

City Data Policy

For

Erode City Corporation

City Data Policy

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1. Preamble

This policy document will serve as the reference for publishing/giving digitally controlled access to the data generated by the Erode City Corporation through its various departments and agencies. This document will have to be read in tandem with National Data Sharing and Accessibility Policy, 2012, Tamil Nadu eSecurity Policy, 2010, ICT policy of Tamil Nadu, 2008, Tamil Nadu eGovernance Policy, 2017 and various other Central and State acts and rules covering the data.

2.

Definitions

Terms	Definition
CDO	City Data Officer
DC	Data Champions
Data	Facts and statistics collected together for reference or analysis.
Data Archive	A place where machine readable data are acquired, manipulated, documented, and distributed to other for further analysis and consumption
Data Generation	Initial generation/collection of data or subsequent addition of data to the same specification
Data Set	A collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer
ECDA	Erode City Data Alliance
High Value Data	Data that can increase agency accountability and responsiveness; improve public knowledge of the agency and its operations;
Meta Data	Data about data
Open Data License	The Open Database License (ODbL) is a copyleft ("share alike") license agreement intended to allow users to freely share, modify, and use a database while maintaining this same freedom for others.
Open Standards	An open standard is a standard that is publicly available and has various rights to use associated with it, and may also have various properties of how it was designed (e.g. open process).
Open Government	Open government is the governing doctrine which holds that citizens have the right to access the documents and proceedings of the

Terms	Definition
	government to allow for effective public oversight.
OGD	Open Government Data
Negative List	List of Prohibitive data sets/feeds
NDSAP	National Data Sharing and Access Policy
Data Agencies	Agencies which are consumers and suppliers of public data

3. Background

3.1. Smart City Mission

There is no universal definition to Smart City and the concept from people to people and even city to city depending on the level of development, willingness to change and reform, resources and aspirations of the city residents. The objective is to promote sustainable and inclusive cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of ‘Smart’ Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a lighthouse to other aspiring cities. The Smart Cities Mission is meant to set examples that can be replicated both within and outside the Smart City, catalyzing the creation of similar Smart Cities in various regions and parts of the country.

3.2. Data and Governance of cities

Data are recognized at all levels as a valuable resource that should be made publicly available and maintained over time to ensure that their potential value is realized. There has been an increasing demand by the community, that data should be made more readily available to all, to enable rational debate and better decision making. Principal 10 of the United Nations Declaration on Environment and Development (Rio de Janeiro, June 1992), stated

“.....each individual shall have appropriate access to information concerning the environment that is held by public authorities and the opportunity to participate in the decision-making process. States shall facilitate and encourage public awareness and participation by making information widely available.”

The principles on which data sharing and accessibility need to be based include: Openness, Flexibility, Transparency, Legal conformity, Protection of intellectual property, Formal responsibility, Professionalism, Interoperability, Quality, Security, Efficiency, Accountability, Sustainability

Erode City Municipal Corporation deals with complex issues like mobility, management of water, solid waste, housing, education and health etc. **Erode Municipal Corporation** execute these functions through various departments. Besides the departments, private sector organizations, corporates, community organizations, research and academic institutions also play a large role in the functioning of cities, through provision of infrastructure, services, research, co-creation and feedback. All these agencies are custodians of different types of datasets that is generated through their operations. However, most of this data remain in silos as these agencies work independently.

However, by being ‘Smart’ the data and digital technology has to work with the ultimate aim of making the lives of the city’s resident a better one. Availability of data, its use, cost, quality, analysis, associated business models and governance are all areas of interest of a smart city.

