



**Title:** Access Indiana – Building & Deploying the Next Generation Citizen & Business Authentication System

**Category:** Enterprise IT Management Initiatives

**State:** Indiana

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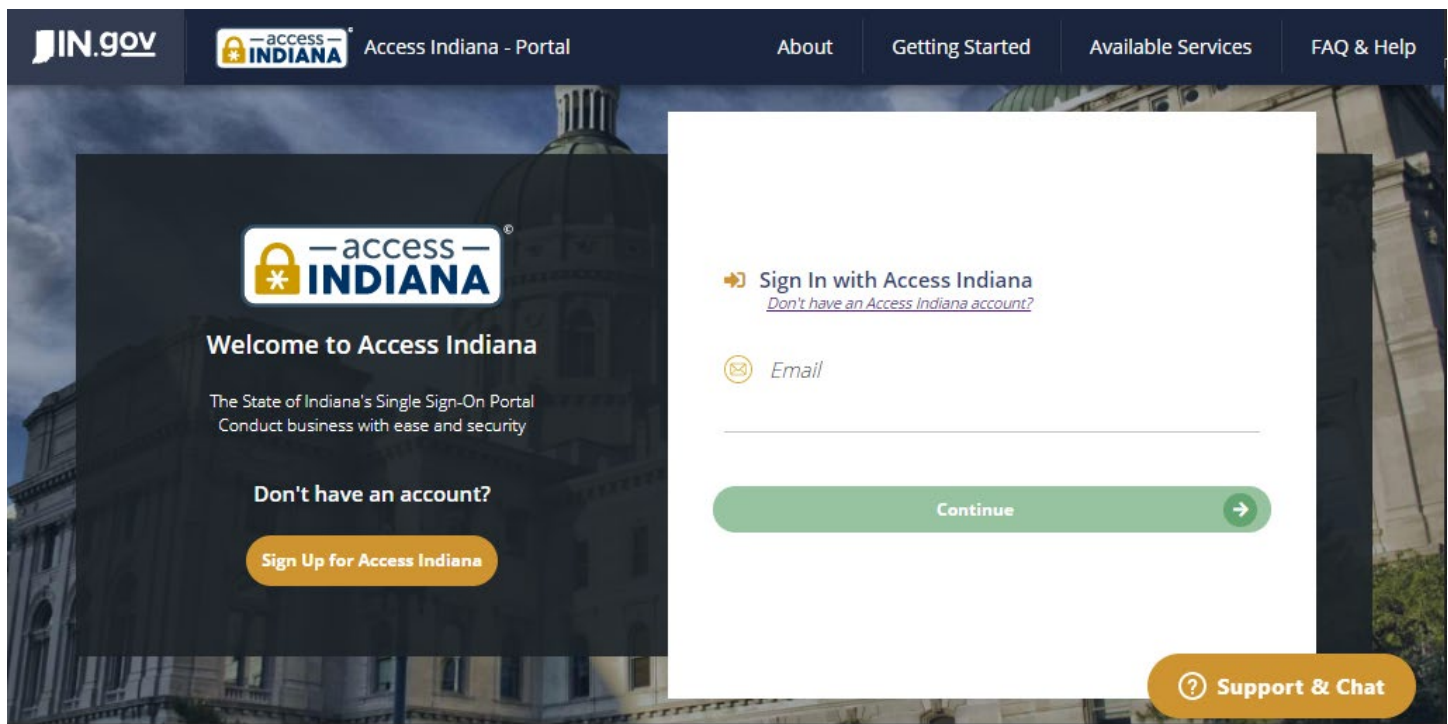
**Project Initiation Date:** 2017

**Project End Date:** Ongoing

## Executive Summary

Indiana has built a robust, highly-available single sign-on system to service citizens, businesses and state employees. The State has been laying the foundation for single sign-on since 2017 when Gov. Holcomb proposed developing a single login to create a better user experience for those conducting business with the State. At that time, Access Indiana (<https://access.in.gov>) began to take shape with the idea that citizen, business, and internal systems could take advantage of the solution. The journey to building an authentication system was long; there was much governance to figure out and ensure that agency business needs were met while still allowing for a smooth user experience.

