# CITY OF SEATTLE 2017 OPEN DATA PLAN



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# INTRODUCTION

# **BACKGROUND**

Last year was pivotal for open data in the City of Seattle. While the City has been publishing open data since 2010 and was the first in the nation to publish dispatch data from our police and fire departments in near-real-time, there was no formal policy or process in place to guide this work.

This changed in February 2016 when the City created an official Open Data Policy that is backed by Executive Order 2016-01 from Mayor Ed Murray. Developed in partnership with the Sunlight Foundation, University of Washington, and Bloomberg Philanthropies' What Works Cities initiative, the Open Data Policy declares the City "open by preference" and directs all City departments to make their data available to the public except when doing so may affect individual privacy. This both sets the expectation that public data will be public and makes clear that we have a responsibility to protect privacy. The new policy laid out clear goals that guide our work as a program.

# **PROGRESS IN 2016**

Seattle IT, which is responsible for implementing the Open Data Policy, made significant progress in 2016 in standing up the official Open Data Program. This included the establishment of a network of Open Data Champions who lead their department's work to facilitate the release of high value datasets onto data.seattle.gov, with centralized support from the Open Data team in Seattle IT.

The 2016 Open Data Annual Report provides a detailed analysis of our progress to date, and provides learning that we will apply to our future initiatives as called out in this 2017 Open Data Plan. The 2016 Open Data Report can be found at: http://seattle.gov/opendata.

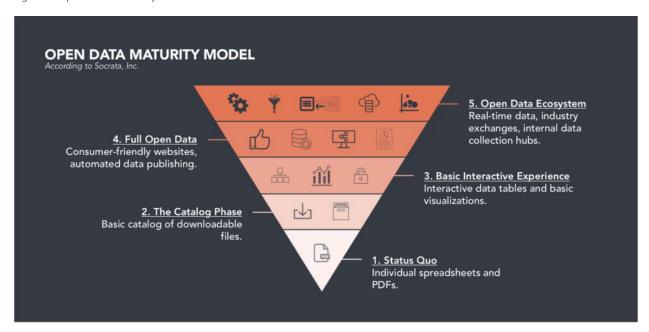
### **CURRENT STATE**

While much work has been done over the past year to establish the City's new Open Data Program, it is important we assess on a macro level the program's current state and envision how our Open Data Program should improve in the future.

One method to help us distill the data and findings from the 2016 Annual Report, as well as additional internal knowledge that we have developed over the last year, is to use an open data maturity model. Several variants of this model exist, so the purposes of this plan we will use the model proposed by Socrata<sup>1</sup>, whose technology powers our open data portal (see Figure 1). Using this model allows us to quickly assess our perceived maturity level and provides a way to track progress over time towards those advanced maturity goals.

<sup>&</sup>lt;sup>1</sup> http://www.datafoundation.org/state-of-the-union-report-pdf

Figure 1: Open Data Maturity Model



When we review the capabilities of our Open Data program today, we believe that our program is mostly at stage 3 of the model, where we are providing some basic interactive experiences using the default technologies on our platform, with the clear majority of datasets being published manually. We have a simple landing page design for data.seattle.gov that contains large amounts of text and graphics while grouping our datasets using the default catalog classifications provided by the portal software, as well as some datasets providing visualizations using the in-built visualization tools from the platform. Some elements of stage 4 in are place; the best examples being the automated publishing of data from some larger departments such as the Police Department, Fire Department, and the Department of Transportation.

Based on that assessment of the maturity of our Open Data program, our aim in 2017 will be to achieve stage 4 maturity across the board. This will involve several initiatives, such as redesigning the data.seattle.gov portal to improve its usability for our customers, integrating Tableau Public into our platform to provide us with more opportunities to share visualizations and insights from the open data we publish, and working across all City departments to help enable more automated publishing of datasets. A stretch goal will be getting closer to stage 5, initially in the form of more real-time (or very close to) data publishing but also in terms of how we can partner with key local partners (such as the King County and WA State Open Data programs) to enable more federation of our respective data catalogs to help tackle regional issues.

