

Taxonomy and Vocabulary Policy

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Foreword

City of Toronto Information Management Policies and Standards are the official publication on the policies, standards, directives, guidelines, position papers and preferred practices given oversight under delegated authority of [Toronto Municipal Code, Chapter 217, Records, Corporate \(City\)](#). These publications support the City's responsibilities for coordinating standardization of Information Management in the City of Toronto.

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- Corporate Information Management Services, City Clerk's Office

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1.0	2021-04-22	City Clerk's Office	Initial publication of Controlled Vocabulary Policy
2.0	2025-06-24	City Clerk's Office	Updated to reflect new title, program and platform names; aligned roles and responsibilities to match Vocabulary Design Guide

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1. Introduction

City information is a corporate asset that sets the foundation for building an accountable, accessible, and trustworthy municipal government. Well-described and searchable City information improves public access to City services and increases trust and confidence in municipal government.

Taxonomies and controlled vocabularies are established lists of standardized terms that can be used to classify and retrieve records or data. The adjective “controlled” indicates that these vocabularies are managed and sustained by authorities, as opposed to “uncontrolled” lists of terms or tags that anyone can modify. Vocabularies can be as simple as a list that populates a dropdown menu in a web form, or can contain hierarchical structure (taxonomies), definitions (glossaries), synonyms (thesauri), codified relationships between concepts (ontologies), or exist as a hybrid of these forms. The use of taxonomies and vocabularies is critical in how the City effectively manages the increasing amount of information within its enterprise applications going forward. These standards are part of the fundamental strategy for managing information effectively.

Taxonomies and vocabularies establish a unified language for the City of Toronto's policies, programs and services. Developing standardized terminology to describe City services ensures all staff have access to consistent, approved language to describe City business and services when writing reports, assessments, policies, procedures and external communications.

Taxonomies and controlled vocabularies can improve and deliver:

- Findability
- Searchability
- Standardization
- Understanding and alignment
- Artificial intelligence and machine learning readiness

Taxonomies and vocabularies can be applied to a wide variety of information sources, from web content to data repositories. They provide consistent terminology to describe the subject of City information, making it easier to find information about a specific topic and better understand it in context. As any given City service can be described in different ways (by the public, staff and stakeholders), taxonomies and vocabularies capture a variety of terms and synonyms that make information retrieval and management more efficient. Taxonomies and vocabularies can also provide a common language for databases and information systems as they share and exchange data.

As the City of Toronto strengthens its digital processes and service delivery, Corporate Information Management Services' (CIMS) role in establishing and maintaining taxonomies and vocabularies plays a critical function in ensuring the City's digital information can be consistently described, classified and retrieved, enabling its usage, interpretation and analysis. The risk of not employing vocabulary best practices include ambiguity in meaning, decreased findability of information, and reduced usability of datasets and applications.

Corporate Information Management Services (CIMS), City Clerk's Office, provides City Divisions with consultative services to develop, manage, and sustain taxonomies and controlled vocabularies through the administration of the Vocabulary & Metadata Program. CIMS offers an enterprise Taxonomy & Vocabulary Management Solution (TVMS) to make those vocabularies easily accessible and sharable, enabling their effective use and reuse. The City of Toronto is committed to improving the relevance and accessibility of its information and data by implementing policies, standards, and best practices that support the development and usage of taxonomies and controlled vocabularies. The Taxonomy and Vocabulary Policy is an output of the [Information Management Accountability Policy](#) and the Information and Data Governance Policy.

2. Purpose

The purpose of this policy is to establish approaches and processes for the development, management, sustainment, and use of corporate and divisional taxonomies and controlled vocabularies to improve the description, search, retrieval and use of City information by staff and the public.

3. Application

This policy applies to all City of Toronto Divisions and City employees.

This policy does not apply to Elected Officials, Accountability Officers or City Agencies and corporations. The City of Toronto encourages City Agencies and Corporations to review, adopt and enhance this policy to accommodate their business needs.

