ASSESSING THE FINANCIAL HEALTH OF INDIAN CITIES

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FOREWORD

I am delighted to present the report 'Assessing the Health of Indian Cities.' This is the first in an annual series of reports on the financial health of cities from the National Institute of Urban Affairs and Munify. The broad objective of both organizations is to create a national database of budget and accounts data of municipal corporations in India.

In a diverse nation like ours, the fiscal status of each municipal body is bound to vary. Some Urban Local Bodies (ULB) have robust systems in place for tax assessment and collection, resulting in higher revenue generation. In contrast, others struggle with low tax collection rates due to inadequate tax assessment, poor enforcement, and lack of taxpayer compliance. In such cases, ULBs heavily rely on transfers from higher levels of the government for funding. Grants and transfers constitute a significant portion of their revenue. The availability and distribution of these transfers vary across states and can impact the financial autonomy of these bodies. Some municipalities have robust financial management systems, including budgeting, accounting, and reporting mechanisms, while others don't. While there have been ample efforts to enhance the financial autonomy of ULBs in India, the status varies significantly across states and cities.

The financial management practices of municipal corporations play a pivotal role in deciding the growth curve of a city. Strengthening revenue generation, improving financial management practices, promoting local resource mobilization, and advocating for policy reforms are essential to empower these ULBs further and enhance their financial autonomy.

Municipal corporations should adopt transparent financial reporting practices, publish audited financial statements, and make them easily accessible to the public. Regular financial audits, citizen engagement in budget processes, and effective oversight mechanisms contribute to accountability and trust.

Encouraging collaboration and networking among cities, municipal associations, and other stakeholders can facilitate knowledge exchange, peer learning, and advocacy for policy reforms. Sharing success stories, best practices, and lessons learned can help empower cities in municipal finance by fostering a supportive ecosystem of knowledge and experience.

This report aims to provide an analytical framework so that urban local bodies can not only assess their financial health but also take appropriate measures to improve the same. Indian cities can be empowered in municipal finance, enabling them to effectively manage their finances, enhance revenue generation, and fulfill their responsibilities in providing residents with quality urban services and infrastructure. It is our ardent collective wish that our cities manage their finances smartly. The story about cities is not complete until innovative financing is achieved.

Hope you find the report useful.

Hitesh Vaidya
National Institute of Urban Affairs

PREFACE

Municipal finances have taken the centre stage in any discussion on the governance of cities in India today. Cities are in the forefront of the fight against climate change. The Government of India's interventions to improve the quality of life in cities through its flagship schemes such as Smart city mission, AMRUT are an acknowledgement of this reality.

This report aims to provide an insightful analysis of the finances of municipal corporations in smart cities, shedding light on the key challenges they face in their pursuit of financial sustainability.

The study is drawn from Munify (munify.in), India's national municipal database, built with the budgets and financial statements of the municipal corporations of India. By aligning the financial data to the national municipal accounting manual, Munify's tech platform makes the data easy to query, compare, analyse and visualise. The resulting insights help to take a view on the state of municipal finances in India. Munify rankings criteria for municipalities formed the framework of the analysis used in this report.

It is our hope that this report 'Assessing the Health of Indian cities' will contribute to the ongoing dialogue on municipal finances, stimulate further research, and provide actionable insights that empower municipalities to navigate the fiscal challenges they face.

This report is the first in an annual series of publications on the municipal finances of India. It is our endeavour to increase the coverage of municipalities and the depth of analysis with each year. We welcome your feedback on the report.

K. Subalakshmi
Munify Datatech Private Ltd

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MUNIS OF 34 CITIES HAD ACCOUNTS STATEMENTS FOR 2015-16 TO 2019-20.

MUNIS OF 23 CITIES HAD BOTH BUDGETS AND ACCOUNTS DATA FOR 2015-16 TO 2019-20.

MUNIS OF 28 CITIES PUBLISHED BUDGETS IN LOCAL LANGUAGE ONLY.

MUNIS OF 29 CITIES PUBLISHED A FUNCTIONAL CLASSIFICATION OF BUDGET. OTHERS PUBLISHED THE BUDGET ONLY ACCOUNT WISE.

MUNIS OF 56 CITIES PUBLISHED THEIR ACCOUNTS AS PER NMAM.

NMAM- National Municipal Accounting Manual.
Information status as at October end, 2022

Municipal Financial Analysis- Framework

OWN SOURCE REVENUE/TOTAL REVENUE RECEIPTS

1

- Own source revenue is derived by excluding assigned revenues and grants from Total revenues.
- This ratio indicates how self-reliant the municipality is.