### **2017 OPEN DATA PLAN**

This 2017 Open Data Plan sets the strategic direction of the Open Data program in 2017 and potentially into 2018. We are focusing on 2017 as a year where the internal operational systems of the program are strengthened, the quality of our existing data platform is improved, we increase awareness of our open data and improve its discoverability when the public visit our portal are all key priorities in 2017.

Per the Open Data policy, this 2017 Plan will include the following information:

- a. Plan for the upcoming year to improve online public access to Open Data and maintain data quality.
- b. Datasets scheduled to be published on the portal in the upcoming year, including description and proposed publication timeline.
- c. Proposals for improving the city's open data management processes that help advance our open data policy goals.
- d. Recommendation on historical document inclusion and schedule for approved historical document publication.
- e. Summary of the costs associated with operating the Open Data Program, including any proposed changes, for the upcoming fiscal year.
- f. Factors which may affect the Open Data Program in the upcoming year.

# **OUR ASPIRATIONS FOR 2017**

Using data from the 2016 Annual Report and other institutional knowledge we have gained since the formation of the Open Data program; we now set out the strategic plan for the Open Data Program in the short-to-medium term. That is, to identify what we aim to accomplish in 2017 (short-term) and how we plan to create the conditions for more ambitious advances in 2018 and beyond (medium-term).

This section outlines our key aspirations and provides context for how they influence our 2017 priorities.

- 1. Strive to maintain a close alignment to "Priority 1: Smarter, Data-Driven City" of the Seattle IT Strategic Agenda for 2017/2018, and specifically focus our efforts on spearheading work related to "Objective 1.1: Increase the use of data". This can involve implementation of data governance concepts within the Open Data program, leading by example on the use of new data tools that aid with data quality and analysis, or making sure that our IoT projects start by posting data in real time to data.seattle.gov. It can also reinforce the embedding of open data considerations into new project intake processes at the City, so that the policy of "open by preference" is top of mind right from the beginning of new projects. Work streams such as these will help us to further weave the Open Data program into the fabric of our City government, and achieve one of the key goals of our Open Data Policy which is to: "empower City employees to be more effective, better coordinated internally, and identify opportunities to better serve the public".
- 2. Refine the Open Data Policy to relocate the existing operational details into an updated version of the Open Data Playbook. The existing Open Data Policy contains prescriptive details on operational aspects of the Open Data program that are becoming dated as we enter 2017. The Policy should maintain its directional relevance to the policy implementation work over time. The Playbook, which has proven effective internally at the City and popular with other governments across the US as an example of best practice when establishing an Open Data Program, and will be a living (open) document that is continually updated as we iteratively improve the operational aspects of the Open Data Program.

3. Create the conditions for a "virtuous cycle" effect caused by ongoing improvements we will make in the Open Data program over time. Internal process and operational improvements will translate into more high value datasets being published onto data.seattle.gov, enabling opportunities to develop actionable insights and analysis that can lead to positive outcomes for the City and the public. This in turn will lead to increased demand for high value open datasets that support specific research questions on issues of concern to the City and the public we serve.

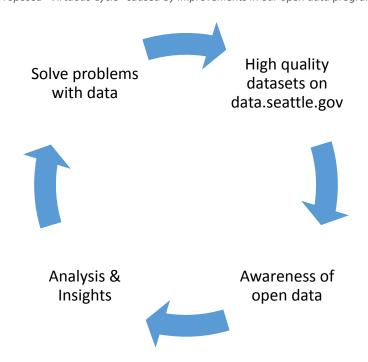


Figure 2: Proposed "Virtuous Cycle" caused by improvements in our open data program

- 4. Identify issues of importance to the City of Seattle and the public we serve, work to identify datasets that could support research, analysis, and advocacy efforts related to those issues, and publish them to data.seattle.gov in an efficient manner. A great example of an initiative that we aspire to do more to support in 2017 is our Race and Social Justice Initiative (RSJI). In 2016 we applied an RSJI Toolkit, developed internally at the City, to the Open Data Program and came up with a set of recommendations for how we will view the work that we do in the Open Data Program through the RSJI lens. One key recommendation is that in 2017 we look for opportunities to identify and release open datasets that help with promoting positive RSJI outcomes. This work can provide a template for how we can support other issues of importance as they arise, and showcase how we as a City derive real value from our open data.
- 5. Enhance our connections with the community at large to develop a deeper understanding of how the public uses open data, and what we can do to help increase the value of the open data we do provide. There are several ways in which we plan to achieve this.