4. Policy Statement

Corporate Information Management Services commits to:

- Centralizing and standardizing taxonomies and vocabularies in partnership with City Divisions to support a culture of collaboration and information sharing;
- Establishing a Taxonomy and Vocabulary Policy to support the adoption, development, and management of taxonomies and vocabularies and maximize their usage and benefits;
- Collaboratively supporting the development and governance of taxonomies and vocabularies across City Divisions to accurately and consistently describe their information and services;

- Developing taxonomy and vocabulary working groups to support program development and complement existing governance structures within the City;
- Collaboratively enabling taxonomies and vocabularies to be used across the City, including integrations with business applications; and
- Monitoring and managing the evolution and lifecycle of taxonomies and vocabularies as corporate assets.

5. Principles

The Taxonomy and Vocabulary Policy is the foundational policy outlining key principles for taxonomy and vocabulary management that are supported by standards, procedures, and guidelines on quality control, governance, usage, and taxonomy and vocabulary lifecycle management.

The general principles for taxonomy and vocabulary management and sustainment include:

- **Currency:** Terms in vocabularies reflect the most current and commonly-accepted concepts and definitions, while noting the historical usage of terms in City programs and services.
- **Accuracy:** Terms are accurate and appropriate for their intended user communities. The terms are consistent with the City's values, i.e. in favour of inclusion and respect for diversity. A single concept can incorporate both preferred terminology and its synonyms.
- **Distinctiveness:** Terms in the same vocabulary are mutually exclusive from each other to avoid duplication. They should have no overlap or ambiguity in their meaning, definition, or interpretation. The Vocabulary & Metadata team works with divisional clients to assist with the disambiguation of terms between vocabularies, in case words have different meanings across knowledge domains or business lines, by providing additional details to help users differentiate between terms in the appropriate context.
- **Consistency:** Terms are consistent with regards to their format and compliance with accepted standards and rules (e.g. plural vs. singular, noun vs. verb) as outlined in the Vocabulary Design Guide.
- **Relationships:** Terms within a single vocabulary may be related to each other, expressing either their equality or their associations within a hierarchical structure.
- **Testing and Validation:** The process of selecting terms for inclusion in taxonomies and vocabularies involves consulting reference sources and subject matter experts within the field in question, as well as the needs of the organization.

The design and development of City taxonomies and controlled vocabularies are structured upon and consistent with the requirements of International Organization for

Standardization (ISO) 25964, 'Thesauri and interoperability with other vocabularies,' as well as other recognized international standards for the development of vocabularies, metadata and classification schemas (See 7.0 References). The City's Vocabulary Design Guide establishes best practices and style conventions for the design of taxonomies and vocabularies, and provides Divisions with guidance to develop, refine, and sustain vocabularies and definitions pertinent to their lines of business.

6. Roles & Responsibilities

6.1 City Clerk will:

- Establish a framework of standards and policies relating to information and records management, in accordance with applicable legislation;
- Develop and offer corporate programs and services to the City of Toronto that promote the responsible management and accessibility of information, including the Vocabulary & Metadata program in Corporate Information Management Services
- Designate Corporate Information Management Services (CIMS) to manage the Vocabulary & Metadata program and the Taxonomy & Vocabulary Management Solution; and
- Promote the development and usage of corporate and divisional vocabularies under established practices for oversight and decision-making.

6.2 Corporate Information Management Services will:

- Manage and deliver the City's Vocabulary & Metadata program, providing leadership on its design, development and evolution;
- Establish and sustain corporate taxonomies and vocabularies in partnership with City Divisions and stakeholders, providing policies, standards, and best practices for vocabulary management;
- Provide consultation and training to Divisions on the development and maintenance of divisional taxonomies and vocabularies;
- Administer the Taxonomy & Vocabulary Management Solution as the authoritative technology solution for managing and making accessible the City's taxonomies and vocabularies, both corporate and divisional in nature;
- Promote the adoption, management and use of taxonomies and vocabularies and adherence to established policy, standards, and best practices; and
- Establish a governance approach, including working groups and a central governance body, to suggest connections between terms, manage disambiguation, address concerns and provide corporate direction on taxonomies and vocabularies.

6.3 Chief Technology Officer (or Designate) will:

- Develop and implement architecture and technology standards applicable to information and records management;

- Delegate Technology Services Division resources to provide corporate technical support in the deployment, sustainment, and integrations of the Taxonomy & Vocabulary Management Solution; and
- Support the alignment of technology capabilities of the Taxonomy & Vocabulary Management Solution with divisional business objectives, including potential system integrations and strategic planning for the platform.

