

OPEN DATA GUIDE

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Background

The city of Las Vegas's open data initiative got its start in 2013 when the Code for America Fellowship in emphasized the importance of open data. The city introduced its Open Data portal when it first participated in National Day of Civic Hacking the same year.

As part of What Works Cities (WWC) engagement in 2016, City Council issued a resolution promoting open data (<u>CLV Open Data Resolution</u>). Also, as part of WWC, the city's Open Data policy was re-issued the same year (the original was issued in the 2014 <u>CLV Open Data Policy</u>). The policy drives increased government efficiency and civic engagement, leading to social and economic benefits such as:

- Empowering citizens through democratization of information
- Fostering citizen participation
- Supporting early-stage entrepreneurship
- Contributing to workforce development and job creation
- Increasing a positive business environment
- Promoting public-private partnerships

The CLV Open Data policy directs all departments to make their data open, which both sets the expectation that public data will be public and makes clear that the city has a responsibility to protect privacy. Under the policy, each department works with the Innovation Technologies (IT) open data project manager and data architect to publish its data. Each department Director appoints an Open Data Coordinator (ODC) to lead the department's efforts, and this guide is intended primarily for those ODCs. Any procedures put in place per the Open Data policy, will be documented and included as an appendix to this guide.

There are a number of reasons why releasing open data can benefit your department and those it serves. Opening up data to the public is a priority to City Council as evidenced by the aforementioned resolution and policy. Releasing data that has been collected and/or maintained through the operation of city departments enhances the transparency of city government, and can help citizens become better informed about the operation of the city and more engaged with their elected representatives.

Releasing open data has many practical benefits for city departments. Open data releases can be an effective way of responding to requests for data through the Nevada Public Records Act. One Open Data release may address multiple requests for information that can be repetitive and costly to respond to if addressed on an individual basis.

City departments may help to stimulate new and innovative ideas from our local technology community. There is great potential for Open Data to act as the fuel for new solutions and even new businesses that can address common problems or challenges facing those that live in, work in or visit the city.

Open Data Portal

The city's Open Data portal is the central location for published city data. The portal provides information on publicly regulated activities that affect the community. The Innovation and Technology department, is responsible for operation of the portal by managing the following activities:

- Publish datasets in accordance with open data standards.
- Ensure that updated datasets retain the original data structure, i.e., the number of data elements
 per record, name, formats, and order of the data elements must be structurally consistent with the
 approved submission.
- Use open, non-proprietary standards when feasible.
- Include an on-line forum to solicit feedback from the public and to encourage public discussion on Open Data policies and public dataset availability.

- Forward open data requests and/or dataset issues to the assigned ODC.
- Take measures to ensure access to public datasets while protecting the Data Catalog from unlawful abuse or attempts to damage or impair use of the website.
- Make department data available according to their customer needs. For example, high-volume
 datasets of interest to developers should be released using bulk downloads as well as Application
 Programming Interfaces (APIs).
- Maintain an Open Data product and licensing to ensure that if data are made public there are no restrictions on copying, publishing, distributing, transmitting, adapting, or otherwise using the information for non-commercial or for commercial purposes.
- Work with department ODC to ensure datasets, and any associated metadata, that are outdated, no longer utilized or updated are properly archived while continuing to be available to the public.

The city published datasets are placed in the public domain with no restrictions or requirements placed on use of these datasets. The city assumes no liability for errors, omissions or inaccuracies in the public data. Data published on the Open Data portal is subject to terms of use developed by the IT Department posted conspicuously on the portal. The city may discontinue availability of content on the Open Data Portal at any time and for any reason.

Purpose

The purpose of this guide is to outline the work done to implement the city's open data policy, as well as provide guidance to city Open Data Coordinators (ODCs). Open Data Coordinators will use this guide to assist in their roles and responsibilities. The city's open data policy directs city staff to develop and implement practices that allow the city to proactively release all publishable city data, to publish it with documentation, and to encourage use of the data by city departments, outside entities and the public. The policy also directs city staff to minimize limitations on the disclosure of public information while appropriately safeguarding protected and sensitive information. This guide, which provides practical instructions, is a work in progress and will be updated on a regular basis.