4. Need for City Data Policy

Despite the availability of a large amount of very useful data with different agencies, not much of it is used to draw insights and create actionable intelligence for city governance. Collaboration around data is missing amongst different stakeholders and the power of data as a potential economic resource is not harnessed appropriately. Even if the city government and its stakeholders realize the value of data and want to unlock the power of this valuable resource, there is often a lack of clarity on data policy which restricts them from doing so. A data policy is essential to understand the contours of data sharing, privacy, security and ownership in the context of the city. Certain types of data (e.g. an individual’s tax payments) are clearly private and should not be shared. Certain types of data (e.g. air quality sensor readings) are for unrestricted public consumption. Vast amounts of data are in the “grey zone” where clear policies are required that balance privacy, legal and public

benefit considerations. Data policy is also needed to define the contours of collaboration between various governmental/ non-governmental entities on sharing and access of data. Data policy should also spell out the key actors within important city organizations who would act as data champions and data contributors. The data policy should lay out the roadmap of the city in terms of milestones in the adoption of open data, data exchange platforms. Data policy should answer critical questions regarding data ownership and safety. Lack of a clear data policy prevents cities from adopting data driven decision making as critical issues highlighted above remain unanswered.

5. Purpose of the Policy

The purpose of this document is to establish a Data Policy for the City of **Erode**. Data collected by the City has not been catalogued, impeding the ability to aggregate, analyse and synthesize it to better allocate public resources. The adoption of a Data Policy will improve the provision of services, increase transparency and access to public information, and enhance coordination and efficiencies among departments and partner organizations.

Another goal of a Data Policy is to proactively provide information currently sought through requests such as Right to Information Act, which saves the City time and money. Access to public information will promote a higher level of civic engagement and allow citizens to provide valuable feedback to government officials regarding local issues. Publicly available data can spur civic innovation resulting in social and economic benefits for the City and its residents.

The City will proactively publish data and related information, consistent with relevant laws. Developing and maintaining an inventory of the City's datasets and assessing data quality is a continual process. Data quality should be taken into account when prioritizing which data sets to release first in order to prevent the release of confusing or misleading data. The protection of privacy, confidentiality and security will be maintained as a paramount priority while also advancing the government's transparency and accountability through open data.

6. Policy Exclusions

Public data to be made available does not include any data set to which the department/agency may deny access pursuant to Right to Information Act, 2005 or any other provision of a central or state law, rule or regulation).

Data that are excluded may include:

- are specifically exempted from disclosure by state or central law;
- if disclosed would result in an unwarranted invasion of personal privacy;
- if disclosed would impair present or imminent contract awards or collective bargaining negotiations;
- are trade secrets or are submitted to an agency 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;
- are compiled for law enforcement purposes and which if disclosed would:
 - interfere with law enforcement investigations or judicial proceedings;
 - deprive a person of a right to a fair trial or impartial adjudication;
 - identify a confidential source or disclose confidential information relative to a criminal investigation; or
 - reveal criminal investigative techniques or procedures, except routine techniques and procedures;
- could if disclosed endanger the life or safety of any person;
- are inter-agency or intra-agency communications, except to the extent that such materials consist of:
 - statistical or factual tabulations or data;
 - instructions to staff that affect the public;
 - final agency policy or determinations; or
 - external audits, including but not limited to audits performed by the Comptroller and Auditor General of India;
- are examination questions or answers that are requested prior to the final administration of such questions;
- if disclosed, would jeopardize an agency's capacity to guarantee the security of its information technology assets, such assets encompassing both electronic information systems and infrastructures;

- are photographs, microphotographs, videotape or other recorded images prepared under authority
- data stored on a department/ agency owned personal computing device, or data stored on a portion of a network that has been exclusively assigned to a single agency employee or a single agency 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; or
- employment records, internal employee-related directories or lists, and facilities data, information technology, internal service-desk and other data related to internal agency administration.

