Executive Order #57

Progress Report

7/31/16

I. PREFACE

Pursuant to Executive Order #57, the Open Data Council was created to establish and recommend standards and policies to the Department of Technology and Information (DTI) and other Executive Branch Agencies related to a statewide data strategy, open data and data sharing among state agencies.

The Council is required to provide a progress report by July 31, 2016 and a strategic plan for Statewide Integration of Open Data by September 30, 2016. This is the progress report to meet the executive order's requirement.

II. EXECUTIVE SUMMARY

The Open Data Council was formed in February 2016 pursuant to Executive Order # 57. The Council has worked to procure and implement the Delaware Open Data Portal which will provide capabilities for citizens, researchers, entrepreneurs and others to search, view, analyze, filter, combine, and visualize data that is proactively published by state agencies and other branches of government. Configuration of the Open Data Portal is 98% complete. Datasets have been identified for inclusion in the launch of the portal. Work to prepare the datasets for publishing in the portal is underway and is expected to be completed by the end of August. The Council recommends that a launch event be planned to occur in mid-September with the Governor, CIO, Secretary of State and members of the Open Data Council.

III. OPEN DATA COUNCIL

The Governor signed Executive Order (EO) #57 on January 27, 2016, which created the Open Data Council. The Executive Order specifically names DTI, Government Information Center (GIC), Health and Social Services (DHSS), Office of Management and Budget (OMB), Natural Resources and Environmental Control (DNREC), State (DOS), Services for Children, Youth and Their Families (Kids), Transportation (DelDOT), Education (DOE), and the Governor's Office.

After the EO signing, CIO James Collins requested designees from each Cabinet Secretary whose agency was named on the Council. CIO Collins designated Rhonda Lehman to serve as the Chair for the Council on his behalf. Dana Rohrbough of the Government Information Center serves as Co-Chair of the Council. The Council membership is shown below.

Rhonda Lehman, Chair	Department of Technology and Information
Dana Rohrbough, Co-Chair	Delaware Government Information Center
Jill Fredel	Department of Health and Social Services
Dean Stotler	Office of Management and Budget
C.R. McLeod	Department of State
Robert Zimmerman	Department of Natural Resources and Environmental Control
Steven Yeatman	Department of Services for Children, Youth and Their Families
Li Wen Lin	Department of Transportation
David Blowman	Department of Education
Meredith Tweedie	The Office of the Governor

The Council has met five times since January 2016. All meetings are open to the public and are publicized in the Public Meeting Calendar. The initial meeting was kicked off by the Governor and CIO Collins. Council members were presented with an overview of open data and the tasks of the Council.

During the second meeting, the Council conducted a video conference with the Chief Data Officer of Connecticut to learn from their notable success with Open Data. The Council asked questions and learned quite a bit from Connecticut. Here are some of the notable things learned from Connecticut:

1. There should be a designee from each agency that will approve the publishing of data for that organization
2. Obtain and publish metadata for each dataset
3. The state doesn't look at data the same way consumers want to see it
4. Implement automation to keep datasets current
5. 30% of the traffic to their open data portal site is from CT state employees

The Council has been interested in learning from other states and local governments on best practices with Open Data. The Council Chair and co-Chair have talked with Chief Data Officer of the State of New York, and data officials from Maryland. The Council reviewed Open Data portals in other states, to better inform Delaware's decisions.

Discussions have been held with the local Delaware tech community. Dana Rohrbough with the Government Information Center recently spoke to the Open Data Meetup hosted by the Open Data Delaware organization about the state's open data efforts. In addition, the Open Data Delaware group organized Delaware's first National Civic Day of Hacking on June 4, 2016 where 50 participants in 10 teams worked the full day on challenges and developed prototypes to help solve civic problems.

Open Data Delaware is a very active organization with 330 members who hold Open Data Meetups and Open Hack Nights events every month. The community is eager to interact with the Open Data portal. The Chair and co-Chair have solicited input from this community about the types of data they would like to see included in the portal. This community is most interested in crime data, and at the local government they are interested in city parking data.

Ms. Rohrbough also spoke to the Delaware Coalition for Open Government to introduce the state's Open Data effort to their community as well.

We will continue to engage the civic tech community so that we can continually add desired and valuable data to the Open Data Portal.

The Open Data Council will continue to invite other state agencies and branches of government to participate in the Council and to submit datasets for publishing in the Open Data Portal.

The Government Information Center built a website for the Open Data Council, opendatacouncil.delaware.gov, which launched last month. The Council's website invites users to make suggestions for datasets. GIC will monitor the contact form on this website and will track, respond, and forward on suggestions to the appropriate agencies. There is also a Twitter account, @DataDelawareGov, https://twitter.com/DataDelawareGov, that will highlight and publish updates about Open Data in state government.

