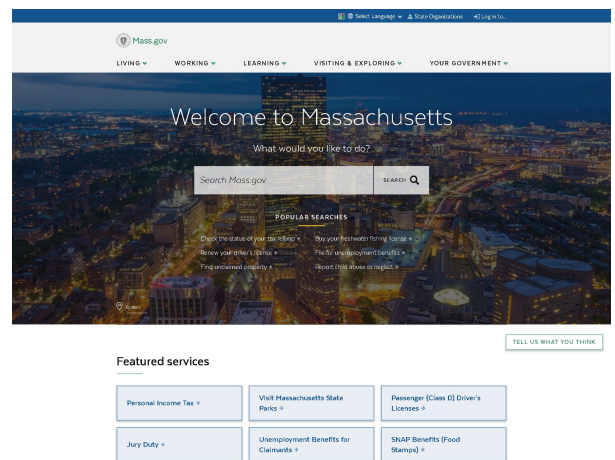
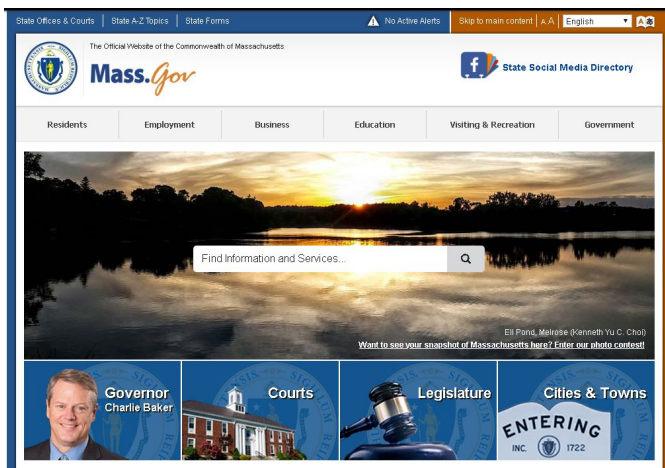
Single face of government With information spread out across numerous independently run government websites with their own branding and navigation – and private websites mimicking them to take advantage of people – users were confused as to which was the authoritative source of truth.

For example, the Massachusetts Department of Transportation and Registry of Motor Vehicles, two of the single largest properties by Web traffic (88 million pageviews in 2016), had their own sites separate from Mass.gov. We wanted to bring everyone back under one roof to improve the user experience and be mindful of the government's role as the sole provider of essential services, from driver's and business licenses to unemployment benefits.

Confidence Tying this all together was the mantra that one of our lead UI/UX designers developed: when it came to our constituents' feelings when using the site, "The emotion that we're aiming for is confidence." Our brand was to be helpful, human, dignified, and modern. Regardless of whether they came to Mass.gov to file for a divorce or get their child's first fishing permit, Bay Staters needed to be confident in Mass.gov's ability to get them what they needed, when they needed it.

Impact

After just over a year of development: we launched the new **Mass.gov** on September 11, 2017. When pilot.mass.gov (which had been live since late 2016) became Mass.gov, the home page changed and users landed on the new website by default, launching a new era for digital services in Massachusetts.



Since then, overall satisfaction with Mass.gov increased by 15%, from 53 out of 100 on the legacy site to 61 today.

(Based on data from a Foresee survey widget.)

Impact con't

Our Content Strategy team – experienced editors and writers – and data scientists used Google Analytics data and cluster mapping to identify 19 “top services,” ranging from taxes to recreation to public safety, and then worked with the relevant agencies to migrate and improve that content. In this process, we did not merely “lift and shift.” Instead, we took the opportunity to make the content easier to read and process for all constituents, rewriting pages at a sixth-grade reading level, and stripping away governmentese and legal jargon.

We also began **content performance experiments** where we paired one of our content strategists with a partner agency and leveraged Web analytics and user feedback to make targeted changes to pages to improve their performance. Simply changing the location of buttons or converting confusing acronyms to plain language has proven to have a large impact: 14 of 15 of our initial experiments showed improvement in the last quarter of 2017. In the first quarter of 2018, we replicated these successes with 150 additional pages across four different agencies, and now we’re scaling this data-driven approach by building dashboards to automate the analysis that we initially performed manually.

These key improvements are making a difference for more and more users. Our objective was to have 80 percent of Web traffic served by the new site by June 30, 2018. We had already reached 77 percent as of the last week of December 2017, a fourfold increase from just over 20 percent in September. (May 20, 2018 was the first time we crossed 90 percent!) On any given week, around 1.2 million visitors generate over 2.5 million pageviews on the new Mass.gov.

Beyond content improvement, a number of key factors drive these numbers and the modern, secure, and user-friendly experience on the new Mass.gov.

1. **Responsive and mobile-friendly:** The site adapts seamlessly to whatever device it loads on, as compared to an old site that really only worked for desktop users.
2. **Accessible:** Extensive testing with the Perkins School for the Blind and adoption of best practices means that Mass.gov meets or exceeds legal accessibility requirements.
3. **Search:** The new, Google-powered search tool serves the most relevant results.
4. **Content management system:** Content creators no longer need to be IT staff willing to suffer through a complicated publishing experience. The new, intuitive platform enables subject-matter experts, communication leads, and others to communicate with the public directly. Our content authors learn to use the system via our [online resource library](#) and [training videos](#), and can rely on the support of an in-house Customer Success team that responds to requests within a business day 80 percent of the time.
5. **Documents:** The new content management system makes document management simpler for authors and simplifies compliance with public record requests.
6. **Security:** We moved Mass.gov from a Windows 2003 server to cloud hosting, and added mandatory two-factor authentication for all users.

But wait! There's more

Not only did the Department of Transportation and Registry of Motor Vehicles join Mass.gov, but all of this was also achieved **on-time and on-budget**, and in some cases even ahead of schedule. That's a remarkable achievement in itself for a sector that has often been plagued by costly delays, and it allows us to look to the future with ambition and confidence.



What's next

We completed Phase 1 with the launch of the new Mass.gov. This transformation expands access to digital services to all Bay Staters. Making the site mobile-friendly and accessible was critical for equity, reducing barriers between constituents and information. Within state government itself, agencies are now prioritizing their online platforms and beginning to rethink how they fulfill their missions. We are breaking down silos in the flow of content, providing a better experience to constituents, and thus strengthening their trust in government.

In the current Phase 2, we will deploy data dashboards to all content authors to empower them to make data-driven improvements to their pages, with the ultimate aim of having high-performing content on the new site and shutting down the old site in December 2018.

Over the longer term, Phase 3 will see us focus on digitizing additional services and expanding into business process redesign. This will also entail integrating our core applications and implementing single sign-on across our digital ecosystem. Finally, we will also build in open-data tools to the website, freeing up the power of this information to everyone.

**A wicked awesome Mass.gov is already here,
but our journey has just started.**