PROPERTY TAX PER CAPITA CAGR

2

- Property tax per capita is calculated as property tax revenues/ population for the year.
- As this tax is the primary source of municipal revenue, the ability to earn from property tax becomes key. Growth over years is analysed to gauge the extent of improvement.

ESTABLISHMENT AND ADMINISTRATIVE EXPENDITURE TO REVENUE EXPENDITURE

3

- Establishment and administrative expenditure/ Revenue expenditure
- The establishment expenditure refers to the salary payments and is fixed in nature. Higher this ratio, lower is the ability of the municipality to set aside revenues for maintenance of infrastructure.

TRENDS IN REVENUE SURPLUS

4

- (Revenue receipts- Revenue expenditure)/ Total revenue receipts
- A healthy revenue surplus is an indicator of the financial strength.

INTEREST COVERAGE RATIO

5

- (Revenue surplus + Interest charges) /Interest charges
- The higher the cover, the greater the ability to make timely interest payment on the debt.

EXTENT OF CAPITAL EXPENDITURE

6

- (Capital expenditure)/(Total revenue + capital expenditure)
- The expenditure of a city corporation should focus on both revenue and capital.

EXTENT OF UTILISATION OF CAPITAL RECEIPTS

7

- Capital receipts/Capital expenditure
- This ratio indicates the extent to which the capital receipts have been utilised to create infrastructure.

CONTRIBUTION OF GRANTS TO CAPITAL RECEIPTS

8

- Grants /Capital receipts
- This ratio indicates the support received from state and central government to the creation of infrastructure.

EXECUTIVE SUMMARY

City Governments are in focus because their financial sustainability is a pressing concern in today's landscape. Initiatives that examine municipal finances, such as this report, can be immensely useful for local governments. This report provides valuable insights into the trends and challenges surrounding municipal finances in 25 selected Smart City municipalities. By analyzing audited accounts and budgets, the report sheds light on the aspects of growing municipal income, the expenditure on revenue and capital items, and how these expenditures are funded. This information can serve as a crucial resource for local governments, enabling them to make informed decisions about budget allocation, revenue generation, and financial planning.

The report highlights the need for local governments to enhance their own revenues, reduce reliance on external sources, and manage debt effectively. It also emphasizes the importance of policy interventions, such as mandatory state government transfers and a share of GST, to improve the fiscal position of local governments. By implementing the insights and recommendations from this report, city governments can work towards achieving greater financial sustainability and successfully address the challenges they currently face.

Challenges with data
Of the one hundred smart cities surveyed, only twenty-five cities (municipal corporations of these cities) had published both budgets and audited financial statements for the period 2015-16 to 2019-20, on their website.

There is also considerable variation between the historic figures presented in the budget documents (Actuals for the previous years) and the audited figures. The budgets are prepared on a cash basis and the audited statements are prepared on an accrual basis. Even allowing for these differences, the variance between these two sets of figures is very high. The variance was over 100% in 36% of the municipal corporations analysed. There is no reconciliation statement in the Audited accounts explaining such variances.

Own Revenues
Our analysis of twenty-five municipal corporations (MC) shows that on an average, own revenues constituted only 48% of the total revenues, indicating that local governments in India are not self-reliant.

The MCs of Gujarat and Tamilnadu showed a relatively higher proportion of own revenues to total revenues.

- Gujarat based MCs such as Vadodara, Ahmedabad, Rajkot had own revenue of 54% 62% and 74% respectively. These municipal corporations showed significant fee and user charges particularly from town planning and construction levies.
- Tamilnadu based MCs' own revenue ratios were in the range of 54% to 63%. They enjoy significant water tax, and development charges.

Property tax contributed on an average, about 42% of own revenues. Among the larger cities, Ahmedabad's property tax revenues have been stagnant, as seen from the growth rates in property tax per capita. Bengaluru on the other hand, showed a healthy growth rate on the back of a strong economic growth.

Own revenue to revenue expenditure
Ideally, the revenue expenditure of a city corporation should be fully covered by its own revenues. Only 4 MCs had own revenues that could meet three fourths of their revenue expenditure-Ahmedabad, Greater Warangal, Mangaluru, Rajkot.

Revenue balance
The revenue balance of the municipal corporations did not show a secular trend over the period under review. All the MCs showed a volatile performance, indicating that the revenue balance is highly dependent on a few key factors such as property tax revenues, stability of government grants, level of establishment expenditure. Of these factors, the transfers from the state government is the most critical.