Below is a screenshot of the Open Data Council website:

IV. OPEN DATA PORTAL

In April 2016, DTI and GIC procured the Open Data Portal software from Socrata, a leading open data platform company. GIC is funding the base cost and launch for the Open Data Portal for the State which will give Delaware 150 licenses for datasets. Beyond 150 datasets, GIC and DTI will discuss options for funding with agencies.

Socrata assigned a project manager to work with Delaware on the configuration of the Delaware Open Data Portal. The configuration is 98% complete. Below is a screenshot of the home page of the portal:
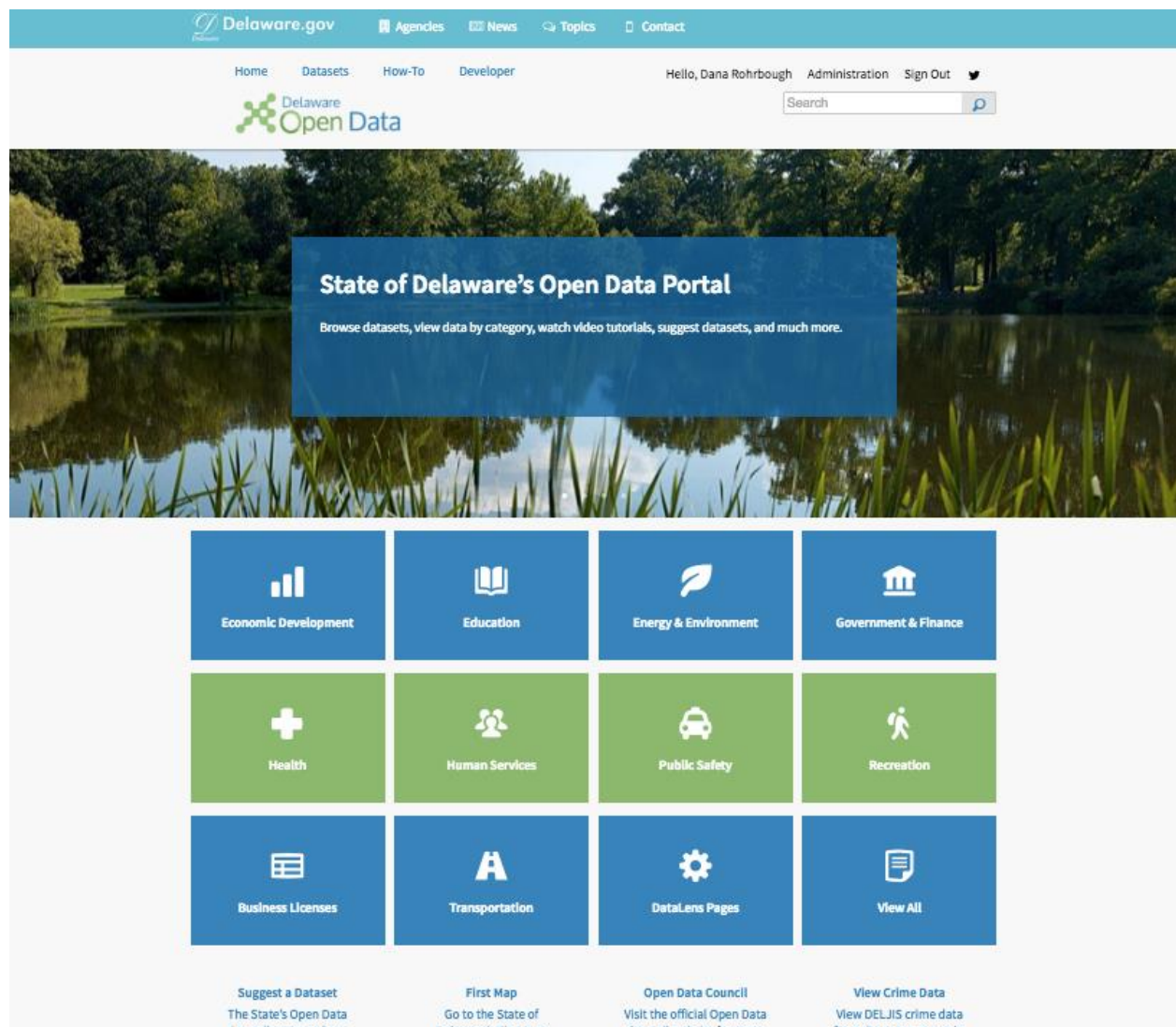
From the home page of the Open Data portal, there are tiles with categories of data that users can easily browse on the following topics:

- Economic Development
- Education
- Energy & Environment
- Government & Finance
- Health
- Human Services
- Public Safety
- Recreation
- Business Licensing
- Transportation

The homepage also has four featured articles where the state can choose to highlight specific datasets or link to related sites, such as FirstMap. We are also encouraging users to tell us what they would like to see in the portal, through our "Suggest a Dataset" link.

