

# Open Data and Policing

## A Five-Part Guide to Best Practices

### PART IV: UPDATING OPEN DATA






# Open Data and Policing

## A Five-Part Guide to Best Practices

### **PART IV: UPDATING OPEN DATA**



This project was supported by Cooperative Agreement Number 2016CRW XK001, awarded by the U.S. Department of Justice, Office of Community Oriented Policing Services. The opinions contained herein are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice. References to specific agencies, companies, products, or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.

The internet references cited in this publication were valid as of the date of this publication. Given that URLs and websites are in constant flux, neither the author(s) nor the COPS Office can vouch for their current validity.

The U.S. Department of Justice reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use this resource for Federal Government purposes. This resource may be freely distributed and used for noncommercial and educational purposes only.

Recommended citation:

Police Foundation. 2018. *Part IV: Updating Open Data*. Open Data and Policing: A Five-Part Guide to Best Practices. Washington, DC: Police Foundation.

Published 2018





## Contents

I. Introduction . . . . .	1
II. Why Is It Important to Update Open Data? . . . . .	2
III. How Often Should Data Be Updated? . . . . .	3
IV. How Can an Agency Update an Open Dataset? . . . . .	4
V. Case Studies. . . . .	5
City of Long Branch (New Jersey) Police Department. . . . .	5
Norman (Oklahoma) Police Department. . . . .	7
VI. Conclusion . . . . .	10
About the Police Foundation . . . . .	11



# I. Introduction

Law enforcement agencies across the country are increasingly using open data to collaborate with their communities on the co-production of public safety.<sup>1</sup> To date, more than 140 law enforcement agencies have joined the Police Data Initiative (PDI), a community of practice consisting of member agencies that have committed to releasing open data.<sup>2</sup>

Drawing from promising practices used by these law enforcement agencies, this five-part best practice series aims to guide executives and members of local law enforcement agencies as they release open data. This guide, *Part IV: Updating Open Data*, discusses the value of updating open data and methods for data updates in the maintenance of open data.

---

1. For more on the value of open data, see *Law Enforcement Executive's Guide to Open Data: Supporting the Community in the Co-Production of Public Safety* (Washington, DC: Police Foundation, 2017), [https://www.policefoundation.org/wp-content/uploads/2017/11/PF\\_Law-Enforcement-Executives-Guide-to-Open-Data\\_WEB.pdf](https://www.policefoundation.org/wp-content/uploads/2017/11/PF_Law-Enforcement-Executives-Guide-to-Open-Data_WEB.pdf).

2. For more information on the Police Data Initiative, visit <https://www.policedatainitiative.org/>.



## II. Why Is It Important to Update Open Data?

Data is most valuable and relevant to its audience when it is updated regularly. To be truly open, agencies should release regular updates to their datasets. Open data updates help law enforcement agencies and community members to view and understand police-related activities and information over time. Data displaying information over time is essential for identifying trends, anomalies, or other findings. Agencies can learn from issues identified and can use positive trends to demonstrate performance enhancements over time. Since it is also possible that published data could contain errors, a plan for updating data can help to correct those errors.

Initially releasing open data provides agencies opportunities to demonstrate their transparency and to collaborate with their community on the co-production of public safety. Providing regular updates can further increase public trust by demonstrating a continued commitment to transparency.



### III. How Often Should Data Be Updated?

Frequent updates tend to be more valuable to agencies and the public, but the exact timeframe for dataset updates may vary based on agency considerations. Agencies should develop plans for dataset releases and updates that balance their desired frequency with their staffing and technical capacity.

Agencies may vary in their desired frequency of dataset updates. Influencing factors may include the following:

- **Agency Priorities:** Agencies may have other needs, such as overhauling their records management systems (RMS), that at times take priority over maintaining open data.
- **Community Interest:** Agencies should encourage feedback from their community on their preferred frequency of updates. Some community members may value frequency of data updates more than other open data priorities.
- **Dataset Subject:** Some datasets, such as calls for service, are more likely to be updated daily, making the timeliness of the update more relevant. For other datasets that have relatively infrequent changes, such as personnel demographics, a yearly update may be sufficient.
- **Agency Staffing and Technical Capacity:** Agency staffing and technical capacity may limit how often datasets can be updated. As agencies develop their open data process, they may also start with infrequent manual updates and move to more frequent updates once they automate the process.

Regardless of the specific update frequency for each dataset, having a plan for making the updates and sharing dataset update frequencies with users of the data is key. By establishing a plan for updates, agencies can manage the most appropriate update schedule for their situation.