The Open Data Program's direct connection to the eGov committee (a sub-committee of the Community Technology Advisory Board (CTAB)) will continue to play a key role in helping us connect with and understand the needs of our many communities across Seattle, especially those minority communities which may be underserved by our program. Our Open Data platform acts as a key enabler for our civic technology community to build rich apps and experiences that both the City and the public can avail of, as well as enabling researchers and data scientists to create deep insights into important issues that can help positively influence City policy decisions and help the City scale. To enhance our connections with the civic tech community, the Open Data Program will partner very closely with the Civic Technology Program, run by the City's Civic Technology Advocate, which exists to engage the broader community in solving civic problems through technology. This includes partnerships that analyze, visualize, or make use of open data. By directly connecting the users of open data with the publishers, civic technology maximizes the value of open data for the community and helps the City make more informed decisions about how best to deliver information to the public. Additionally, the Open Data Program will further develop our partnerships with Universities and other research entities to leverage their research into open data and its impact as well as partaking in studies and programs where beneficial.

It is thinking through these aspirations, in conjunction with supporting data on the state of our program and our data platform, that we devised the following strategic plan for the Open Data Program in 2017 and beyond.

# **OUR STRATEGIC FRAMEWORK IN 2017**

The key to any successful enterprise is to have clarity of purpose (or vision) and a clear objective, guided by a set of core principles and a well-defined set of priorities that help us achieve that core objective in time. As this is the first Open Data Plan for the City of Seattle, it provides us with an opportunity to step back and review those questions around why, what and how and use a '3P Framework' that defines the purpose for the use of open data by the public and within the City of Seattle, the principles that will govern our decision making within the Open Data program, and the priorities that will inform what projects we aim to accomplish in 2017.

#### **PURPOSE**

The Open Data Program, through our "open by preference" policy, makes the data generated by the City of Seattle openly available to the public to aid with increasing the quality of life for our residents; increasing transparency, accountability and comparability; promoting economic development and research; and improving internal performance management within the City of Seattle organization itself.

# **PRINCIPLES**

As we complete our work and encounter new issues and demands on our resources, every decision we will make about how we should proceed will be guided by five core principles. These principles act as a guide to enable us to make thoughtful decisions on how we will move forward in any given situation.

- 1. Begin by asking how the work we do will help the public, through the equity lens.
- 2. Cultivates a culture of operational efficiency, learning, agility and innovation.
- 3. Use data to inform our planning and prioritization decisions.
- 4. Strive to release open datasets that unlock real value for the public as well as internal City departments.
- 5. Eliminate technological barriers to successful (internal or external) outcomes.

# **PRIORITIES**

Here we define the five main priorities for 2017, and outline the work we will do to achieve these goals.

Priority	Objective
1. Open Dataset Publishing improvements In partnership with our Open Data Champions, improve our internal systems to help identify, generate and facilitate the publishing of open datasets to data.seattle.gov.	<ul> <li>1.1. Create an online version of our Open Dataset Submission Form.</li> <li>1.2. Reduce friction in the publishing workflow to enable publishing of more automated datasets.</li> <li>1.3. Provide more training and documentation to upskill our Open Data Champions and other key stakeholders.</li> </ul>
2. Improve the quality of the existing data platform Our Data.seattle.gov platform has been in existence since 2010 and during the bulk of that time there were limited policies and procedures in place to guide the release of open datasets. Thus, our platform of open datasets now requires maintenance as well as a review of quality standards.	<ul><li>2.1. Audit the existing datasets on the data.seattle.gov platform to improve their quality.</li><li>2.2. Improve how we listen and respond to customer feedback about our platform of data.</li></ul>