Users will have the ability to search for datasets by keywords or category. Any dataset can be viewed in a format similar to an Excel spreadsheet. Data can be sorted, filtered, summarized, and visualized in a number of different types of charts or maps.

Examples of the visualization chart types available
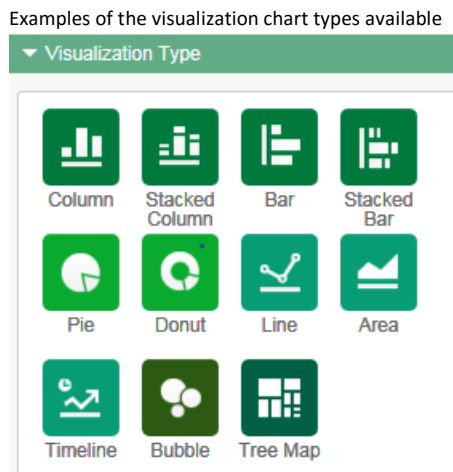
The following image shows an example of a stacked bar chart that was developed against the dataset for Professional Licensees.
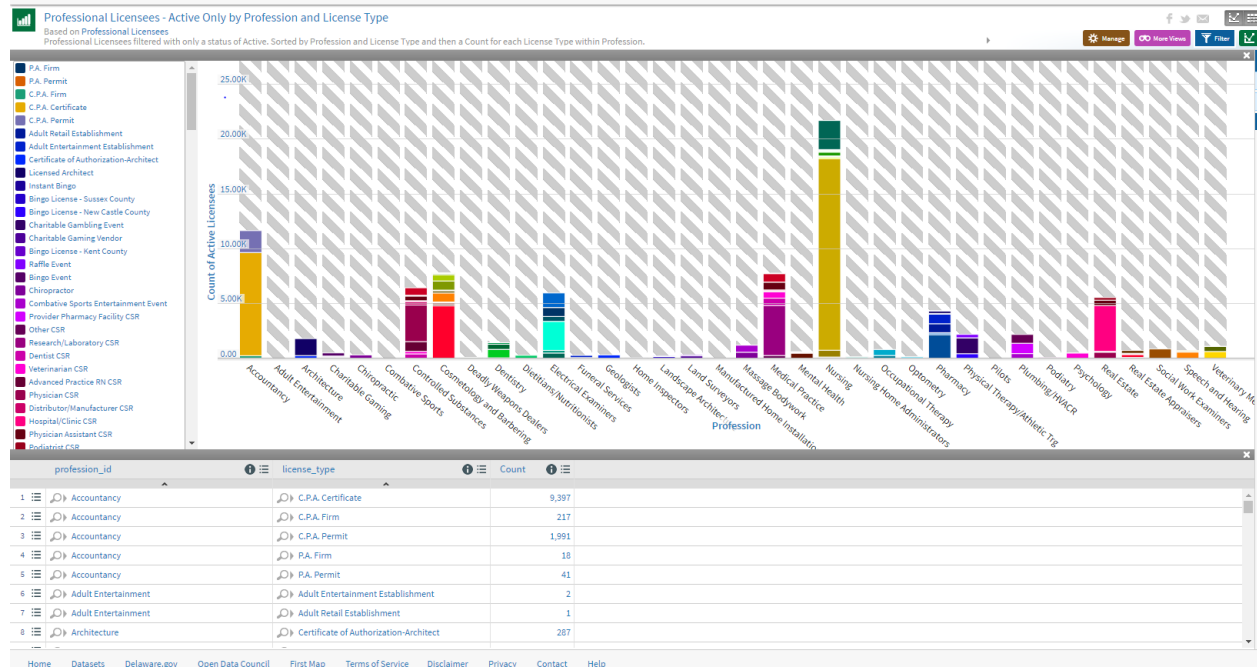
Just as the above chart uses the Professional Licensee dataset, the below chart does too – this is a filtered view of the most frequent professional license categories.
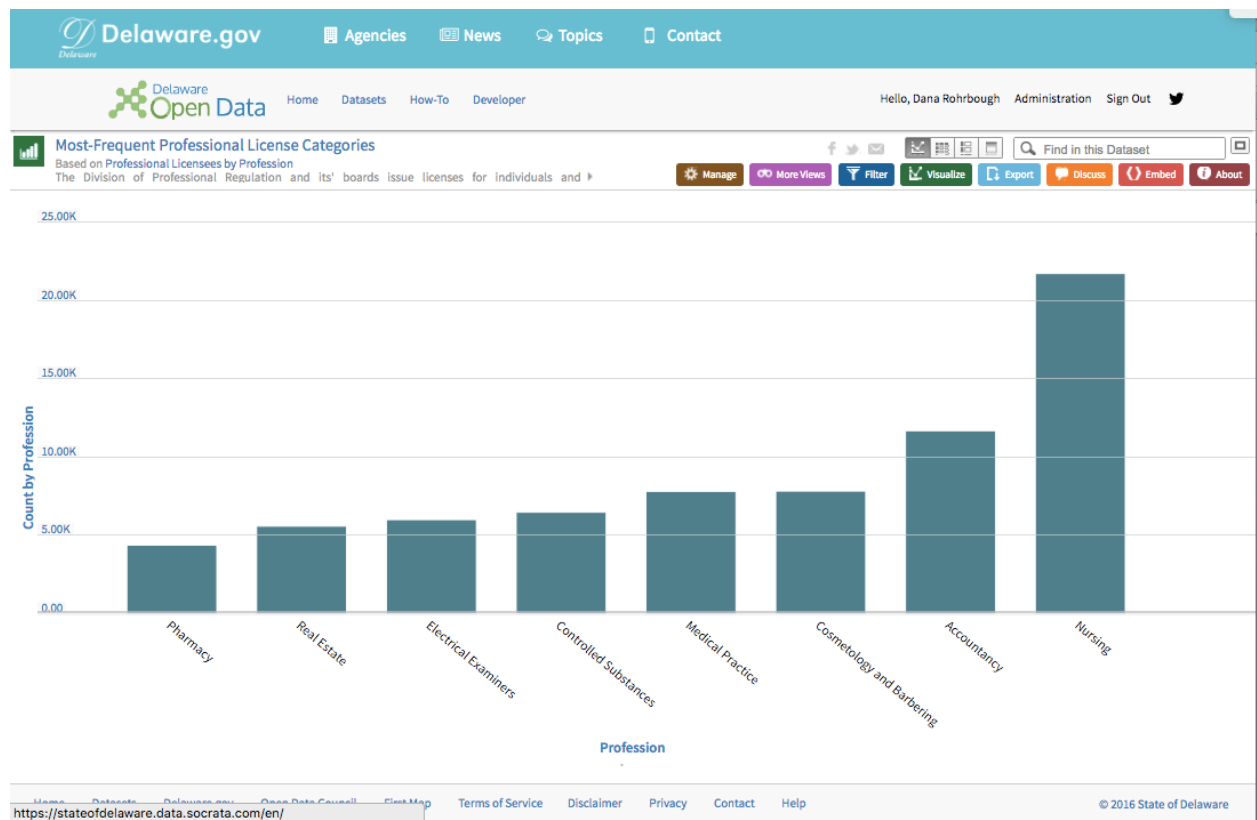
The map below plots the locations of child care providers in the state. This could be filtered to show only child care providers with a specific STARS level and within a