GOVERNANCE

The following is intended to define roles to help the ODCs and others when carrying out their responsibilities.

Open Data Steering Committee

Development and implementation of best practices are overseen by the Open Data Steering Committee (ODSC). The ODSC provides direction to all City departments, offices, administrative units, boards, commissions, and committees on Open Data policy. The ODSC is comprised of persons designated by the City Manager from internal city departments and external stakeholders, who will work with the city's departments to review and approve:

- open data coordinators for each city department who will work with the Innovation and Technology Open Data Program Manager and Open Data Architect and will be responsible for managing their department's participation in the Open Data initiative;
- the creation of a comprehensive inventory of datasets held by each city department which is published to the Open Data portal and regularly updated;
- technical requirements for publishing and archiving public datasets by departments;
- a process for determining the relative level of risk and public benefit associated with potentially sensitive, non-protected information so as to make a determination about whether and how to publish it;

- a process for prioritizing the release of datasets to the Open Data portal which takes into account new and existing signals of interest from the public (such as the frequency of public records requests), the city's programmatic priorities, existing opportunities for data use in the public interest, and cost;
- processes for publishing datasets to the Open Data portal, including processes for ensuring that datasets are reviewed for use-appropriate formats, quality, timeliness, and exclusion of protected and sensitive information;
- a routinely updated timeline for new dataset publication; and
- all published and archived datasets available for download.

The ODSC submits an Annual Open Data Report to city council in March of each year. This report includes the following:

- Assessment of progress towards achievement of stated goals
- Assessment of the current scope of department compliance
- List of datasets currently available on the Open Data Portal
- Timeline for dataset publication in the coming year

In the report, the ODSC may suggest ways to improve the city's Open Data management processes to ensure movement towards the achievement of the policy's stated goals.

Open Data Program Manager

The Innovation and Technology (IT) Department is led by the Chief Innovation Officer who provides leadership by liaising with the City Manager, the Mayor's Office and City Council as necessary. The CIO/IT Director designates an Open Data Program Manager (ODPM) to oversee the process for inventorying and publishing datasets, including setting timelines for publication. The ODPM is responsible for:

- ensuring publication of open data is consistent with the Open Data policy, including privacy protections;
- developing a process for determining the relative level of risk and public benefit associated with
 potentially sensitive, non-protected information to make a determination about whether and how
 to publish it (See Appendix A);
- establishing a process for prioritizing the release of datasets to the Open Data Portal which takes into account new and existing signals of interest from the public, the city's programmatic priorities, existing opportunities for data use in the public interest, and cost (See Appendix A);
- maintaining relations with city department management and directors to discuss goals, rules, and training opportunities as needed;
- ODSC meeting agendas and minutes, tracking milestones and goals, benchmarking progress, and the upkeep of this guide, which details actions necessary to implement the Open Data policy and standards of when datasets are appropriate for public disclosure;
- keeping an inventory of all data assets and the ODC(s) that oversee them;
- · hosting quarterly ODC meetings; and
- assembling and hosting training opportunities.

IT Open Data Architect

In addition to the ODPM, the CIO/IT Director designates an IT Open Data Architect (ODA). The IT ODA is responsible for:

day-to-day management of the open data program and platform;

- process management and quality control for all datasets published to the Open Data portal, as well as the open dataset inventory;
- ensuring data is in the correct schema for automating upload process;
- the application and use of tools and standards on Open Data platform;
- building datasets to be published on the Open Data portal;
- developing technologies required to capture data from third-party sources;
- creating and maintaining data pipeline for extraction, transformation, and loading of data from stage to platform
- collecting, cataloging, and managing all metadata for each published dataset;
- properly archiving datasets and all corresponding metadata
- implement privacy, data licensing, metadata and other standards and practices;
- · attending quarterly ODC meetings and training sessions; and
- following the direction set by the ODSC and ODPM to implement the Open Data policy.