7. Data Categorization and classification

Data classification is the classification of data based on its level of sensitivity and the impact to the Erode City Municipal Corporation should that data be disclosed, altered or destroyed without authorization. The classification of data helps determine what baseline security controls are appropriate for safeguarding that data. All institutional data of Erode City Municipal Corporation should be categorized into two broad categories

Personal Data: Personal data means data consisting of information which is related to a living individual who can be identified from that information (or from that and other information in the possession of the data users), including any expression of opinion about the individual but not any indication of the intention of the data user in respect to that individual.’ ‘Data’ is defined as information recorded in a form in which it can be processed by equipment operating economically in response to instructions given for that purposes.

Note: Personal Identifiable Information cannot be published by City on Data Platform under any data sets. Data sets must be anonymized before publishing.

Non-Personal Data: Non-personal data also refers to anonymous information/data, namely information which does not relate to an identified or identifiable natural person, or personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable. In other word, anonymization means excluding any personal identifiers from data sets.

The **Non-Personal Data** will be further classified as below:

Table 1: Data Classification (Non-Personal Data)

Classification	Class	Definition
Level 1	Public	Data available for public consumption and use.
Level 2	Internal Use	Information which could only be disclosed to Municipal Corporation employees for managing operations or delivery of public services on day to day basis.
Level 3	Confidential	Data regulated by any City/ State/Central law or regulation like privacy etc.
Level 4	Protected	Data which needs to be protected for e.g. Identity of citizens and disclosure /notification need to be issued by municipal corporation in case of any breach or loss of data.
Level 5	Restricted	Data which could lead to threat to life or loss of public assets or critical infrastructure.

8.1. City Data Officer (CDO)

City Data officer's major responsibility is to put data to its right use i.e. for generating insights, using data for effective service delivery or infrastructure delivery, improving civic operations by making real time decision making etc

CDO will work with the City's departments and agencies to:

- a) Identify a Data Champion for each in respective departments/government agencies.
- b) Collaborate with Data Champions of other government departments/agencies within the city for the effective implementation of City Data Policy through a unified approach.
- c) Monitor the creation of a comprehensive inventory of datasets/data catalogues held by each government departments/agencies and publish to the Open Data Portal of Government of Tamil Nadu <https://tn.data.gov.in/>
- d) The CDO will ensure that the data sets are regularly updated;
- e) Develop and implement 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

The CDO cannot work in isolation. Active participation from data agencies will be key to successful data collaboration within the city. Data champions will be senior functionaries, not below the rank of a Head of Department or equivalent, who would champion the implementation of the CDP in their respective departments/ organizations. They would be the flag bearers of the policy in their departments/ organizations and would work to align their teams to imbibe the principles of data driven decision making in their day to day functioning. They would also make their respective teams aligned to the value of collaborative work on data, as siloed approach to data ownership and use will not foster the

development of integrated approaches to resolution of potential use cases within the context of each city.

8.2. Data Champions (DC)

- a) Data Champions (DCs) in respective departments/government agencies shall identify the data sets/feeds, derived information, intelligence or data challenge with respect to day to day operations of the department.
- b) DCs will actively publish/ enable to publish data sets/feeds identified as relevant to the resolution of critical use cases for the city. They will work closely with the CDO for active implementation of the City Data Policy.
- c) DCs will be assisted by the Data Coordinators (DCOs) within the department to streamline processes of data reporting, collection and analysis etc. Data Champions will be responsible for data quality.
- d) DCs will undertake activities to engage with their stakeholders and evolve their department's strategy on data in line with the deliberations.

8.3. Data Coordinators

- a) Data Coordinators will assist DCs at the department/government agency level as reporting staff.
- b) Data Coordinators will also aggregate the data demand from various channels.
- c) Data Coordinators will also be responsible for sensitizing the department employees over the importance of data quality etc.

