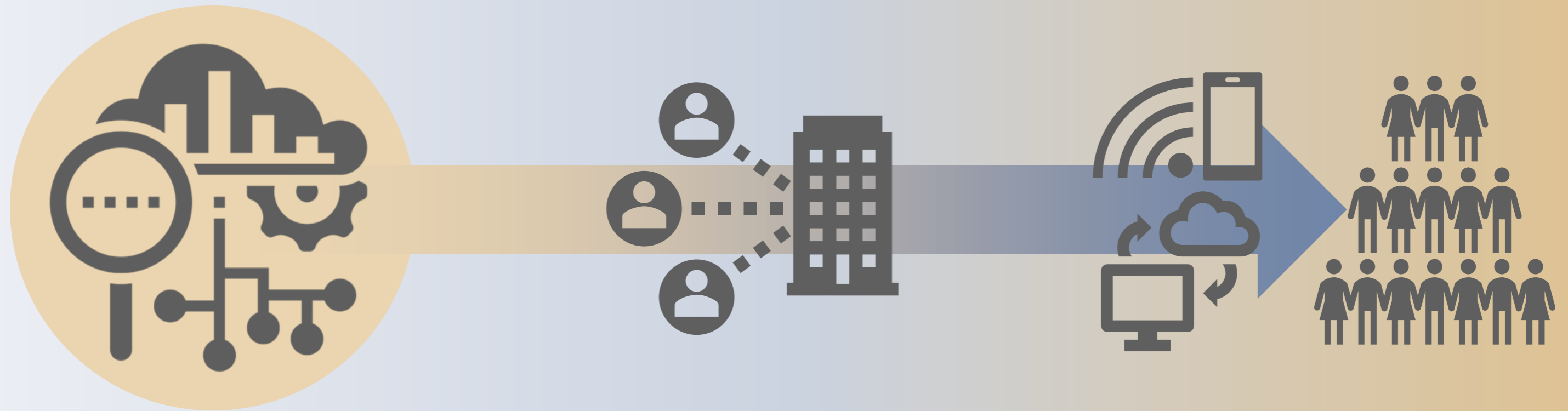Assessing the maturity of selected Urban Local Bodies (ULBs) in online service delivery by applying Local Online Service Index (LOSI) methodology in India

In collaboration with:

CEPT UNIVERSITY
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United Nations | Department of Economic and Social Affairs

UNITED NATIONS UNIVERSITY
UNU-EGOV
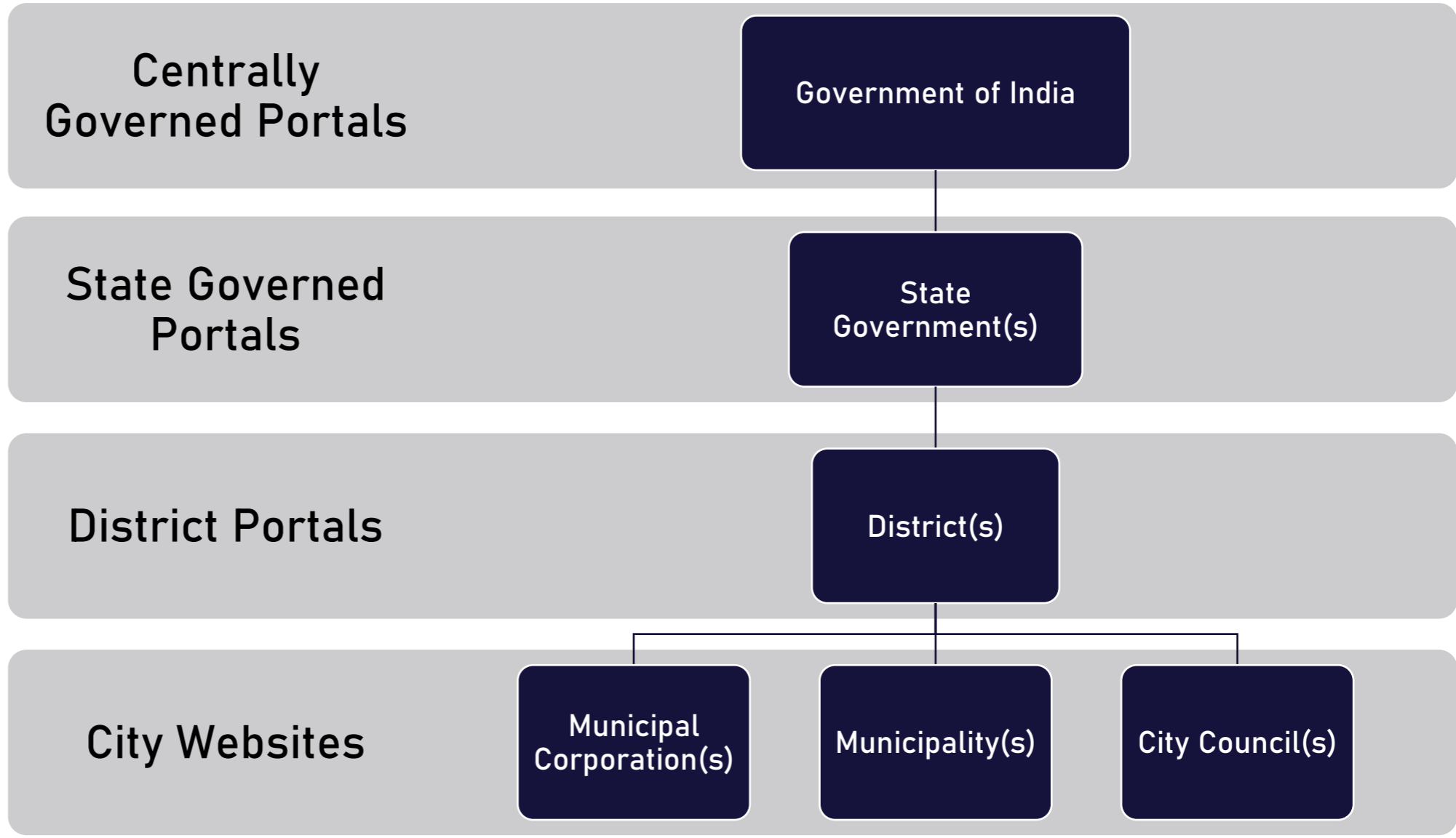Operating Unit on Policy-Driven Electronic Governance

Dr. Gayatri Doctor

Saumya Mehta

CONTENT

LOCAL GOVERNANCE IN INDIA

LOCAL GOVERNANCE IN INDIA

ADMINISTRATIVE PORTALS AT DIFFERENT TIER OF ADMINISTRATION

NATIONAL GOVERNMENT SERVICES PORTAL
Find Government Services Faster

eNagar Gujarat

જિલ્લા અમદાવાદ
DISTRICT AHMEDABAD

Ahmedabad Municipal Corporation (AMC)

Tier	Portal	Level
Centrally Governed Portals		Government of India
State Governed Portals		State Government(s)
District Portals		District(s)
City Websites		Municipal Corporation(s) / Municipality(s) / City Council(s)
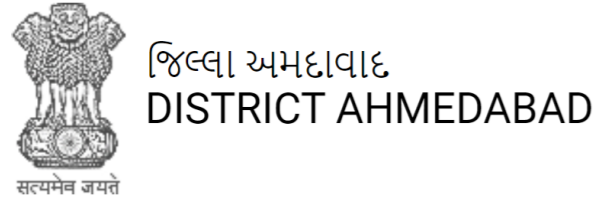
NEED FOR ASSESSMENT

- In India, the country has been assessed on its e-Government development, states have been assessed for their online service delivery, but the assessment of the online service index of the Urban Local Bodies (ULBs) is yet to be done. LOSI helps to do so.
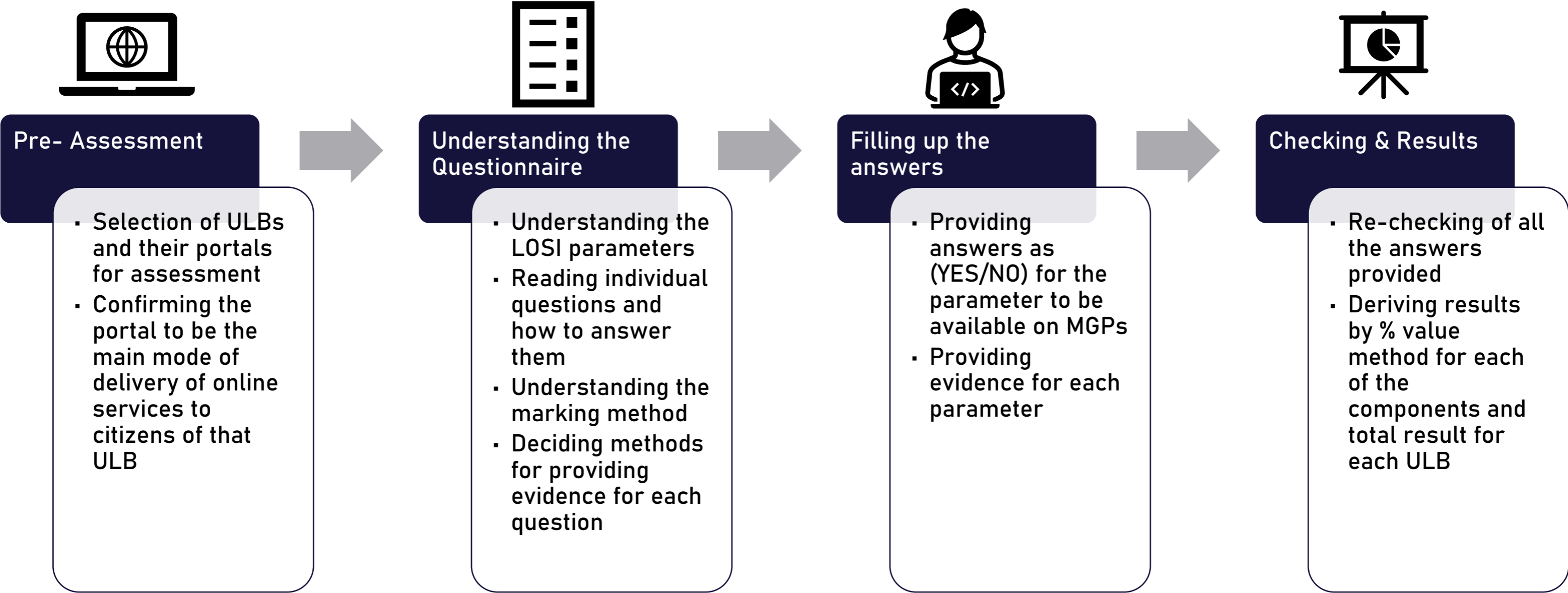
Source: Secondary Research