Department Directors

Department Directors guide their department's participation in the Open Data initiative, setting open data-related performance goals for their teams, updating policies and procedures to reflect the open data policy, and making sure their staff have the time and resources to participate in the program. As needed, they:

- set priorities, engage stakeholders, attend ODSC meetings;
- work through any sensitivities in their datasets with the appointed ODC prior to publication;
 and
- consult with department staff at the start of new projects and software implementation to ensure that they facilitate compliance with the city's Open Data policy.

Lead Open Data Coordinator

Additionally the CIO/IT Director designates a Lead Open Data Coordinator which will assist the ODPM and ODA in ensuring:

- each participating department has an ODC that is responsible for their published data;
- feedback from consumers or users on published datasets and their use are shared with the responsible ODC;
- that if needed, can act as a line of communication between the ODA and/or ODPM; and
- Any dataset identified as beneficial/ related to the Open Data initiative be brought to the ODPM.

Open Data Coordinators

Each department's Open Data Coordinator (ODC) is responsible for managing their department's participation in the initiative. The ODC works with the department Director to set priorities and data goals. The ODC works in partnership with the IT Open Data Architect to inventory department datasets, keep data up to date establish a plan and timeline for publishing datasets; to implement privacy, data licensing, metadata and other standards and practices; and to provide reports on progress in implementing the open data plan. The ODC is the point of contact in a department for the IT Data Architect, and when called upon, answers questions from the ODSC about datasets.

The ODC for each department is responsible for carrying out the following actions:

- oversee implementation and compliance with the Open Data policy;
- inventorying department's datasets and data sources, and make reasonable efforts to make available all datasets under the department's control;

- work with ODPM to prioritize datasets for publication;
- regularly review progress on providing access to datasets requested by the public with the IT;
 Open Data Architect. When applicable, review with the IT Open Data Architect, public feedback on the department's published datasets;
- respond to information requests from the public related to a dataset through the ODPM;
- follow processes put in place for publishing datasets to the Open Data Portal, including processes for ensuring that datasets are up to date, reviewed for use-appropriate formats, quality, timeliness, coordinating dataset publication, and exclusion of protected and sensitive information:
- notify the IT Data Architect prior to any structural changes to datasets when data for updates;
- follow the archiving request and approval process (Exhibit B);and
- · attend quarterly ODC meetings.

The ODC must ensure their department adheres to the following open data standards/requirements with future data collection:

- Use machine-readable, interoperable, and open formats for information as it is collected or created
- Ensure privacy and confidentiality are fully protected and that data are properly secured.
- Determine if there are any restrictions that would prevent making data publicly available.

Internal Data Review

Open data has many stakeholders (e.g., those impacted by the data directly or indirectly; those who use or consume the data). At each stage in the process, gauge how stakeholders react to the proposed data, identifying areas of potential confusion or unnecessary limitations on its usefulness before it is published. Direct Stakeholders are people and institutions who are represented directly in the data, whereas Indirect Stakeholders are people and institutions who may be impacted by the release of the data or analysis conducted on it. Users are people and institutions who will use the raw data, Consumers are anyone who reads or uses the information.

An important outreach task to undertake when releasing open data is inside the ODC's respective department. Most importantly, make sure the department Director is aware of any planned data release. Some questions the ODCs should ask themselves:

- Have people who can provide insights into the structure of the data been interviewed?
- Have planned data releases been communicated to areas that may be impacted?
- Does the data you plan to release contain personally identifying information?
- Will removing such information diminish the value of the data for consumers?
- Are there any restrictions on how the data may be used?
- Has the City Attorney's Office approved the release of such information?

Having an internal conversation with others in a department about data that is planned for release is a necessary precursor to external communication with outside data consumers. This dialogue will also inform the terms of use that accompany your data release. It is also a good idea to identify people in a department through these discussions knowledgeable about the data to be released. Identify both administrative contacts (i.e., how often is the data updated, where can it be downloaded, etc.) and technical contacts (i.e., what does this field in your dataset mean?) for the data, in the event that the ODC will not fill these roles.

Sensitive Information and Personally Identifiable Information

Public information or publishable information can be or currently is released to the public. It does not need protection from unauthorized disclosure, but does need integrity and availability protection controls. This

would include general public information, published reference documents (within copyright restrictions), open source materials, approved promotional information and press releases.