Capital Expenditure
Two thirds of the cities surveyed had capital expenditure/total expenditure of 25%-40% or more. Therefore, notwithstanding the weak revenue profile, cities continue to create infrastructure on the back of grants, which constitute almost 80% of the capital receipts.

For both revenue and capital expenditure, these local governments are dependent on grants from the state and central governments.

Borrowings
Two thirds of the municipal corporations analysed also show debt on their books and these are largely secured loans from banks and financial institutions. Fifty-eight percent of the borrowing MCs, had low (even negative) interest cover.

The credit quality of the local governments will be the single biggest constraint to the development of the municipal bond markets. Large scale policy interventions such as mandatory state government transfers to maintain revenue balance, a share of GST, need to be considered to improve the fiscal position of the local governments.

ASSESSING THE FINANCIAL HEALTH OF INDIAN CITIES

1. Introduction

Cities are the engines of economic growth. Capital cities in particular, contribute 20-45% of the state GDP. Further, the urban population in the country which was 31.8 percent in 2011 is expected to increase to 38.2 percent in 2036. Given their economic importance and the relentless pace of urbanisation, cities have many complex challenges to resolve.

City governments/Municipalities in India are the least empowered among the three tiers of Government, with limited taxation powers. In many cities they are responsible for critical functions such as water supply and sanitation, elementary education, primary health centres, street lighting and parks. Some cities also execute strategic road development programs.

Municipal Corporations in India have the additional challenge of carrying along a number of parastatal entities working for the city's development such as Urban Development Authority (town planning for suburbs and upcoming areas of the city), Water supply and Sewerage Boards, Transport Corporations.

A number of funded infrastructure programs such as Smart City Mission, AMRUT are being executed with the participation of the Municipal Corporations to improve the service delivery. Besides, they receive support in the form of revenue grants and transfers from the State and well as Central Government.

However, the support is still insufficient to meet the newer challenges that have come their way- combating infectious diseases such as the Covid, Climate Change and related disasters.

In balance, city corporations continue to struggle with a shortage of funds, human resources and find it difficult to meet the expectations of citizens. The state of the financial health of municipal corporations is critical to meeting these challenges.

This report focuses on the finances of the municipal corporations of the smart cities. The focus of the analysis is on whether the city corporations are financially sustainable, what their ability to raise own revenues is, if the spending on revenue and capital programs are sufficient and how they are funded.

2. Challenges with Data- availability and quality of financial statements

City corporations are expected to share the budget document with the citizens. The document is not always available on the municipal website. The availability of audited accounts, which are historical statements, have shown an improvement over the years with incentives in the form of performance grants from the finance commission for publishing the same. The 2021-22 budget is expected to be available on the municipal websites by March end 2021. That is, before the actual spending begins. Similarly, at least the audited accounts of 2019-20 is expected to be available by March end, 2022.

2.1. Analysis of availability of documents

As per the status of availability of budget and audited financial statements as of October 31, 2022.

- Only 36 out of the 100 cities had budget documents for the years 2017-18 to 2021-22. These budgets contain 'actuals' for the period 2015-16 to 2019-20. (Refer chart 1)
- Further, not all the 36 city corporations had audited accounts up to date. Only 22 of these 36 corporations had audited accounts for the period 2015-16 to 2019-20. (Refer chart 1)
- A total of 34 municipal corporations had detailed audited accounts for the period 2015-16 to 2019-20 out of the total of 100 smart cities. However, only 23 of these corporations had budgeted statements up to date.
- Audited accounts data was available more for the states of Tamilnadu, Uttar Pradesh, Karnataka, Gujarat than other states. Notably for Maharashtra, audited accounts was available only for very few MCs such as Pimpri Chinchwad corporation, Pune. Even then, detailed accounts with sub schedules was not available continuously for the period under review.(Refer chart 2).

