

6A

CITY OF BETHLEHEM

Inter-Office Memorandum

SUBJECT: Proposed Open Data Ordinance

TO: Members of Council

FROM: J. William Reynolds, President of Council

DATE: September 28, 2017

Attached is a proposed Ordinance to establish an open data program and open data online portal. The Ordinance defines policies and practices, governance of the open data program, establishing an online portal, terms of use, and required annual reporting.

An open data program increases accountability, transparency and accessibility, and allows citizens to see the data that exists about their community and their neighborhoods. People throughout the country, when given access to their community's data have found new and innovative uses and applications for it that may not be apparent in city government. Some applications of city open data initiatives include the tracking of leaf collection, snow removal, and pothole issues. Other applications have included tracking health violations, crime statistics, and permit and construction numbers. Releasing data can also assist non-governmental organizations and social service providers in providing information that helps them deliver services.

I have also attached an excerpt from Bethlehem 2017 concerning establishment of an open data program.

I would ask the Members of Council to consider this Ordinance for First Reading at the October 17, 2017 City Council Meeting.



J. William Reynolds, President of Council

Attachment

cc: J. F. Spirk, Jr., Esq.
Mayor
Department Heads

W. Leeson, Esq.
E. Healy, Esq.

BILL NO. ____ -2017

ORDINANCE NO. 2017-_____

AN ORDINANCE OF THE CITY OF BETHLEHEM,
COUNTIES OF LEHIGH AND NORTHAMPTON,
COMMONWEALTH OF PENNSYLVANIA,
ESTABLISHING AN OPEN DATA PROGRAM AND OPEN DATA ONLINE PORTAL

WHEREAS, the City Council (“City Council”) of the City of Bethlehem, (“City”) and the City administration (“Administration”), under the leadership of the Mayor, express their joint support for creating a more open, accountable, and accessible City government through the development and implementation of a financially and operationally feasible open data program, including the proactive publication of certain government information on a freely accessible open data online portal;

WHEREAS, pursuant to the Bethlehem Charter Commission Report of Findings and Recommendation, dated July 27, 1959, which sets forth the City’s current form of government, City Council is authorized to establish policies by which the City is governed;

WHEREAS, the Pennsylvania Right to Know Law, 65 P.S. §§67.101 et seq., as amended, creates a presumption in favor of transparency and public access to certain government documents and the City of Bethlehem, Office of Open Records Right-to-Know Law Policy, dated April 13, 2016, as amended, governs release of certain City information in response to right to know requests from the public;

WHEREAS, municipalities in the Commonwealth of Pennsylvania and throughout the country have implemented open data programs to promote certain policy objectives, which the City Council and Mayor hereby support, including program elements designed to: Increase government accountability, transparency, accessibility and foster greater civic engagement and participation in government; Improve municipal services and coordination among city agencies through data sharing and related applications; and Promote efficient use of City resources and tax revenue;

WHEREAS, City Council and Mayor believe that establishment of a robust open data program will advance the City’s strategic goals by improving the City’s capacity to develop and implement informed, evidence-based public policy and operating strategies, to collect, analyze, and synthesize information and utilize data analytics, and to better measure the effectiveness of municipal programs and services;

WHEREAS, open data programs can stimulate economic development, entrepreneurship, and community-based research by allowing data to be assembled, visualized, and analyzed in innovative ways for businesses, consumers, and researchers, by providing opportunities for data sharing partnerships between local government, educational institutions, non-profits, and the private sector, and by facilitating development of new applications and tools to collect, organize,

and share public data for the benefit of City residents and the general public, and City Council and the Mayor support these policy objectives; and

WHEREAS, implementation of this open data program must be balanced with the City's need to operate in an efficient and cost-effective manner and its important obligations to comply with applicable law and regulation, to protect private and confidential information, and to ensure public safety; therefore, adoption of this Ordinance and implementation of the program is neither intended nor to be interpreted to alter, narrow or invalidate exceptions and exemptions from disclosure of records under the Pennsylvania Right to Know Law, 65 P.S. §§67.101 et seq., as amended, or any other Law and/or Policy as defined in this Ordinance.