## IV. How Can an Agency Update an Open Dataset?

Agencies can update open datasets in the same ways they initially release them. Some common choices are as follows:

- **Manually Input Data Directly In an Open Format:** Agencies can manually compile open data directly into an open format on a regular basis. For example, the **Northampton (Massachusetts) Police Department** compiles open data in a spreadsheet over the year and posts a new year's worth of data to its portal annually.
- **Manual Export:** Agencies can extract data from existing records through a manual export on a regular basis. For example, the **Bloomington (Indiana) Police Department** uses Crystal Reports to generate CSV files from its RMS each quarter and posts the new quarter's data on its data portal.
- **Integration:** Agencies may be able to leverage an existing system interface, or write a program that pulls data from the system's underlying database, to produce an open dataset on a regular basis or to automatically populate and update the open data available in their data portal. For example, the **Cincinnati (Ohio) Police Department's** open data portal is integrated with department records systems so data on the open data portal is automatically updated daily.

More information on these common choices can be found in *Part II: Practices for Opening Data*.

## V. Case Studies

### City of Long Branch (New Jersey) Police Department



City of Long Branch  
(New Jersey) Police  
Department badge

The City of Long Branch Police Department (LBPD) is located in Monmouth County, New Jersey. The department employs 93 sworn officers and serves a jurisdiction of approximately 30,000 people.<sup>3</sup> After learning of the Police Data Initiative in July 2016, Chief Jason Roebuck (then Director of Public Safety) encouraged the LBPD to take part in the initiative, using open data as an opportunity to demonstrate a commitment to information transparency, provide tools to facilitate the co-production of public safety, and promote police-community relations.

Prior to taking part in the PDI, certain LBPD data were already being collected, prepared, and shared internally with platoon command and division command. These included data on calls for service captured by the county's Computer Aided Dispatch (CAD), broken down by type, such as burglaries, drugs, and violent crimes. These data provided a foundation the department could use to develop open datasets. The frequency of the department's existing internal data sharing also provided a starting point for the frequency of open data updates: the data was already being exported and prepared monthly and annually for internal reports by the administrative analyst and CRS coordinator with the LBPD's Support Services Division, which is leading the department's open data effort. The data needs only to be reformatted in an Excel sheet, with considerations for personally identifiable information (PII), to be ready to be shared with the public.

*"[Creating a process for open data updates] was really just a matter of redesigning the data and how it fed."*

— Lt. Charles F. Shirley, Jr., Support Services Division, City of Long Branch Police Department<sup>4</sup>

Monthly and yearly updates are posted on the Long Branch Public Safety [Open Data Portal](#) within the department website. The display format is designed to make the monthly and yearly data easily comparable: for example, monthly drug-related service call data is displayed with a preview of the previous month's data, links to download the previewed data in PDF or Excel format, and links to yearly and year-to-date data at the top and bottom of the page.

3. Lt. Charles F. Shirley, Jr., City of Long Branch Police Department, interview with Police Foundation staff, March 29, 2018.