Sensitive Information is information that could potentially impact the privacy or welfare of an individual, the security of a business or organization, and trade-secrets of a business. Additionally, at the personal level, several acts related to internet fraud, identity theft, and credit fraud are precipitated by misuses of sensitive information. This information is often released in an aggregate format, reducing the ability to trace or link information to a specified individual.

Sensitive information may not be specifically protected from disclosure by law and is for official use only. It is generally not released to the public unless specifically requested. Although most all of this information is subject to disclosure laws because of the city's status as a public entity, it still requires careful management and protection to ensure the integrity and obligations of the city's business operations and compliance requirements. It also includes data associated with internal email systems and city user account activity information.

- High information is considered sensitive by stakeholders, leadership; including Council Members
 and the Mayor's Office, such that it would likely require outreach to those groups prior to
 publication.
- Medium information has an impact on stakeholders that should be taken into account, but is unlikely to be disruptive to ongoing processes.
- Low information is already public in some form or does not contain data that would be surprising to stakeholders.

Some confidential information is specifically protected from disclosure by law and subject to strict handling requirements dictated by statutes, regulations, or legal agreements. Serious consequences could arise from unauthorized disclosure, such as threats to critical infrastructure, increased systems vulnerability and health and safety, or legal sanctions. Departments handling this category of information must demonstrate compliance with applicable statutes, regulatory requirements and legal agreements.

Personally identifiable information (PII) refers to information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual, like sensitive information. Because PII is not anchored to any single category of information or technology, it requires a case-by-case assessment of the specific risk that an individual can be identified. Before disclosing potential PII or other sensitive information, all Departments must recognize that non-PII can become PII whenever additional information is made publicly available (in any medium and from any source) and is combined with other available information. The data created through this mosaic effect could allow for the identification of an individual or present additional security concerns. As departments consider whether or not information may be disclosed, they must also account for the "mosaic effect" of data aggregation. The mosaic effect occurs when the information in an individual dataset, in isolation, may not pose a risk of identifying an individual (or threatening some other important interest such as security), but when combined with other available information, could pose such risk.

PII may include the following:

- Name and initials in any combination
- Identification number (e.g., Social Security #)
- Birthdate
- Age
- Gender
- Home address
- Home telephone number
- Personal cellular, mobile or wireless number
- Personal e-mail address
- Drivers' license number

- Information on medical or health conditions
- Financial information (credit card/PCI, billing info, account info)
- Health information
- Marital status
- Nationality
- Sexual behavior or sexual preference
- Physical characteristics
- Racial or ethnic origin
- · Religious, philosophical or political beliefs
- Trade union membership
- Biometric data
- Household information
- Consumer purchase or billing history
- Unique device identifiers (IP/MAC addresses)
- Location information (GPS)

Community Engagement

Publishing an open dataset for outside consumers isn't the end of the process - it's just the beginning. Las Vegas has a broad and vibrant community of different users interested in working with city data. The members of this community, and all of the smaller communities, cliques and collectives that it is made up of, are the city's most important asset for turning data into value. Reaching out to and actively engaging with this community is a process that will take place long after your data is initially released.

There are many people and institutions who are impacted by the data in different ways. The more you can map them out as you think about your datasets, the easier it will be to make decisions about what to include (or what not to), what format to provide the data in, and what activities to undertake around its release to ensure the data is well understood. All this should be viewed through an equity lens. The Open Data initiative provides outreach opportunities and can help to connect with users of data as well as to support efforts to engage those impacted by the data in the process, from publication to promotion, but subject matter expertise is necessary to consider the possible impacts and start brainstorming about who needs to be engaged.

The city has participated in national efforts to release more and better data, such as the What Works Cities initiative. The city also collaborates with regional jurisdictions, such as the county and state, and share best practices. These connections allow the city to share and adopt the best approaches, creating a community of practice that makes all this work easier in the long run. The ODSC will work to facilitate better communication between the city and the technology community and participate in, or host, events such as hackathons.