geographic area. Locations of child care providers are currently listed online in address form, but today there is not an interactive map. When the Open Data Portal is launched, users will benefit from having this view of the data showing child care locations.
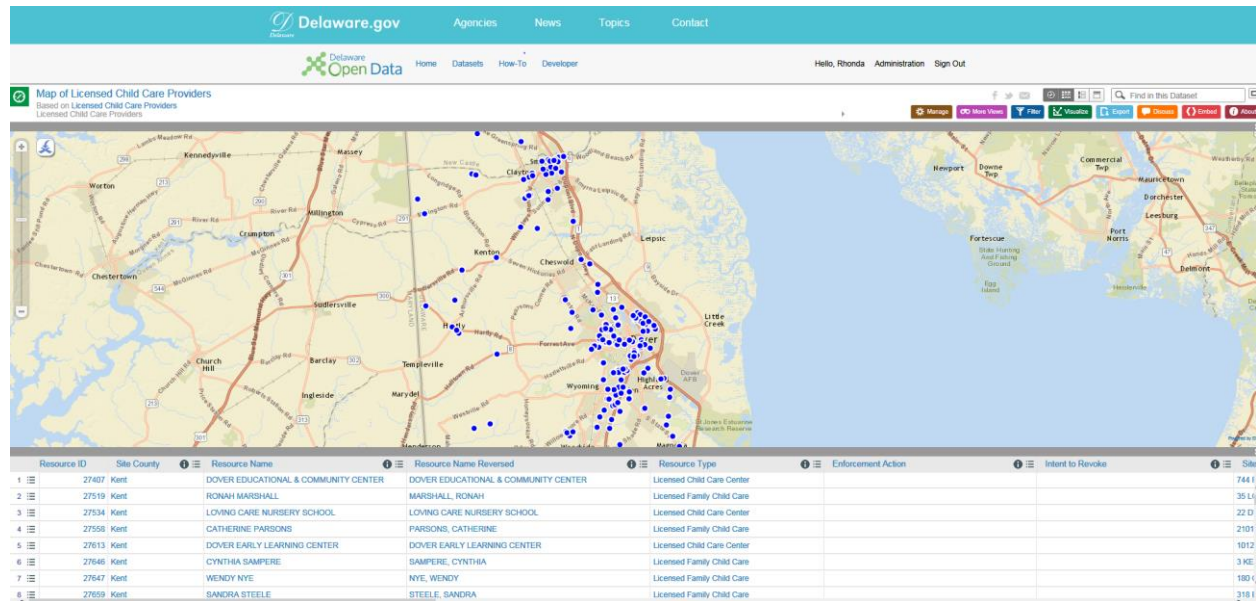
All data in the Open Data Portal is in machine-readable format and will be exportable or downloadable into several formats (.csv, .xml, etc.) that will allow the user to do further analysis of the data. Data is also accessible to application developers through a built-in application programming interface (API). Entrepreneurs and others in the private sector can use APIs to build new websites, aps, or other products utilizing portal data. There is a rich set of information and documentation to make it very simple for developers to understand how to utilize the data within the Open Data Portal.