THE COUNCIL OF THE CITY OF BETHLEHEM HEREBY ORDAINS AS FOLLOWS:

SECTION 1. DEFINITIONS.

- A. **City Department** or **Department** - any City of Bethlehem department, bureau, office, administrative unit, or agency, but excluding the Law Bureau and all authorities, commissions, advisory committees, and quasi-public corporations.
- B. **Contractor** - means the third party contractor that creates or acquires Data, Datasets or any element thereof on behalf of the City or any Department.
- C. **Data** - means up-to-date final versions of statistical or factual information that (i) are in alphanumeric form reflected in a list, table, graph, chart or other non-narrative form, that can be digitally transmitted or processed; and (ii) are regularly created or maintained by or on behalf of a Department and are controlled by such Department; and (iii) record a measurement, transaction or determination related to the mission of such Department. The term "Data" shall not include information provided to a Department by other governmental entities, image files, such as designs, drawings, photos or scanned copies of original documents, Word documents, whether draft or final, emails, working papers, or documents with similar purpose.
- D. **Dataset** - means a named collection of related records, with the collection containing Data organized or formatted in a consistent, specific or prescribed way, often in tabular form.
- E. **Effective Date** - The date on which this Ordinance takes effect pursuant to the "Third Class City Code" meaning the Act of June 28, 1951, P.L. 662, as amended.
- F. **Law and/or Policy** - Any provision of a federal, state or local law, rule, regulation or City Policy governing the release or prohibited disclosure of information, including without limitation, the Pennsylvania Right to Know Law, 65 P.S. §§67.101 et seq., as amended ("PA RTK Law"), the City of Bethlehem, Office of Open Records Right-to-Know Law Policy, dated April 13, 2016, as amended ("City RTK Policy"), and any other City policy.

- G. **Metadata** - means descriptions of the content or context of a given Dataset that makes it easier to understand and use, including, but not limited to, title, description, tags, date the Data was last updated, frequency of publication, format, field names and explanations, departmental origin and contact information.
- H. **Open Data** - means Data, a Dataset or any element thereof, that is published on the Open Data Portal (defined below), in Open Format, with no legal restrictions on use or reuse unless otherwise required by law or contract, and is available for all to access and download in full without fees or registration requirements.
- I. **Open Format** - means any widely accepted, nonproprietary, searchable, platform-independent, machine-readable method for formatting data which permits automated processing of such data and facilitates analysis and search capabilities.
- J. **Publishable Data** - Data which is not Protected Information or Sensitive Information and which has been prepared for release to the public on the Open Data Portal.
- K. **Protected Information** - means any Data, Dataset or portion thereof determined by the Chief Data Officer not in the best interests of the City to release. Release of Protected Information shall be subject to the discretion of the Chief data Officer after consultation with the applicable Open Data Coordinators and affected Departments. Protected information includes, but is not limited to, the following: (1) Any Data, Dataset or portion thereof to which a Department may deny access pursuant to applicable Law and/or Policy; (2) any Data or Dataset, or portion thereof, that contains a significant amount of Data to which the City may deny access pursuant to applicable Law and/or Policy, if the removal of such Protected Information from the Dataset would impose an undue financial or administrative burden on the City; (3) Data that reflects the internal deliberative process of a Department, including but not limited to opinions, mental impressions, strategy, draft documents, internal discussions pertaining to procedures and time tables to be followed, negotiating positions, future procurements, or pending or reasonably anticipated legal or administrative proceedings; (4) Data stored on a City-owned personal computing device, or data stored on a portion of a network that has been exclusively assigned to a single Department employee or a single Department-owned or controlled computing device; (5) Materials subject to copyright, patent, trademark, confidentiality agreements or trade secret protection; (6) Proprietary applications, computer code, software, operating systems or similar materials; (7) Employment records, internal employee-related directories or lists, and facilities data, information technology, internal service-desk and other data related to internal Department administration; (8) Legacy data: Any public data set that, due to its size or complexity, or due to technology constraints, cannot be made available on the Open Data Portal without creating a material administrative or financial burden for the City, shall be classified as legacy data; (9) Any Data, Dataset or portion thereof which contains any personally identifiable information or financial identifying information that can be associated with a particular individual through one or more identifiers or other information or circumstances and specifically includes, but is not limited to, a private individual's home address, personal electronic mail address, personal telephone number, social security

number, credit card information, and/or driver's license number; or (10) criminal investigative materials, notes, correspondence, reports, recordings, and/or evidence associated with any criminal investigation regardless of whether charges are filed.