Communications

The ODSC and the Office of Communications will develop campaigns involving the following elements:

- Links to Open Data Portal across city internet site, where appropriate
- Use embed codes to insert captivating open data visualizations on the Open Data/Transparency Page
- Include links to Open Data Portal in blog posts where appropriate
- Post information on social media when new datasets are added
- Use hashtag #opendata to increase reach on social media
- Create a regular feature on social media to share unique or popular data
- Post interesting data visualizations on existing government social media accounts
- Create a distribution list and send regular open data updates

- Press releases/op-eds connecting open data to some important initiatives
- Encourage stakeholders to use our open data in their meetings
- Consider gamification techniques to incentivize open data posts by city departments
- · KCLV videos of datasets

Evaluating Reach

Each year the Open Data Initiative will focus on quality over quantity, prioritize datasets based on the public interest, improve governance of our open data through improved metadata and regular updates to datasets, and engage our users proactively throughout the process. We want to publish meaningful and usable data, maximizing the benefit to the public of the resources spent to manage the program.

Measures

The open data platform provides performance data about the published datasets, including: dataset name, category, date created, date last updated, number of views, number of downloads, and number of rows.

The ODC will evaluate reports, provided by IT, outlining the trends and analysis of the open data datasets. The data presented during the ODC meetings will allow the committee to determine dataset feasibility and consideration of the following actions: replacement, removal, or general reevaluation or revision.

Datasets categorized to highlight:

- Top 5 Datasets Most Viewed
- Top 5 Datasets Least Viewed
- Top 5 Datasets Oldest "Date Last Updated"
- Top 5 Searched terms

Qualitative data will also be explored based on any feedback posted on the open data portal, or gathered by data driven initiatives sponsored by the city, local educational institutions, and others (i.e. hackathons, civic events, and tradeshows).

APPENDIX A.

The following is a process to follow when publishing department datasets on the Open Data portal:

Step 1: Identifying Data Sources

Data may be housed in a variety of places including on the systems of outside vendors. To discover and identify major data sources, the ODCs ask the following questions:

- · What information systems does the department use?
- What databases does the department use?
- Which applications capture information or are used in department business processes?
- Where does the data reside?
- What information is the department already publishing; where did that information come from?

Step 2: Identify Datasets

Datasets can be produced by properly identifying data sources (Step 1) Every dataset will be reviewed and approved before it's published. Please note, at this point, the ODC does not need to exclude any datasets based on privacy, security, sensitivity or quality concerns (this step is not the in-depth data quality and privacy assessments that are required prior to publication), this process is intended to assist with identification and publication of department datasets. To discover and identify datasets, the ODC should ask the following questions:

- What type of data is currently, or in the process to be, published?
- What data populates department reports (monthly, annual, financial, etc.)?
- What do other states, cities, or jurisdictions have published?
- What data does the department use for performance and/or other benchmarking analysis?
- What data is reported to federal, state or local agencies?
- What data do other departments ask for or is already shared with other departments?
- What information is sought via the public disclosure process and/or open data requests?
- What departmental data is publicly available on the Open Data Portal or elsewhere online?
- What information does the department want publicly available?

In addition, below are some additional data collection, transformation, and maintenance considerations when identifying datasets:

- Types of dataset collection and preparation methods:
 - Extraction- exporting data from source system, and since each is different, the methods will vary.
 - Transformation- if necessary, modify the exported data so the data structure matches the data schema.
- Methods for publishing and updating datasets:
 - Manual- generally used for datasets that are relatively small and uncomplicated, and where the refresh rate is quarterly or less infrequent
 - Semi-Automated- used when the dataset requires some manual process to update the dataset; includes manual uploads.
 - Automated- recommended when datasets will be updated more frequently than quarterly. (Evaluated on a case-by-case basis, depending on source system capabilities)
 - o Programmatic (API to API) is recommended for real- or near-real-time data transfers

- Confirming data quality for public use:
 - Good datasets are managed in a way that makes it legible to users besides the owner, used routinely, and reasonably accurate.
 - Acceptable datasets are used routinely but not necessarily legible to non-owners and/or has some gaps or discrepancies that limit its usability.
 - Poor datasets are not regularly used, updated, or otherwise managed in a way that makes it valuable.