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LOSI ASSESSMENT

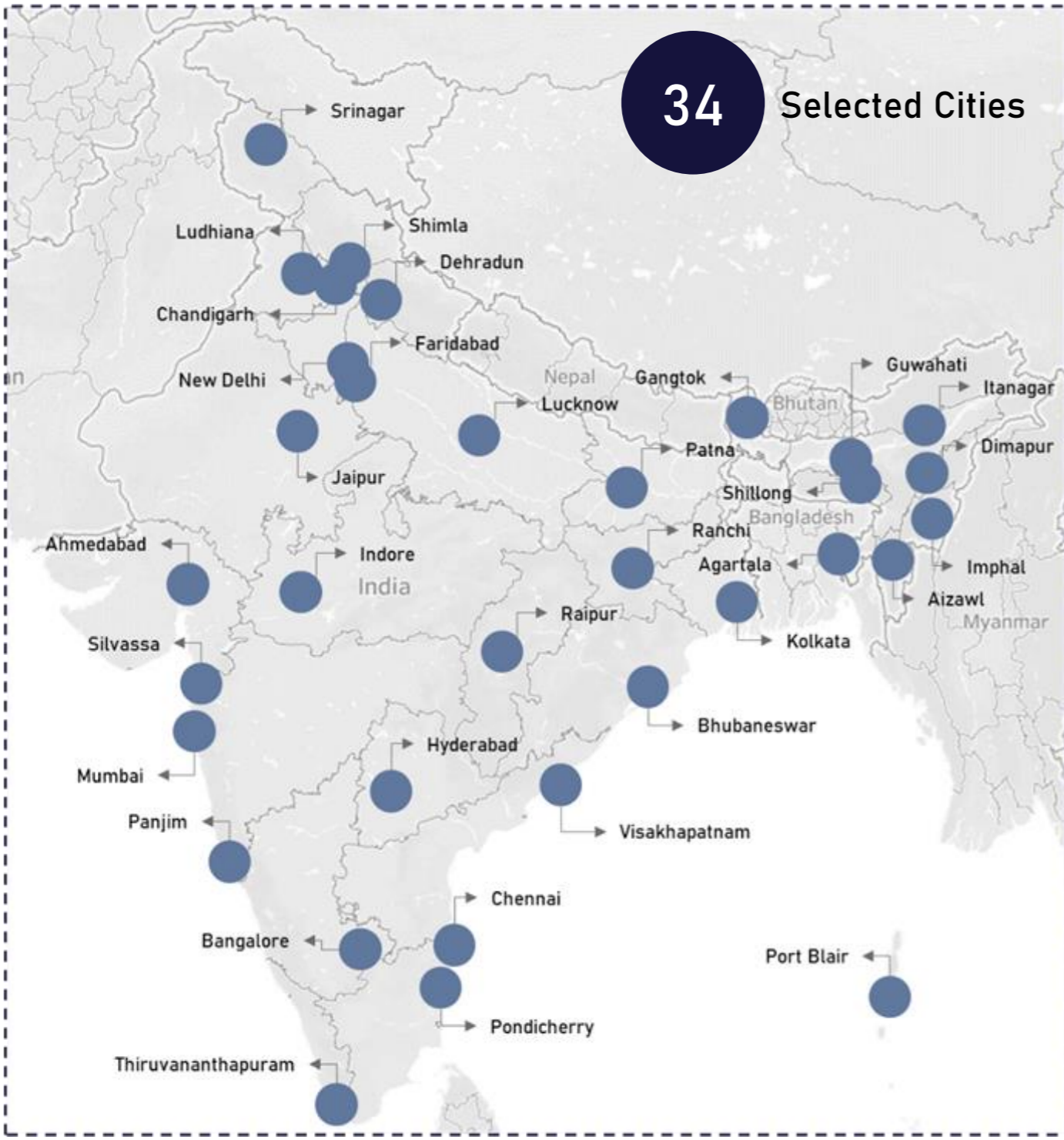# LOCAL ONLINE SERVICE INDEX (LOSI) METHODOLOGY

PROBLEM STATEMENT

What is the current level of maturity of Indian cities' Municipal Governance Portals (MGPs) in terms of institutional framework, technology, provision of service and information, and features for local participation?

ASSESSMENT PROCESS

Pre- Assessment

- Selection of ULBs and their portals for assessment
- Confirming the portal to be the main mode of delivery of online services to citizens of that ULB

Understanding the Questionnaire

- Understanding the LOSI parameters
- Reading individual questions and how to answer them
- Understanding the marking method
- Deciding methods for providing evidence for each question

Filling up the answers

- Providing answers as (YES/NO) for the parameter to be available on MGPs
- Providing evidence for each parameter

Checking & Results

- Re-checking of all the answers provided
- Deriving results by % value method for each of the components and total result for each ULB

Source: Primary, LOSI Methodology by UN–DESA

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SITE SELECTION

SELECTION OF ULBs FOR ASSESSMENT

34 Selected Cities

Selection Criteria

- City with the most population in every state and UTs
- 27 States & 9 Union Territories

Types of Municipal Governance Portals (MGPs)

- Cities have different types of MGPs, hosted on national, state or private data centers
- MGPs are developed by state government agencies or private companies
- 2 cities do not have MGPs – Leh and Andrott

Population Affected

- Total population catered by all these portals is around **17.5%** of total urban population of India

Population Assessed	Urban Population of India (2011 Census)
6,59,82,925	37,71,00,000

Diversity of the Study

- Different zones of the country, multiple official languages, range of population and cities identified to become smart cities

Source: Primary, Potential cities list

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LOCAL ONLINE SERVICE INDEX (LOSI)

MARKING SCHEME – LOSI 2022

Scoring Method

Questions

Total 87 indicators

Answering Method

Binary Response

Scoring Method

Percentage Value (%)

87 parameters divided into 5 Components

Component	Count
Content Provision	25
Participation & Engagement	17
Institutional Framework	9
Service Provision	18
Technical Technology	18

Value 1 — If the indicator is found in a ULB's website

Value 0 — If the indicator is missing from the website

Maturity Level	Range of score	Color
Very High	0.75 to 1.00	NA
High	0.50 to 0.75	
Middle	0.25 to 0.50	
Low	0.00 to 0.25	

- The total number of points scored by each city (a.k.a. "raw score") is divided by the maximum score of 87 to derive the LOSI value for a given city in the range of 0 to 1.

Note:

- There were some cases where the city portal did not provide certain services since they were provided on the national portal. In such cases, the city portals scored a point only if they provided a link to the national portal.

UNDERSTANDING THE QUESTIONNAIRE

TYPES OF QUESTIONS

TEC	Compliance of Municipal Governance Portal (MGP) with World Wide Web Consortium (W3C) standards
TEC	Availability of helpdesk on MGP to assist citizens in availing of online services
EP	Community participation and awareness
IF	Open Data Policy, Privacy Policy
EP	Availability of Open Data on MGP

RELEVANCE TO INDIAN CONTEXT

Guidelines for Indian Government Websites

GIGW
Compliance & Certification
Handbook

National Informatics Centre NIC

- Guidelines for Indian Government Websites (GIGW) suggests adhering to W3C standards

- Sustainable User-Centric Governance through Accessible and Managed websites. (SUGAM Web) has been developed to increase adherence with GIGW and rank of India in UN E-Gov Assessment

- Membership & participation in global consortia like W3C, and emulation of global standards like WCAG to adopt & align with the best in global standards

data.gov in
Open Government Data (OGD) Platform India

- One of the goals for Smart Cities Mission in India is to provide Open Data to citizens

- On smart city context, open data initiative seek to promote better city governance, enhance transparency, analysis, planning, and reinforce citizen engagement and participation