- L. **Sensitive Information** - means any Data, Dataset or element thereof which, if published online or otherwise released, could raise privacy, confidentiality or security concerns or have the potential to jeopardize public health, safety or welfare to an extent that is greater than the potential public benefit of publishing that data.

SECTION 2. OPEN DATA PROGRAM.

- A. The City shall develop an open data program (“Open Data Program”) pursuant to this ordinance (“Ordinance”) and implement policies and practices to accomplish the following policy objectives:
 - 1. Proactively release high quality Publishable Data, with Metadata, making it freely available, in the public domain, in appropriately varied and useful Open Formats, and fully accessible to the broadest range of users to use for varying purposes to encourage maximum use;
 - 2. Establish and maintain, directly or through a third party, an open data web portal that provides a central location for published Open Data (“Open Data Portal”);
 - 3. Minimize limitations on the disclosure of otherwise public information, while appropriately safeguarding public safety, confidentiality, Protected Information, and Sensitive Information, and while ensuring that any published Open Data complies with applicable Law and/or Policy;
 - 4. Encourage innovative uses of the City’s Open Data by City Departments, the public, educational institutions, researchers, non-profits, private sector entities, and City contractors and work to generate economic development opportunities through the release and utilization of Open Data;
 - 5. Proactively seek out partnerships to encourage the development of new software applications and tools to collect, organize, and share Open Data; and
 - 6. Balance release of useful information with the needs of the City to conduct operations in an efficient and cost-effective manner.
- B. The requirements of this Ordinance shall apply to all Departments as defined in section 1.A of this Ordinance.

SECTION 3. GOVERNANCE OF OPEN DATA PROGRAM.

- A. **Program Administration; Chief Data Officer.** Development, implementation, and operation of the Open Data Program will be managed by the by the Chief Data Officer (defined below), who will collaborate with the City Departments and oversee the Open Data Management Team (defined below). Within ninety (90) days of the Effective Date, the Mayor shall designate a “Chief Data Officer” who shall report to the City Business

Administrator, unless directed otherwise by the Mayor.

- B. Open Data Management Team.** Within ninety (90) days of the Effective Date, the Mayor shall establish an “Open Data Management Team” chaired by the Chief Data Officer, consisting of the following individuals: (a) Chief Data Officer; (b) a representative from each Department, and City bureau, if appropriate, appointed by the Mayor (each an “Open Data Coordinator”); (c) Two (2) individuals designated by City Council, at least one (1) of which is a City Council member; and (e) an attorney from the City Solicitor’s office. The Open Data Management Team shall meet at least once quarterly, or more often as may be necessary, as determined by the City Business Administrator or Chief Data Officer.
- C. Open Data management Team Responsibilities.** The Chief Data Officer shall manage the Open Data Management Team to ensure the performance of the following Open Data Program functions and operations:
1. **Implementation Plan.** Submit an Open Data Program implementation plan (“Implementation Plan”) to the Mayor and City Council, within one (1) year of the Effective Date, which shall include detailed departmental action items and timelines for developing and implementing processes, policies, and procedures necessary to support the Open Data Program in accordance with this Ordinance.
 2. **Data Catalogue.** Oversee the creation and periodic update of a “Data Catalogue” meaning a comprehensive inventory of potential City Datasets possessed, controlled, or managed by each Department that could feasibly be published on the Open Data Portal.
 3. **Open Data Policy.** Prepare a comprehensive “Open Data Policy” document, incorporating operationally and financially reasonable procedures, practices, processes, and technical standards to achieve the objectives of the Open Data Program, adapted to the City’s needs and operating constraints, which shall be reviewed with reasonable frequency for appropriate revision.
 4. **Risk Assessment and Management; Privacy protection.** In collaboration with the City Solicitor: (a) Develop, document, and implement a process for determining the relative level of risk and public benefits associated with potentially releasing Publishable Data to make determinations about whether and how to publish such information on the Open Data Portal; (b) Ensure that the City is reasonably insured for potential liabilities associated with operation of the Open Data Program; (c) Develop, document, and implement an ongoing privacy risk mitigation process to reasonably minimize privacy risks and legal liability related to publication of Open Data; (d) Ensure that the Open data Program continually complies with applicable Law and/or Policy.