Step 3: Adding Metadata

All datasets identified in Step 1 and Step 2 require Metadata. Metadata is descriptive information about the dataset including data type, field description, and other useful information. Metadata includes any information (including relevant links) that does not belong inside the dataset but is important for understanding what it is and how to use it. In order to submit a dataset for publication, the metadata for each dataset will also need to be submitted. This information will be published and accessible to the public in conjunction with the dataset itself. The basic tenants of metadata qualify for all digital databases, including geographic.

Use the ODC Metadata Template to fill in the following information:

- Dataset Name
- Data Description
- Data Refresh Frequency
- For each column in a Dataset, the ODC will document:
 - o Field (field name)
 - o Data type (text, date/time, geocode, etc.)
 - Sample value
 - o Field description (what the data in the column represents or means)

Note: Make sure to save your own copy before entering information into the template. Do not alter the template layout or file type (.xlsx).

Once the Metadata template is complete, upload the file to the <u>ODC Completed Metadata Folder</u> on SharePoint/ Teams. Also make note of the link, this will need to be added to the <u>city of Las Vegas Open Data Coordinators Inventory list</u> under metadata location in the next step.

Step 4: Dataset Inventory

The Open Data program's dataset inventory serves as a way to see what data the city has awaiting publication or published as open data under the open data policy. The inventory is a tool to keep track of all the potential open data in the city to best manage the program down to the department level. Each department is different in terms of how it is managed, how much data it owns and what type of data it owns. The ODCs meet with department leadership to share what open data is, what the ODSC's expectations are for the inventory, and how they might best go about soliciting input from data owners. The ODCs should not exclude any datasets based on privacy, security, sensitivity or quality concerns. Every dataset is reviewed for such elements and approved by the ODSC before it is published. The ODCs may consult with IT for guidance and support. To determine data suitable for release, the ODCs may also work with the Data Architect to use site analytics on the Open Data portal and city website to identify information gaps.

For each data source and dataset that is identified as publishable, the following information will need to be entered directly into the city of Las Vegas Open Data Coordinators Inventory list

- Dataset Name- the name of data set as it will be published
- Data Description short but clear description of the data
- Data Source name of data source
- Data Date Range- date range within the data to be published
- **Department** name of the department overseeing the published dataset
- Open Data Coordinator- name of ODC overseeing the published dataset
- Coordinator Confirmation Date date ODC was confirmed, defaults to current date
- Data Program program the dataset was collected under. Defaults to Open Data Initiative
- Update Frequency- frequency at which the dataset will be updated
- Update Status- process that will be used to update the data at the specified Update Frequency
- Data Classification- public, sensitive, or protected data
- Status- status of dataset publication
- Metadata Location -URL to completed metadata template on sharepoint
- **Notes** list any additional comments or pertinent information

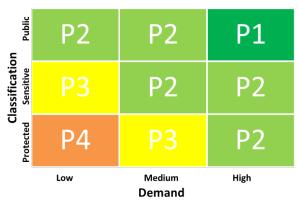
Department ODC will need repeat or review this process as new datasets are created, discovered or requested.

Step 5: Dataset Prioritization

Datasets will begin the publication approval process in the order the Open Data Program Manager and Data Architect receives them. In the event multiple datasets are received, each dataset will be assigned a priority based on the criteria below:

Priority 1	Priority 2
Public datasets that are part of strategic priorities	Datasets range from high to low demand and may
or are in high demand.	contain private and sensitive information
Priority 3	Priority 4
These datasets will be scheduled after all Priority	These datasets are not urgent in nature and are
1 and 2 data has been scheduled.	completed after all scheduled publications.

ODCs can also use the criteria on the following matrix for dataset demand (Low, Medium, High) and classification (protected, sensitive, public) to assist in determining the priority for publication.