Source: Master Sheet, GIGW Handbook, Open Data Platform, data.gov.in
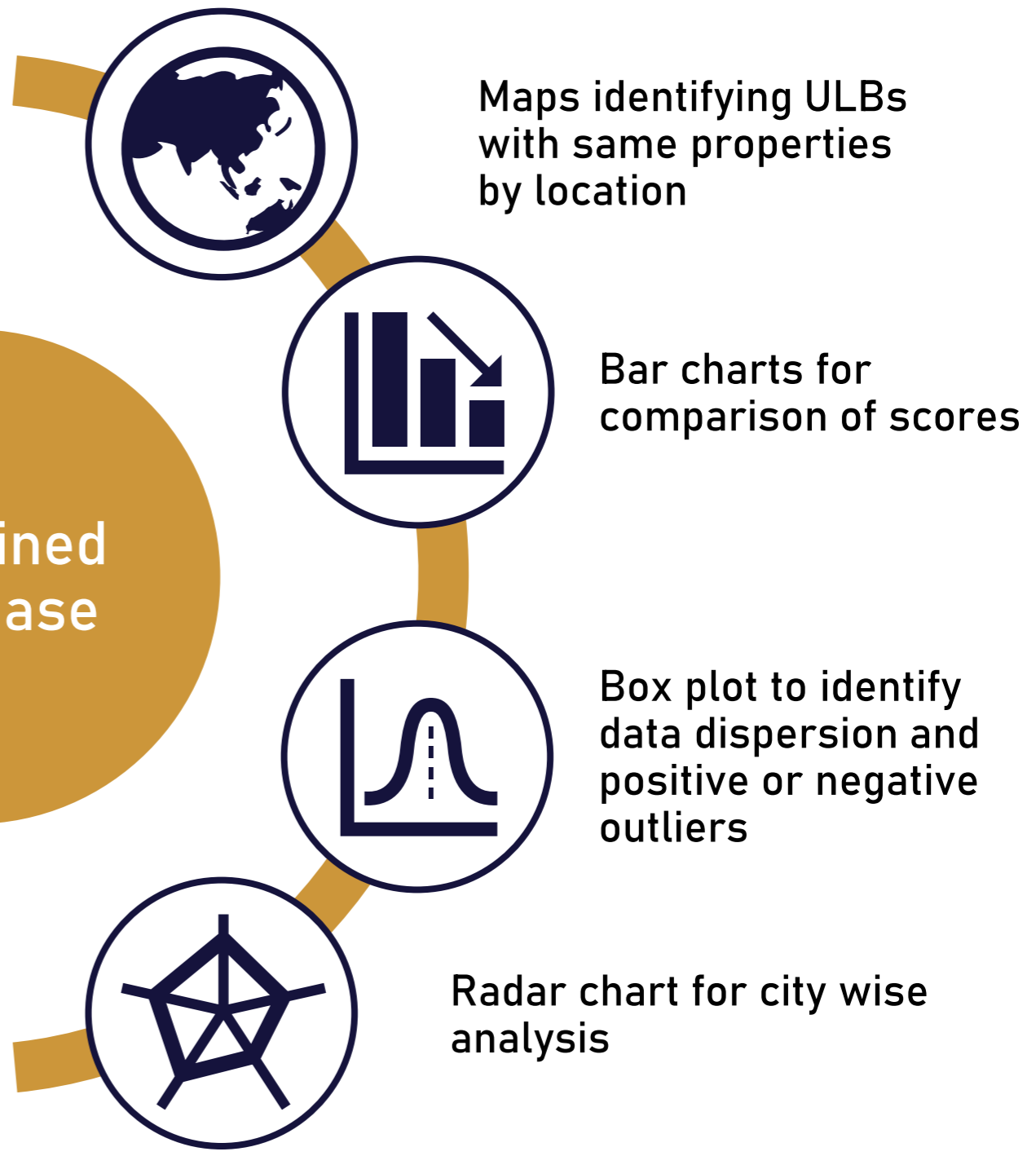
LOSI RESULTS

ANALYSIS PROCESS

DATAPOINTS

City Demographics
- Population
- State
- Zone
- Smart city
- Budget allocation

City wise score
- City wise compiled LOSI score of all 87 parameters

Category wise score
- City wise LOSI score divided into 5 categories of parameters

Parameter wise score
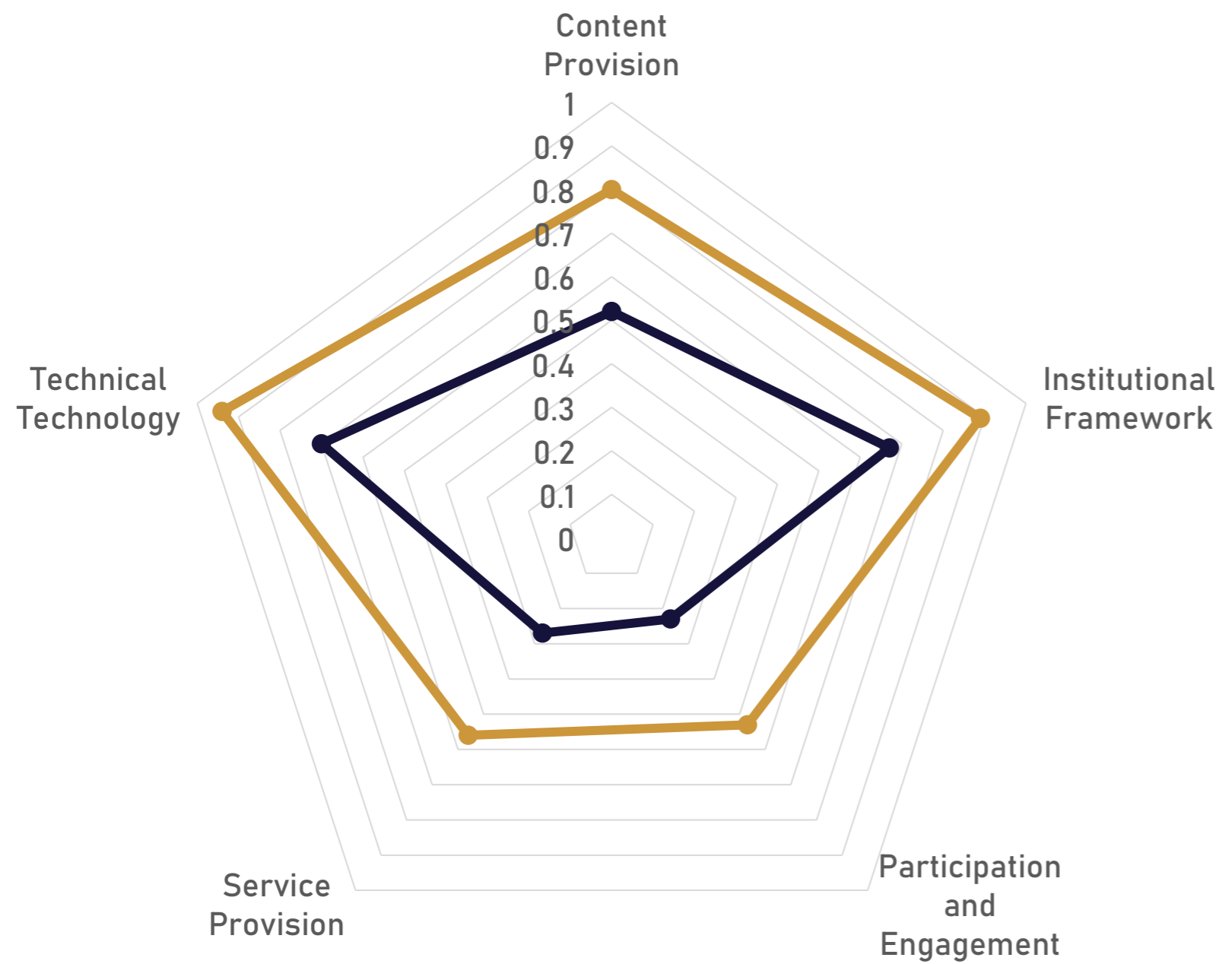- Individual score for all 87 parameters

→ **Combined Database**
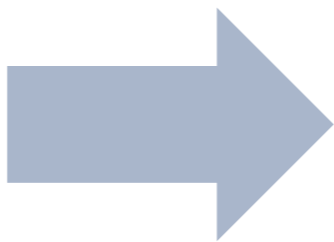
VISUALIZATION & ANALYSIS