4. Shirley, interview with Police Foundation staff (see note 3).

Long Branch displays open data from the previous month alongside annual data

## Drugs

2017

2016

2015

## Previous Month: March, 2018

<u>IR NUMBER</u>	<u>CRIME</u>	<u>FIRST DATE TIME</u>	<u>BEAT</u>	<u>PUBLIC ADDRESS</u>
18LB05123	Cont Subs, Possess, Marijuana	03-03-2018 21:29	P251	1XX ELMWOOD AVE, LONG BRANCH, NJ 07740
18LB05619	Cont Subs, Possess, Marijuana	03-08-2018 19:16	P251	2XX ATLANTIC AVE, LONG BRANCH, NJ 07740
18LB05702	Cont Subs, Possess, Marijuana	03-09-2018 16:53	P252	3XX W COLUMBUS PL, LONG BRANCH, NJ 07740
18LB06442	Cont Subs, Sale/Mfg, Marijuana	03-17-2018 22:16	P254	2ND / HOWLAND, LONG BRANCH, NJ, 07740
18LB05384	Cont Subs, Possess, Paraphrnla	03-06-2018 12:53	P254	SAIRS / EASTBOURNE, LONG BRANCH, NJ, 07740
18LB06884	Cont Subs, Possess, Heroin	03-22-2018 13:56	P251	1XX UNION AVE, LONG BRANCH, NJ 07740
18LB06982	Cont Subs, Possess, Paraphrnla	03-23-2018 09:47	P254	XX NORWOOD AVE, LONG BRANCH, NJ 07740
18LB07758	Cont Subs, Possess, Marijuana	03-31-2018 19:01	P253	3XX 3RD AVE, LONG BRANCH, NJ 07740
18LB05253	Cont Subs, Possess, Marijuana	03-05-2018 09:10	P253	1XX GARFIELD AVE, LONG BRANCH, NJ 07740
18LB05123	Cont Subs, Possess, Marijuana	03-03-2018 21:29	P251	1XX ELMWOOD AVE, LONG BRANCH, NJ 07740
18LB05123	Cont Subs, Possess, Marijuana	03-03-2018 21:29	P251	1XX ELMWOOD AVE, LONG BRANCH, NJ 07740
18LB05123	Cont Subs, Sale/Mfg, Cocaine	03-03-2018 21:29	P251	1XX ELMWOOD AVE, LONG BRANCH, NJ 07740
18LB06442	Alcohol Offense	03-17-2018 22:16	P254	2ND / HOWLAND, LONG BRANCH, NJ, 07740
18LB04871	Cont Subs, Possess, Paraphrnla	03-01-2018 00:33	P251	LIBERTY / JOLINE, LONG BRANCH, NJ, 07740
18LB05487	Cont Subs, Possess, Paraphrnla	03-07-2018 10:42	P252	JOLINE / EDWARDS, LONG BRANCH, NJ, 07740
18LB05711	Cont Subs, Possess, Marijuana	03-09-2018 19:28	P251	HILLSDALE / FLORENCE AVE, LONG BRANCH, NJ, 07740
18LB05619	Cont Subs, Possess, Marijuana	03-08-2018 19:16	P251	2XX ATLANTIC AVE, LONG BRANCH, NJ 07740

Providing access to these data has allowed the LBPD both to enhance internal data processes and to demonstrate its commitment to the community. Internally, developing open datasets and continuing to seek ways to improve them have enhanced record keeping systems already in place. “What it made us do was go back and look at the way we were doing things and not doing things, and it actually improved the way we do business here. And [the objective] was to get the data, but it ended up fixing the way we do things here and making it better,” says Lt. Charles Shirley, Jr. of the Support Services Division. Administrative Analyst Susan Catapano-Moore has also noticed increased community participation since the launch of the open data portal, which includes a page featuring information about LBPD community involvement. “I don’t think the community actually realized that they were involved in all this, so I think it really opened the community’s eyes . . . it’s just a better rapport,” she says.

Following installation of a new component to Monmouth County’s CAD system, the LBPD is hoping this expansion will provide an opportunity to reevaluate its capacity to move toward a more automated update process. With regular updates, incorporation of lessons learned, examination of potential expansions, and ongoing promotion of the department’s work in the Long Branch community over time, the LBPD is continuing to build on its existing open data processes.

## Norman (Oklahoma) Police Department



Norman (Oklahoma)  
Police Department  
badge

The Norman Police Department (NPD) employs 180 sworn officers and serves a jurisdiction of approximately 122,738 people. Under the leadership of Chief Keith Humphrey, the NPD became the first agency in Oklahoma to join the PDI in September 2016. The NPD sought to use open data as a vehicle to promote transparency and trust with the community.<sup>5</sup> The department's Open Data Portal launched on March 20, 2018. To exemplify its commitment to transparency, the NPD chose to populate it from the start with the datasets perceived to be most in demand by the community, including use of force, complaints and inquiries, and department demographics. The NPD is also continuing to update its daily blotter of criminal incidents, which was started years prior to the department's open data initiative.

When deciding how often to update the department's open datasets, Sgt. John Stege, who manages NPD's open data initiative, says that the NPD's primary consideration was community engagement through transparency. After testing the open data release with a year's worth of data, the department opted to update most of its datasets on a quarterly basis, including complaints and inquiries; use of force; contacts, citations, and arrests; and community engagement. Valuing the use of the data to facilitate continued engagement with its community, the NPD's decision to increase the frequency of updates for certain datasets seemed natural to leadership. "People would lose interest. You'd lose momentum; people wouldn't check back," Sgt. Stege said about annual updates to these types of datasets. However, datasets related to department demographics continue to be updated annually, as NPD found this dataset does not change significantly from quarter to quarter.