8.4. Erode City Data Alliance (ECDA)

The CDO along with Data Champions will form a network of government departments, agencies, private sector companies, community organizations, city policymakers, domain & legal experts, research, academic institutions, incubators, entrepreneurs, etc., within the city as **Erode City Data Alliance. ECDA** will act as an advocacy group. The **ECDA** will provide a collaborative framework to create and define use cases to solve

critical city problems through the use of data, catalyse the right set of collaborations and networks to make available such data and undertake continuous dialogue between various stakeholders in the city towards improving quality of life, employability and sustainability in the city, and also act as the chief driver of adoption of data driven governance and co-creation within the community. The alliance will undertake education and awareness about data in the community, understand and address concerns on data privacy and security, build use cases for city problems, create data collaborations between various government and private agencies for solving relevant use cases and continuously evolve the culture of data in the city's context.

The major roles of **ECDA** will be

- a) To act as an advisory group to the city leadership on the City Data Policy.
- b) To assess the data needs of various Smart City stakeholders.
- c) To promote data driven governance and policy formulation.
- d) Prioritize the Data Sets/Feeds for publishing on Data Platform
- e) To arrive at guidelines for data collection, data processing, data quality assessment, open data norms
- f) To design and implement solutions and analysis using city data.
- g) To support industry to design solutions using emerging technologies like Artificial Intelligence, Machine Language, and Blockchain.
- h) To generate awareness in various stakeholders towards open government initiatives.
- i) To bring Smart Cities stakeholders on common platform to influence the city data priorities.
- j) To facilitate data for co-creation and collaboration over civic issues
- k) To provide critical feedback to the city over the quality and relevance of data provided by Smart City.
- l) To sensitize ecosystem partners to share the data for leveraging data for solving civic challenges

8.5. Data Consumers

The envisaged users of Data from the Data portal are

- a) **Government Agencies:** Government Agencies operating with dedicated administrative structure (apart from City Administration) in Smart City namely Traffic Police, City Police, Central/State Government Departments, Government Autonomous Bodies etc.
- b) **Funding Agencies:** Funding Agencies which regularly works with city administration in different domain for e.g. World Bank, ADB, DFID, AFB etc.
- c) **Industry:** Key flagship manufacturing/service Industry promoters/players in the Smart city/state.
- d) **Academia:** leading Universities/Colleges/Schools in the Smart city.
- e) **Policy Advocacy Groups and NGOs:** Policy Advocacy groups and NGOs working in different domains/areas like Slums, Health, Education, Environment, Participatory Governance, Mobility etc.
- f) **Start-ups and Incubators:** Start-ups and incubators in the Smart City/State.
- g) **City Businesses:** Local Small and medium business communities
- h) **Citizens and Communities:** Communities and citizen interest groups to further the interest of citizens/communities towards data driven policy governance and service delivery.
- i) **Local Elected Representatives:** Local elected representatives to further the interest of citizens/communities towards data driven policy governance and policy formulation.
- j) **Professionals:** Various professional like Doctors, CA, and Engineers, Lawyers etc.

8.6. Terms and Conditions for Data Consumers

By accessing data sets and feeds available through the Open Data Portal, the user agrees to all of the Terms of Use related to privacy that will be laid by CDO in consultation with Erode Data Alliance. The user also agrees to any additional terms of use defined by departments/agencies providing data or feeds through the portal. Public data sets made available on the Data Portal are provided for informational purposes. The City does not warranty the completeness, accuracy, content, or fitness for any particular purpose or use of any public data set made available on the Data Portal, nor are any such warranties to be implied or inferred with respect to the public data sets furnished therein.