Maps identifying ULBs with same properties by location

Bar charts for comparison of scores

Box plot to identify data dispersion and positive or negative outliers

Radar chart for city wise analysis

Source: Primary

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PUBLISHED LOSI OUTPUT

CURRENT & PREVIOUS RESULTS OF LOSI ASSESSMENT OF MUMBAI

- The 2022 LOSI is the first to the most populous city in each of the 193 Member States.
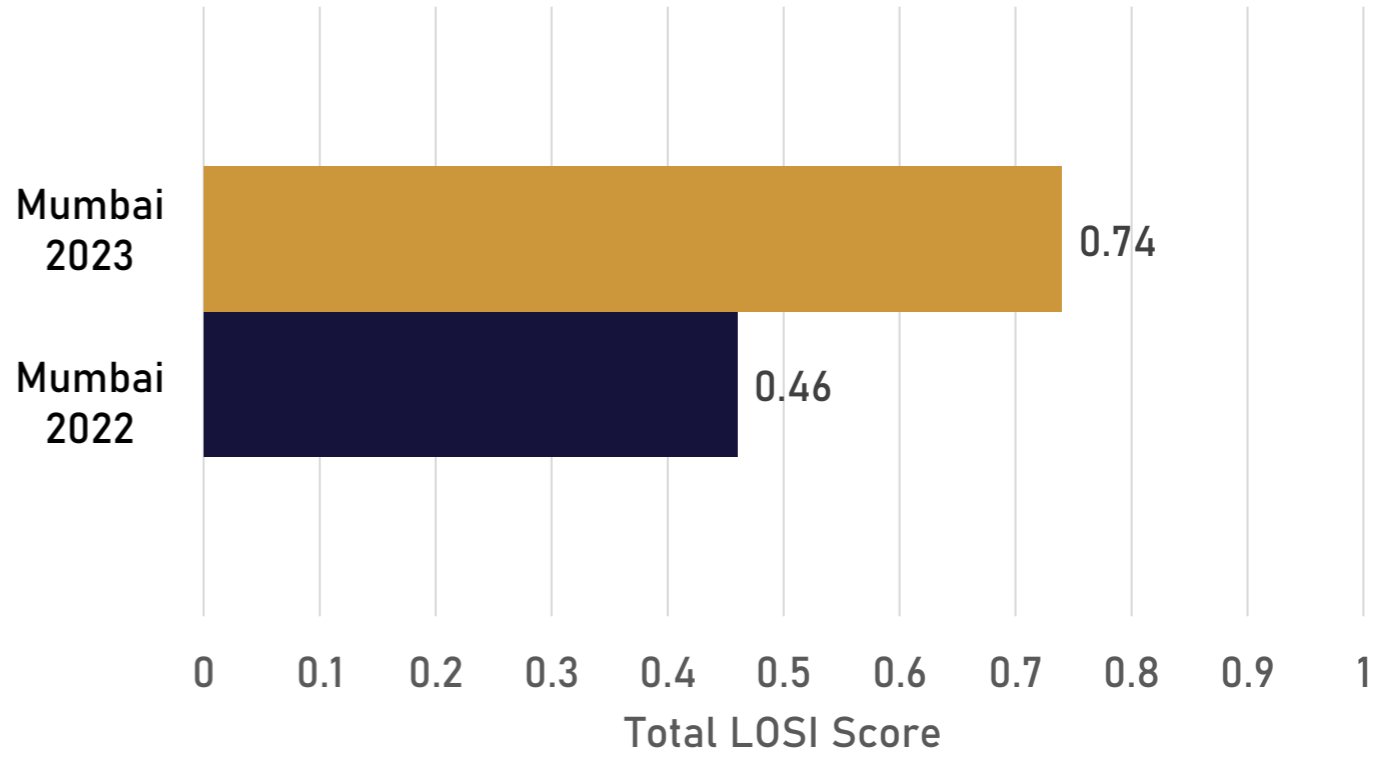
- As published on the official website of UN E-Government Knowledgebase, Mumbai scored 0.46 in LOSI assessment, which is ahead than world and region average

- As per the assessment conducted, Mumbai now holds 0.74 score in the LOSI assessment
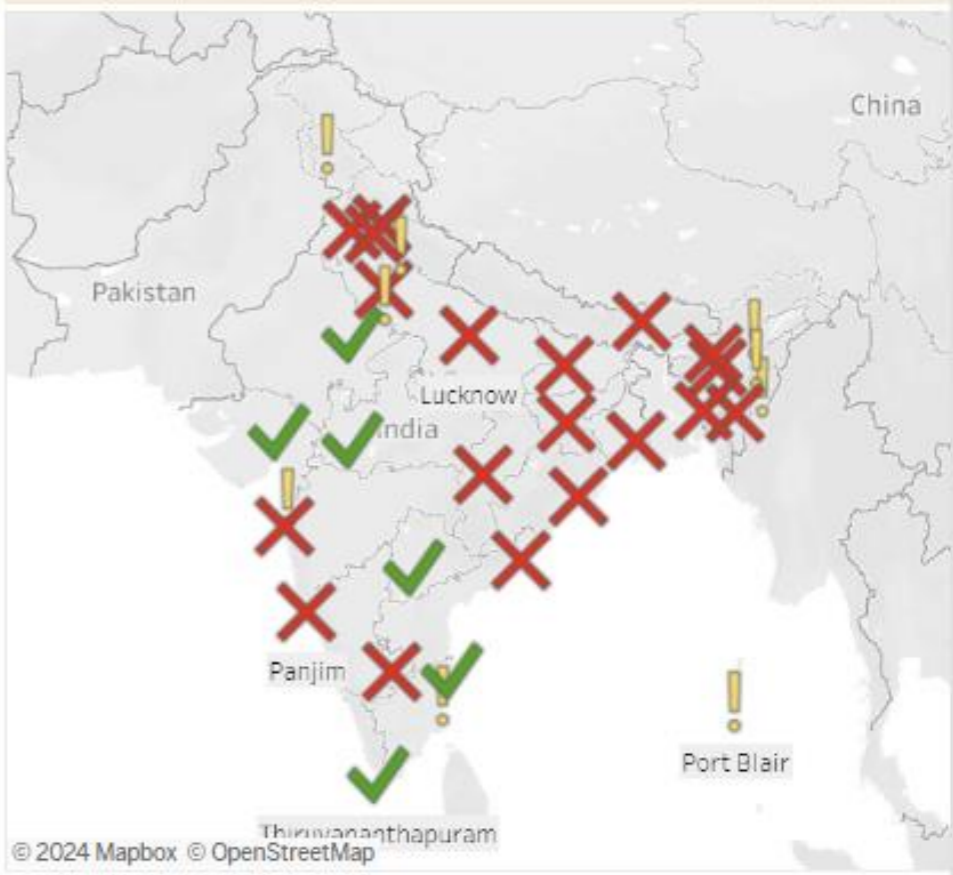
Source: UN E-Government Knowledgebase

DATABASE VISUALISATION

VizSlides FREE for Tableau Public

| Demographics | LOSI Results | Data Spread | Content Provision | Institutional Framework | Participation & Engagement | Service Provision | Technical Technology | Parameters | Cities |

City Demographics
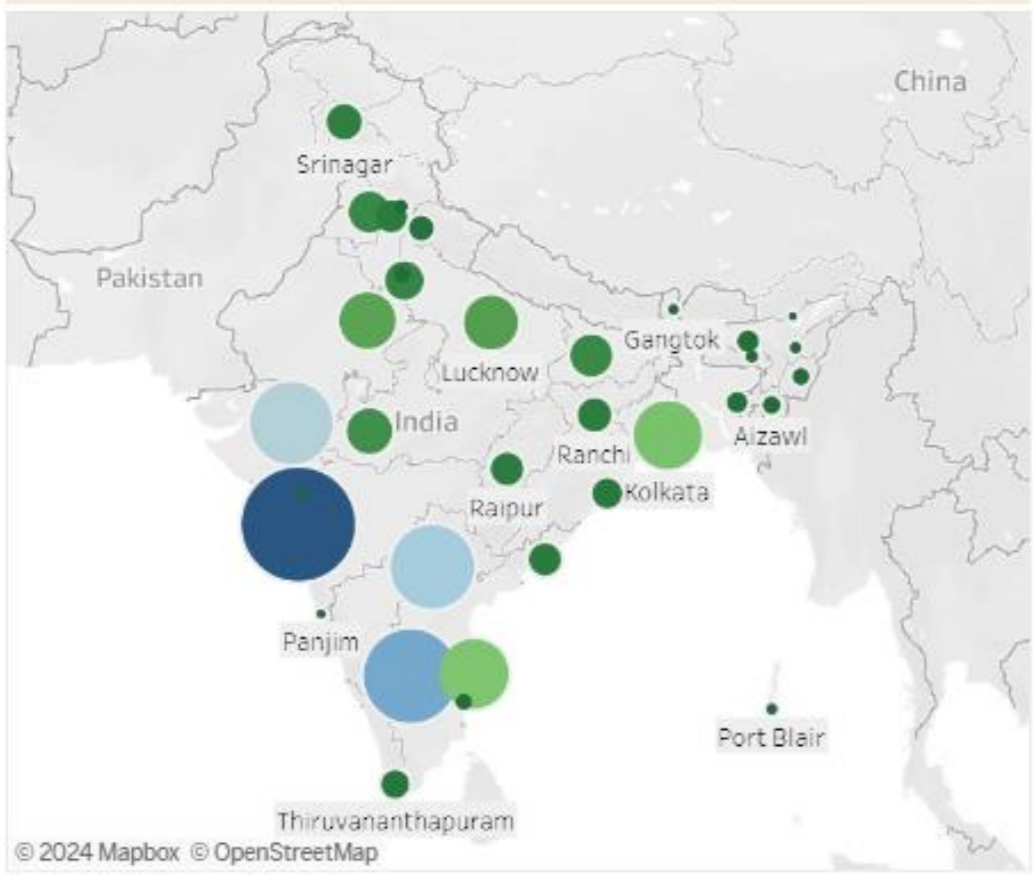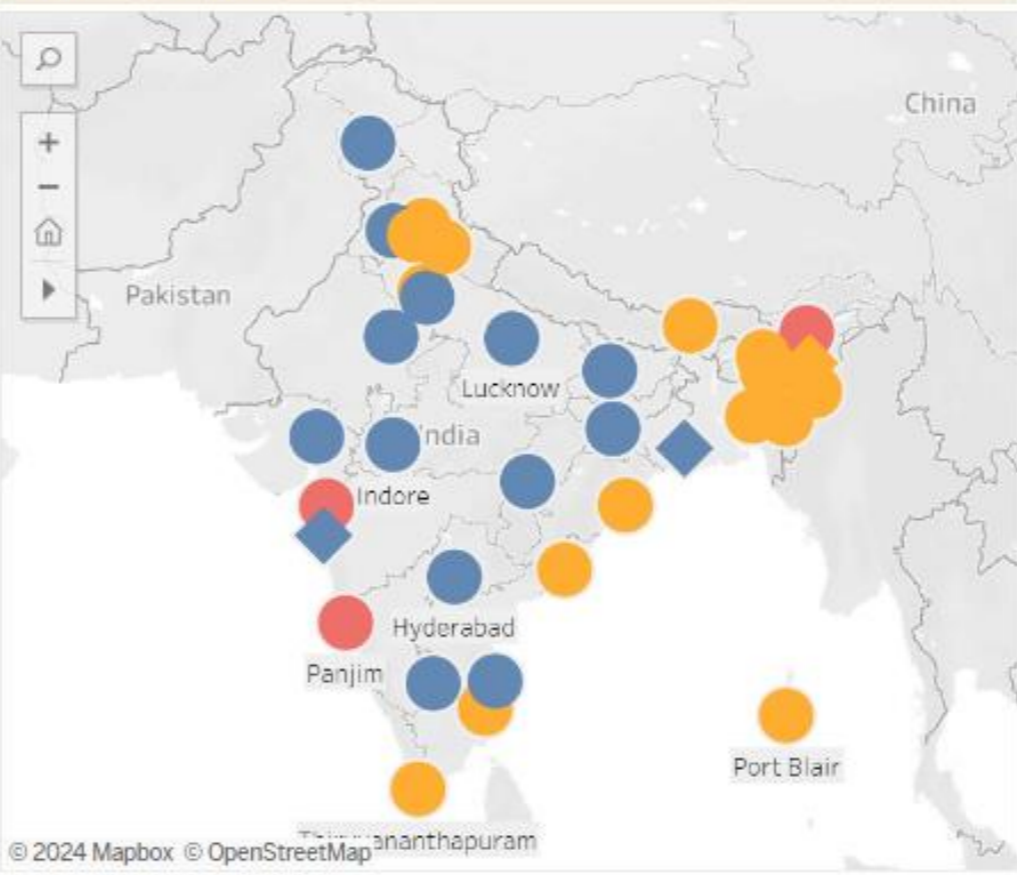
Population
65301 —————————— 12432830