FirstMap, http://opendata.firstmap.delaware.gov/, is an online Geographic Information System (GIS) using ESRI cloud software that publishes location based data in map format. FirstMap and the Open Data Portal will work together hand-in-hand. Map layers published in FirstMap will also be available in the Open Data Portal. End users of the Open Data Portal can display data on map layers that have been published from FirstMap. Users will see a centralized search in the Open Data Portal for all FirstMap map layers and datasets entered directly in the portal. Some examples of map layers that will be incorporated from FirstMap include legislative boundaries, municipal boundaries, bike trails, and Delaware nature preserves.

Below is an example of senatorial district boundaries. Other data can be overlaid on this map to show that data divided up by the senatorial district boundaries in a visual format.
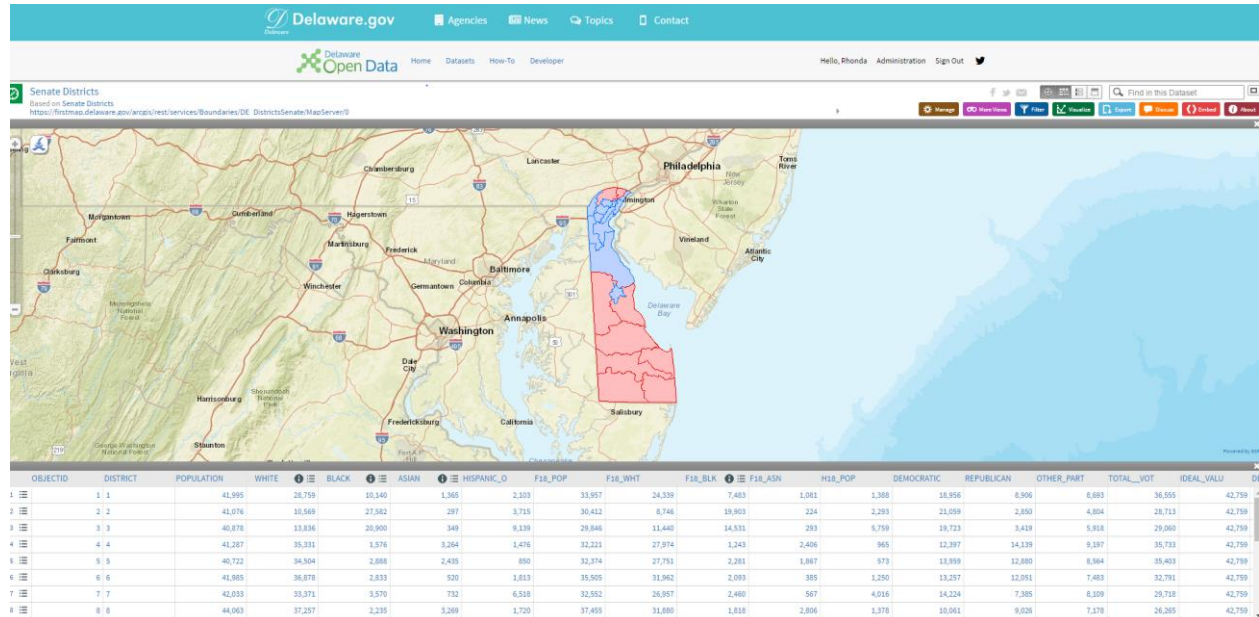
The portal has the ability to mashup or combine multiple datasets for new analyses to be performed. Some planned examples of data that could be combined are drug treatment admissions and controlled substance licensees. This could identify hot spots that should be targeted.

