City of Seattle

OPEN DATA PROGRAM

2016 ANNUAL REPORT

Seattle
Information Technology

EXECUTIVE SUMMARY

The City of Seattle's Open Data Program makes the data generated by the City of Seattle openly available to the public for the purpose of increasing the quality of life for our residents; increasing transparency, accountability and comparability; promoting economic development and research; and improving internal performance management.

Seattle is home to an engaged, innovative public that strives to make the city a better place to live. As a City, we strive to make our data open to the public, enabling those outside of government to find solutions to our most pressing civic challenges.

Since the launch of the City's open data program in 2010, more than 500 datasets have been made open, including several that are used by private companies, journalists, and community members. Open data also powers tools hosted on the City's website such as Open Budget, Performance Seattle, the Police Department's Neighborhood Crime Map, and the Department of Transportation's Capital Projects Explorer.

In February 2016, Mayor Murray signed an Executive Order directing all City data to be "open by preference," meaning City departments should make their data accessible to the public after screening for privacy, security, and quality considerations. This policy is the result of a collaboration between the City of Seattle, the University of Washington, and the Sunlight Foundation through Bloomberg Philanthropies' national What Works Cities initiative.

In June 2016, the Seattle Open Data Program presented Data Camp, three days of in-depth training for department Open Data Champions. Open Data Champions are staff members from each participating City department who are tasked with stewarding the identification and release of open datasets from their respective departments. The Champions, as well as guests from the State of Washington, King County, Bellevue, Tacoma and the University of Washington, heard talks and panel discussions with open data experts and technology community leaders, and participated in group exercises and workshops that helped provide the new Open Data Champions with the tools and knowledge they needed to successfully coordinate the release of new high value open datasets.

This year, the City's Open Data Team and our network of Open Data Champions designed new processes, trainings, and tools that bring the Open Data Policy to life. This report includes the elements mandated by the Open Data Policy as well as an overview of the major activities and accomplishments of 2016.

"The City of Seattle strives to make the data it generates and collects openly available to the public for the purposes of increasing the quality of life for our residents; increasing transparency, accountability and comparability; promoting economic development and research; and improving internal performance management." – Open Data Policy

Program goals

The City of Seattle is committed to expanding both the data it makes available to the public and tools for understanding this data, and the Seattle Open Data Program (Program) has been created to realize these commitments. The Open Data Policy defines the principles governing the Program and describes expectations for department participation and governance. The goals of the Program are:

A. Improve public understanding of City operations and other information concerning their communities.
B. Generate economic opportunity for individuals and companies that benefit from the knowledge created by Open Data.
C. Empower City employees to be more effective, better coordinated internally, and identify opportunities to better serve the public.
D. Encourage the development of innovative technology solutions that improve quality of life.

In 2016, the Program achieved the following results.

Improve public understanding of City operations: When will streets and sidewalks be closed?

In December 2016, the Seattle Department of Transportation published datasets indicating which streets, sidewalks, intersections, parking lanes, and bike lanes may be closed due to permitted construction, as well as which streets are closed due to storm events. This information is displayed directly on maps within our open data platform and available to any external mapping platforms in real-time that might wish to provide their users with more accurate data. For an example, see our map of permitted street closures as well as an updated version of the community-developed solution Access Map (an online tool that enables safe, accessible trip planning on pedestrian ways for people with limited mobility), which also now displays this information.

Generate economic opportunity: How do internet speeds compare?

In February 2016, Seattle IT launched a tool created in partnership with New America's Open Technology Institute and Open Seattle to test broadband internet connection upload and download speeds. The Broadband Speed Test and Map display insights by census block, and open data users can also view anonymous speed test data directly. While the data is only as complete as the number of tests taken, it allows users to see how their experience stacks up against their neighbors. Often, speeds experienced are slower because of the level of service users pay for and the number of devices they have connected at once, as well as how much bandwidth their activities require. This also provides a window into which providers operate where, allowing everyone to see where there might be opportunities to expand consumer choice.

Empower City employees: Which community groups work on digital equity?