Consideration of E-Governance in Municipal Budget
✗ No saperate fund dedicated to E-Governance initiatives
✓ Funds allocated for E-Governane initiatives
! Budget data not available

Population Group

Population
65301 ○——————————□ 12432830

Population Group wise classification
■ Metropolitan Centre
■ Urban Centre
■ Semi-urban Centre

Budget Consideration

Population
· Study includes 15 Metropolitan Centres, 16 Urban Centres and 3 Semi-urban Centres
· The smallest city by population is Itanagar (65,301) and the largest city by population is Mumbai (12,432,830)
Smart City
· Apart from 3 cities (Mumbai, Kolkata and Dimapur) all other 31 cities are declared as smart cities
Fund Allocation
· Only 6 cities out of 34 have separate funds allocated to E-Governance initiatives in their municipal budgets

Source: Primary, Tableau Viz

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INFERENCES

INFERENCES

| LOSI Score | India is scoring higher than Region and World average | World Leader – Berlin
0.9767 |

**Average Score (India)
0.4032** — 0.4023

**Average Score (Asia)
0.3514** — 0.3514

**Average Score (World)
0.3943** — 0.3943

0   0.1   0.2   0.3   0.4   0.5   0.6   0.7   0.8   0.9   1
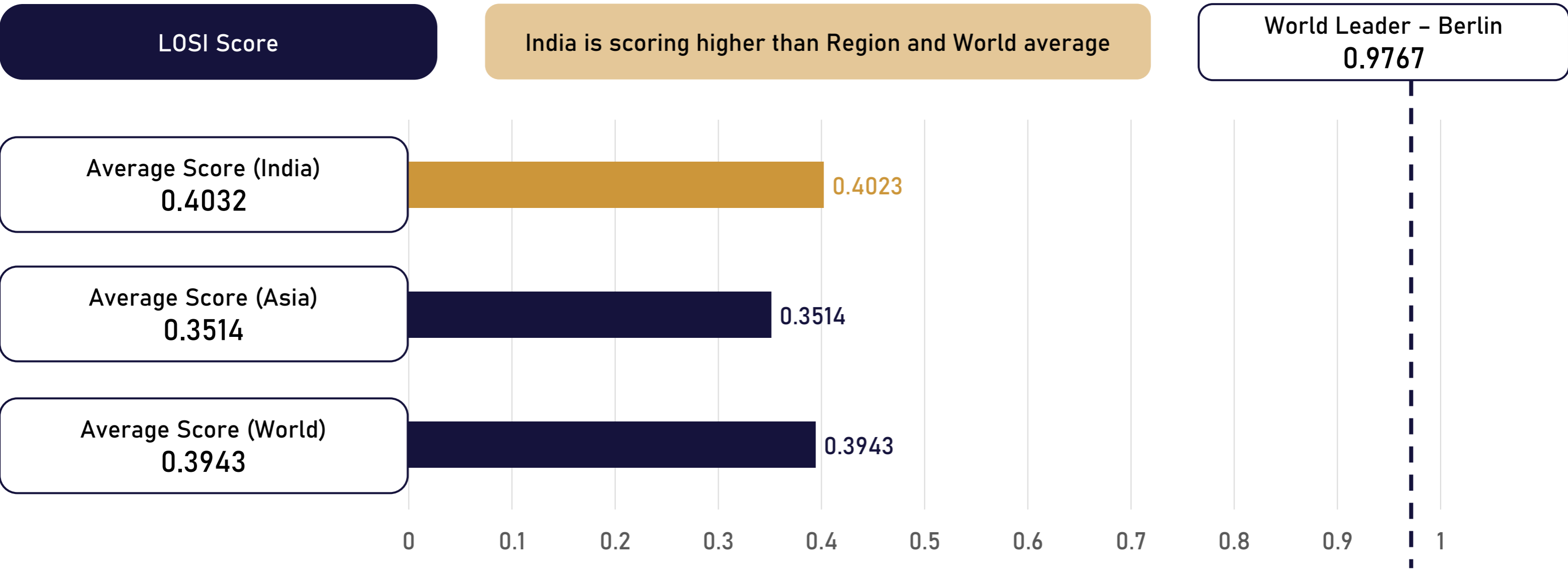
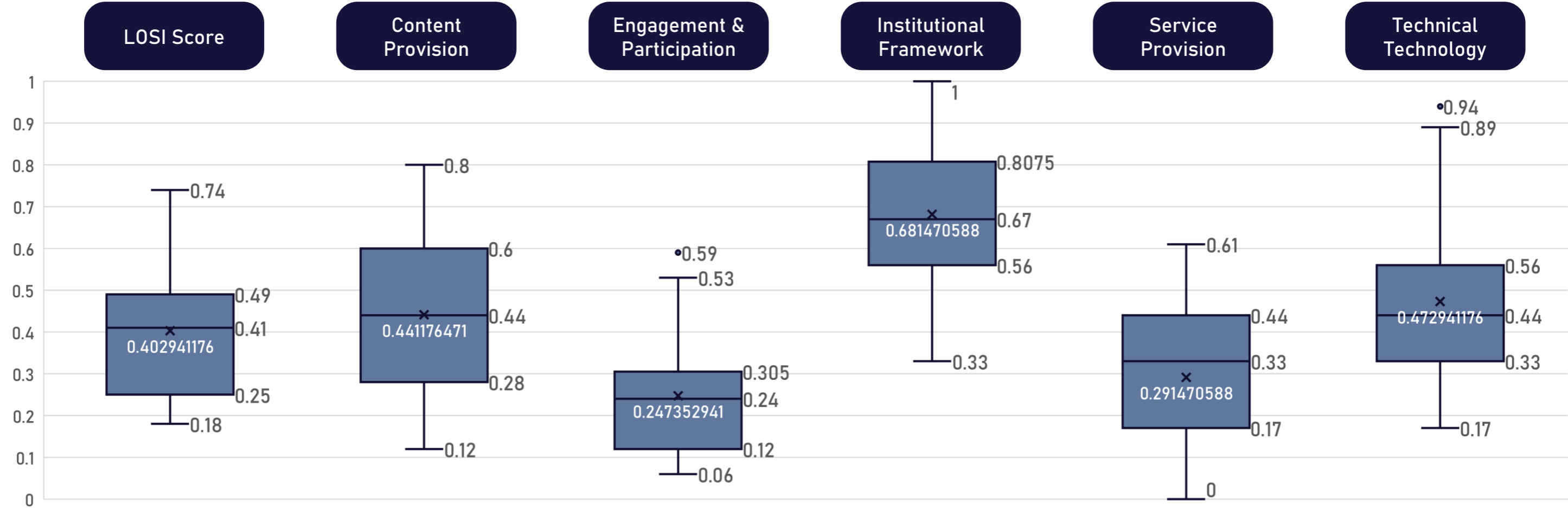All the cities with separate fund allocated to E-Governance in municipal budget are in High or Middle categories

Apart from Lucknow, all the metropolitan centers have scored in High or Middle category

