البيانات أولاً
datafirst

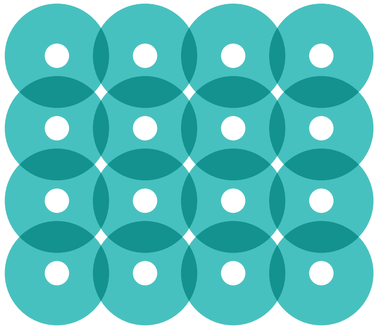
تحدي بيانات المدينة
The City's Data Challenge

DATA FIRST CHALLENGE

CRITERIA & APPLICATION PROCESS

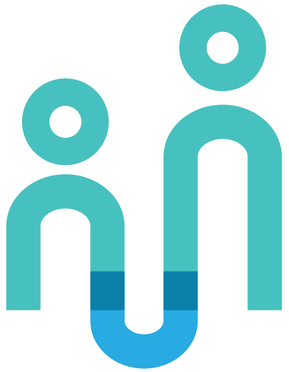
DATA FIRST

MAIN PURPOSE OF THE CHALLENGE



Increase city data availability in the city

Enhance data governance & compliance



Nurture a strong data community

DATA FIRST

CRITERIA MEASURMENT

1

Comply with Dubai Data Law

30%

2

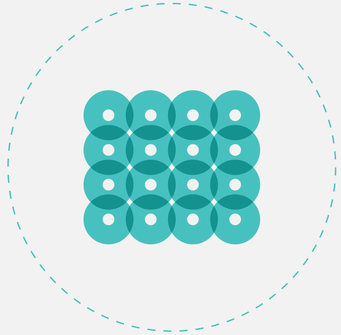
Participate in Smart Dubai Data Events

15%

3

Collaborate on data requests

25%



4

Participate in each data ingestion cycle

25%

5

Support a data driven culture

5%

30%

COMPLY WITH DUBAI DATA LAW

WHY

OBJECTIVE

- To improve data compliance with Dubai Data Law
- To open motivational channel between entities, create the spirit of health competition

WHAT

“SUCCESS MEASUREMENT AGAINST CRITERIA”

- Entities who are compliant by **70%** and above
- **50%** improvements in overall compliance

HOW

“MEASUREMENT METHOD”

- Measure the average of 2019 data compliance reports

15%
PARTICIPATE IN SMART DUBAI DATA EVENTS

WHY
OBJECTIVE

- To enhance smart data ecosystem engagement
- To create a channel to showcase best practices

WHAT

“SUCCESS MEASUREMENT AGAINST CRITERIA”

- Entities who participated in more than **50%** of Smart Dubai Data events in 2019

HOW

“MEASUREMENT METHOD”

- Track attendance matrix of 2019 events managed by Smart Dubai Data

25%

COLLABORATE ON DATA REQUESTS

WHY

OBJECTIVE

- To improve the collaboration between the government entities to meet all data requests
- To encourage cross-functional projects between government entities

WHAT

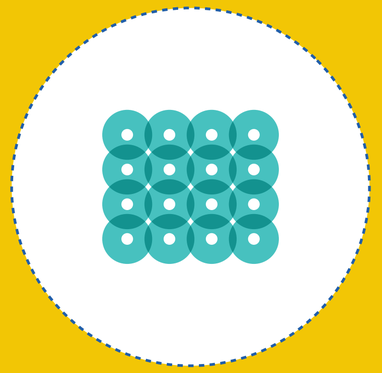
“SUCCESS MEASUREMENT AGAINST CRITERIA”

- Entities with **100%** of closed and completed data requests

HOW

“MEASUREMENT METHOD”

- Track all data requests status in 2019 for each entity



25%

PARTICIPATE IN EACH DATA INGESTION CYCLES

WHY

OBJECTIVE

- To increase city “open data” availability for the public on DubaiPulse
- To increase city “shared data” accessibility for the government entities on DubaiPulse

WHAT

“SUCCESS MEASUREMENT AGAINST CRITERIA”

- Entities who participated in minimum **5 ingestion cycles** with at least **5 datasets** each cycle in 2019

HOW

“MEASUREMENT METHOD”

- Track all ingestion cycles report to verify number of datasets per entity

5%

SUPPORT A DATA DRIVEN CULTURE

WHY

OBJECTIVE

- To act as a change agent in raising the awareness of the importance of exchange open / shared data
- To drive own entity toward becoming a data driven organization