While many cities have opted for automation using existing city software, the NPD did not have the framework or budget to pursue such a process. "[Automation] may be very beneficial for a large agency . . . [but] we didn't have the resources to just go out and spend thousands of dollars on a new software program," said Sgt. Stege. Instead of using automated software, Sgt. Stege delegates open data work to staff from multiple areas of NPD. While distributing tasks to staff positions that experience turnover and require training may be less efficient than centralizing open data work, Sgt. Stege sees value in keeping the staff engaged with the initiative. "The most efficient way of doing it would be to have me gather up everything. . . . The problem with that is, then I am the only one invested in it. . . . In our philosophy, the chief and staff believe Internal Affairs should want this information out there—and they do. So, we want them to have a role to play in the production of it. We want our crime data done by our analyst—why? Because that's our link to the department at large."

---

5. Sgt. John Stege, Norman Police Department, interview with Police Foundation staff, April 10, 2018.

For each category of data featured on the open data portal, the NPD includes links to CSV files with the open datasets on a page with context for the data. For example, for use of force data, NPD created a page on the open data portal that defines use of force in accordance with departmental policy and explains easily mis understandable dataset terms or fields. The page also explains that incidents are categorized into quarterly reporting periods by time of initiation, clarifying how incidents are counted in dataset updates.

Norman Police Department Use of Force dataset page

**NORMAN POLICE**  
Integrity \* Accountability \* Mutual Respect \* Service Attitude \* Partnerships

Search NormanOK.gov Search

City of Norman | Contact | FAQ

Office of the Chief | Department Organization | Animal Welfare | I Want To... | Community Services | Public Safety Tax

Community & Law Enforcement Partners | Open Data Portal

Home » Office of the Chief

## Use of Force

# USE OF FORCE

### About the Use of Force Data

The use of force definitions and reporting guidelines can be found in Policy 300 of the Norman Police Department Policy Manual. The policy defines force as "the application of physical techniques or tactics, the application of a Control Device, or the presentation of a Conducted Electrical Weapon or Firearm toward another person." However, use of force is not "when a person allows him/herself to be searched, escorted, handcuffed or restrained."

The use of force is never comfortable and often intense. It is important for both members of the Norman Police Department and the community to remember that the use of force is a critical concern for us all whether appropriately used or otherwise. Officers and community members must have an understanding and appreciation for the use of force applications and limitations. Officers are charged with preserving life and property and keeping the peace in the city. To those ends, they may be required to use reasonable force in carrying out their duties.