Step 6: Review for Completeness and Accuracy

The final review will be done by the Open Data Steering Committee (Step 7) prior to this step, the ODC and their department directors should review the identified datasets to ensure they are consistent with the following Open data principles:

- Public city departments must adopt a presumption in favor of openness to the extent permitted by law and subject to privacy, confidentiality, security, or other valid restrictions.
- Accessible Open data are made available in convenient, modifiable, and open formats that can
 be retrieved, downloaded, indexed, and searched. Formats should be machine-readable. To the
 extent permitted by law, these formats should be non-proprietary, publicly available, and no
 restrictions should be placed upon their use.
- Described Open data are described fully so that consumers of the data have sufficient information to understand their strengths, weaknesses, analytical limitations, security requirements, as well as how to process them.
- Reusable Open data are made available under an open license that places no restrictions on their use.
- Complete Open data are published in primary forms with the finest possible level of granularity
 that is practicable and permitted by law and other requirements. Derived or aggregate open data
 should also be published but must reference the primary data.
- Timely Open data are made available as quickly as necessary to preserve the value of the data.
 Frequency of release should account for key audiences and downstream needs.
- Managed Post-Release A point of contact must be designated to assist with data use and to respond to complaints about adherence to these open data requirements.

Step 7: Open Data Steering Committee Review and Publication Approval

The ODSC will review each dataset for privacy, security, and quality prior to publication. If there is a significant risk of privacy harm or if they notice security issues, they will work with the ODC to reduce the risk of harms prior to publication. If security issues are identified; the risk of harm will be mitigated by the IT Security Team prior to publication. The ODSC will flag any quality concerns so they can either be addressed prior to publication or described in the metadata, so that users are aware of the dataset's limitations. The following matrix provides a guideline for ODSC members when evaluating a dataset for publication:

CRITERIA	DOES NOT MEET	MEETS	EXCEEDS
Open Data Standard	Data is not available	Data is available	Data is available in
	online, closed format,	online, in open	multiple formats in
	legal encumbrances	format, no legal	addition to the meets
	on use and reuse	encumbrances on	qualifications criteria
		use or reuse	
Open Format Standard	Data presented in a	Data presented in	Data is accessible
	propriety, non-	widely accepted,	through developed
	standard format,	nonproprietary,	APIs, web services,
	format is not machine	platform independent,	and other advanced
	readable, processes	machine-readable	technologies in
	are manual and non-	method for formatting	addition to meets
	automatable	data and process	qualifications criteria
		automatable	
Protected Information	A department allows	Any dataset and all	Not applicable
	access to any dataset	portions that a	

	or portion, contrary to	department may deny	
	state law or city	access pursuant to	
	ordinance, or any	state law or city	
	other law or rule or	ordinance, or any	
	regulation	other law or rule or	
		regulation	
Sensitive Information	Data published on the	Data is <u>not</u> published	Not applicable
	open data portal that	on the open data	
	could raise privacy,	portal that could raise	
	confidentiality or	privacy,	
	security concerns or	confidentiality or	
	have the potential to	security concerns or	
	jeopardize public	have the potential to	
	health, safety, or	jeopardize public	
	welfare greater than	health, safety, or	
	the benefit of	welfare greater than	
	publication	the benefit of	
		publication	
Security	CLV information	CLV Information	In addition to meets
	technology assets,	Technology Security	qualification criteria,
	both electronic	Team validates the	ensuring CLV Open
	information systems	protection of city of	Data Portal is not
	infrastructures, and	Las Vegas assets,	abused, damaged, or
	open data portal are	encompassing both	impaired
	exposed, abused,	electronic information	
	damaged or impaired	systems and	
		infrastructures	
Data Quality	Data published is low	Data published is	Data published is
Data Quality	Data published is low	Data published is high quality, contains	•
	quality, no metadata, unidentified source	metadata, references	superior quality, contains metadata,
		source system, and	reference source
	system,	sustainable	
	unsustainable	Sustamable	system, sustainable, data dictionary, entity
			relationship diagram
Automation/Timeliness	Source systems, file	Source systems, file	Source systems, file
/ Monadon/ milemess	transfer mechanisms,	transfer mechanisms,	transfer mechanisms,
	and technologies are	and technologies are	and technologies are
	outdated without	modern or	fully automated using
	automation options,	upgradable with	the latest
	jeopardizing the	automation options,	technologies
	timing of portal	increasing the	providing optimal
	updates	timeliness of portal	timeliness of portal
		updates	updates
Financial Impact	Data published on the	Data published on the	Not applicable
'	open data portal	open data portal	''
	creates an	does <u>not</u> create an	
	5. 54.55 WIT	1300 Hot oroate an	