“SUCCESS MEASUREMENT AGAINST CRITERIA”

Entities who support Dubai Data initiative by:

- Organizing internal workshops
- Encouraging / Sponsoring employees to attend RIT Data Analytics workshops and Master of Data Analytics
- Organize awareness programs within own entity

“MEASUREMENT METHOD”

- Submit evidence of conducting data awareness sessions and workshops

DATA FIRST

SELECTION PROCESS

01
STEP

THE ANNOUNCEMENT

July 14 Announce “Data First” the city data challenge and apply for the competition

02
STEP

KEEPING TRACK

July - December Smart Dubai will monitor all entities progress

03
STEP

PANEL REVIEW

December Smart Dubai will conduct a panel review to select winners based on scores against criteria

04
STEP

CELEBRATION

January Announce the winners

DUBAI DATA

COMPLIANCE FRAMEWORK

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% OF COMPLIANCE TO DUBAI DATA LAW

TO MEASURE THE PERCENTAGE OF COMPLIANCE TO DUBAI DATA LAW, TWO FACTORS WILL BE MEASURED FOR EACH ELEMENT OF COMPLIANCE.

Reporting Frequency

FACTORS MEASURED

Each element of compliance will be scored from 0 to 2 on two factors:

1	2
TIMELINESS	COMPLETENESS
Score:0-2	Score: 0-2

% OF COMPLIANCE TO DUBAI DATA LAW

To measure the percentage of compliance to Dubai Data Law, two factors will be measured for each element of compliance.

ELEMENTS OF COMPLIANCE

Each element of compliance is assigned a different weight depending on importance:

1 Designate Team	2 Determine Governance	3 Inventory Data
Weight: 3%	**Weight: 3%**	**Weight: 10%**
4 Prioritize Data	5 Classify Data	6 Prepare Data Release Plan
Weight:4%	**Weight: 5%**	**Weight: 5%**
7 Complete Data Cataloguing	8 Ingest Data on Platform	9 Maintain data
Weight:25%	**Weight:33%**	**Weight:12%**

DESIGNATE DUBAI DATA TEAM

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% OF COMPLIANCE TO DUBAI DATA LAW

1 DESIGNATE TEAMS

Effective/ empowered Data teams formed through internal decree and with clearly communicated roles and responsibilities

TEAM STRUCTURE

ORGANIZATION STRUCTURE:

4 ROLES

DUBAI DATA LEADER

Executive sponsor
Single point of contact for entity's Dubai Data effort
Decision making responsibility

DUBAI DATA ADMINISTRATOR

Working level, day-to-day point of contact

INVENTORY

CLASSIFICATION

DATA STEWARD

- SPECIFIC COMMITTEES
- BUSINESS UNITS

DATA SPECIALIST

- IT
- DBA

ACCESS

INGESTION

DATA MANAGEMENT

DETERMINE GOVERNANCE

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% OF COMPLIANCE TO DUBAI DATA LAW

2 DETERMINE GOVERNANCE

Formally documented, approved and implemented RACI model defining approval process

TEAM STRUCTURE

DUBAI DATA ESTABLISHMENT SUGGESTED RACI MATRIX

	DIRECTOR GENERAL	DUBAI DATA LEADER	DATA ADMINISTRATOR	DATA STEWARD/ SPECIALIST	DUBAI DATA ESTABLISHMENT
START DATA INVENTORY PROCESS	I	I	R	I	I
REQUEST ENTITY DATA INVENTORY	I	A	R	C	I
PREPARE DATA INVENTORY	I	I	A	R	I
REVIEW DATA INVENTORY	I	R	R	A	C
APPROVE DATA INVENTORY	R	A	C	I	I
FINALISE DATA INVENTORY	I	C	R	A	R
PREPARE DATA CLASSIFICATION	I	A	R	C	I
REVIEW DATA CLASSIFICATION	I	R	A	I	C
APPROVE DATA CLASSIFICATION	R	A	C	I	R
DETERMINE DATA INGESTION METHOD	I	C	A	R	I
REVIEW DATA INGESTION METHOD	I	C	R	C	I
APPROVE DATA INGESTION METHOD	I	C	A	C	R

INVENTORY DATA

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% OF COMPLIANCE TO DUBAI DATA LAW

3 INVENTORY DATA

- **Data inventory sheet is submitted**
- **Written statement is sent by Data Leader confirming that:**
    - List has been reviewed/approved by Data Leader
    - The list includes all obvious and high value datasets, already published/shared data and all existing identified lists of this entity
    - The process has been followed and checked by Data Administrator
    - List of all departments involved in creating the draft lists and name/role of data lead responsible

DATA INVENTORY EXAMPLE

Data Inventory is an inventory of the Dubai Data that a Dubai Government Entity has in its possession, including any Dubai Data which the Dubai Government Entity produces or controls.