5. **Release Factors and Prioritization.** Develop, document, and implement a process for prioritizing potential publication of Datasets which takes into account factors such as: (i) whether publication improves public knowledge of City operations, aligns with City strategic priorities, increases accountability, improves efficiency and responsiveness of City services; (ii) whether publication increases availability of information commonly requested by the public; (iii) whether the financial and operational costs of releasing such information outweigh the public benefit derived from the potential release; and (iv) any other reasonable factors developed by the Open Data Management Team from time to time.
6. **Release Timeline.** Develop a routinely updated, public timeline for new Dataset publication.
7. **Publication Logistics.** Develop, document, and implement processes for publishing Datasets to the Open Data Portal, including processes for coordinating with Contractors, if any, and any third-party entities providing Open Data Portal services to the City.
8. **Outreach.** Develop and implement a process for proactively collaborating with and soliciting feedback from members of the public, Department staff, Contractors, if any, and other stakeholders to identify demand for particular high-value Datasets.
9. **Contracting; Procurement Policies.** Where operationally and financially feasible, the Chief Data Officer shall coordinate with the City Purchasing Department, the City Solicitor, and other appropriate City Departments to develop rules for including open data requirements in applicable City contracts and standard contract provisions that promote the City's open data policies, including, where appropriate, provisions to ensure that the City retains ownership of Contractor-produced or controlled Data and the ability to post such data on the Open Data Portal or make it available through other means. The foregoing shall not prohibit the negotiation of contract terms which do not include open data requirements where deemed appropriate by the Administration or the City Solicitor to conform to the exceptions and exemptions from disclosure under applicable Law and/or Policy or to protect a vendor's or a contractor's intellectual property rights or proprietary interests.
10. **Partnership and Funding opportunities; Employee Education.** In order to facilitate program improvement and sustainability, actively seek out institutional partnerships, funding, and capacity-building opportunities such as grants and technical assistance programs and identify and fund reasonable open data educational opportunities for City employees with open data responsibilities.
11. **Other Responsibilities.** Perform any other tasks reasonably necessary for the implementation, resourcing, and long-term maintenance of a robust and sustainable open data program.

SECTION 4. ONLINE PORTAL.

- A. **Open Data Online Portal; Updates.** A single web portal (“Open Data Portal”) shall be (i) established and maintained by or on behalf of the City to publish Open Data. The Open Data Portal shall be administered by the Chief Data Officer or as otherwise determined by the City Business Administrator. To the extent that applicable City Departments regularly maintain or update such information, published Datasets shall be updated periodically with reasonable frequency, using automated processes when practical, including real-time data when practical, in order to preserve the integrity and usefulness of such information.
- B. **Portal Features.** The Open Data Portal shall include at least the following features: (i) a list of all Datasets currently available on the portal; (ii) a mechanism for online public feedback and for submission of recommendations for publishing additional Datasets; and (iii) System tracking of user website behavior and other analytics to facilitate generation of usage metrics for ongoing program improvement.

SECTION 5. OPEN DATA REPORT AND PROGRAM REVIEW.