The first Access Indiana users created accounts in March 2019, with the initial application rolling out the following month. Despite slow adoption, the Indiana Office of Technology, using its central IT contract oversight and the power of the executive support, kept pointing new services to the SSO and several large legacy services converted away from custom credential systems. In the past year, 20 applications were added to Access Indiana, bringing the total to 39 services customers can get to with a single username and password. User accounts have grown exponentially over the past year, from 11,567 on May 1, 2020, to more than 665,000 as of May 27, 2021. Separately, Access Indiana federates to Azure AD, so the state's 40,000+ users can log in to the system to use internal systems or manage and administrate public-facing applications.



## Project Narrative

### Idea

After the first legislative session in office, Gov. Eric Holcomb asked all state employees to lean on their expertise and suggest one proposal or idea that could move Indiana to the Next Level. In an April 2017 email to agency heads, Gov. Holcomb outlined his thoughts:

**“The proposals should outline a new idea that will benefit Hoosiers. Be creative and unconventional. You or your staff may have a great idea for a new program, a way to improve the delivery of a core service, a way to increase government efficiency, generate revenue or improve a process. Now is the time to be bold.”**

State of Indiana employees did not disappoint with their creativity and ingenuity. They submitted more than 250 ideas to improve the lives of Hoosiers. Gov. Holcomb selected fifteen to pursue from those ideas, including a single sign-on, which became Access Indiana.

Access Indiana was more than just a single sign-on; it was a method to consolidate authentication, improve security, and present a better user experience.

To accomplish this idea, the Indiana Office of Technology (IOT) could not lead the project alone; participation of key executive branch agencies was necessary for implementation.

## Implementation

Without buy-in from key agencies, the project could not have gone very far. The governor's office assigned a variety of agencies to participate in the project initially, including the Management Performance Hub, Dept. of Revenue, Family and Social Services Administration, Bureau of Motor Vehicles, Dept. of Health – later including the Dept. of Homeland Security and the Professional Licensing Agency. To make the project successful, the first agencies needed to create a project chart and a governance structure to work toward the same goal and under the same assumptions.

The State created a variety of governance boards that all funneled to an executive council of agency heads – demonstrating the complete buy-in of the administration.



Each committee had distinct assignments, and those decisions rolled up for consent.

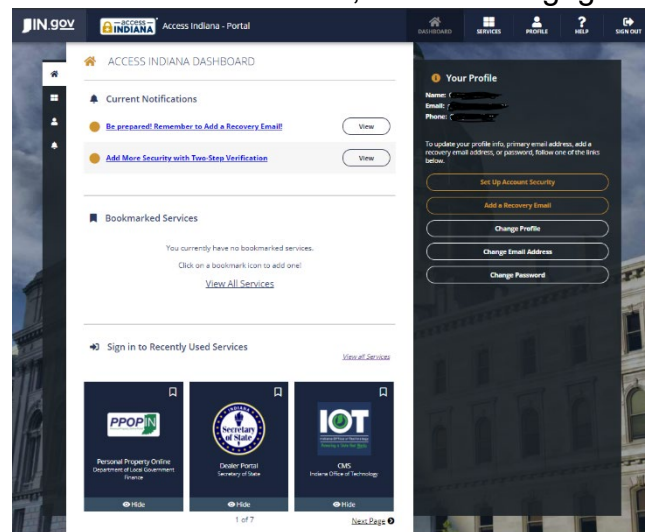
- **Technical Working Group:** An open forum for agencies actively integrating with Access Indiana to share knowledge and present recommendations to the Advisory Committee for consideration. It is comprised of subject-matter experts and developers.
- **Marketing & Communications:** Provides direction for the HDL brand and ensures all communications, marketing and user interface guidelines adhere to this brand.
- **Advisory:** Made up of agency CIOs, the committee provides technical guidance to the initiative.
- **Executive Committee:** Exists to ensure the program will meet its goals and has the ultimate responsibility to ensure the initiative's success. Agencies heads and/or chiefs of staff and a gubernatorial appointee participate on this committee.