Priority	Objective
3. Increase the discoverability of our Open Data to the public In addition to making internal process improvements, it is also vital that we improve our external-facing experiences so that our public can more easily discover the data that the City of Seattle is providing for them.	<ul> <li>3.1. Redesign the data.seattle.gov home page to make our Open Data more discoverable.</li> <li>3.2. Update <a href="http://seattle.gov/opendata">http://seattle.gov/opendata</a> to provide more transparency into our Open Data program.</li> <li>3.3. Increase the usage of our official social media channels to drive awareness of our Open Data.</li> </ul>
4. Complete the Privacy Risk Assessment of the Open Data Program  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. A risk assessment will be completed by 7/31/2017, which will be published as a public-facing report.	<ul> <li>4.1. Partner with Future of Privacy Forum and oversee their project delivery per the Statement of Work.</li> <li>4.2. Implement recommendations arising from the Privacy Risk Assessment report, as they pertain to the Open Data Program.</li> </ul>
5. Generate increased awareness of Open Data within the City of Seattle government As 2017 has been designated by Mayor Ed Murray as the year of good governance at the City of Seattle, initiatives such as the Open Data Program are at the forefront of internal City efforts to derive value from our internal data.	<ul><li>5.1. Ccontinue to develop our outreach capabilities and help drive awareness of open data across Seattle and beyond.</li><li>5.2. Educate internal and external stakeholders on the value of open data.</li></ul>

### 1. Open Dataset Publishing improvements

One of the key roles of our Open Data Champions is to work within their departments to help identify, generate and facilitate the publishing of open datasets to data.seattle.gov. The current publishing processes require a lot of manual steps, and as we look to scale the volume of open data being published in 2017 and beyond, this is a bottleneck that needs to be addressed urgently. Open dataset publishing process improvements will include:

 Open Dataset Submission Form (ODSF) v2.0 – we will create an online version of the current ODSF that will enable the Open Data Champs at each City department to more quickly and efficiently enter their proposed open datasets into the publication system. It will be linked to our Open Dataset publishing schedule, and will aid with improving the quality of metadata in

- new datasets being published. This is our #1 internal priority in 2017, simplifying this procedure will incentivize our Open Data Champions to release even more datasets.
- Partner closely with Socrata to reduce friction in the publishing workflow outside of our ODSF form, particularly for automated datasets. Moving more datasets from manual publishing mode into an automated publishing mode is a top desire for our program over time.
- Provide better documentation to the Open Data Champions and other stakeholders on the
  processes we wish them to follow in 2017. The goal is for them to be able to self-serve where
  possible, and reduce the need for on-demand help from the Open Data team.

# 2. Improve the quality of the existing data platform

Our Data.seattle.gov platform has been in existence since 2010 and during the bulk of that time there were limited policies and procedures in place to guide the release of open datasets. Thus, our platform of open datasets now requires maintenance as well as a review of quality standards.

- Using a detailed data analysis of the data.seattle.gov asset inventory, we will identify deficiencies in our data.seattle.gov platform and develop a project that will mitigate these issues. Issues include improvements to our dataset metadata, identifying stale datasets and creating processes to either update or responsibly deprecate those. This project will be carried out by our Open Data Champions, in conjunction with the Open Data team who will identify ways to address certain issues programmatically. It is expected that this work will take several months to complete, and we will target this work to be completed in the first half of 2017.
- We will partner with Socrata on how to create an improved ability to listen to feedback and suggestions from the public for new datasets as well improvements to existing datasets. This feedback will be channeled to our Open Data Champions primarily, enabling them to use these data as a method to prioritize what additional open datasets could be published.

### 3. Increase the discoverability of our Open Data to the public

One of the most common pieces of feedback that we receive is that the discoverability of our open data could be improved. In 2017 we will take some major steps to addressing those deficiencies, in the ways listed below. It is worth noting that the work we will do in Priority 2 will also have a positive impact on our open data discoverability, as improving the quality of the metadata in our datasets will result in better search engine optimization (SEO) and more accurate search results on data.seattle.gov itself.