unintended fiscal	unintended fiscal
impact for CLV	impact for CLV

Once the dataset has been published, each ODC is responsible for keeping their department's data upto-date, for handling questions about the dataset from the public, working with the ODSC to resolve any issues that emerge, and submitting requests for archiving as needed. At least once a quarter, the ODC should review all the department's published datasets to ensure they are being updated on the basis promised in the metadata. This is true for datasets updated automatically as well as those that require a manual update. The dataset inventory acts as a tool to keep track of what has been published to verify that the data are up-to-date.

Step 7.1: Interim Dataset Review and Approval

In the event that a high priority dataset (Step 5) has completed all previous steps and criteria, but needs to be published prior to the next upcoming ODSC meeting the committee will receive communication via email seeking approval for publication. Communication will emphasize any sensitive, personal identifiable information, or security concerns that may be in the data and/or metadata.

Approval of Interim Datasets requires a quorum, majority rules.

APPENDIX B.

Data archiving is essential for the business needs of the organization. Historical data can aid in identifying information on past trends, project success, revenue/ expenditure, etc. that can lead to better future decision making. The following is a process to follow when archiving department datasets on the Open Data portal:

Step 1: Identifying Datasets for Archiving

There are numerous ways to identify datasets capable of being archived, including datasets:

- that have a low visit/download performance rate.
- that are redundant; other datasets contain the same information.
- that are outdated (over 365 days without update).
- that will no longer be updated.
- where data sources or systems are no longer available or has been migrated, upgraded, changed, etc.
- that were operational but are no longer in use.
- other issues, not listed above, expressed by the ODSC, ODC, Directors, and/or community stakeholders.

Note: Datasets that are utilized by other city applications and/or identified platforms or software will be excluded from archiving even when any or all of the conditions above are met.

Step 2: Request to Archive

A request to archive can be started once a dataset has been identified. Initial archive requests are to be submitted through the city of Las Vegas ServiceNow. The Data Architect will receive the request and will begin to assist the requestor in providing the necessary documentation and metadata needed for ODSC review.

Step 3: ODSC Review

Completed archiving requests will be reviewed by the ODSC for approval. Approved requests will proceed to the next step. Denied requests will be returned to requestor with cause and steps for corrective action.

Step 4: Archived Data Storage

All approved archived datasets and related metadata can continue to be housed on the open data portal and accessible to the public after archiving if the dataset is marked appropriately. If the dataset is to be removed from the Open Data portal, it will be kept for record by the Data Architect and be made available to the public by request.

Step 5: Permanent Removal of Datasets

Permanent removal of data from the open data portal will only take place when legal and/or privacy circumstances are present. Permanent removal of datasets must receive approval from the ODSC and City Clerk's Office.

APPENDIX C.

GLOSSARY

The following are frequently used terms related to the aforementioned processes:

Data	"Data" means statistical, quantitative, or qualitative information that is regularly maintained, created, or obtained by or on behalf of a City department.
Dataset	"Dataset" means a named collection of related records, with the collection containing data organized or formatted in a specific or prescribed way, often in tabular form.
Department	"Department" refers to all departments, divisions, boards, commissions, agencies, and internal or external organizations responsible for providing and disseminating data.
Open Data	"Open data" means data that is available online, in open format, with no legal encumbrances on use or reuse.
Open Format	"Open format" means any widely accepted, nonproprietary, platform-independent, machine-readable method for formatting data, which permits automated processing of such data and facilitates search capabilities.
Protected Information	"Protected information" means any dataset or portion thereof to which a department may deny access pursuant to state law or City ordinance, or any other law or rule or regulation.
Publishable Data	"Publishable data" means data which is not protected or sensitive and which can be prepared for release to the public.
Sensitive Information	"Sensitive information" means any data which, if published on the Open Data Portal 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.

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