



LOUISVILLE METRO GOVERNMENT

OPEN DATA POLICY

Contents

1.0 Introduction	4
2.0 Definitions	4
3.0 Louisville Metro Policies.....	6
3.1 Governance and Oversight.....	6
3.1.1 Open Data Point of Contact	6
3.1.2 Open Data Coordinator	6
3.1.3 Compliance.....	7
3.1.4 Open Data Catalogue	7
3.2 Technology Projects	7
3.2.1 New Technology Systems.....	7
3.2.2 Existing Technology Systems.....	8
3.3 Tools	8
3.3.1 Open Data Portal.....	8
3.4 Data Sets	8
3.4.1 Open By Default	8
3.4.2 Maintenance	8
3.4.3 Third-Party Search Engines	8
4.0 Louisville Metro Standards.....	9
4.1 Integration Architecture.....	9
4.2 Data Set Publishing.....	9
4.2.1 Database Management System (DBMS) Access	9
4.2.2 File Transfers	9
4.2.3 Self-Hosting	9
4.3 Maintenance	10
4.3.1 Data Set Content Updates.....	10
4.3.2 Structural Changes (Fields, Data Types).....	10
4.3.3 Content Support.....	10
4.4 Ownership, Responsibility, and Retention.....	11

4.4.1	Ownership	11
4.4.2	Responsibility	11
4.4.3	Retention.....	11
4.5	Exemption from Public Access	12
5.0	Louisville Metro Guidelines.....	13
5.1	Data Set Selection	13
5.1.1	Prioritization Criteria	14
5.1.2	Public Input and Participation.....	14
5.1.3	Public Review	14
6.0	Public Policies	14
6.1	Explicit Identification of Public Use by Third Parties.....	14
6.1.1	Terms of Use	15
6.2	Ensuring Continued Public Access to Data Sets	15
6.3	Protecting the Louisville Metro Open Data Portal.....	15
6.4	Improving Service Delivery.....	15
7.0	Public Standards	16
7.1	Web Application.....	16
7.2	Application Programming Interface (API)	16
7.3	Download Formats	16

1.0 Introduction

The ODP identifies the reasons why each technical standard was selected and the types of data for which it is applicable, and may recommend or require that data be published in more than one technical format. The ODP includes a plan to adopt or use a web application programming interface that permits application programs to request and receive public data sets directly from the single web portal. MTS will update the ODP as necessary, as required by the law.

2.0 Definitions

Terms	Definition
Department	Any Metro Government department, office, administrative unit, commission, board, advisory committee, or other division of Metro Government within the official jurisdiction of the executive branch.
Louisville Metro Standard	An industry standard or de facto standard which is adopted and/or mandated by MTS to be used in relation to Louisville Metro's information technology systems and services. MTS is directed by the Executive Order to establish Citywide standards that apply to all Louisville. Departments.
Data	Final versions of statistical or factual information
	1. In alphanumeric form reflected in a list, table, graph, chart or other non-narrative form, that can be digitally transmitted or processed.
	2. Regularly created or maintained by or on behalf of and owned by a department that records a measurement, transaction, or determination related to the mission of a department.
	3. Data may include information provided to a department by other governmental entities, but it shall not include image files, such as designs, drawings, maps, photos, or scanned copies of original documents, provided that it shall include statistical or factual information about such image files and shall include geographic information system (GIS) data.
Data Set	A named collection of related records on a storage device, with the collection containing individual data units organized or formatted in a specific and prescribed way, often in tabular form, and accessed by a specific access method that is based on the data set organization.
MTS	The Louisville Metro Technology Services department.

Metadata	Contextual information that makes the public data sets easier to understand and use.
ODC	An Open Data Coordinator. An ODC is a Louisville Metro employee designated by a Department to act as the coordinator of open data efforts for that Department.
Open Standard	A technical standard developed and maintained by a voluntary consensus standards body that is available to the public without royalty or fee.
Public Data Set	A comprehensive collection of interrelated data that is available for inspection by the public in accordance with any provision of law and is maintained on a computer system by, or on behalf of, a Department, excluding any data to which a Department may deny access pursuant to any provision of law or any federal or state rule or regulation.
	The entry above is only a summary. Please consult The Mayor's Open Data Executive Order for the full authoritative definition. http://louisvilleky.gov/government/mayor-greg-fischer/read-open-data-executive-order
Requirement	1. A condition or capability needed by a stakeholder (such as an entity, member of the public, or Louisville Metro) to solve a problem or achieve an objective.
	2. A condition or capability that must be met or possessed by a solution or solution component to satisfy a contract, standard, specification, or other formally imposed document.
	3. A singular documented need of what a particular product or service should be or perform.