Further, the Open Data portal can show historical trends. Below is a chart that shows state spending on state contracts for goods and services combined over the last three years.
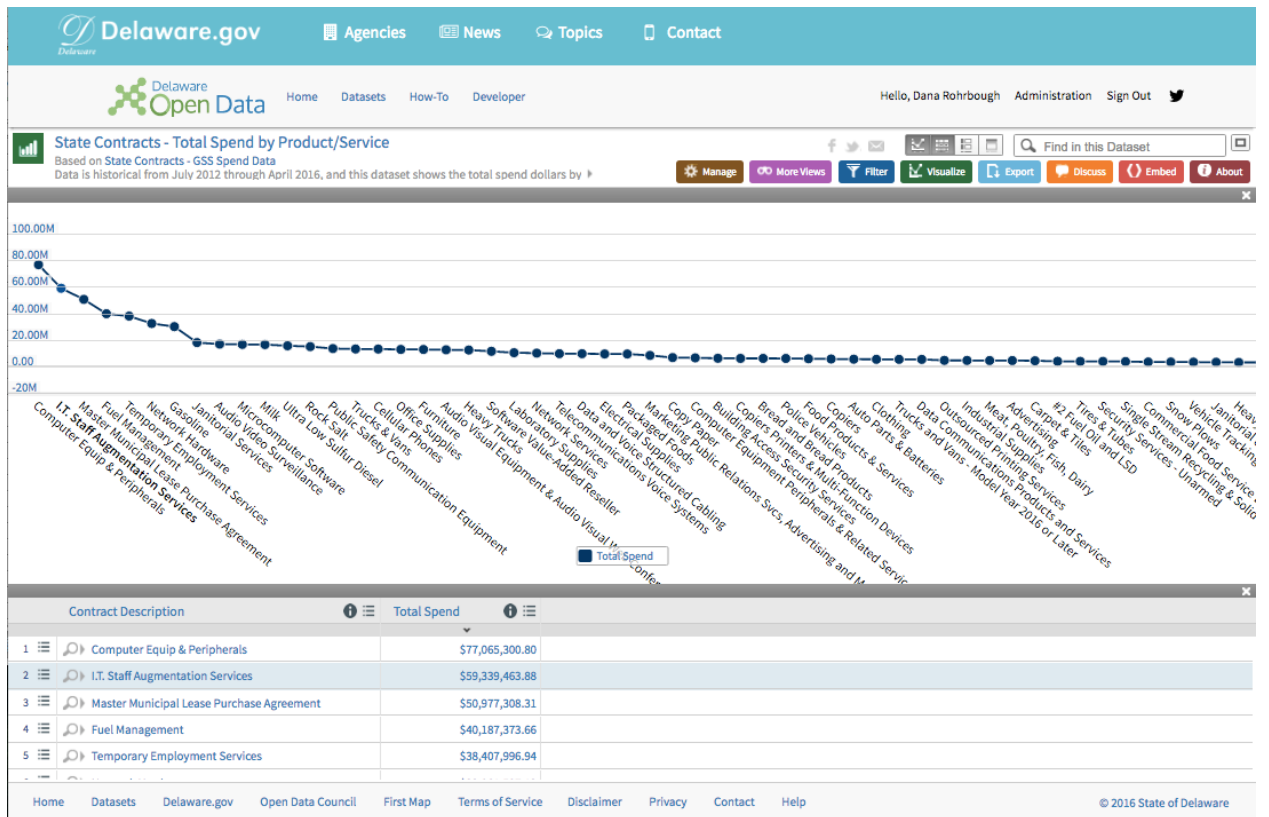
V. DATA

Per the Executive Order, council members were required to submit a list of datasets to be included in the Open Data Portal. Fifty six datasets and forty eight maps were submitted for publishing in the portal. The full list was then prioritized by council members based upon agency priority, readiness to be published, and frequency of requests for this data. Thirty three datasets were selected to be made available with the launch of the Open Data Portal. Other agencies that are not represented on the Open Data Council have also submitted datasets to be included; such as DELJIS, Criminal Justice Council Statistical Analysis Center, the Department of Finance, and the Department of Agriculture.