Seattle IT's Community Technology team works closely with organizations across the City to bridge the digital divide, including through grants made via the Technology Matching Fund. However, many other City departments also want to know which community organizations are working with underserved communities. By publishing a dataset of all Technology Matching Fund grant recipients since 1998, the Community Technology team has made it easy for their colleagues to see for themselves who is achieving our digital equity goals in which parts of our community.

Encouraging innovation: exploring Seattle Parks

One of the most visible ways the City benefits our communities is through our parks and recreation centers. Yet finding information about what's happening inside the City's parks isn't always easy. This year, Seattle Parks and Recreation worked with the Open Data and Civic Technology programs to encourage the development of innovative technology solutions, based on open data, that improve quality of life for Seattle residents and visitors.

Seattle Parks and Recreation is responsible for publishing 62 of the 143 new datasets that came online this year, which have been downloaded more than 9,700 times. These include maps and listings of all parks features, such as fountains, picnic sites, and tennis courts; use data from 26 community centers; and registration data for classes and activities held at parks and recreation centers.

All of these datasets were published in advance of a hackathon in March 2016 that was supported by Parks and Recreation and Seattle IT, and was organized and sponsored by AT&T Mobile. At the hackathon, 183 participants formed 26 teams to develop innovative technology solutions. One solution that grew from the hackathon was the Seattle Trails app, built for Apple iOS devices. Seattle Trails provides a more accurate, comprehensive map of trails locations in Seattle Parks and allows users to report issues they encounter on the trail, was released by the nonprofit Seattle Trails Alliance in June and is available for download in the Apple App Store.

Seattle Parks and Recreation's work this year is a case study for how open data can stimulate innovation in the community that improves the public's experience of the services the City provides.

OPERATIONAL GOALS

In addition to our broad community impacts, the Open Data Program established and achieved five operational goals for 2016.

Goal	Result
At least 70 percent of City departments name an open data champion	94 percent (31 departments) **134% of goal**
Publish at least 50 new datasets to data.seattle.gov	146 new datasets have been published **292% of goal**
Publish a playbook with step-by-step guidance for departments	The Open Data Playbook was published in September 2016 **Complete**
Raise awareness of open data and its benefits throughout the City	The Open Data Program has been recognized by local and national media, and accomplishments of the program have been promoted via Twitter, Facebook, and the TechTalk blog **Complete**

Goal	Result
Increase engagement with users of open data in the community	The Civic Technology Advocate and Open Data Manager have spoken at several events, routinely meet with members of Open Seattle, and hosted a civic design event in December featuring new datasets to help deliver information about winter weather emergencies. **Complete**

DATASETS CURRENTLY AVAILABLE

Data.seattle.gov provides public access to all open data datasets currently published by the City.

The program has released two listings of the current open data:

- All datasets published before January 1, 2017
- All data published in 2016

In 2016, the Open Data Program published 146 new datasets – 38 tabular datasets and 108 maps. This represents a 256% increase over the identical measure in 2015.
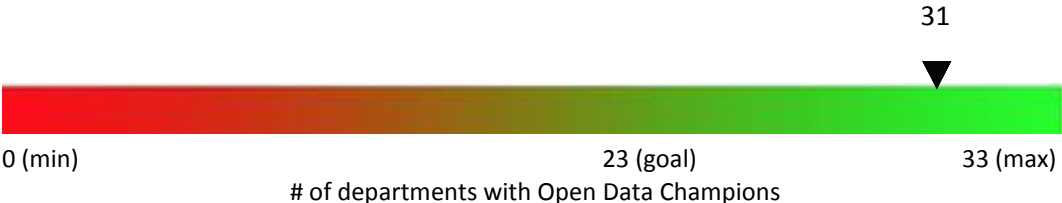
	Tabular Datasets	Maps	Total
2016	38	108	146
2015	32	25	57