- A. **Open Data Report.** Within one (1) year of the Effective Date, and thereafter at least annually, the Chief Data Officer shall submit to the Mayor and City Council an “Open Data Report” which shall at least include the following elements: (1) assessment of progress towards achievement of Open Data Program goals and Implementation Plan action items; (2) comments on the state of open data availability from the previous year; (3) open data program plan for the subsequent year to improve public access to open data, maintain and improve data quality, and improve open data collaboration between City Departments; (4) a list of currently published Datasets and Datasets targeted for release in the next year; (5) estimated program funding requirements for the next year; (6) discussion of open data education completed and planned for the upcoming year; and (7) discussion of efforts to engage in data sharing and open data internal capacity-building partnerships; (8) discussion of efforts to seek out grant and other potential outside funding opportunities; (9) discussion of progress creating and/or revising key open data program documents, such as the Open Data Policy, during the prior year and plans for creating and/or revising such documents during the next year in response to significant legal and/or policy developments, if any; and (10) suggestions for improving the City’s open data management processes in order to ensure that the City continues to move forward in achieving the policy goals of the Open Data Program.

SECTION 6. LEGAL PROVISIONS; ONLINE TERMS OF USE AND DISCLAIMERS

- A. **Open Data Portal Terms of Use and Disclaimers.** The Open Data Management Team shall collaborate with the City Solicitor to develop and periodically update appropriate legal provisions for display on the Open Data Portal, including without limitation, terms of use, disclaimers, and privacy policy language. Such provisions shall indicate, but not be limited to advisories of the following nature:

1. the Open Data published on the Open Data Portal is provided for informational purposes only.
 2. the City does not warranty the completeness, accuracy, content or fitness for any particular purpose or use of any Open Data made available on the Open Data Portal;
 3. there are no express or implied warranties, or warranties to be inferred with respect to the Open Data or the Portal itself.
 4. the City is not liable for any deficiencies in the completeness, accuracy, content or fitness for any particular purpose or use of, or detrimental reliance upon, any Open Data, or application utilizing such data provided by any third party.
 5. the City assumes no liability for any virus or other damage to any computer or information technology system that might occur during or as a result of accessing the Open Data or Portal or information re-published therefrom.
- B. **No private right of action.** This Ordinance shall not create any private rights or any private right of action to enforce its provisions. Failure to comply with this Ordinance shall not result in any liability to the City, its employees, agents, contractors, or counterparties to any data-sharing or other agreements.
- C. **Immunities and defenses preserved.** Nothing in this Ordinance or any City policy or act attributable to a City official or employee shall be construed to waive any privilege, right, defense, or immunity arising out of any applicable governmental immunity laws, statutes, rules, regulations, or common law.
- D. **Discontinuance of Data; Voluntary Release.** The City reserves the right to amend or discontinue any policy or practice regarding availability of any content on the Open Data Portal, and to withdraw any data published on the Open Data Portal, at any time and for any reason. Subject to applicable Law and/or Policy, nothing in this Ordinance shall be deemed to prohibit a City Department from voluntarily disclosing information not otherwise defined by this Ordinance.
- E. **No Intellectual Property Rights Granted.** No user of the Open Data Portal or any Open Data, nor any recipient of data from the Portal, whether acquired directly or indirectly, shall acquire or have intellectual property rights or proprietary interests in the Open Data or any other information or element thereof published on the Open Data Portal, including without limitation any written materials, logos, trademarks, trade names, copyrights, patent applications, patents, know-how, trade secrets or moral rights. The City reserves the right to claim or seek to protect any patent, copyright, trademark, or other intellectual property rights in any of the information, images, software, or processes displayed or used on the Open Data Portal.
- F. **No Partnership.** No use of Open Data shall be deemed to constitute a partnership or joint venture between the user and the City or between a third party and the City.

SECTION 7. MISCELLANEOUS

A. **City Rules and Regulations.** The Mayor, the Administration, and the City Departments shall have the authority to promulgate reasonable rules and regulations, from time to time, to implement and enforce the requirements of this Ordinance.

SECTION 8. REPEALER

That all ordinances and sections thereof that are inconsistent with this Ordinance are hereby repealed.

Sponsored by _____

PASSED finally in Council on this ____ day of _____, 2017.

President of Council

ATTEST:

City Clerk

This Ordinance approved this _____ day of _____, 2017.