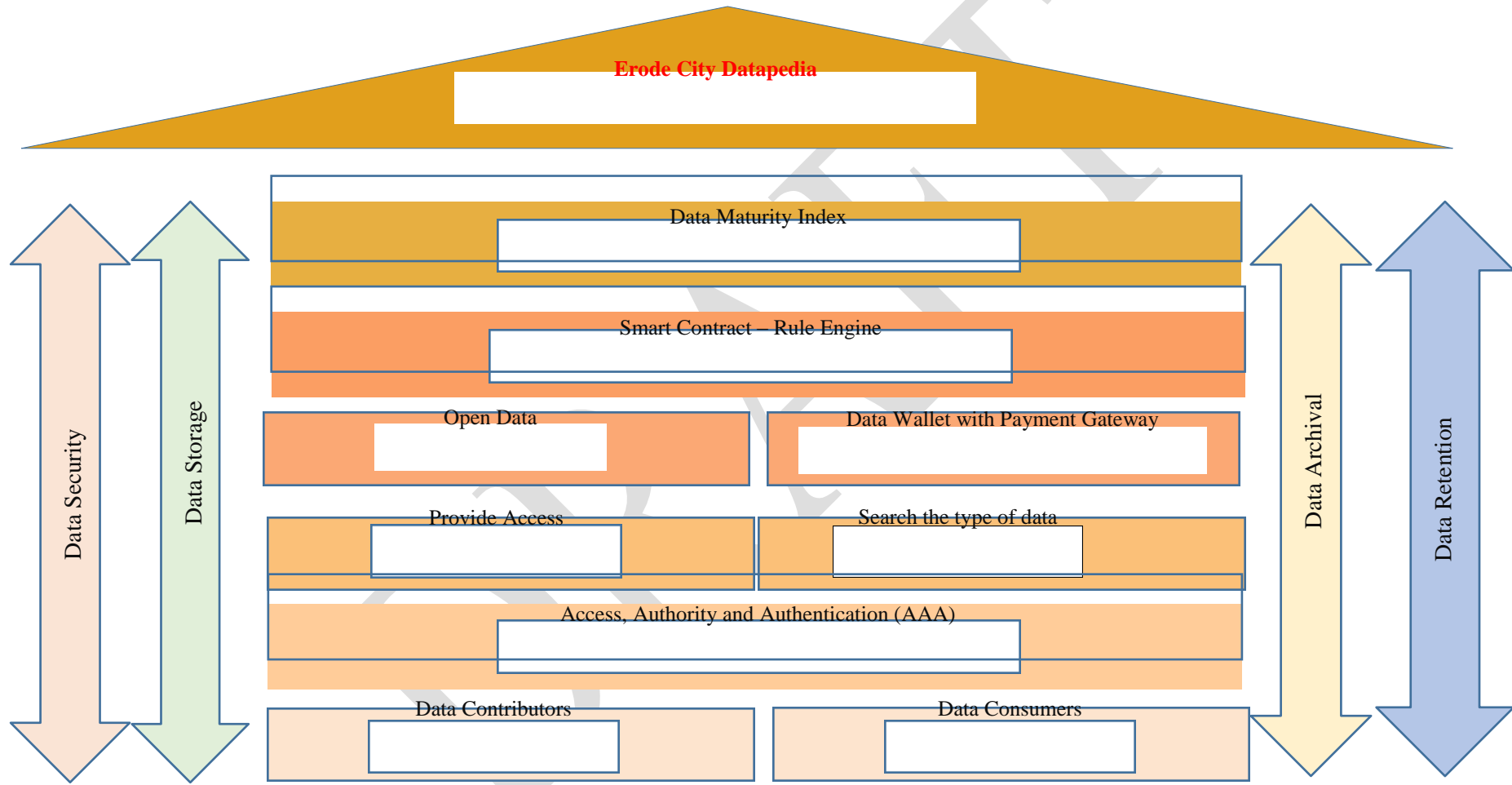
The City is not liable for any deficiencies in the completeness, accuracy, content, or fitness for any particular purpose or use of any public data set, or application utilizing such data set, provided by any third party.

Submitting City Agencies are the authoritative source of data available on Data Portal. These entities are responsible for data quality and retain version control of data sets and feeds accessed on the portal. 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.