Description of data	Dept./Agency	Proposed Category	Agency Priority	Included in Launch?
Toxics Release Inventory	DNREC	Energy & Environment	High	Yes
Licensed Child Care Providers	DSCYF	Human Services	High	Yes
State Contracts/Usage	OMB	Government & Finance	High	Yes
Office of Supplier Diversity Directory	OMB	Economic Development	High	Yes
Small Business Focus Directory	OMB	Economic Development	High	Yes
Births	DHSS	Health	High	Yes
Deaths	DHSS	Health	High	Yes
Restaurant Inspections	DHSS	Health	High	Yes
Permitted Septic Systems	DNREC	Energy & Environment	High	Yes
Septic System Inspections	DNREC	Energy & Environment	High	Yes
Well Permits	DNREC	Energy & Environment	High	Yes
Recent Environmental Releases	DNREC	Energy & Environment	High	Yes
DNREC Environmental Violations	DNREC	Energy & Environment	High	Yes
Air Quality Monitoring Network	DNREC	Energy & Environment	High	Yes
Ozone Exceedances	DNREC	Energy & Environment	High	Yes
Cancer incidence and mortality (age adjusted rates by census tract)	DHSS	Health	High	Yes
Nursing Home Inspections	DHSS	Human Services	High	Yes
Medicaid Enrollment	DHSS	Human Services	High	Yes
Crime Map	DELJIS	Public Safety	High	Yes
Drug Treatment Admissions	DHSS	Human Services	High	Yes
Fisheries Catch Data	DNREC	Recreation	High	Yes
Population Data of clients served	DSCYF	Human Services	High	No
School Directory	DOE	Education	High	Yes
Student Demographic	DOE	Education	High	Yes
Student Performance	DOE	Education	High	Yes
Student Preparation	DOE	Education	High	Yes
Staff Demographic	DOE	Education	High	No

Description of data	Dept./Agency	Proposed Category	Agency Priority	Included in Launch?
Storm Water Notices of Intent	DNREC	Energy & Environment	Medium	Yes
Library Circulation (Books and E-books)	DOS	Recreation	Medium	Yes
Library Card Holders	DOS	Recreation	Medium	Yes
PC Use by Library	DOS	Recreation	Medium	Yes
Professional Licenses	DOS	Licenses	Medium	Yes
Salary/Earnings of State Employees	OMB	Transparency	Medium	No
Baby Names	DHSS	Human Services	Medium	Yes
Drinking Water (Drinking Water Watch)	DHSS	Health	Medium	No
Recreational Water Quality Monitoring (Also part of EPA WQX)	DNREC	Energy & Environment	Medium	Yes
Regulated Facilities	DNREC	Energy & Environment	Medium	No
Pollen Count (Also part of EPA ICIS AIR)	DNREC	Energy & Environment	Medium	No
Number of Park Visitors	DNREC	Energy & Environment	Medium	No
Deer/Wildlife Harvest	DNREC	Energy & Environment	Medium	No
Certified Lead Abatement Contractors	DHSS	Business & Economic Development	Low	No
Certified Renovation, Repair and Paint Contractors	DHSS	Business & Economic Development	Low	No
X-ray machine facilities by modality	DHSS	Health	Low	No
Division of Family Services Intake and Investigations Data	DSCYF	Human Services	Low	Yes
Animal Shelter Inspection Data	DHSS	Transparency	Low	No
Human exposure to rabies reports	DHSS	Health	Low	No
Animal control and cruelty reports (# of reports only)	DHSS	Transparency	Low	No
State Spay and Neuter Program utilization	DHSS	Transparency	Low	No
Dept. of Agriculture Nursery Licenses	DDA	Business & Economic Development	Low	No
DWR Licensees (Wastewater and Disposal)	DNREC	Energy & Environment	Low	No
DNREC FOIA Requests	DNREC	Transparency	Low	No
Boiler Tanks (FOIA Search)	DNREC	Public Safety	Low	No
Board of Pardons	DOS	Public Safety	Low	No
Budget	OMB	Government & Finance	Low	No
Real Estate Inventory/ Leased Space	OMB	Government & Finance	Low	No
Asbestos	OMB	Business & Economic Development	Low	No