6.4 Division Heads (or Designate) will:

- Promote openness, collaboration and standardization of information throughout the Division;
- Promote the creation, use, socialization and sharing of Division-specific terminology in communications, strategic planning, and reporting;
- Identify and prioritize sets of terms and concepts to be standardized, defined, approved and managed centrally (in the Taxonomy & Vocabulary Management Solution) and make them accessible for divisional and corporate purposes;
- Ensure that governance to support the maintenance of taxonomies and vocabularies is delegated appropriately to divisional Vocabulary Owners, Vocabulary Sponsors, Vocabulary Administrators, Vocabulary Analysts, and business subject matter experts; and
- Provide funding and resources for integration efforts with the Taxonomy & Vocabulary Management Solution as needed.

6.5 Working Groups will:

- In coordination with the Vocabulary & Metadata program, formalize divisional groups as needed to develop, manage, and sustain taxonomies and vocabularies;
- Raise and review conflicting terms, definitions and contentious issues around overall management of taxonomies and vocabularies;
- Provide recommendations to the Vocabulary & Metadata Program for resolution;
- Serve as communication and change management agents to advocate taxonomy and controlled vocabulary decision-making activities and decisions;
- Facilitate divisional or business area approvals on taxonomy and vocabulary work.

6.6 City Staff will:

- Foster a culture of openness and transparency through collaboration, information-sharing and the use of standardized terminology across all Divisions;
- Adhere to the Taxonomy and Vocabulary Policy and its applicable standards;
- Develop, manage, share, use, and sustain divisional taxonomies and vocabularies using the Vocabulary Design Guide;
- Leverage and re-use approved taxonomy and vocabulary terms to describe and tag their content, and leverage them when writing reports, policies, or other communications;

- Identify opportunities to develop and leverage new vocabularies to support changes to organizational structures, services, programs, business processes, functions, technology and assets in their Division; and
- Provide subject matter expert support to the development of taxonomy and vocabulary terms, synonyms, and associated metadata.

7. References

- [ANSI/NISO Z.39.19 \(2010\)](#) (American National Standards Institute/National Information Standards Organization)
- BS 8723-4:2007 Structured vocabularies for information retrieval – Guide- Part 4: Interoperability between Vocabularies (British Standards Institute)
- [City of Toronto Act, 2006](#)
- [Information and Data Governance Policy](#)
- [Information Management Accountability Policy, 2018](#)
- [Information Management Framework](#)
- ISO25964 Thesauri and interoperability with other vocabularies (International Standards Organization)
- [Records Management Metadata Standard](#)
- [Toronto Municipal Code, Chapter 169, Officials, City](#)
- [Toronto Municipal Code, Chapter 217, Records, Corporate \(City\)](#)

8. Policy Approval

Provided by Kristie Pratt, Deputy City Clerk, Corporate Information Management Services, City Clerk's Office
June 24, 2025

9. Policy Review

The City Clerk's Office will review this Policy and its effectiveness at the three-year mark from the effective date of this Policy, or earlier if warranted.

Appendix

Appendix A: Definitions

Classification: An activity comprised of processes of grouping similar or related things (concepts or terms) together; separating dissimilar or unrelated things; and arranging the resulting groups into a logical sequence.

Controlled Vocabularies: A prescribed list of terms, each representing a concept, and designed to identify each concept with one consistent label. All terms in a controlled vocabulary must have an unambiguous, non-redundant definition. Thesauri, taxonomies, subject heading schemes, and name authority lists are examples of controlled vocabularies.

Corporate Controlled Vocabularies: Vocabularies that are developed and managed by CIMS and with a corporate scope. The Subject and Service Thesauri are two examples of corporate controlled vocabularies, which maintain a hierarchical structure for subjects and services of City business.

Disambiguation: To clarify (something ambiguous) especially by providing or considering additional information.

Divisional Controlled Vocabularies: Vocabularies that are developed and managed by divisional business users, in alignment with CIMS policy and best practices. Divisional Controlled Vocabularies are used to maintain division-specific interpretations of vocabulary terms.

Information Management: The means by which the City of Toronto responsibly plans, creates, captures, organizes, protects, uses, controls, shares, disposes of, and evaluates its information (including records and data) and through which it ensures that the value of that information is identified and used to the fullest extent.

