



Opening Data and Opportunities for Illinois Residents

NASCIO Award Category
Digital Government: Government-to-Citizen
State of Illinois

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Executive Summary

While many states have only begun considering how to implement open data initiatives, the state of Illinois has made it a priority since 2014. That is when the state legislature passed Public Act 98-0627, calling for an “open operating standard” for state agencies to follow for data publication.

In response to the Act, the Illinois Department of Innovation and Technology (DoIT) created the Illinois Open Data Portal (ODP), the state’s first enterprise caliber open source data site. The ODP is a clearinghouse of various data sets cultivated from various state agencies. Its purpose is to increase access to public data or the data used in the operations of government, and to make it easily accessible to the citizens of Illinois.



The ODP is designed to provide unparalleled transparency with regards to government data and spur citizen involvement in deriving solutions to government challenges. The goal is for the ODP to encourage innovative thoughts, ideas, and plans in order to generate improvements in government -- including better services, identification of economic barriers, and more opportunities for Illinois residents.

Concept

Prior to the issuance of Public Act 98-0627, all Illinois state agencies maintained their own siloed, data sets. A citizen or organization interested in accessing information about health or human services or educational programs needed to visit different sites to attempt to glean the totality of data they were looking for. Even then, that information could be difficult to find. Navigation could be a challenge, and some of the information might be incomplete or outdated. As such, citizens were unable to really trust the information they were getting – if they even had the time to actually look for it.

The Act changed the game. It stated: “Public data sets that are made available on the Internet by agencies shall be accessible through a single web portal that is linked to data.illinois.gov” and “under this open operating standard, each agency of State government under the jurisdiction of the Governor shall make available public data sets of public information.”

An Open, Flexible, and Powerful Portal

With passage of the Act, DoIT immediately began soliciting RFPs from enterprises for the creation of the ODP. The criteria were simple. First, the project needed to be built on an open source platform, which would provide the state with better control, flexibility, and cost savings.

Second, it required the use of technology that would allow for data to be presented to the public in a visually appealing, easy-to-read way so that information could easily be delineated and made actionable. For the first criteria, the DoIT team used the open source project CKAN, a data management system, to lay the groundwork for the ODP. It was the first enterprise-wide open source project in the state. For data visualization, the team selected Tableau for its software’s ability to present complex data sets in a visually appealing and sensible way. Tableau makes data more consumable and interactive.

As the platform was developed, the team had to balance multiple security and compliance standards. As a result, they created a multi-tiered permission system to ensure data integrity and citizen privacy. The ODP also meets multiple additional requirements for open standards and data sharing across the state and its municipalities.

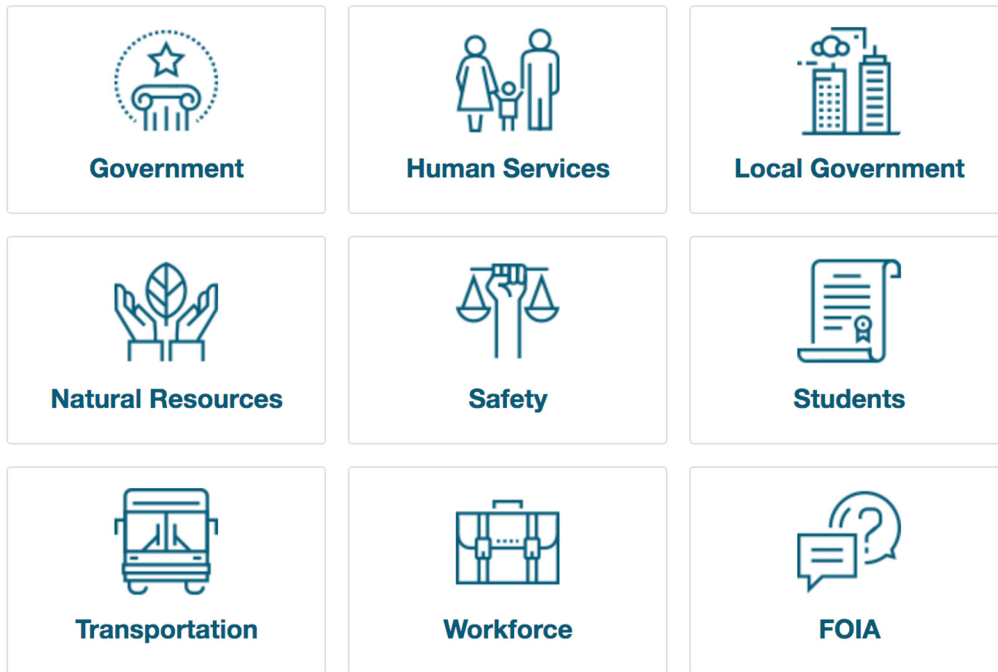
Once the platform was developed, DoIT initiated a pilot test phase that included data from various agencies. The pilot ran for two weeks during June 2017. During that time, the DoIT development team worked with the state CIO and CTO to ensure that the portal addressed their desired goals

Illinois expects to save \$1.2 million with its new open source data portal



The new portal expands the state's existing transparency initiatives and is scheduled for expansion in coming months with new features.

for data sharing. They also tested the portal’s delivery mechanisms to ensure that access to the raw data was quick, seamless, and reliable.