DEPARTMENTAL COMPLIANCE WITH THE OPEN DATA POLICY

Three 2016 goals were established for City department compliance with the new policy. These goals exist to provide accountability for departments as well as to help the Open Data Team identify areas where we should target resources and additional program support.
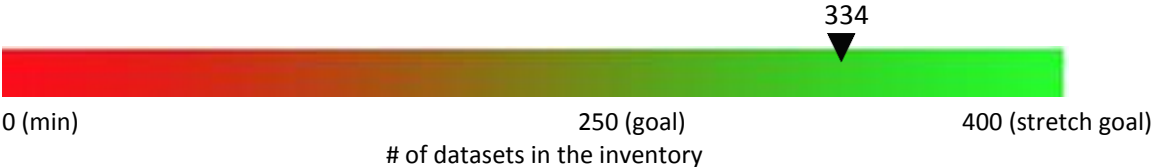
1. **Name an Open Data Champion**

   The Open Data Policy requires department to name an Open Data Champion to lead the department's management and publication of open data. As of December 31, 2016, 31 of 33 identified departments had complied, with the remaining two planning to names Open Data Champions early in 2017.

   31
   ▼

0 (min)	23 (goal)	33 (max)

   # of departments with Open Data Champions

2. **Contribute to the Open Dataset Inventory**

   Each department was asked to contribute 10-20 datasets to the Citywide dataset inventory by September 1, with an overall goal of reaching between 250 and 400 datasets in the inventory. Thirteen (13) departments met the deadline, with 21 total participating by December 31, for a total of 334 datasets listed. This inventory acts as a list of datasets that departments plan to publish in the future; however not all datasets may get published and this list is mostly used for planning and tracking purposes.

   334
   ▼

0 (min)	250 (goal)	400 (stretch goal)

   # of datasets in the inventory

3. **Publish a dataset to Data.Seattle.Gov**

   The Open Data Program also established the goal that by the end of 2016 each department would publish at least one new dataset to Data.Seattle.Gov using the newly established dataset submission process which includes formalized privacy, security and quality reviews. Because the process was not fully developed by mid-Fall, the goal was modified to require the initiation of the submission process for at least one dataset by completing the Open Dataset Submission Form by December 1, 2016.

   ▼

0 (min)	33 (goal)

   # of datasets in the inventory

Open Data Program Department Participation 2016 — Department	Code	Attended April Roadshow	Open Data Champion Named	Contributed to the Dataset Inventory	Published or Submitted a Dataset by Dec 1
Arts and Culture, Office of	ART	✓	✓		
Budget Office, City	CBO	✓	✓		
City Attorney, Seattle/Law	LAW	✓	✓		
City Auditor	SAO	✓	✓		✓
City Light	SCL	✓			
Civil Rights, Seattle Office for	OCR	✓	✓		
Construction and Inspections	SCI	✓	✓	✓	✓
Economic Development	OED	✓	✓	✓	✓
Education & Early Learning	DOE	✓	✓	✓	
Emergency Management	OEM	✓	✓	✓	✓
Ethics and Elections	EEC	✓	✓		
Finance & Administrative Services	FAS	✓	✓	✓	✓
Fire Department, Seattle	SFD	✓	✓	✓	✓
Hearing Examiner	HXM	✓	✓		
Housing, Office of	OFH	✓	✓	✓	✓
Human Resources	SHR	✓	✓		
Human Services	HSD	✓	✓	✓	✓
Immigrant and Refugee Affairs, Office of	IMR	✓	✓		
Information Technology, Seattle	ITD	✓	✓	✓	✓
Intergovernmental Relations, Office of	OIR				
Labor Standards, Office of	OLS	✓	✓	✓	
Legislative/Clerk, Office of the City	LEG	✓	✓	✓	
Municipal Court, Seattle	SMC	✓	✓		✓
Neighborhoods	DON	✓	✓	✓	✓
Parks and Recreation, Seattle	PKS	✓	✓	✓	✓
Planning and Community Development, Office of	PCD	✓	✓	✓	✓
Police Department, Seattle	SPD	✓	✓	✓	✓
Public Library, Seattle	SPL	✓	✓	✓	✓
Public Utilities, Seattle	SPU	✓	✓	✓	✓
Retirement Office	RET		✓	✓	
Seattle Center	CEN	✓	✓	✓	✓
Sustainability and Environment, Office of	OSE	✓	✓	✓	✓
Transportation, Seattle Department of	DOT	✓	✓	✓	✓

Overall, 17 of the 33 departments met all goals for 2016. See the table below for the breakdown of department participation in the Open Data Program.