- Redesign the data.seattle.gov home page to make our Open Data more discoverable. This will require us to create a new simplified design that allows the public to quickly search for data by both pre-defined categories and City departments, as well as providing quick access to our GIS data portal, data visualizations for key datasets, and entry points to other key data services the City provides such as police reports. The goal is to ensure that our residents can more easily self-serve from our data portal.
- Update our existing public-facing Open Data Program site (<a href="http://seattle.gov/opendata">http://seattle.gov/opendata</a>) to provide more transparency into our Open Data program, with easily discoverable links to our documentation, training, research pertinent to our program and general information on our program. Another goal will be to relocate a lot of text and photos currently on data.seattle.gov to this site.
  - Increase the usage of our official social media channels to drive more awareness of our Open Data. This includes ramping up the usage of our Open Data Program Facebook and Twitter accounts, in conjunction with targeted blog posts highlighting important dataset releases and

other key events related to Open Data within the broader Seattle region. The powerful network effects arising from Twitter posts allow us to greatly amplify our messaging and create broad awareness of our Open Data work within Seattle as well as nationwide. In time, we hope to include other social media channels into our outreach activities.

#### 4. Complete the Privacy Risk Assessment of the Open Data Program

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. As such, the City has contracted with the Future of Privacy Forum (FPF) to develop a methodology for conducting a risk assessment based on review of a subset of high-risk agencies or data sets as well as a random sample of additional agencies or data sets, to evaluate the risk of re-identification in case of release of individual data sets or multiple data sets. FPF will deliver a risk assessment by 7/31/2017, which will be published as a public-facing report.

- Partner with Future of Privacy Forum and oversee their project delivery per the Statement of Work. This work involves regular communication and sharing of information vital to enabling the research to proceed in a timely fashion, and facilitating visits by FPF to the City of Seattle for research and collaboration purposes.
  - Once completed, implement recommendations arising from the Privacy Risk Assessment report, as they pertain to the Open Data Program. It is expected that this implementation work will begin in the third or fourth quarter of 2017 and likely continue into early 2018.

# 5. Generate increased awareness of Open Data within the City of Seattle government

2017 has been designated by Mayor Ed Murray as the year of good governance at the City of Seattle, and initiatives such as the Open Data Program are at the forefront of internal City efforts to inculcate a more data-driven culture. Indeed, one of the four main goals of the Open Data Program is to enable City departments to derive value from our open data to drive internal efficiencies and improve performance.

- Working closely with our network of Open Data Champions, we will actively seek opportunities
  to generate increased awareness of our Open Data Program across City departments and
  encourage them to use the high-value datasets already available to the public for their own
  internal decision making purposes. This will include identifying suitable internal use cases of
  open data and presenting those to City departments as examples for them to consider.
- Additionally, we will regularly update City department leadership on progress towards our 2017
   Open Data Priorities as outlined in this plan, with a view to encouraging City leadership to factor in open data as part of their departmental activities and priorities.
- We will work within Seattle IT to update the IT Project intake process to include a
  recommendation to release any data generated through that project implementation as open
  data. This will aid with keeping open data as a key consideration for both internal and external
  use cases for all new IT projects in 2017 and beyond.
- As part of our annual Data Camp training for Open Data Champions, we will include training that will enable them to upskill in the areas of data analysis and data visualization to aid with their ability to leverage open data internally within their respective departments.

# **OPEN DATASETS SCHEDULED FOR RELEASE IN 2017**

In this section, we list the open datasets that our City departments have identified as priorities for publication in 2017. Not all departments have listed datasets at time of publication, therefore this list will be updated throughout the year as departments refine their plans based on feedback from the community and other prioritization efforts. To ensure we can track those updates publicly, we will be releasing the Open Dataset publication schedule as an open dataset on data.seattle.gov and updating it once a quarter so that it remains up to date. The results of the departments' efforts to publish open data will then be listed in the 2017 Open Data Annual Report, published in January 2018.