While the concept of an SSO was clear, the State knew that selecting the right technologies and standards would be critical to adoption and future success. The Indiana Office of Technology (IOT), the project lead, investigated various technologies and solutions before presenting to the Executive Committee the proven, standards-based technologies that ultimately back-ended Access Indiana, including IdentityServer, a certified OpenID Connect and OAuth 2.0 framework. This technology is heavily used in the identity management space, and Google, among others, also uses this framework to support its users.

Agencies tasked IOT with ensuring that Access Indiana was safe, secure and easy to use. The platform uses Defense Information Security Agency (DISA) templates to set the standard for security and follows NIST standards regarding identity management and password policies. For example, user password creation is automatically vetted against a custom-built microservice that ensures the password has not been present in previous breach corpuses. The search validates against more than 600,000,000 account passwords. Upon completing the hardened environment and implementing these policies, the advisory committee approved the presented security features and validated the results against third-party penetration testing. To give applications an extra layer of security, users can voluntarily adopt, or agencies can enforce a two-step verification at the application level. If a user requests authorization to an app that requires two-step verification, the user must configure and use the second factor before entering the app. This does not force two steps on the user during their normal sign-in process on future visits, only when they enter the specific agency application.

The third goal of Access Indiana was to improve the user experience. If citizens have difficulty using the service, it does not provide value and increases tier 1 support. Though IOT, through its IN.gov Program, is well experienced in UX, to gain a full appreciation of the end-users, the State engaged a marketing firm to run user testing sessions in August 2018 and again in November 2018. Between those months, many tweaks were made and improved the overall experience and speed to account creation. Testers understood the concept of SSO and looked forward to when the State rolled out Access Indiana.

To augment the user experience and demonstrate the value of SSO, Access Indiana has a dashboard to connect you with all services, manage accounts and receive messages pushed from applications. Additionally, as a precaution, users can enter a Recovery Email, a backup option if they lose access to their primary email account.



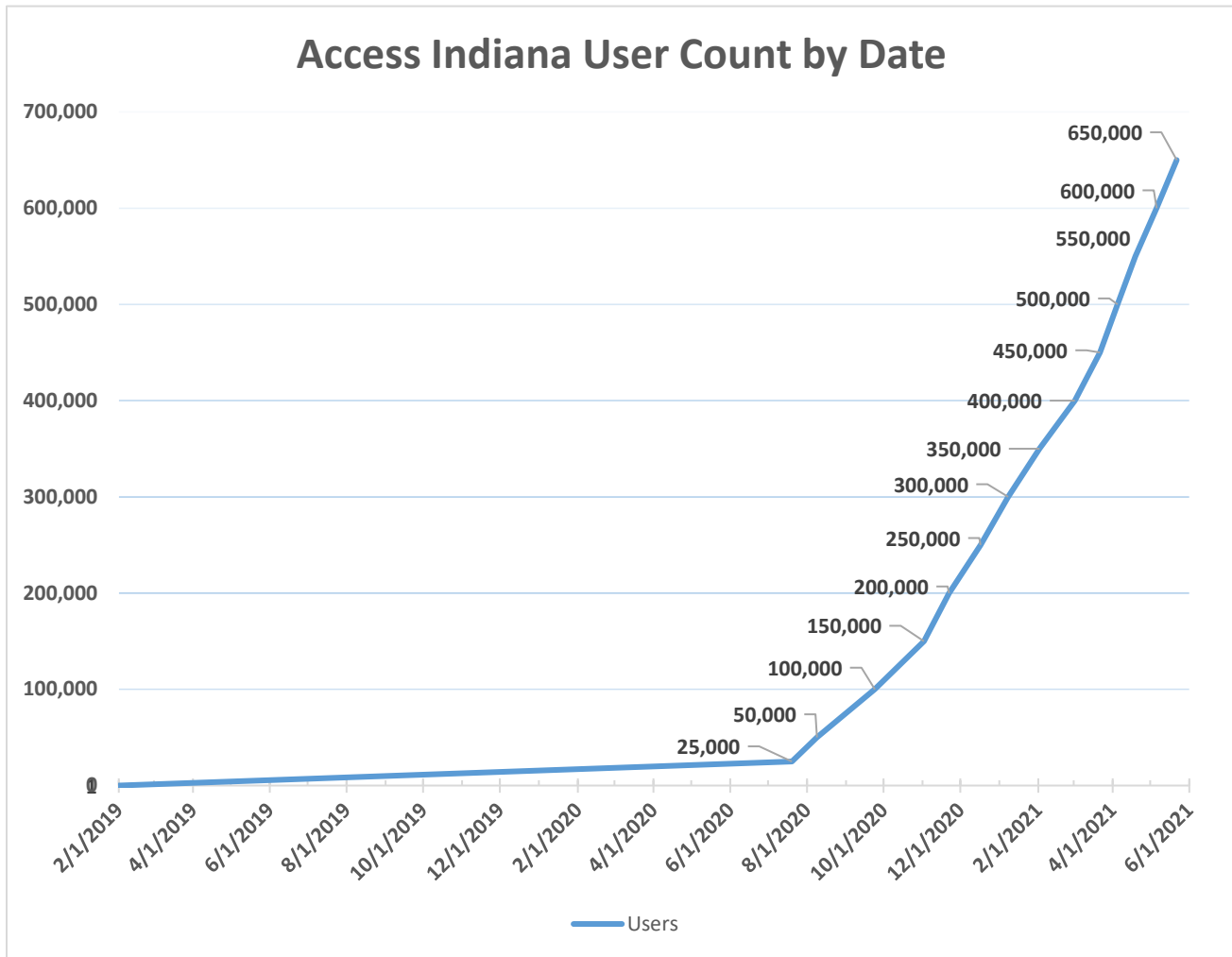
IOT continues to survey users on their account creation experience and make subsequent adjustments. Since September 2020, user satisfaction has increased by 10%.