3.0 Louisville Metro Policies

In accordance with The Mayor's Open Data Executive Order, MTS has established the following policies. Louisville Metro Open Data policies apply to all Louisville Metro Departments as defined by Mayor's Executive Order 1, Series 2013.

The key factors that will propel the open data movement going forward will be:

- Continued investment in open data initiatives
- Making as much open data available as possible
- Expanding interaction between governments and their many stakeholders
- Increasing support from government leaders, and
- Fostering deep and abiding trust from citizens

3.1 Governance and Oversight

3.1.1 Open Data Point of Contact

MTS will designate an Open Data Point of Contact (ODPoC). The ODPoC will act as the overall manager for information technology initiatives as they pertain to open government, and making machine-readable data and transactional services available for public use. The ODPoC will have the following responsibilities:

- Oversee the operation and ongoing evolution of Metro Louisville's Open Data program and coordinate the efforts of the MTS Open Data team
- Engage with Department Open Data Coordinators (as described below) and with executive leadership to strategically plan, and provide support for, the publishing of data sets
- Publish the annual Open Data Report (as mandated by The Mayor's Open Data Executive Order)
- Determine, operationalize, and support the public engagement strategy, including outreach and public inquiries
- Collaborate with other local, state, and federal government entities on open government strategies and data specifications
- Ensure the appropriate governance and technical controls exist as required by Louisville's Chief Information Security Officer
- Host quarterly meetings to educate staff and maximize Open Data development opportunities

3.1.2 Open Data Coordinator

Each Department must designate one of its employees as the Department's Open Data Coordinator (ODC). Each ODC will act as the coordinator of open data efforts for that Department. Each ODC will have the following responsibilities:

- Identify and enable the delivery of data sets to the designated Open Data Portal
- Develop the Department portions of the citywide annual Open Data report
- Liaise with the Chief Open Data Officer and the MTS team supporting the Open Data program
- Address feedback from the public for the Department's public data sets
- Perform public outreach and presentations with the aim of increasing strategic use of Metro Louisville data sets

The ODC should be knowledgeable of the following Department teams:

- Analytics / Strategic / Management Planning
- Web Content / Communications
- Legal
- Information Technology

3.1.3 Compliance

The Mayor's Open Data Executive Order establishes the following compliance requirements:

- Annual OD plan/report
- Policy review to continue to position Metro Government as a leader on issues of openness, efficiency and technical best practices
- Department response to Open Data requests
- Department responsibility for creating their departmental Open Data Catalogue

3.1.4 Open Data Catalogue

MTS will create a public Open Data catalogue to promote accountability to the public and internal departments. The catalogue will track interim progress of datasets that have been published through the Louisville Metro Open Data portal or by direct public access. The catalogue will also display by Department:

- Data set release dates
- Inventory of data sets released
- Datasets planned for released (Not Yet Public)
- Data sets that will not be released (Cancelled).

3.2 Technology Projects

3.2.1 New Technology Systems

All new Louisville Metro projects to implement information technology systems, excluding infrastructure, must include funding, staffing, and tasks to comply with Open Data legislation, policies, and technical standards.

"Infrastructure" refers to those projects that solely involve the procurement and deployment of desktop computers, servers, operating systems, telephones, routers, firewalls, networks, and similar hardware capabilities.

3.2.2 Existing Technology Systems

All operating information technology systems, excluding infrastructure, must be evaluated for data that is eligible for publication. For each system, the Department that owns or prepares the data must create a plan to publish data to comply with the Open Data legislation, policies, and technical standards. This plan must be provided to ODC for inclusion in each Open Data Report.

3.3 Tools

3.3.1 Open Data Portal

MTS will provide and manage the Louisville Metro Open Data portal for Louisville's public data set catalog. All public data sets must be identified and referenced on this site. The portal will include interactive features to solicit public feedback. Public feedback includes discussion of Open Data policies, standards, guidelines, data sets, and prioritization of data set releases. Whenever practical MTS will ensure the portal uses open Internet standards and specifications.

3.4 Data Sets

3.4.1 Open By Default

All data sets must be considered open unless they contain information designated as sensitive, private, or confidential as defined by Local, State, or Federal law.