8.7. A Framework for Erode City Datapedia

The policy envisages six layered framework for **Erode city Datapedia**. In the bottom, it is the data contributors and data consumers. The Data Coordinators and Data champions of those departments/agencies that are willing to contribute data to the City portal will comprise data contributors; whereas Data Consumers are any or all the stakeholders mentioned in section 8.5 of this policy document. The data consumers and data contributors will pass through the Access, Authority and Authentication (AAA) layer to ensure only the right users have access to right data. They will be able to upload the data and /or search for the data based on the role. The public use data (Level 1) as classified in the section 7, will be given open access. Other data classifies as Levels 2,3, and 4 will be stored in the Data Wallet enabled with a payment gateway. The data in the data wallet will be available for the user based on second level authentication. If the department/agency that contributes the data is interested in monetizing the data, they may utilize the payment gateway. A Smart contracts will be explored as means to leverage efficiency, security and impartiality in the execution of this policy. Big data analytics will be leveraged to arrive at Data Maturity Index. The parameters of Data Security, Data Storage, Archival and Retention cut across all the horizontal layers described above.

Exhibit 2 – A Framework for Erode City Datapedia



9. Data Security

In line with the Information Security Policy of Government of Tamil Nadu

- a) Ownership of data, including citizen related data, Government financial data etc. arising out of any Information Technology project or already available with the State Government would be with the State Government and/or its various departments, bodies, agencies only and may be shared with Government departments and agencies within the provisions of the various Acts.
- b) Government would ensure security and privacy of citizen data, while compiling citizens database in accordance with the various Acts in this regard.
- c) The Departments would be advised to standardize the databases to Unicode standards.
- d) The Departments will be encouraged to consider digitization of their old records and files.
- e) The CDO, DCs and GCCDA will evolve the guidelines for sharing the data on the data portal and in line with these guidelines, for use by various stakeholder's general public.

The Data Champions (departments/agencies) shall extend authorization to CDO for access to the information in written form. The CDO shall validate data before the same is made accessible to the users. The CDO, DCs and all authorized secondary users shall take all reasonable precautions against unauthorized access, wilful or not, to screens and/or reports containing sensitive data. The concerned department dealing with IT Services shall install security procedures to reasonably prevent unauthorized access to systems and data by students or any other unauthorized person.

10. Data Storage Archival and Retention

In spite of the data being collated at a common portal for better data driven decision making, the ownership of the individual data sets will lie with the concerned department/agency. And the decision related to data storage, retention, archiving and destruction will be strictly in line with policies of the concerned department with respect to these aspects.

The accessibility of any data depends on the quality of the storage medium and the availability of the relevant data reading equipment for that medium. Application

Programming Interface (API) is a software intermediary that allows two applications to talk to each other. The data from the data portal, <https://tn.data.gov.in/> will be retrieved from that particular departments' web page.

11. Implementation schedule

Within three months from the issue of this policy, Erode City Municipal Corporation will identify the City Data Officer and within six months from the policy issue date, the CDO will identify Data Champions (DCs) and the **Erode** City Data Alliance will be formed. The CDO along with DCs and **ECDA** will bring out detailed implementation guidelines including the technology and standards for data and metadata. All the departments/agencies will provide at least 5 high value datasets on <https://tn.data.gov.in/> within three months of the guidelines issue. The portal will only have the metadata and data itself will be accessed from the portals of the Erode city Municipal Corporation <https://www.tnurbantree.tn.gov.in/erode/> through the links from data portal.

12. Legal Framework

Data will remain the property of the agency/department/entity which collected them and reside in their IT enabled facility for sharing and providing access. Access to data in this policy will not be in violation of any acts and rules that the government of India enforces. Legal framework of this policy will be aligned with various acts and rules covering the data.

13. Policy Conclusion

The Policy aims at technology-based culture of data management as well as data sharing and access. It opens up, proactively information on available data which could be shared with various data consumers. The policy has limited its scope due to data owned by various departments/agencies. Further, the **ECMC** aims to maximise social and economic value of data for the benefit of citizens, city government, and businesses to promote economic growth and efficiency while building a self-sustainable revenue plan.