Note: Both the Office of Intergovernmental Relations (OIR) and Seattle City Light named new Open Data Champions in early January 2017, and both departments are fully engaged in implementing the Open Data Policy.

TIMELINE OF MAJOR ACTIVITIES

JANUARY
- The Open Data Policy is finalized through consultations with the Mayor's Office, the Sunlight Foundation, and the University of Washington.

FEBRUARY
- Mayor Ed Murray signs Executive Order 2016-1, directing all departments to comply with the new policy. Five members of the public who have built tools using existing open data, representing startups, researchers, students, and nonprofits, present at a public signing event hosted by Impact Hub Seattle.
  Read more at http://www.govtech.com/data/Seattle-Data-Open-by-Preference.html and www.geekwire.com/2016/seattle-mayor-signs-new-open-data-policy-makes-city-information-accessible/.
- Seattle IT launches the Broadband Speed Test which allows Seattle residents to test the speed of their Internet connection. Developed in partnership with New America's Open Technology Institute and Open Seattle, the test measures the speed Internet customers are experiencing. The data collected is published to data.seattle.gov with the goal of helping the City and others who are interested in digital equity to assess the state of broadband access in Seattle.

MARCH
- Staff of the Mayor's Office and Seattle IT begin recruiting Open Data Champions.
- The Open Data Team creates http://seattle.gov/opendata to communicate about the policy and program with City staff and the public.

APRIL
- Seattle IT hosts a "road show" with four sessions for department heads or their designees to understand the Open Data Policy, its goals, and the role of the Open Data Champion. Twenty-nine (29) departments attend.

MAY
- Seattle IT hosts first "Breakfast of Champions" for new Open Data Champions to meet and familiarize themselves with their new responsibility.

JUNE
- Seattle IT organizes "Data Camp," an internal training conference for department Open Data Champions. Staff from State of Washington, King County, Bellevue, and Tacoma attend, as well as researchers from the University of Washington. Ten (10) outside experts and thirteen (13)

City staff with experience in open data present on a full range of subjects related to open data and its uses. Videos of the first two day's sessions are recorded by the Seattle Channel and posted to http://seattle.gov/opendata.

- Seattle IT creates a listserv and SharePoint site for Open Data Champions.

JULY
- Open Data Champions begin working on dataset inventory.

AUGUST
- A subgroup of Open Data Champions and the Open Data Team begins work on a Racial Equity Toolkit for the Open Data Program.
- The Open Data Program Playbook is published.
  Read more at http://statescoop.com/seattle-builds-playbook-to-guide-open-data-efforts.

SEPTEMBER
- First draft of the dataset inventory is completed, with 316 total datasets.
- Incoming Open Data Program Manager David Doyle joins the Open Data Team.
  Read more at http://techtalk.seattle.gov/2016/09/07/david-doyle-is-the-citys-new-open-data-program-manager/.

OCTOBER
- The Open Data Team relaunches its social media presence on Facebook (https://www.facebook.com/Opendata.Seattle) and Twitter (@seattleopendata).

NOVEMBER
- The Open Data Program's Racial Equity Toolkit is completed and submitted to Seattle IT leadership.
- Final push for datasets for the inventory and Open Dataset Submission Forms for new datasets results in the participation of 5 more departments.

DECEMBER
- The Open Data team begins work on producing the program's first annual report and annual plan, to be released in Q1 2017.
- Staff work with the Department of Transportation to publish 21 new datasets prior to a community design workshop around snow and other storm emergencies.

COMMUNITY OUTREACH

PRESENTATIONS

Members of the Open Data and Civic Technology programs directly engaged with the following community organizations in 2016:

CODE FELLOWS
Code Fellows is a coding academy based in Seattle.

ADA DEVELOPERS ACADEMY
Ada Developers Academy is a tuition-free code academy for women. The Open Data Program also engaged with the Academy in fall 2016 to develop an internship opportunity for 2017. The Ada Academy intern begins work with the Open Data Program in February 2017.

GENERAL ASSEMBLY
General Assembly provides training for lifelong learning and success in technology and data-related fields.