DATASET NAME

Formal name of the dataset that will be used to reference the dataset between SDO & Government Entity.

DATASET DESCRIPTION

Statement about the dataset describes the contents and the fields included

DATA ATTRIBUTES

Attributes are the columns or fields that make up the data set

ATTRIBUTE DESCRIPTION

Statement describing the contents and the nature of data in the attribute

PRIORITIZE AND CLASSIFY DATA

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% OF COMPLIANCE TO DUBAI DATA LAW

4 PRIORITIES

ALL DATASETS:

- Have a prioritization score
- Overall prioritization is reviewed and signed off by Data Leader
- DDE comments are reflected in final prioritization (if any are received)

DATA PRIORITIZATION CRITERIA

There are two broad sets of criteria:

1

BENEFIT CRITERIA

For evaluating the potential value of opening a particular dataset to citizens and companies, or sharing it with other Dubai Government Entities.

2

READINESS CRITERIA

For evaluating the effort involved in getting the dataset ready for publication or sharing (through the Smart Dubai Platform).

DATA PRIORITIZATION RESULTS (SAMPLE)

DATASET NAME	DATASET DESCRIPTION	BENEFITS				QUALITY AND READINESS			
		User demand	Economic Impact	Better services	Better Governance	Defined Owner	Existing Metadata	Already Published	Open Format
Formal name of the dataset that will be used to reference the dataset between SDO & Government Entity.	Statement about the dataset describes the contents and the fields included	3	2	4	3	**YES**	**YES**	**NO**	**YES**

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5 CLASSIFY

All prioritized datasets:

- Are classified, and
- Reasons for classification are documented
- DDE feedback on prioritization reflected

PRACTICIAL CLASSIFICATION

CLASSIFY DATA SETS

DATASET IDENTIFICATION

- Identify priority datasets for classification

DATASET CLASSIFICATION

- Classify the attributes
- Split dataset based on attribute
- Identify attributes causing a secret, sensitive, or confidential scoring in order to arrive at open classification

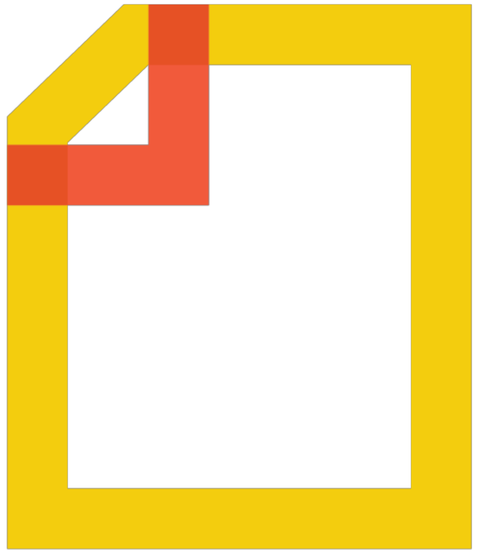
REVIEW & APPROVAL

- Review classification by smart Dubai office
- Review and agree on final classification by smart Dubai and department

PRACTICIAL CLASSIFICATION

DATA SETS IDENTIFICATION IDENTIFY PRIORITY DATASETS FOR CLASSIFICATION

IDENTIFIED DATASET



DO ANY OF THE FOLLOWING APPLY TO DATASETS?