3.4.2 Maintenance

Every Department must ensure that each open data set and associated metadata is kept current to the extent that the department regularly maintains or operationally updates the public data set. ODCs are responsible for ensuring the

3.4.3 Third-Party Search Engines

All open data sets must be accessible to the public through the Louisville Metro Open Data portal and accessible to third-party (Internet-based) search engines. In any exceptional case in which for technical reasons it is not feasible to host an open data set on the Louisville Metro Open Data portal itself, the Louisville Metro Open Data portal must provide a direct link to the open data set that is hosted elsewhere. A Department may self-host the open data set, provided that the open data set is accessible through the link on the Louisville Metro Open Data portal to the public and to third-party (Internet-based) search engines.

4.0 Louisville Metro Standards

4.1 Integration Architecture

Delivery of data from back-end systems to the Louisville Metro Open Data portal will take place through an architecture which permits de-coupling and enables a layer of abstraction. This architecture leverages infrastructural investments and technical capabilities that either already exist within Departments or would require minimal effort to implement.

A de-coupled architecture provides the following benefits:

- It supports effective data governance including the ability to avoid the public release of information not otherwise defined as public data, including personally identifiable information
- It supports the ability to monitor update cycles and identify issues for rapid resolution
- It permits Louisville Metro to migrate to a different Open Data portal solution without requiring significant re-engineering at every data source

4.2 Data Set Publishing

The Department ODC should work closely with MTS during the initial data set publishing process to identify the best technical approach to automate delivery to the public. The following mechanisms are supported:

4.2.1 Database Management System (DBMS) Access

For Departments that require MTS assistance to extract data from back-office systems, the Department must provide read-only DBMS credentials for the necessary databases, tables, stored procedures, and/or views. The credentials should not permit access to tables, columns, or other entities that contain information that is not included within the definition of public data set because it is exempt from disclosure.

If the Department operates a data warehouse, it should provide access to extract open data sets from the warehouse rather than the source operational system.

4.2.2 File Transfers

Departments may choose to publish files to a location on the Louisville Metro network that MTS staff or MTS-managed automation tools can access. Specific details, such as location, formats, naming conventions, and sizing, should be discussed with MTS.

4.2.3 Self-Hosting

In any exceptional case in which transaction volumes, data structure, technical barriers, or resource limits prevent hosting a public data set on the Louisville Metro Open Data portal itself, the Louisville Metro Open Data portal must provide a direct link to the public data set that is

hosted elsewhere so that the data set is accessible to the public through the Louisville Metro Open Data portal. In such an exceptional case, a Department may self-host the relevant public data set, provided that the public data set is accessible to the public through the link on the Louisville Metro Open Data portal according to following standards:

- The department must provide a single, unique, publicly accessible URL for each data set along with the data set-level metadata. This information will be made available in the Louisville Metro Open Data portal's catalog of data sets. It is strongly preferred that the URL be the location of the data set, and not an intermediate web page.
- The data set must be machine-readable and in one of the formats listed in the Public Standards section of this document. The Portable Document Format (PDF) is not permitted.
- The data set may be encapsulated in a single archive file (and optionally compressed) if it consists of multiple related files.

4.3 Maintenance

Data sets published on the Louisville Metro Open Data portal must be maintained for accuracy, timeliness, and accessibility, as set forth below.

4.3.1 Data Set Content Updates

Department ODCs are responsible for identifying an update frequency for each public data set as an element in its data set metadata, and for ensuring that their data set content updates are maintained and published according to the data set's identified schedule or to the extent that the department regularly maintains or updates the public data set.

4.3.2 Structural Changes (Fields, Data Types)

The ODC or Department liaison must not modify existing data structure during normal updates to the data set. The number of data elements per record, name of data element, data element format, order of the data elements, file name and file format must be consistent with the originally-published version. The Department ODC should notify MTS prior to any structural changes to data sets.

4.3.3 Content Support

MTS may contact the Department ODC to obtain feedback or a direct answer to comments or inquiries from the public that relate to data set contents or supporting documentation. The Department will provide MTS with an expected timeframe to resolve the support inquiry. The Department must then notify MTS when the updates or corrections are ready for publication. A Department that proactively identifies defects or improvements related to its data set content or supporting documentation must notify MTS prior to publication of any changes.

4.4 Ownership, Responsibility, and Retention

4.4.1 Ownership

Departments retain ownership over the data sets that they submit. All data and data sets remain the property of the originating Department and public users acquire no ownership rights to Department data or data sets.