## Impact

The first user accounts in Access Indiana were created in March 2019, with the initial application (DHS Public Safety Portal) launching in April 2019. Given that both systems were new, rolling them out simultaneously was not feasible; on the off chance something went wrong, it would have been challenging to isolate the system problems.

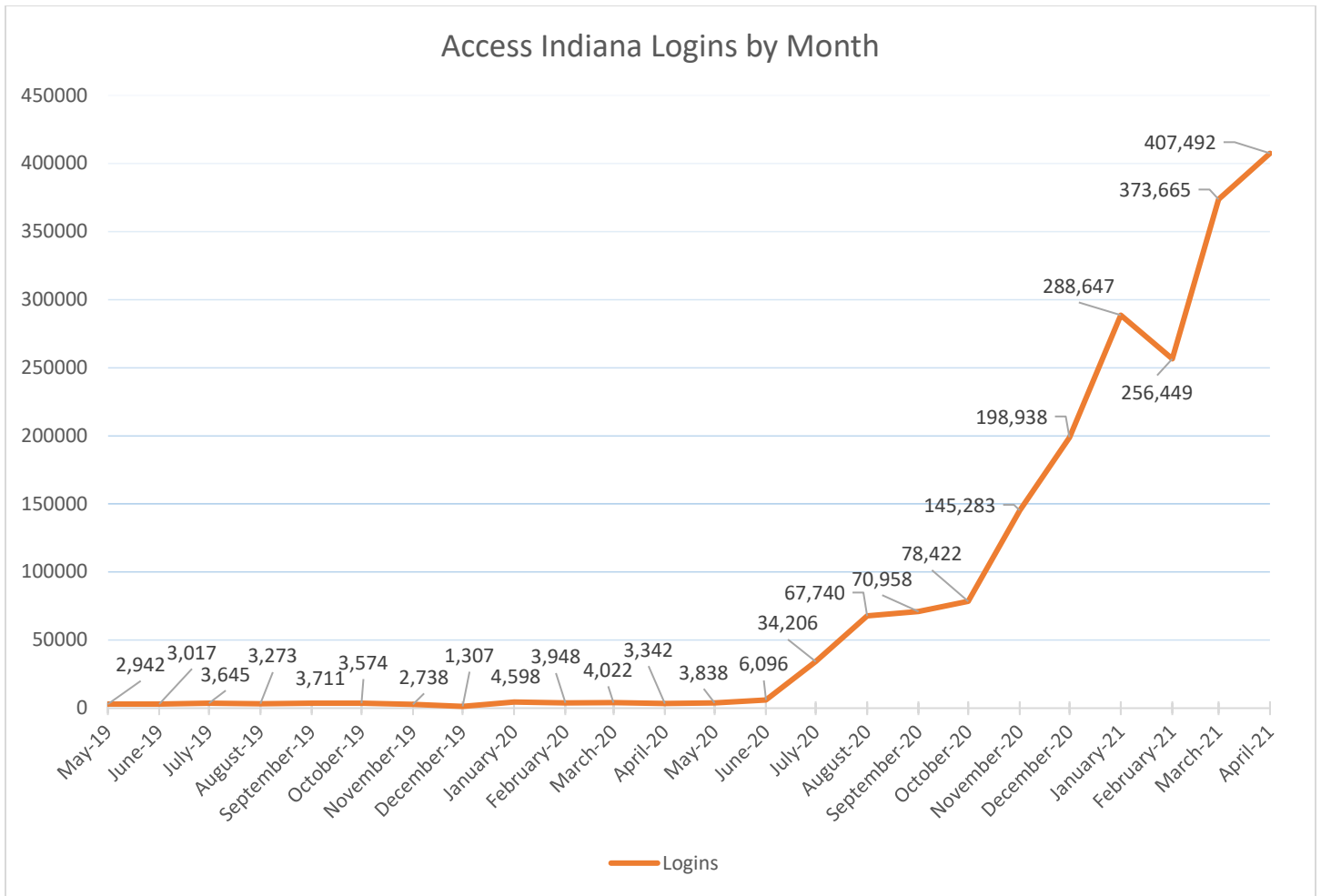
With only one app in place, the focus on the program level was to ensure a smooth user experience. Rather than outsourcing to a call center, the State's general call center has handled customer support since day one because of the low user account. During the first nine months, only 0.10% of users required assistance logging or creating an account. The lack of necessary user support provided confidence that the user experience had hit the mark, and the State could save money by not paying for a separate call center.

User adoption was slow as agencies did not want to be the first to put a significant system on the platform. The executive buy-in from the top allowed the project to move forward with a major application, hunting and fishing licenses, going live in July 2020. On July 17, 2020, four days after the launching hunting app, Access Indiana hit 20,000 users. In part, due to the hunting application's success and with other apps coming online shortly after, user creation grew exponentially.



Confidence in the system from the agencies remained because so few user issues existed, even with the growth in new users. Through the life of the application, 99.77% of logins have not required support. Since the Public Safety Portal launch, 40 other online services have been added to the Access Indiana catalog – including significant public-facing systems like INBiz, the State's business one-stop resource, Enterprise Licensing, which manages more than 100 professional licenses, Covid-19 Test Results, and Covid-19 Vaccination documentation. The State's central Content Management System with 250 websites also uses Access Indiana for authentication.

The State has progressed from 23,210 total logins in the last six months of 2019 to 407,492 in just one month (April 2021).



One of the goals of an SSO is to access multiple services with one credential. We are beginning to see the results of that. In May 2021, on average, users are accessing 1.47 applications per login. It is helpful and also a sign of success that agencies with existing integrations are bringing more applications to Access Indiana.

Access Indiana continues to schedule and work with agencies to onboard more applications. In the pipeline, there are more than a dozen integrations in varying states. Access Indiana is also finalizing the addition of identity verification through a knowledge-based quiz. The identity verification feature will allow user-based action within an application to prompt verification, ensuring that only those that need to go through this process do so.

Through four years of work, Access Indiana has gone from an idea to low adoption to a system adding daily an average of 3,300+ new users. The service features applications from 18 different agencies or separately-elected offices, including 9 with more than one application. With the enterprise fully bought in, growth and expansion of the system will continue.