1. Part of Primary Registry
2. Strategic alignment with Smart Dubai priorities (in particular Smart Economy and Smart Living)
3. User demand for the data
4. Government efficiency benefits
5. Service improvement benefits
6. Economic growth benefits
7. Transparency/accountability benefits

YES →

NO →

PRACTICIAL CLASSIFICATION

DATA SETS CLASSIFICATION

TYPES OF CLASSIFICATION

The relationships between the different categories of Dubai Data are illustrated in this figure:

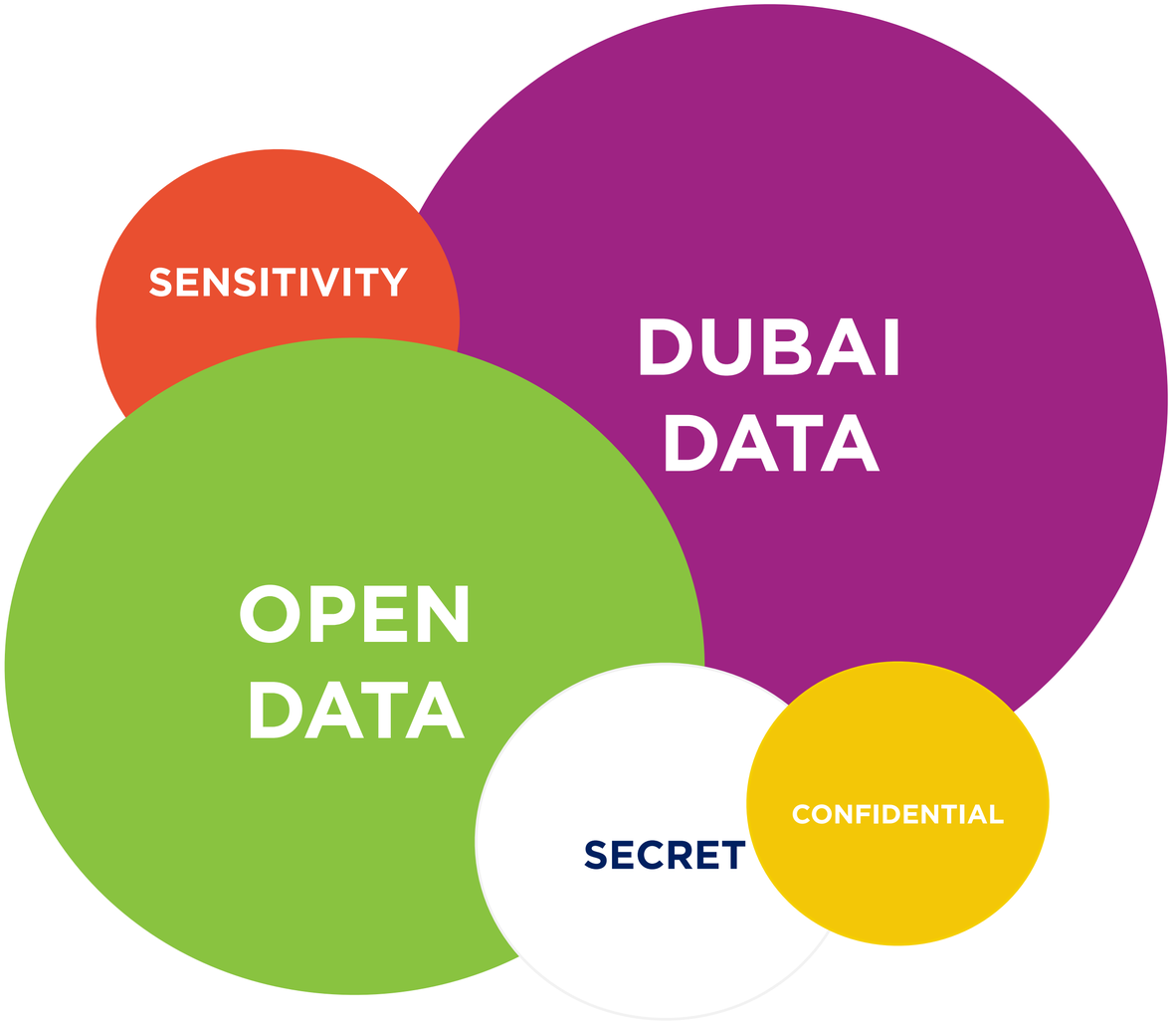
DUBAI DATA
Owned by entities is made available for sharing and re-use by other entities

OPEN DATA
Openly disclosed to everyone

CONFIDENTIAL
Shareable across entities according to professional responsibilities

SENSITIVE
Shareable within certain groups subject to strict controls

SECRET
Shareable in a limited way between certain individuals under strict controls