# Current list as of January 31st, 2017:

Dataset name	Department name	Description of the Dataset
Aging Case Management     Statistics	Human Services Department	Client Level (anonymized) of who received case management through an HSD funded program.
2. Film Permits	Office of Economic Development	Film locations, dates, production types, and production spend.
3. SODO Commercial Solar Viability	Office of Economic Development	List of commercial properties in SODO with stats that indicate their potential for solar power.
4. Design Excellence Award Winners	Office of Planning and Community Development	Names and associated information of Design Excellence Award winners. The Seattle Design Commission selects winning projects, typically on an every-other-year basis, from public buildings, parks, open spaces, and vision plans completed in Seattle since the previous awards. The Commission chooses projects for these awards based on inspired design, contextual integration, innovative sustainability, social inclusion, exemplary partnerships, effective investment, and impeccable execution.

5.	Planning and Community Reporting Area equivalencies	Office of Planning and Community Development	Table of 2010 Census geographies (Census blocks, Census Block Groups, and Census Tracts) indicating correspondence with City defined planning area boundaries (Urban Centers, Urban Villages, Urban Village Demographic Areas, Community Reporting Areas, Council Districts).
6.	Planning Projects Underway in Office of Planning & Community Development	Office of Planning and Community Development	Planning projects underway in Office of Planning & Community Development with key info on broad type of project, geographic area, link to applicable Project webpage, and information and links on resulting legislation as applicable.
7.	Residential Building Permit Data in Urban Village Growth Reports	Office of Planning and Community Development	Residential Building Permit Data used for growth reporting. This dataset feeds the Urban Center / Village Housing Growth Report (pdf format) that OPCD updates quarterly and posts on the Population & Demographic Website. OPCD also uses this dataset to generate tables key tables about Housing Growth in the City's Comprehensive Plan appendices. These reports and tables could potentially be published as alternative or additional datasets.
8.	SPC Project Tracking	Office of Planning and Community Development	Topics that have been on agendas of full Planning Commission from beginning of 2014 to present.

9. Seattle Design Commission Review Projects	Office of Planning and Community Development	Names and associated information of current and previous projects being reviewed by the design commission. Information includes project name, applicant (public agency involved or labeled as "private project") project value, location (lat & long), MUP # if applicable, year reviewed, and project type.
10. SPC Quarter at a Glance	Office of Planning and Community Development	Topics that have been on agendas of full Planning Commission as well as Planning Commission Land Use & Transportation and Housing & Neighborhoods committees beginning January 2016.
11. AFA Responses	Seattle Fire Department	List of all SFD responses to Auto Fire Alarms
12. CO Responses	Seattle Fire Department	List of all SFD CO Responses
13. RESELV Responses	Seattle Fire Department	List of all SFD RESELV Responses
14. FIB/FIBRES Responses	Seattle Fire Department	List of all SFD responses to FIB & FIBRES
15. FOS Responses	Seattle Fire Department	List of all FOS Responses
16. FUELSP Responses	Seattle Fire Department	List of all FUELSP Responses
17. HAZ Responses	Seattle Fire Department	List of all SFD HAZ Responses
18. Hydrant Inspections	Seattle Fire Department	List of Seattle fire hydrants and their inspection/testing history.
19. NGO/NGL Responses	Seattle Fire Department	List of all SFD NGO and NGL Responses.
20. SFD Response Type Codes	Seattle Fire Department	List of all Seattle Fire Department Response Type Codes.
21. Single Adult Night Shelters	Human Services Department	List of overnight emergency shelters, including any eligibility and hours.
22. Annual Issued Building Permits	Department of Construction and Inspections	Number of Building Permits issued each year.

23. Annual New Units	Department of Construction and Inspections	Number of new units added by construction permits that have been issued or finalized.
24. Complaints by Type of Problem	Department of Construction and Inspections	Complaints by type of problem (such as housing, zoning, weeds, construction, etc.).
25. Issued NOVs	Department of Construction and Inspections	Number of Notices of Violations issued by type of case.