Being a smart city does not affect on LOSI score of the ULB

ULBs in North-Eastern zone have the lowest average score

COMPONENT WISE SCORE DATA

	LOSI Score	Content Provision	Engagement & Participation	Institutional Framework	Service Provision	Technical Technology
Highest	Mumbai	Mumbai	Ahmedabad	Guwahati	Bhubaneswar	Mumbai
Middle Range	0.25 to 0.49	0.28 to 0.60	0.12 to 0.30	0.56 to 0.80	0.17 to 0.44	0.33 to 0.56
Lowest	Dimapur	Port Blair	Itanagar	Gangtok	Aizawl	Imphal

Source: Primary assessment, Master Sheet, Tableau Viz

INFERENCES

CITY WISE SCORE DATA

LOSI Score vs Selected Urban Local Bodies

High Maturity – 8: Mumbai 0.74, Chennai 0.68, Ahmedabad 0.63, Bangalore 0.61, New Delhi 0.57, Bhubaneswar 0.53, Kolkata 0.53, Chandigarh 0.51

Middle Maturity – 18: Hyderabad 0.49, Guwahati 0.47, Faridabad 0.46, Shimla 0.46, Indore 0.45, Jaipur 0.44, Agartala 0.43, Ludhiana 0.43, Thiruvananthapuram 0.43, Raipur 0.39, Ranchi 0.39, Srinagar 0.39, Visakhapatnam 0.39, Panjim 0.34, Patna 0.32, Pondicherry 0.32, Shillong 0.31, Itanagar 0.25

Low Maturity – 8: Dehradun 0.24, Port Blair 0.24, Silvassa 0.24, Lucknow 0.23, Aizawl 0.22, Dimapur 0.18, Gangtok 0.18, Imphal 0.18

| Mumbai | 0.74 |

- Highest scoring ULB in India
- Leader in Content Provision with 80% of the parameters achieved
- Leader in Technical Technology with 94% of the parameters achieved
- Only city with published outcomes of e-participation activities on MGP
- Only city with information about participatory budgeting published on MGP

BRIHANMUMBAI MUNICIPAL CORPORATION

Public Appeal

Citizens of Mumbai are hereby informed that, the process of preparation of Budget Estimates for the financial year 2023-24 for Income & Expenditure of Brihanmumbai Municipal Corporation is underway. The Budget Estimates will be presented before 5th February, 2023.

In view of public participation, citizens of Mumbai are appealed that if citizens wish to make suggestions regarding budget, they may send the suggestions before 28th January, 2023 on following e-mail ID.

E-mail ID - bmcbudget.suggestion@mcgm.gov.in

Participatory budget notification

Source: Primary, Master Sheet, Tableau Viz

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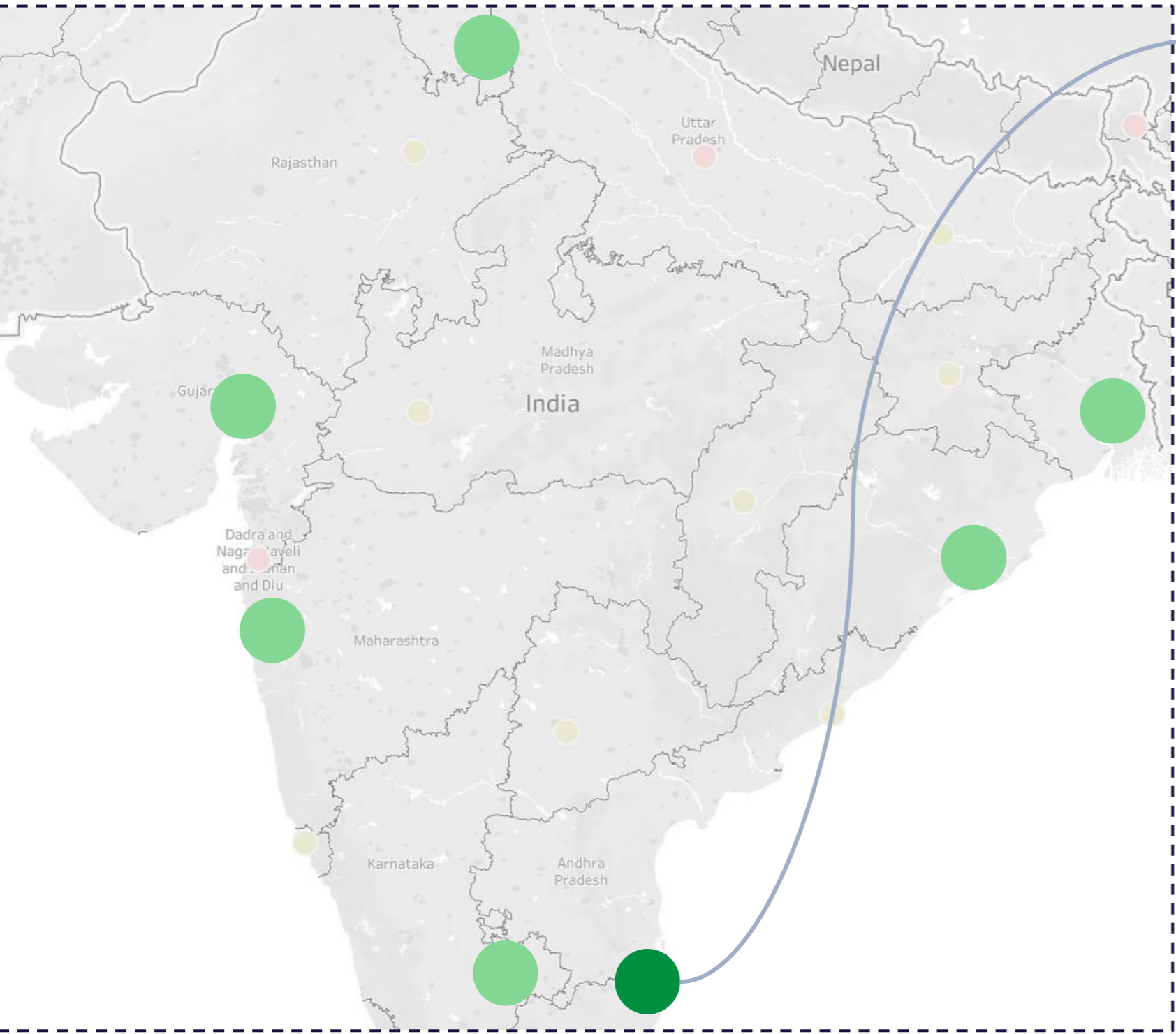
Chennai	0.68

- Highest scoring ULB in Southern zone
- Second in Content Provision adhering to 76% of parameters
- Second in Technical Technology adhering to 89% of parameters
- One of the 6 cities with separate fund allocated to e-governance initiatives in its municipal budget
- One of the 2 cities with provision of information about justice matters on MGP
- Only city to have Blockchain policy published on MGP

GOVERNMENT OF TAMILNADU

INFORMATION TECHNOLOGY DEPARTMENT

Tamil Nadu Blockchain Policy 2020

Blockchain Policy 2020 Document

Source: Primary, Master Sheet, Tableau Viz

INFERENCES
GOOD PRACTICES
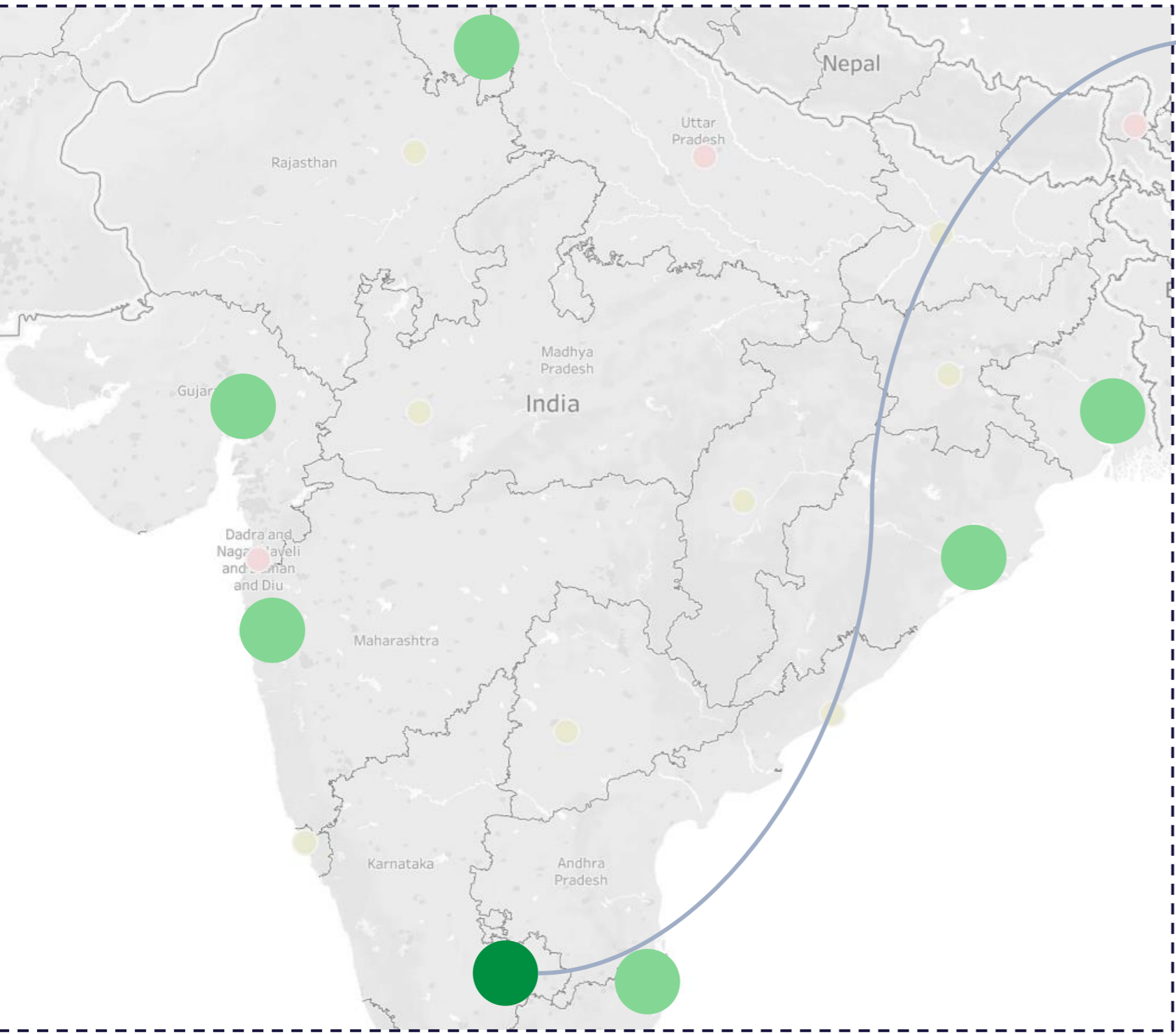
Bangalore 0.63