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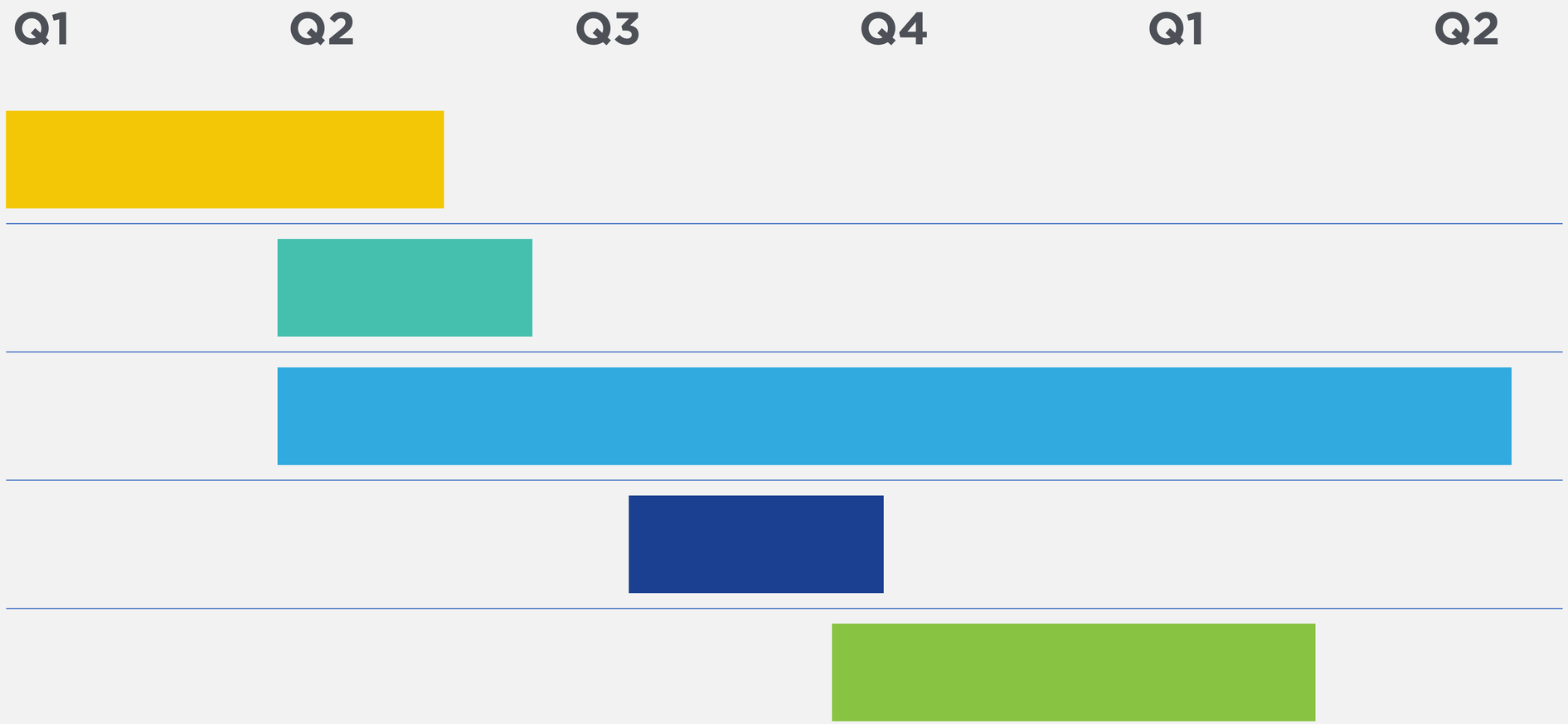
6 DATA RELEASE PLAN

Data Release Plan completed as per the standard and approved by management of entity

PRACTICIAL CLASSIFICATION

INITIATION AND DATA RELEASE PLAN

CREATE AN INITIAL ROADMAP FOR YOUR ENTITY'S DATA WORK THAT MEETS WITH DDE REQUIREMENTS



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% OF COMPLIANCE TO DUBAI DATA LAW

7 CATALOGUING
(INCLUDES METADATA, QUALITY, FORMAT STANDARD REQUIREMENTS)

EACH DATASET:

- has been classified,
- has data quality assessment report,
- has sample dataset,
- has core/optional metadata provided,
- compliance statement has been signed off by Data Leader