The data sets published on the Louisville Metro Open Data portal become a public resource available to anyone with access to the Internet. The public use of the data sets may include development of applications. In this case, the developers retain all intellectual property ownership in their applications, excluding the Department data itself, whose ownership continues to reside with the Department.

4.4.2 Responsibility

The Department that owns the data set is responsible for all aspects of the quality, integrity, and security of the data set contents, as detailed below, and as subject to limitations on liability contained in The Mayor's Open Data Executive Order. Departments do not relinquish control of their data to MTS when the data set is submitted for publication on the Louisville Metro Open Data portal.

Departments are responsible for ensuring that all of their submitted data has been reviewed by appropriate Department management for confidentiality, privacy, security, and all other content limitation issues consistent with The Mayor's Open Data Executive Order before the data is submitted for publication. The Department supplying the data is also responsible for maintaining records of information privacy status and public-disclosure requirements.

The Department is responsible for updating its data according to the frequency identified in the data set metadata or to the extent that the department regularly maintains or updates the public data set.

4.4.3 Retention

As the authoritative source of the information, submitting Departments retain version control of public data sets and must comply with record retention schedules and requirements defined by the KY State law.

4.5 Exemption from Public Access

Public data to be made available per The Mayor's Open Data Executive Order does not include any data set to which a Department may deny access pursuant to the Freedom of Information Law (FOIL) or any other provision of a federal or state law, rule or regulation or local law. The Mayor's Open Data Executive Order does not prohibit Departments from releasing such FOIL-deniable data.

Records deniable under FOIL are those that:

- (a) are specifically exempted from disclosure by state or federal statute
- (b) if disclosed would result in an unwarranted invasion of personal privacy
- (c) if disclosed would impair present or imminent contract awards or collective bargaining negotiations
- (d) are trade secrets or are submitted to a department by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise
- (e) are compiled for law enforcement purposes and which if disclosed would:
 - i. interfere with law enforcement investigations or judicial proceedings
 - ii. deprive a person of a right to a fair trial or impartial adjudication
 - iii. identify a confidential source or disclose confidential information relative to a criminal investigation
 - iv. reveal criminal investigative techniques or procedures, except routine techniques and procedures
- (f) could if disclosed endanger the life or safety of any person;
- (g) are inter-department or intra-department communications, except to the extent that such materials consist of:
 - i. statistical or factual tabulations or data
 - ii. instructions to staff that affect the public
 - iii. final department policy or determinations
 - iv. external audits, including but not limited to audits performed by OMB and the federal government

(h) are examination questions or answers that are requested prior to the final administration of such questions

(i) if disclosed, would jeopardize a department's capacity to guarantee the security of its information technology assets, such assets encompassing both electronic information systems and infrastructures

The Mayor's Open Data Executive Order specifies the following additional exemptions:

- any portion of such data set to which a department may deny access pursuant to the public officers law or any other provision of a federal or state law, rule or regulation or local law
- any data set that contains a significant amount of data to which a department may deny access pursuant to the public officers law or any other provision of a federal or state law, rule or regulation or local law and where removing such data would impose undue financial or administrative burden
- data that reflects the internal deliberative process of a department, including but not limited to negotiating positions, future procurements, or pending or reasonably anticipated legal or administrative proceedings
- data stored on a department-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
- materials subject to copyright, patent, trademark, confidentiality agreements or trade secret protection
- proprietary applications, computer code, software, operating systems or similar materials
- employment records, internal employee-related directories or lists, and facilities data, Information technology, internal service-desk and other data related to internal department administration

Nothing in the legislation, policies, or standards shall be deemed to prohibit a Department from voluntarily disclosing information not otherwise defined as a public data set, nor shall it be deemed to prohibit a department from making such voluntarily disclosed information accessible through the Louisville Metro Open Data portal.

5.0 Louisville Metro Guidelines

5.1 Data Set Selection

Departments should use the following guidelines to select and prioritize their data sets for publication.

5.1.1 Prioritization Criteria

For purposes of prioritizing public data sets, Departments understand that all data is open by default and should consider whether information embodied in the public data set:

- Increases Department accountability and responsiveness
- Improves public knowledge of the Department and its operations
- Responds to a need or demand identified by the public
- Furthers the mission of the Department
- Reduces the impact of automated tools which scan the Louisville's website for data
- Fosters department/inter-department efficiency
- Creates economic opportunity

5.1.2 Public Input and Participation

Public input is essential to selecting and disseminating information. The Louisville Metro Open Data portal includes an online forum to solicit feedback from the public and to encourage public discussion on open data policies and public data set availability. Departments should use this forum to solicit recommendations regarding the presentation of data, data types, and metadata from individuals, groups, and organizations.