Mayor

EXCERPT

Bethlehem 2017

#2 Open Bethlehem

As the 21st century has progressed, the contemporary world of communication has allowed for the vast sharing of information in networks of individuals across the world. The sharing of information movement has extended to public affairs as citizens in a community have been a source of ideas, solutions, and innovation. This use of communication technology to enhance public participation is advancing quickly in other cities and the City of Bethlehem has an opportunity to take advantage of the broad and exciting opportunities for such engagement that exist. Many cities throughout the country are leading the way in using technology to create more efficient ways to deliver services, encourage entrepreneurship, and provide our citizens with information pertinent to their community. Specifically (or most notably), many cities are revolutionizing the way in which governments interact with their citizens by *opening up* themselves to their outside communities of creativity, ideas, and technology. By taking current internal governmental data and making it more accessible to the public, cities are allowing their citizens to be better aware and more informed about what their city is doing well and those programs and policies that need improvement.

What is Open Data? Open data is data that can be freely used, re-used and redistributed by any citizen. On May 9, 2013, President Obama signed an executive order that made **open and machine-readable data** the new default for government information. In April of 2016, Governor Wolf issued an Executive Order mandating that state departments issue or release agency data for the purpose of engaging “citizens in innovative policy solutions”.

How is Open Data Used? Many cities currently have Open Data websites including nearly every major city in the country. Cities currently have internal data that is helpful in multiple ways to residents and investors in a community. Currently in Bethlehem, however, citizens don't have extensive access to the aforementioned data. Open data allows citizens to see the data that exists about their community and their neighborhoods. People throughout the country, when given access to their community's data have found new and innovative uses and applications for it that may not be apparent in city government (similar to the way third party software engineers create applications for operating systems). Some applications of city open data initiatives include the tracking of leaf collection, snow removal, and pothole issues. Other applications have included tracking health violations, crime statistics, and permit and construction numbers. The federal government has an effective website that shows hundreds of third party applications that have been developed for use in conjunction with governmental and urban based services (www.data.gov). Philadelphia (www.opendataphilly.org/) and Pittsburgh (www.pittsburghpa.gov/pgldataforum/) both have excellent websites that show the applications of their current open data initiatives.

Why should Bethlehem look at developing Open Data? Currently, there is a divide between the extensive capabilities of available technology and the utilization of that technology by the City of Bethlehem. We live in a growing tech based community with citizen knowledge that may exceed either the labor or knowledge currently available in City Hall. We must switch from a reactive system to a proactive system of releasing data and information. Releasing data can also assist non-governmental organizations and social service providers in providing information that helps them deliver services. Encouraging third parties to develop apps that use the datasets is a huge opportunity for our community. Many cities have established

relationships with their universities, colleges, and tech communities. There is no reason why the City of Bethlehem cannot do the same with Lehigh University, Moravian College, Northampton Community College, and the many successful technology based businesses in Bethlehem.

Isn't there a downside to turning over data? Other cities with open data initiatives have not reported any extensive problems in turning over public data. Several cities have reported positively on the accomplishments of their data sharing projects, for example, in the area of economic development. Businesses rely on datasets when making determinations every day. The City of Bethlehem already has data on crime, income levels through the city, etc. Internally, that information is used to make policy decisions every day. There is an enormous benefit in making that data as accessible as possible to potential investors in Bethlehem. Certain datasets also may help to show the challenges in particular areas of the city which, at times, can help to prove the value and necessity of increased investment from the City of Bethlehem (such as economic development incentives) as well.

Is there a cost to developing an Open Data website? Some cities have been able to build open data sites in house. Other cities have had to increase their IT budgets or subcontract with an outside provider to build a data portal. Data portal costs often depend on how many data sets are provided.

How should the City proceed? Other cities have passed ordinances that laid out reasonable and practical timelines and procedures to create Open Data websites. The attached Resolution #2 lays out the creation of an Open Data working group with representatives of the Administration, City Departments, members of City Council, and the citizens of Bethlehem.

The Open Data Team will have a timeline to study the major issues involved with producing an Open Data site including but not limited to collection of data, potential costs of developing an Open Data site, and any legal issues that may arise. The goal is to pass an Open Data formal ordinance at the beginning of 2018.