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META DATA ITEMS

BUSINESS	TECHNICAL	DATA QUALITY
1. Dataset Name	1. Data Provenance	1. Data Quality – Completeness
2. Contributor/Custodian	2. Format (MIME)	2. Data Quality – Uniqueness
3. Creator Business Unit within Entity	3. Attribute Datatype	3. Data Quality – Timeliness
4. Dataset Description	4. Attribute Size	4. Data Quality – Accuracy
5. Coverage (Geographic area)	5. Attribute Delimiter	5. Data Quality – Consistency
6. Dataset Temporal Windows	6. Attribute Delimiter- Other	6. Data Quality – Reconciliation
7. Attributes	7. Attribute Foreign Key	7. Data Quality Issue Resolution SLA
8. Attribute Description	8. Attribute Join Rules to Related Datasets	
9. Language	9. Dataset Source	
10. Attribute Classification	10. Source Platform Type	
11. Attribute Range of Values	11. Preferred Ingestion Method	
12. Primary Identifier Attribute for the dataset	12. Description for Method	
13. Dataset Supplementary Reference Data	13. Connectivity Option	
14. Related datasets	14. Description for Connectivity	
15. Related Identifier	15. Frequency of Update on Source	
16. Dataset Point of Contact	16. Frequency of Update to SDP	
17. Dataset POC Email	17. Scheduling of SDP Update	
18. Dataset POC Phone	18. Expected Volume/Ingestion Cycle (Daily if Real-time)	
19. Rights		
20. Subject Level 1		
21. Subject Level 2		
22. Subject Level 3		
23. Tags / Keywords		
24. Already Published?		
25. If Published, where?		
26. Already Shared?		
27. If Shared, with which Entities?		
28. Expected Data Set Utilization		
29. Remarks/Special Business Rules		

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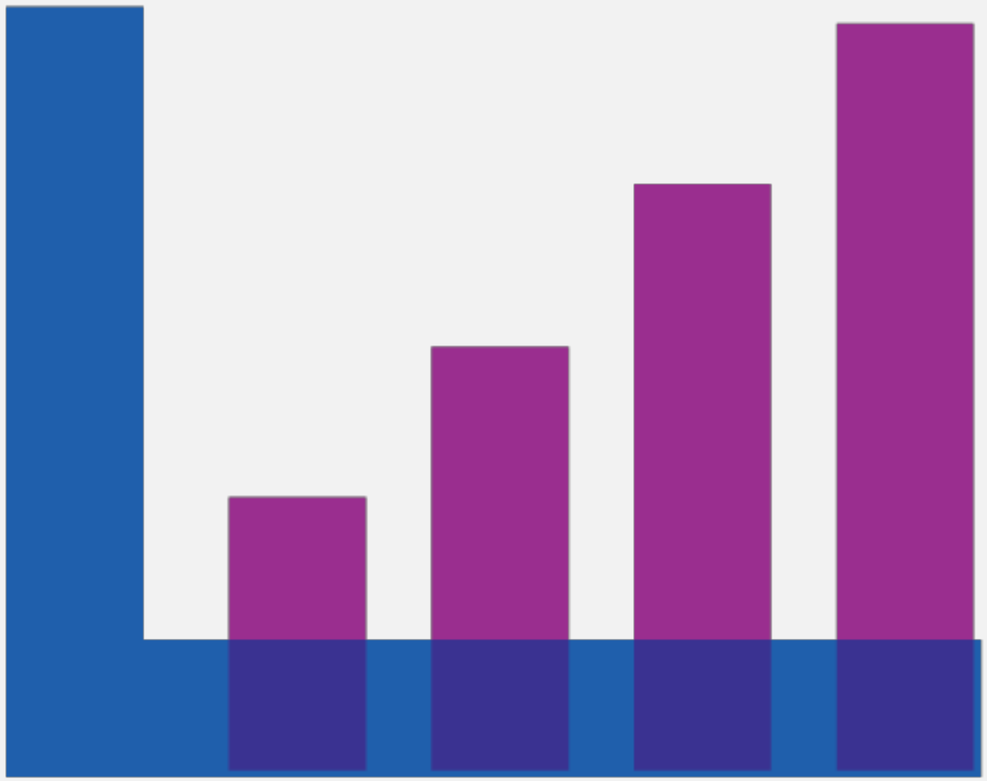

8 INGEST DATA

Data ingested on the platform with no technical issues from entity as per agreed ingestion method

9 DATA MAINTENANCE

Data quality maintained as per agreed data contract (i.e. frequency of publication, attributes etc) for all datasets

THANK YOU