SEATTLE DATA FOR GOOD MEETUP
Seattle Data for Good is a community group socially-conscious data scientists, architects, analysts, visualizers, and students who are committed to solving some of the most pressing problems of our community, nation, and world.

PHILANTHROPY FOR ACTIVE CIVIC ENGAGEMENT (PACE)
PACE is a membership network of foundations and funders that invest in civic engagement and democracy. **WEBINAR ON WHAT WORKS CITIES OPEN DATA WORK**

Additionally, Tyler Running Deer (Director of the City of Seattle Performance Team) participated in a webinar in October 2016 on What Works Cities (WWC) open data work and provided an overview of Seattle's work since the main WWC engagement had completed.

OPEN DATA EVENTS AND HACKATHONS

Members of the Open Data and Civic Technology programs coordinated events that promoted and/or used open data in collaboration with the following organizations in 2016, all of which were open to the public:

OPEN SEATTLE
Open Seattle is community group focused on open data and civic technology. The Civic Technology Advocate coordinated 6 talks nights with departments about their use of data and technology, including the Seattle Police Department in February, Parks in March, Office of Planning and Community Development in May, Department of Transportation in June, the City Clerk in July, and Department of Neighborhoods in September.

IMPACT HUB
Impact Hub is an event space that regularly hosts community events, including the Open Data Executive Order signing. The Civic Technology Advocate coordinated 6 additional events here in 2016, including brown bag lunches with Seattle Police Department in February and with Parks in March, office hours, a panel on Bloomberg-funded innovations in May, Department of Neighborhoods in September, and the Office of Civil rights in October.

BLACK TO THE FUTURE HACK
The City hosted a meeting with the event organizer in January, and participated in a hackathon in February, which was hosted at Amazon by the Amazon Black Employee Network.

AT&T MOBILE PARKS & REC HACKATHON
Members of the Open Data Program, the Civic Technology Advocate, and Seattle Parks and Recreation staff participated in event held in March, which was sponsored and organized by AT&T Mobile and hosted at the SURF Incubator.

FISHACKATHON
This event focused on using data and technology to develop usable solutions to address the problem of worldwide overfishing. Members of the Open Data Program and the Civic Technology Advocate participated in event held in April, which was hosted at Impact Hub and organized in partnership with Microsoft, Vulcan, University of Washington, and the U.S. Department of State.

ZOOHACKATHON
The Zoohackathon focused on developing usable solutions to problems solicited from wildlife experts around the world on reducing wildlife trafficking. Members of the Open Data Program and the Civic Technology Advocate supported the event held in October, which was hosted at Woodland Park Zoo and sponsored by Microsoft, Vulcan, University of Washington, the U.S. Department of State, and the National Wildlife Service. The winning team also presented at an Open Data Breakfast of Champions event.

"LET IT SNOW" COMMUNITY DESIGN WORKSHOP
The Civic Technology Advocate collaborated with Seattle Department of Transportation in organizing an event held in December to engage the community in suggesting ideas for how the City can better communicate with the public during snow-related emergencies. The event was hosted by design firm Substantial, and was sponsored in partnership with Substantial and Open Seattle.

INTERDEPARTMENTAL ENGAGEMENT

BREAKFASTS OF CHAMPIONS
The Open Data Team worked with the Civic Technology Advocate to bring in speakers for Breakfasts of Champions who can create a sense of context for the City's open data work, help City staff understand the community's needs, and showcase the value of public open data for the world. This year, we invited the following speakers:

- June: Dontae Rayford, IFTTT, on integrating open data with existing apps
- July: Shelly Smith, Seattle Parks, on opportunities to work with Google
- August: Adam Sheppard, 8 Ninths, on virtual and augmented reality

- September: Hey Duwamish Team (Jacob Caggiano, Luke Swart, and Trevor Croxson) on open source technology and maps
- October: Zoohackathon winners (Eamon Brennan and Rachel MacFarlane) on crowdsourcing data via SMS

DATA CAMP

Data Camp was a three-day series of workshops designed to educate Open Data Champions about the Open Data Policy and processes for publishing open datasets on data.seattle.gov. Presenters covered topics such as data quality, data privacy, data equity, and public disclosure. Training topics also included how to write good metadata, how to upload datasets, and how to do statistical analysis with open data. Over 50 City of Seattle staff members attended Data Camp, which also included speakers from organizations such as Hack Oregon, the Washington State Office of the CIO, Seattle Police Department, Vulcan, Socrata, the University of Washington eScience Institute, and others. Full video of the workshops is available at the Seattle Channel:

- Session 1: http://www.seattlechannel.org/misc-video?videoid=x65654
- Session 2: http://www.seattlechannel.org/misc-video?videoid=x65653
- Session 3: http://www.seattlechannel.org/misc-video?videoid=x65655
- Session 4: http://www.seattlechannel.org/misc-video?videoid=x65656

SOCIAL MEDIA ENGAGEMENT

In October, the Open Data Program reactivated two dormant social media accounts: a Facebook page at http://facebook.com/opendata.seattle and a Twitter account, @seattleopendata. In that two-month period, both accounts saw a growth in activity and followers, with significantly more activity on Twitter (see below). The Open Data Team plans to continue using social media as a channel for the public to access our program. It will not replace or supplement email as a channel for suggesting datasets, noting problems with existing datasets, or other program management. It will instead be a way to increase the visibility of the program, help residents understand how it can serve their needs, and ensure that City staff are part of ongoing public conversations about open data and related issues.

SOCIAL MEDIA PERFORMANCE

Platform	Facebook	Twitter
Posts in 2016	13	14
Average post impressions	24	426
Followers	120	217
Growth in followers in 2016	+6 (5%)	+43 (24.7%)

OTHER ACTIVITIES

ONGOING COORDINATION
The Open Data Program Manager meets regularly with managers of other open data programs, including from other cities (both in person and by phone) and at the state and federal levels, in order to share best practices and ensure Seattle's program delivers the highest value for users within the context of open data overall.

VENDOR RELATIONSHIP MANAGEMENT
The Open Data Program Manager meets with the open data platform vendor, Socrata, on a bi-weekly basis to discuss issues with the platform, requested improvements, and other opportunities for collaboration.

PRIVACY
The Open Data Program works closely with the City's Privacy Program to ensure that data is published in compliance with our privacy principles. The Open Data Policy (Section 5.K.) directs the City to perform an annual risk assessment of both the Open Data Program and the content available on the Open Data Portal. The City has partnered with the Future of Privacy Forum (FPF) to develop a methodology for conducting this assessment and provide the first evaluation. It will be delivered by 7/31/2017 and published as a public-facing report. Additionally, the program partnered with Berkman Klein Center on their recently released open data privacy playbook.

BROADBAND SPEED TEST & MAP
In 2015 and 2016, the Open Data Program worked closely with the New America Foundation's Open Technology Institute to develop a broadband speed test using M-Lab technology, which is the federal standard for evaluating internet speeds used by the FCC. Data collected using the speed test is visualized on an interactive map that users can explore whether or not they take the test. Data from the test is also published to data.seattle.gov. Learn more:

- Broadband Speed Test: http://www.seattle.gov/broadband-speed-test
- Broadband Map: http://www.seattle.gov/broadband-speed-test
- Open dataset with results: https://data.seattle.gov/City-Business/Broadband-Speed-Test/7rui-4ksb

FOR FURTHER INFORMATION

Learn about our program at http://seattle.gov/opendata
Visit our open data portal at https://data.seattle.gov
Email us at open.data@seattle.gov
Find us on Facebook at http://facebook.com/opendata.seattle
Follow us on Twitter at @seattleopendata

Change log	Edits
4/11/17: Updated the report to correct some errors reported after the initial publication.	• Fixed some formatting issues. • Updated the 'Acknowledgements' section with several new additions, plus corrected one error. • Updated the 'Department Participation' table to fix errors related to the Seattle Parks and Recreation department, as well as the Constructions and Inspections department. Both published datasets prior to the 2016 deadline, but that was not reflected in the original report. • Added an additional note regarding the Office of Intergovernmental Relations (OIR) participation in the Open Data Program.

ACKNOWLEDGEMENTS

Mayor Edward B. Murray

Council President Bruce Harrell
Chair, Education, Equity, and Governance Committee

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Seattle Center: Denise Wells
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