The ODPoC will also coordinate a regularly scheduled Online Services & Open Data Forum for additional public input and feedback.

5.1.3 Public Review

Public review creates a means for Departments to establish and maintain communications with members of the public and governments inside and outside Louisville's jurisdiction. Such review ensures that Departments create valuable information products, along with ways of disseminating information.

6.0 Public Policies

The Mayor's Open Data Executive Order requires that data sets must be available without registration requirement, license requirement, or usage restrictions, except as provided in Sections 6.1 through 6.4 below.

6.1 Explicit Identification of Public Use by Third Parties

Notwithstanding Section 6.0 above, MTS may require third party entities such as application developers to explicitly identify the source, version, and modifications made to a public data set, should they publicly re-publish it elsewhere or incorporate the public data set into an application. This is addressed through updated Terms of Use for the Louisville Metro Open Data portal.

6.1.1 Terms of Use

The following Terms of Use apply to visitors to the Louisville Metro Open Data portal and application developers who obtain Louisville Metro data through this single web portal:

By accessing data sets and feeds available through the Louisville Metro Open Data portal (or the "Site"), the user agrees to all of the Terms of Use of LouisvilleKY.gov as well as the LouisvilleKY.gov Privacy Policy. The user also agrees to any additional terms of use defined by entities providing data or feeds through the Site. Entities providing data include, without limitation, Departments, bureaus, offices, departments and other discrete entities of Louisville Metro. Public data sets made available on the Louisville Metro Open Data portal are provided for informational purposes. Louisville Metro does not warranty the completeness, accuracy, content, or fitness for any particular purpose or use of any public data set made available on the Louisville Metro Open Data portal, nor are any such warranties to be implied or inferred with respect to the public data sets furnished therein.

Louisville Metro is not liable for any deficiencies in the completeness, accuracy, content, or fitness for any particular purpose or use of any public data set, or application utilizing such data set, provided by any third party.

Submitting Louisville Metro Departments are the authoritative source of data available on Louisville Metro Open Data. These entities are responsible for data quality and retain version control of data sets and feeds accessed on the Site. Data may be updated, corrected, overwritten and/or refreshed at any time. The anticipated update frequency is indicated for each data set on the Site. Older versions of data sets will not be retained.

6.2 Ensuring Continued Public Access to Data Sets

MTS may implement rate-limiting on a per-visitor basis to ensure that the Louisville Metro Open Data portal's system resources are shared fairly between all visitors.

6.3 Protecting the Louisville Metro Open Data Portal

MTS may implement rate-limiting and other security mechanisms to ensure that the Louisville Metro Open Data portal is not abused, damaged, or impaired.

6.4 Improving Service Delivery

MTS may implement registration capabilities in order to gather usage metrics, particularly for third-party applications which routinely access the Louisville Metro Open Data portal. In addition, the developers of third-party applications will benefit from receiving updates from MTS as enhancements to the site and the data it contains are applied over time.

The goal is to improve the way the Louisville Metro Open Data portal functions and the data available through it, by using registration only to ensure access to public data sets, to protect the single web site

housing public data sets from unlawful abuse or attempts to damage or impair use of the web site, or to analyze the types of data being used to improve service delivery.

7.0 Public Standards

7.1 Web Application

The Louisville Metro Open Data portal supports most modern web browsers. The web application permits the listing, viewing, exporting, embedding, filtering, visualizing, personalizing, commenting on, and rating of public data sets.

7.2 Application Programming Interface (API)

The Louisville Metro Open Data portal supports a generic API that permits access to all published data sets in a similar manner.

7.3 Download Formats

In 2009, the U.S. Government defined an open file format as “one that is platform independent, machine readable, and made available to the public without restrictions that would impede the re-use of that information.”

Type	Type	Description
CSV	Text Type	Comma-separated values Description
JSON	Text	JavaScript Object Notation
PDF Type	Binary	Portable Document Format
RDF	Text	Resource Description Framework
RSS	Text	RDF Site Summary/Really Simple Syndication
		<i>(Note: each row is represented as a separate item, but each item's description field contains an HTML table with the column names and row values)</i>
XLS	Binary	Microsoft Excel
XLSX	Binary	Microsoft Excel Open XML
XML	Text	Extensible Markup Language