FirstMap Data Layers			
Description of map layer	**Agency**	**Proposed Category**	**Included in Launch?**
Properties under the Delaware Agricultural Lands Preservation Foundation's farmland preservation program (3 layers)	DDA	Energy & Environment	Yes
Groundwater Monitoring Wells	DDA	Energy & Environment	Yes
ADA Inventory (21 layers)	DOT	Transportation	Yes
Aeronautics (4 layers)	DOT	Transportation	Yes
Bike (4 layers)	DOT	Recreation	Yes
Bridges (2 layers)	DOT	Transportation	Yes
Byways (1 layer)	DOT	Recreation	Yes
Centerline (1 layer)	DOT	Transportation	Yes
Evacuation Routes (1 layer)	DOT	Public Safety	Yes
Freight Corridors (6 layers)	DOT	Transportation	Yes
Functional Classification (1 layer)	DOT	Transportation	Yes
Intersections (1 layer)	DOT	Transportation	Yes
MPOs (1 layer)	DOT	Transportation	Yes
NHS (1 layer)	DOT	Transportation	Yes
Paving (16 layers)	DOT	Transportation	Yes
Private or Proposed Streets (1 layer)	DOT	Transportation	Yes
Railroad (2 layers)	DOT	Transportation	Yes
Road Inventory Maintenance Responsibility (2 layers)	DOT	Transportation	Yes
Road Ratings 2008 (1 layer)	DOT	Transportation	Yes
Road Ratings 2014 (1 layer)	DOT	Transportation	Yes
Roadside Obstructions (10 layers)	DOT	Transportation	Yes
Roadabouts Traffic Circles (1 layer)	DOT	Transportation	Yes
Routes (1 layer)	DOT	Transportation	Yes
Sidewalks (1 layer)	DOT	Transportation	Yes
Snow (4 layers)	DOT	Transportation	Yes
Speed Limits (1 layer)	DOT	Transportation	Yes
State Maintained Roads (1 layer)	DOT	Transportation	Yes
TID Areas (1 layer)	DOT	Transportation	Yes
Traffic Counts 2005-2014 (1 layer)	DOT	Transportation	Yes
Traffic Counts 2015 (1 layer)	DOT	Transportation	Yes
Trails and Pathways (1 layer)	DOT	Recreation	Yes
Transit (5 layers)	DOT	Transportation	Yes
Sea Level Rise Scenarios (4 layers)	DNREC	Energy & Environment	Yes
Coastal Building Line (4 layers)	DNREC	Energy & Environment	Yes
Tax Ditches (4 layers)	DNREC	Energy & Environment	Yes
Shellfish Advisory Areas (1 layer)	DNREC	Energy & Environment	Yes
Lands Dedicated to Outdoor Recreation (1 layer)	DNREC	Recreation	Yes

Description of map layer	Agency	Proposed Category	Included in Launch?
Open Space Lands (1 layer)	DNREC	Energy & Environment	Yes
Land and Water Conservation Trust Fund Lands (1 layer)	DNREC	Recreation	Yes
Delaware Natural Areas (1 layer)	DNREC	Recreation	Yes
Delaware Nature Preserves (1 layer)	DNREC	Recreation	Yes
Delaware Public Protected Lands (1 layer)	DNREC	Recreation	Yes
Delaware Outdoor Recreation Inventory (1 layer)	DNREC	Recreation	Yes
Delaware Park Facilities (1 layer)	DNREC	Recreation	Yes
Wellhead Protection Areas (1 layer)	DNREC	Energy & Environment	Yes
Groundwater Management Zones (3 layers)	DNREC	Energy & Environment	Yes
Adopt-a-Wetland Locations (1 layer)	DNREC	Energy & Environment	Yes
Wetlands (2 layers)	DNREC	Energy & Environment	Yes

Work is required to prepare each dataset for inclusion in the Open Data Portal. Metadata and a data dictionary must be prepared for each dataset to ensure that the consumer clearly understands what the data represents. This is necessary for the user to understand the data, helps avoid misinterpretation, and reduces questions regarding the data. Preparing this information for publication is a large task for agencies, but is necessary to get all datasets ready for the launch of the Open Data Portal.

In addition, after learning from other states, the Council prioritized keeping data current and fresh in the Open Data Portal. Datasets that are coming from state databases have been selected for automated updates. DTI is configuring automated data connections between the Portal and various databases, and this will prove to be instrumental to keeping data current. This configuration requires more time spent up front, but will pay great dividends once the Portal is launched.

VI. LAUNCH

Work is ongoing to get datasets ready in order to launch the Portal. Once datasets are ready, the Council will organize a launch event with the Governor, CIO, and Secretary of State to officially announce the Open Data Portal to the public. The target public launch date is mid-September.

In order to prepare for the launch, the Council and the agencies must complete the following:

- Agencies need to send all high priority datasets to the Chair.
- Agencies must create and compile data dictionaries and metadata for each dataset.
- Agencies then must give the final sign off for data publishing, to approve the data for publication in the Open Data portal.

Cooperation is needed on these outstanding items to get the portal launched to the public.

VII. CONCLUSION

The Open Data Council has made great progress in cooperation with state, community and private organizations. The Council has focused on getting the right information included in the portal in the most accurate and sustainable manner. This effort requires significant effort on the front end but has proven to increase transparency and reduce information requests in other government organizations. In addition to launching the portal this fall, the Council is also working to establish open data policies and is planning to begin facilitating agency data sharing initiatives as well.