Metadata: Data that can describe the context, content and structure of records and their management throughout their lifecycle. Metadata can also describe the properties of a document. For example, the following information about a document is typically recorded: Title (of the document), Date (the document was created), and Created By (individual author). These descriptors are known as 'metadata.' Metadata facilitates search, identification, and the management of information.

Ontologies: formal, explicit specifications of shared conceptualizations. An ontology typically includes definitions of concepts and specified relationships between them, set out in a formal way so that a machine can use them for reasoning.

Preferred Term: One of two or more terms selected as the primary term to describe a concept. It is included as the main entry in a controlled vocabulary and is also known as

the *descriptor*. Terms that are non-preferred to describe the concept are treated as *synonyms* of that concept.

Record: Documented information, however recorded or stored, whether in printed form, on film, by electronic means or otherwise, and includes documents, financial statements, minutes, accounts, correspondence, memoranda, plans, maps, drawings, photographs and films – [City of Toronto Act, 2006](#), s.3 (1) & [Municipal Code, Chapter 217](#).

Synonyms: Words or terms having the exact or very nearly the same meaning as another word or term.

Tagging: The process of assigning metadata to an item of content, such as a document or web page, using controlled vocabularies or other metadata used by the organization, to improve an individual's abilities to search for, navigate to, and retrieve that information.

Taxonomies: Collections of controlled vocabulary terms organized into a hierarchical structure. Each term in a taxonomy is in one or more relationships (parent/child, broader/narrower) to other terms in the taxonomy.

Thesauri: Vocabularies of terms arranged in a structured order and with relationships between terms indicated with standardized designations; used to aid document indexing and searching.

Vocabulary Administrators: staff who are trained to upload and edit vocabularies using the City's Taxonomy & Vocabulary Management Solution. This role may be fulfilled by Corporate Information Management Services staff or may be extended to divisional staff as appropriate.

Vocabulary Analysts: business subject matter experts tasked with coordinating the creation, development, testing, validation, and sustainment of a vocabulary, or a portion of a vocabulary.

Vocabulary Owners: the person or group responsible for implementation and evaluation of a vocabulary once it has been developed. In a Divisional Vocabulary, the Owner is typically the manager of a business unit, or a working group or steering committee. Corporate Information Management Services is the Owner of all corporate vocabularies.

Vocabulary Sponsors: the person or group who are responsible for approving and authorizing use of a vocabulary in business activities, such as policies, communications, reporting, and service delivery. In a divisional vocabulary, the Vocabulary Sponsor is typically a divisional Director, Steering Committee, or Division Head. The scoping of this role changes based on the scope of a vocabulary. Corporate Information Management Services is the Vocabulary Sponsor of all corporate vocabularies.

Appendix B: Taxonomy and Vocabulary Framework

Themes	Accountable Government	Trustworthy Government	Accessible Government	Progressive Government
Goals	<ul style="list-style-type: none"> Collaborative governance to manage taxonomies and vocabularies Shared responsibility 	<ul style="list-style-type: none"> Identify and maintain authentic and trustworthy taxonomies and vocabularies Publish non-sensitive taxonomies and vocabularies as Open Data 	<ul style="list-style-type: none"> Taxonomies and vocabularies are accessible through a scalable enterprise platform 	<ul style="list-style-type: none"> Technical readiness Technological infrastructure
Objectives	<ul style="list-style-type: none"> CIMS, Technology Services (TSD), and Divisions will jointly support development, management and integration of taxonomies and vocabularies to improve information searchability by City staff and the public. CIMS will establish a governance strategy administered by Vocabulary & Metadata Program to resolve conflicts and develop services. Establish clear roles and responsibilities for vocabulary management amongst CIMS, TSD and Divisions. Collaboratively establish and maintain <i>Taxonomy and Vocabulary Policy</i>. 	<ul style="list-style-type: none"> Centralizing and standardizing taxonomies and vocabularies, which are official or trusted sources of City's descriptive terminology. Manage the lifecycle and evolution of taxonomies and vocabularies as corporate assets. CIMS will provide consultation and training on the adoption, management and use of taxonomies and vocabularies. Publish taxonomies and vocabularies as Open Data. 	<ul style="list-style-type: none"> The web-based enterprise platform will provide access to taxonomies and vocabularies for all City staff. CIMS and Divisions collaboratively ensure defined taxonomies and vocabularies are accurate, current, distinctive, consistent, tested and validated. Adhere to industry best practices for vocabulary and metadata management (e.g. ISO standards, NISO/ANSI). 	<ul style="list-style-type: none"> Enable assisted and auto-classification, text analysis, rule-based inference at enterprise level. Enable API integration with City applications to apply taxonomies and vocabularies as a component of descriptive metadata, which is fundamental in managing City's digital information. Enable metadata crosswalk from disparate data sources and facilitate data cleansing, exchange and contextualization to achieve system interoperability. Collaboratively establish and contribute to data governance framework in alignment with Information & Data Governance Policy and City's <i>Digital Infrastructure Strategic Framework</i>.