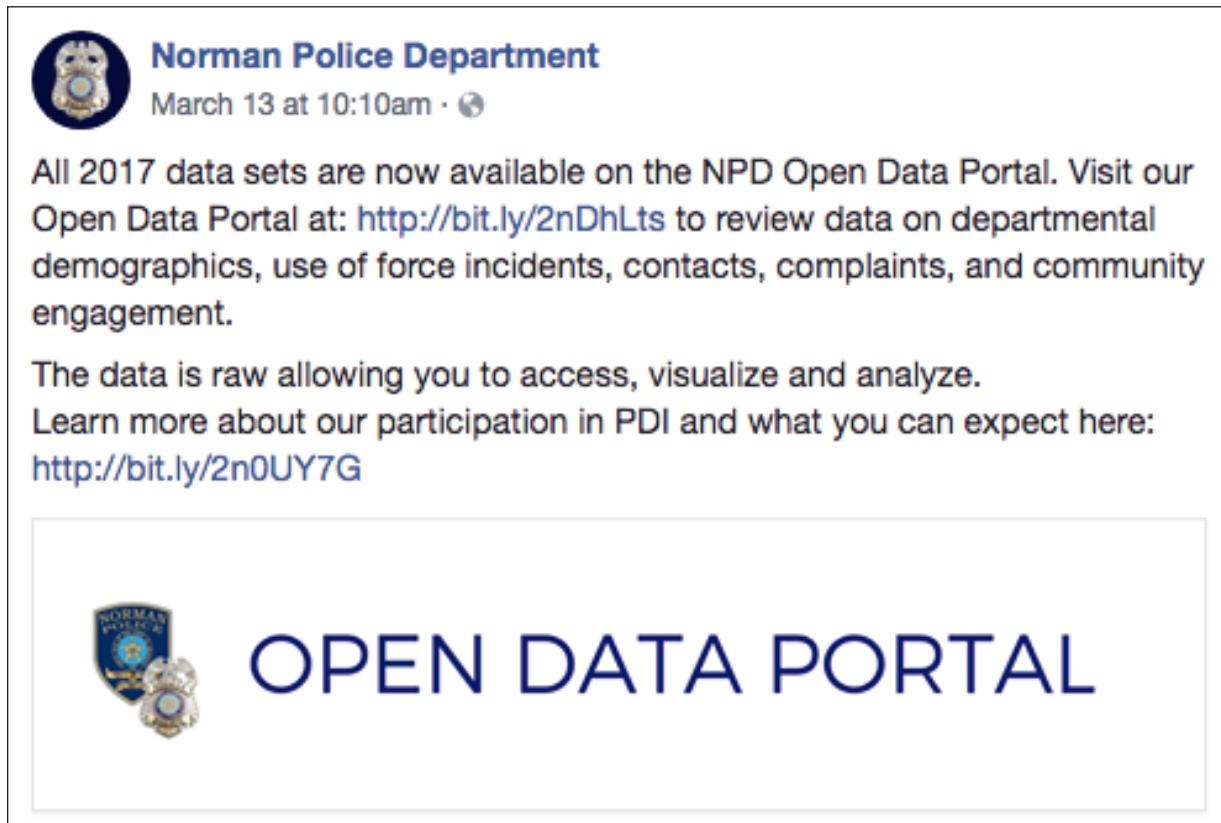
### What you can do with the data

This data set is intended to fulfill one of the fundamental elements of the Police Data Initiative. We have found that it is difficult to set an arbitrary report period as not all incidents are reported right away. That means an investigation may be started contemporaneously with an incident, or it may not be started for weeks, months or even years later – depending upon when it is reported. Therefore, we have decided to start with January 1, 2016 and report quarterly on the investigations that have been initiated year-to-date. That way we will not leave an incident out.

The information contained in these files, along with community and departmental demographic data, may provide researchers with valuable insight that can move beyond subjective or anecdotal claims involving the use of force by the Norman Police Department. We hope that it will also help us with identifying training needs or policy modifications to help ensure the highest level of police services.

Additionally, the NPD has begun to publicize when dataset updates are added to the open data portal. By sharing this notice with their community, such as through the department's social media platforms, NPD can remind the community of their consistent—and even expanded—efforts to promote transparency and invite community engagement and feedback.

Norman Police Department announcement of the opening of the NPD Open Data Portal



NPD is currently in Phase 2 of its open data plan, publishing new datasets in addition to its initial three releases. The department believes that the open data initiative provides an avenue for self-improvement; Sgt. Stege says he has already observed improvements to internal record keeping, expanded transparency with the community, and officers' increased ability to view internal police data from new perspectives. As the NPD builds on its existing open datasets, agency leadership believes that its open data engagement will continue to foster community involvement and increased trust through transparency.





## VI. Conclusion

Dataset updates are necessary to keep open data timely and relevant. As agencies open new datasets, they should remember to update and maintain their datasets. Key lessons learned from Long Branch, Norman, and other PDI agencies that have successfully developed processes for updating data are as follows:

- Develop a plan for open data updates.
- Consider the desired frequency of updates and agency staffing and technical capacity.
- Share notice of dataset updates with the public.
- Continue to evaluate opportunities for developing existing open data practices.



## About the Police Foundation

The **Police Foundation** is a national, nonpartisan, nonprofit organization dedicated to advancing innovation and science in policing. As the country's oldest police research organization, the Police Foundation has learned that police practices should be based on scientific evidence about what works best, the paradigm of evidence-based policing.

Established in 1970, the foundation has conducted seminal research in police behavior, policy, and procedure and works to transfer to local agencies the best new information about practices for dealing effectively with a range of important police operational and administrative concerns. Motivating all of the foundation's efforts is the goal of efficient, humane policing that operates within the framework of democratic principles and the highest ideals of the nation.

To learn more, visit the [Police Foundation](#) online.





Law enforcement agencies nationwide have released open datasets representing calls for service, arrests, and more. Members of the public, community groups, and law enforcement agencies can analyze this data to identify problems and craft solutions. To date, more than 140 law enforcement agencies have joined the Police Data Initiative (PDI). Drawing from their promising practices, this five-part series aims to guide executives and members of local law enforcement agencies as they release open data.

This guide, *Part IV: Updating Open Data*, discusses the value of and methods for updating and maintaining open data, with case studies from Long Branch, New Jersey and Norman, Oklahoma.



1201 Connecticut Ave NW  
Suite 200  
Washington, DC 20036

[www.policefoundation.org](http://www.policefoundation.org)

031801865  
Published 2018