- One of the 2 ULBs complying with markup validity standards by W3C
- Second in Institutional Framework with 89% of the parameters achieved
- One of the 3 ULBs where citizens can make declarations to police online

JANASEVAKA
GOVERNMENT OF KARNATAKA

	+	DEPT FOR EMPOWERMENT OF DIFFERENTLY ABLED AND SENIOR CITIZEN	+
	+	BBMP	+
	+	KARNATAKA STATE POLICE	−
	+	Application for complaint of lost items - Mobile/Document	
	+	Application for registration of Senior Citizen	
	+	Application for Locked home registration	
		Antecedant and Address Verification for Domestic servants or House Keeping	
		Antecedents Verification for MNCs or Private or Corporate	
		Antecedents and Address Verification for MNCs or Private or Corporate	
		Complaint Registration	
		License for Amusement	
		License for Amplified Sound Systems	
		No Obligation to Return to India	

Police related services available on MGP

Source: Primary, Master Sheet, Tableau Viz

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INFERENCES
GOOD PRACTICES
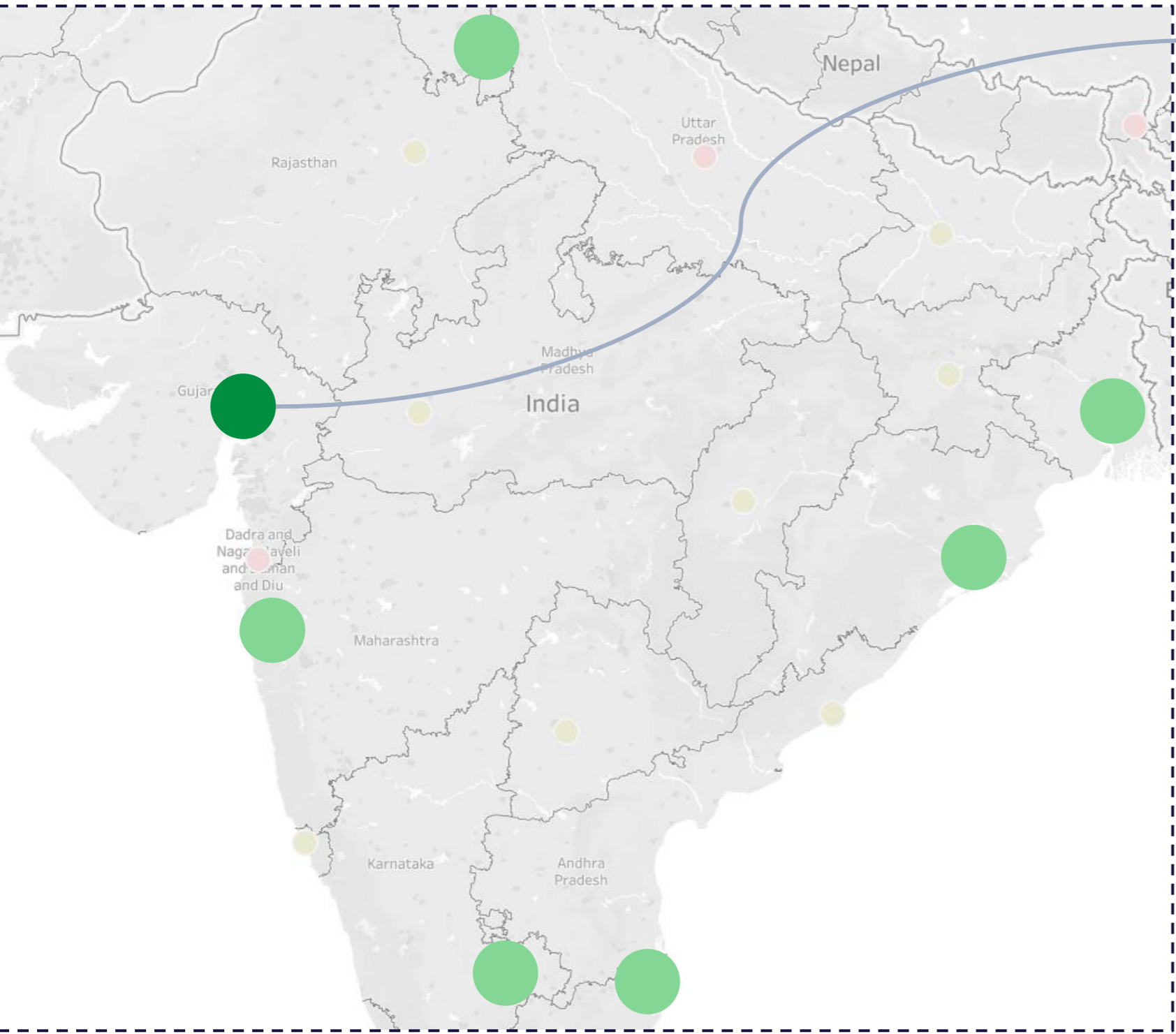
Ahmedabad — 0.63

- Highest scoring city in Engagement and Participation category with 59% of the parameters achieved
- One of the 6 cities with separate fund allocated to e-governance initiatives in its municipal budget
- Second in Content Provision category with 76% of parameters achieved
- One of the 2 cities with active e-mail ID for any citizen to inquire about information

Informative response provided in 1 day

Opening hours of the civic center — Inbox ×

Saumya Mehta <saumyam98@gmail.com>   Feb 22, 2023, 2:51 PM
to feedback

Respected sir/ma'am,
I would like to be informed about the working hours of the civic center in Ahmedabad. So that I can visit to deal with a subject of my interest.

Thanks and regards,
Saumya Mehta

feedback@ahmedabadcity.gov.in   Feb 23, 2023, 6:17 PM
to me

https://ahmedabadcity.gov.in/portal/jsp/Static_pages/ccc.jsp

-:------------:-
Regards
AHMEDABAD MUNICIPAL CORPORATION
E-Governance
AHMEDABAD.
Visit our website :- http://ahmedabadcity.gov.in/

Source: Primary, Master Sheet, Tableau Viz

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INFERENCES

CITIES WITH LOW SCORE
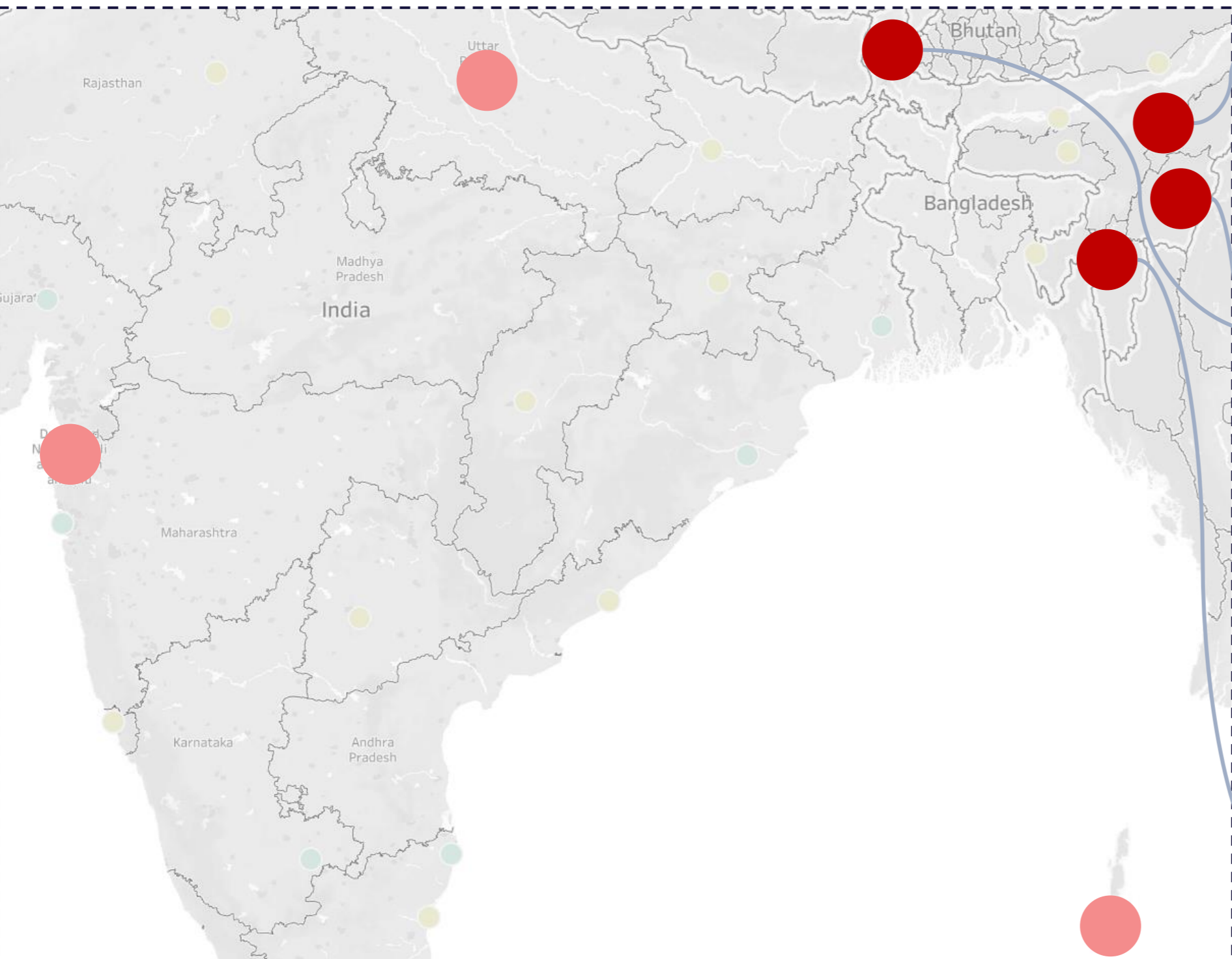
| Dimapur | 0.18 |