The Nine Categories of the ODP 1

The portal went live in August 2017 and included data collected under nine categories as seen above. Shortly after launch, data visualization capabilities were added to ensure that the information was presented in a compelling and easy to discern manner.

After rolling out the ODP, the DoIT team began to introduce its benefits to agencies across the state to get them on board. Education took the form of presentations on the portal’s capabilities and benefits and in-depth discussions with agency representatives to identify the challenges they have regarding open data. In the words of Emir Biser, Chief Data Architect for the state of Illinois, these meetings were a way to “present the possibilities” to those representatives and work with them to realize those possibilities.

Significance

The significance of the ODP is probably best summed up by Biser:

“Traditionally, when trying to interact with government data, people have been flooded with information. They’re not able to easily find what they want, and when they do, they can’t trust what they get. The information they find may be out of date, or difficult to decipher.

Our goal is to build up trust with the public. We want to assure them that if they are looking for government data, they will be able to do so easily through the platform we have created. They will be able to easily access the data they need, browse through information, and interact with it without having to go through the pains of combing through multiple sites.”

Aside from providing easier access to data, consolidating data sets across various agencies into a single portal also offers significant savings and efficiencies for the state. Illinois will no longer have to manage multiple portals containing reams of data, resulting in a more cost effective data management process.

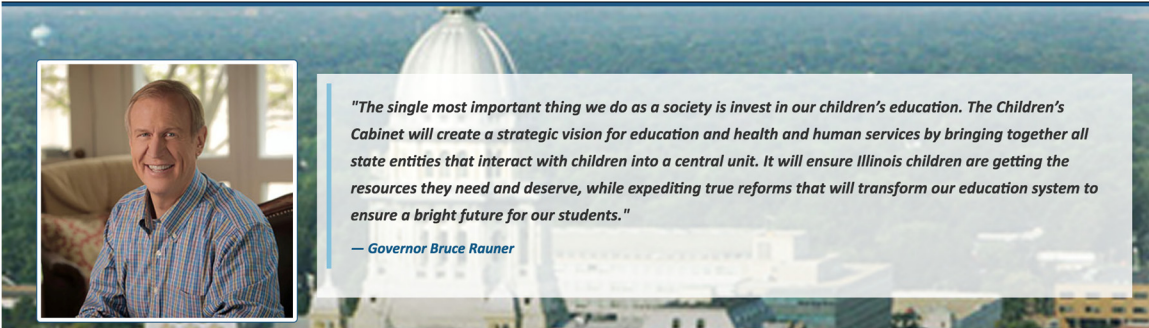
The ODP exemplifies a number of NASCIO’s Top Ten Priorities, most notably government to citizen communications and consolidation and optimization. This portal is capable of housing every public data set in state agencies and bringing it to the public in a secure, efficient manner. It also supports digital government, shared services, data management and security.

Impact

Twenty of the state agencies now house their data under the ODP. This consolidation has, as expected, produced multiple benefits. Illinois citizens now have a one-stop shop for many of their data resources, including information about local safety initiatives, environmental concerns, transportation issues, health and human services, and more. In addition, the state expects to save \$1.2 million over the next five years as a result of the consolidation.

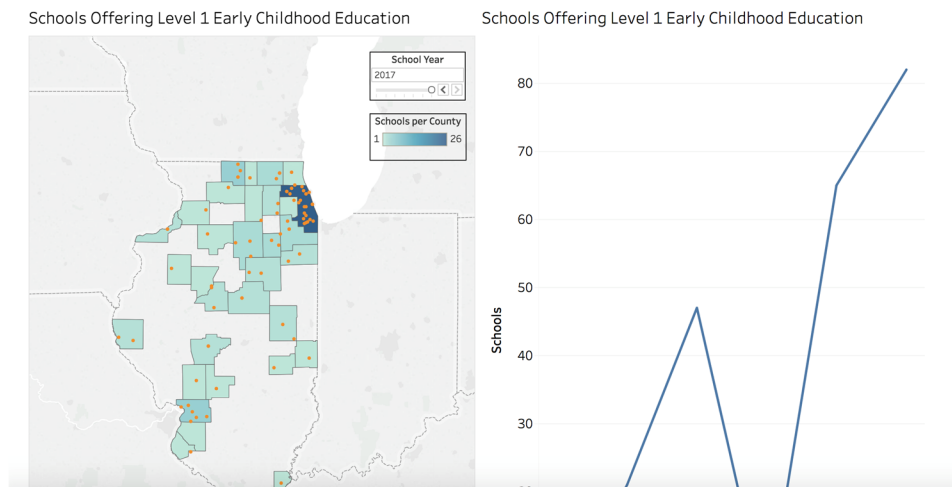
The Governor’s Cabinet on Children and Youth