Appendix C: Vocabulary & Metadata Program Service Table

ID	Service name	Description	Tools	Notes
1	Vocabulary Services	Provide consultation and advisory services on corporate/divisional vocabulary management.		
1.1	Vocabulary lifecycle management	Provide assistance and consultation on the development, use/reuse and sustainment of vocabularies (e.g. glossaries, taxonomies and classification). We support divisions in the building and sharing of well-structured and clearly defined terms that will unify language, capture meaning, improve reporting and knowledge sharing.	VocabManager, VocabBrowser	
1.2	Vocabulary literacy	Engage with divisions and build awareness and competency in the work of vocabulary management, which plays a key role in content strategy and making sense of organization's content. By consistently communicating about their work with clear and aligned language, divisions enhance their ability to convey meaningful narratives, ensure accurate reporting, and strengthen their overall impact within the organization.	VILT, Vocabulary Design Guide	VILT = Virtual Instructor-Led Training
1.3	Vocabulary policy support	Lead policy development in vocabulary related areas. This includes providing policy, standards and procedures on vocabulary management, classification and other use cases.	CIMS Intranet	
2	Metadata Services	Provide assessment and consultation on metadata best practices and their application (e.g. data dictionary, metadata profile, document metadata etc.). Using metadata to describe City resources enables its understanding by humans as well as machines. This permits effective levels of interoperability, data exchange, data structures and interfaces.		Scope includes: descriptive metadata, data dictionary and other data governance related initiatives.

2.1	Metadata management advisory	Support and provide advisory services to divisions on the implementation and use of descriptive metadata; this may include support in building their metadata profiles, provide strategies in improving descriptive metadata for contents and explore automated metadata labelling with predefined terms.		
2.2	Data Governance Community of Practice leadership and support	Through the Data Governance Community of Practice (DG CoP), provide strategic and policy support to divisions to build and sustain DG initiatives within their data lifecycle; build standardized metadata approach and maintain data quality in data collection, management, reporting and analytics.		
2.3	Metadata policy support	Lead the development of policies, standards and guidelines pertaining to metadata management.	CIMS Intranet	
3	Vocabulary Technology Services	Provide technology and administrative support on corporate tools that support the management and use of vocabularies (e.g. taxonomies) and metadata at the City.		
3.1	Administration of Taxonomy and Vocabulary Management Solution	Provide administrative support to divisional users of the corporate Taxonomy & Vocabulary Management Solution.	VocabManager, VocabBrowser, VocabAnalyzer, VocabTagger 3.0	
3.2	Integration consultation	Support the delivery of use case-focused integration between vocabulary technology and client application; coordinate the delivery of such integration (e.g. via add-on, API) with Technology Services Division and client division.		
3.3	User training and onboarding	Provide user training and onboarding to the corporate Taxonomy & Vocabulary Management Solution.		
4	Classification and Tagging Services	Provide consultation and advisory services on classifying and tagging City information assets, support search optimization (in collaboration with TSD-DTS Corporate SEO Services), and provide	VocabAnalyzer, VocabTagger 3.0	

		automated methods to extract relevant keywords from textual documents.		
5	Vocabulary and Metadata General Consultations	Provide vocabulary or metadata advisory and support on projects and initiatives in the City (such as projects with enterprise impact e.g. M365, and projects coming through the Information Management Assessment).		