- Lowest scoring ULB in North-Eastern zone
- One of the 3 non-smart city in the assessment list
- Scored 0 in Service Provision

| Gangtok | 0.18 |

- Least scoring city in Institutional Framework category with only 33% adherence to parameters

| Imphal | 0.18 |

- Least scoring city in Technical Technology category with only 17% adherence to parameters
- Least scoring city in Institutional Framework category with only 33% adherence to parameters

| Aizawl | 0.22 |

- Scored 0 in Service Provision

Source: Primary, Master Sheet, Tableau Viz

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CITIES WITH LOW SCORE

Lucknow | 0.23

- Lowest scoring ULB in Metropolitan Centre category
- Least scoring city in Institutional Framework category with only 33% adherence to parameters

Port Blair | 0.24

- Least scoring ULB under Union Territory
- Lowest scoring ULB in Southern zone
- Least scoring city in Content Provision category with only 12% adherence to parameters

Silvassa | 0.24

- Least scoring ULB under Union Territory
- Lowest scoring ULB in Western zone
- Least scoring city in Technical Technology category with only 17% adherence to parameters

Source: Primary, Master Sheet, Tableau Viz

Multiple Modes of Service Delivery

- Multiple portals for a city to access citizen services –
- Out of the total of 87 parameters, 3 parameters were available on District Portals, 1 was related to parastatals, services assessed by 7 parameters were delivered by State portals and 4 by national portals

City Website　　**District Portals**　　**Smart City Portals**　　**State Portals**　　**Centrally Governed Portals**

Relevance to Indian Context

- As Indian jurisdiction system is centrally governed with designated functions to be performed by Urban Local Bodies at a city level
- This makes it important for the index to consider all available modes of service delivery in cities of India

Source: Primary, Parameter Analysis

CONCLUSION

CENTRALLLY GOVERNED SERVICE PORTALS

Open Data

- Centrally governed open data portal with state wise and sector wise data sets is available in India

- As the responsibility lies with Smart City and there is already separate portal available, cities do not have open data available on their MGPs

- Open government data policy is also available at central level, launched in 2012 and applicable since then

Income Tax

- Centrally governed e-Filing system portal for both citizen and business entity

- Provision of relevant information, online forms, verification of documents and disclosures

Source: Primary, Parameter Analysis, Open Data Portal, e-Filling Portal

CONCLUSION
CENTRALLLY GOVERNED SERVICE PORTALS

Driving License

- Centrally governed state wise license and vehicle related service portal called parivahan
- License issuance, renewal, fees payment, forms, online test, etc. license related services are provided
- Vehicle registration, number allocation, permit, etc. vehicle related services are provided

Residency Permit

- e-FRRO portal allows foreigners to avail registration services without visiting registration office
- The application is aimed to build centralized online platform for foreigners for visa related services.
- Its key objective is to provide Faceless, Cashless and Paperless services to the foreigners without requirement of visiting FRRO/FRO office.

Source: Primary, Parameter Analysis, Parivahan Portal,

CONCLUSION

POSSIBLE IMPACT

Content Provision
- Information about infrastructure facilities provided by municipality on MGP
- Provision of information about functions that do not fall under Municipality's purview. E.g., Transport, traffic, justice, disaster, etc.

- Citizen awareness about works of municipality

Institutional Framework
- Online publication of city open government data policy
- Municipality should publish their e-governance strategy online on their MGP

- Increase in transparency
- Increase in Innovation and economic value

Participation & Engagement
- Use of participatory decision making and tools (forms, polls, etc.)
- Publication of data related to municipal works and surveys in open data format on MGP with relevant metadata

- Better understanding of citizen needs
- Public service improvement

Service Provision
- Compilation of all the service portals as hyperlinks on a webpage on city MGP

- Single stop public service delivery to citizens

Technical Technology
- Adherence to World Wide Web Consortium (W3C) standards for markup validity, style sheet and Web Content Accessibility Guidelines (WCAG2.0)

- Prevention of errors and improved accessibility

Source: Primary assessment, Master Sheet, Tableau Viz

CONCLUSION

Service Provision

- Payment of Property tax / House tax
  - Property tax is the most essential service in India for all the ULBs as property tax revenue is their major source of income
- Property mutation services
  - Property mutation is an important service to keep track of levied tax for all the properties in coming under city administration

Institutional Framework

- Availability of Copyright and Hyperlinking policy
  - Copyright and Hyperlinking policies are important to declare data ownership

Content Provision

- Maps related to services derived from GIS mapping of the city
  - As smart cities are mapping their services on GIS, citizens should get some information out of it

Source: Primary, Master Sheet

53 Cities has been selected from the state of **Gujarat**

The LOSI methodology has been continuously refined year by year to cater to dynamism of continuously evolving governments and inputs from pilot studies

2018
40 cities
5 components
60 parameters

→

2024
193 cities
6 components
95 parameters
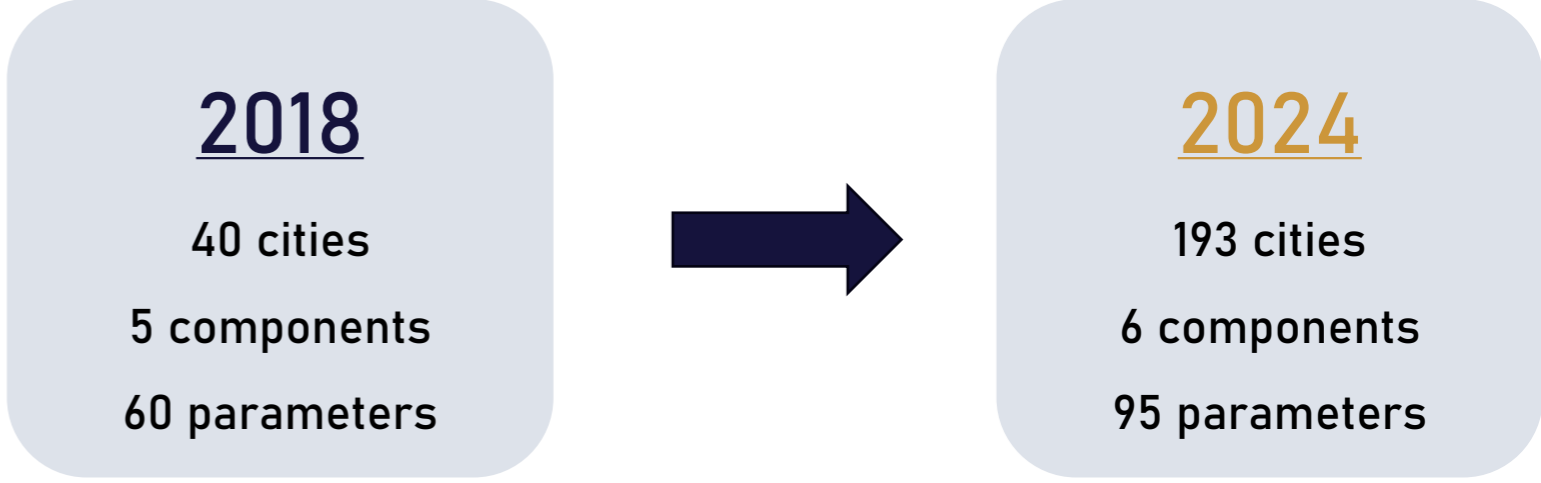
LOSI 2024

31 Channel Independent Questions

Which assesses availability of city information / services across various portals or channels; including National, State and Local platforms

64 MGP Specific Questions

Which assesses availability of city information / services particularly on city MGP or linked websites on the portal

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THANK YOU

Dr. Gayatri Doctor | gayatri.doctor@cept.ac.in
Saumya Mehta | saumyam98@gmail.com