Perhaps the best example of the success of the state’s data consolidation and visualization efforts can be found in the website for The Governor’s Cabinet on Children and Youth (<https://www2.illinois.gov/sites/children/Pages/default.aspx>). Established in 2016, this program is designed to measure the overall health of the children of Illinois and create “a cohesive statewide strategy to improve outcomes for children and youth.”



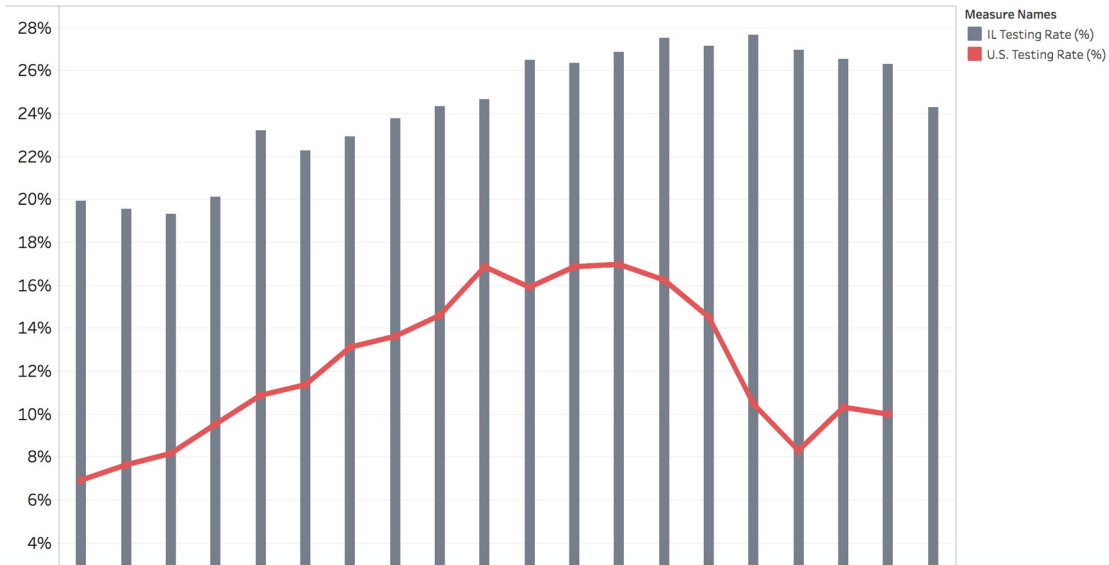
The program focuses on four categories: health, safety, self-sufficiency, and education. DoIT collects data on metrics within each of these categories to help officials assess the well being of children across Illinois. After the data is collected from various state agencies, it is tabulated and presented to the public on the ODP and the Cabinet's main website using data visualization tools.

Below is an example of data sets pertaining to schools offering early childhood education:



The data is interactive so that users can see trends over a set period of time.

Here is another example, this time detailing lead poisoning statistics among children:



In addition to making this information readily available to the public, the state is also using data insights to improve children’s lives. For example, the data has led to the establishment of a new pilot education credit program that is being tested among several hundred students statewide. The results from that program will be used to inform larger initiatives to help students receive school credit.

The data sharing goes beyond state lines, too. Since the ODP is an open portal, it allows information to be shared with other states and federal sites. For instance, information from the state of Illinois is also available through Data.gov, the U.S. government’s open data website.

More Data Leads to Better Services

The launch of the ODP is only the beginning. Although 20 agencies are already using the ODP and seeing great benefits from it, there are still a handful of other agencies across the state of Illinois that will ultimately house their data under the portal.

As that data is collected, analyzed, and shared, the state will accomplish several primary goals. First, it will continue to manage its data in a more cost-effective manner. Second, it will derive better insights from the data, making the raw information more actionable, leading to the creation of better services. Third, it will fulfill its goal of providing Illinois citizens with a powerful means of accessing whatever information they need, whenever they need it. Beyond these formal goals, DoIT hopes to see citizen groups and non-profits begin building apps to help citizens and to use the data to make recommendations to the state government as well.

With the ODP, the State of Illinois is at the forefront of the open data revolution. It is well on its way to providing its residents with data they can see, trust, and learn from.