Chart 1- Proportion of smart cities' municipalities with budgets and audited accounts on municipal website
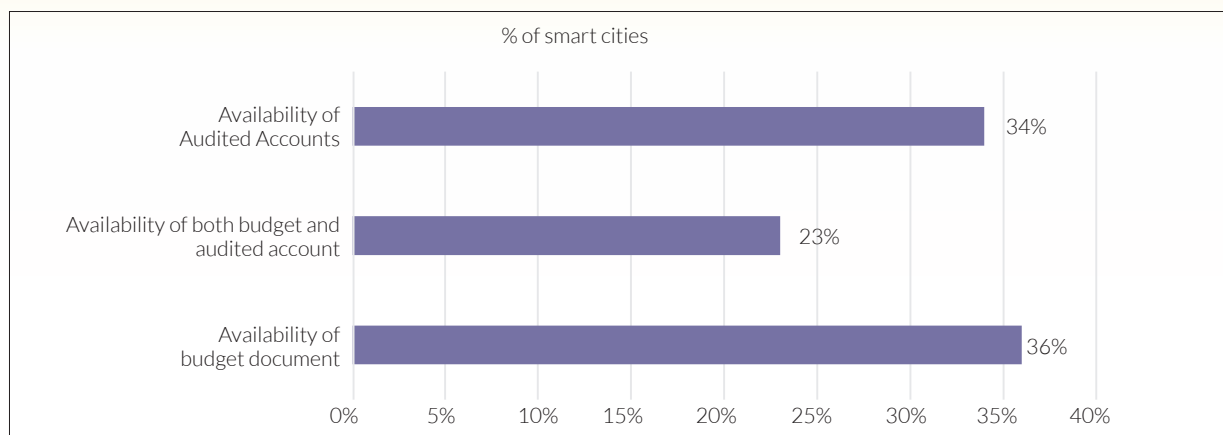
% of smart cities

Notes: *Availability of budget documents is for the period 2017-18 to 2021-22, Availability of audited accounts is for the period 2015-16 to 2019-20.*

Chart 2- State wise availability of budget and audited financial statements for smart cities' municipalities
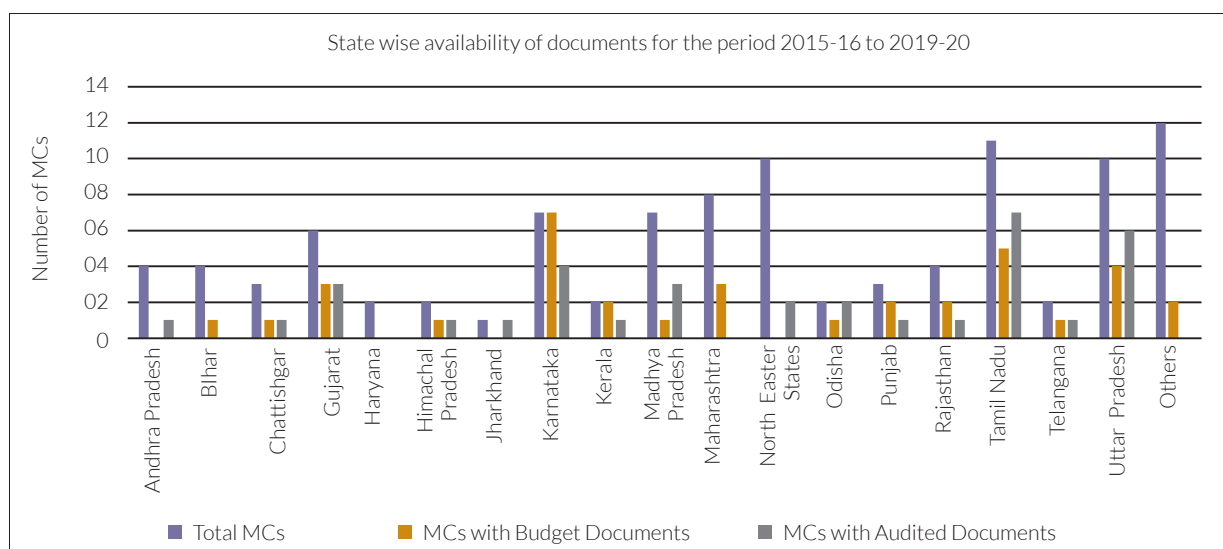
- Budget data was available more for the states of Karnataka, Tamilnadu, Gujarat and Uttar Pradesh than other states (Refer chart 2).
- Overall, availability of accounting and financial information requires improvement. This is particularly with states like Andhra Pradesh, Haryana, Maharashtra, North eastern states and union territories.

2.2. Analysis of presentation of budget documents and audited statements

Language of presentation of budget documents

28 of the 100 smart cities municipalities publish their budget documents in the local language. Municipalities of Gujarat, Maharashtra, Punjab, UttarPradesh, Chattisgarh publish predominantly in the local language. This makes it difficult for the credit markets to understand the financials.

Chart 3- Language of publication of budgets

Language of publication of municipal budgets of smart cities
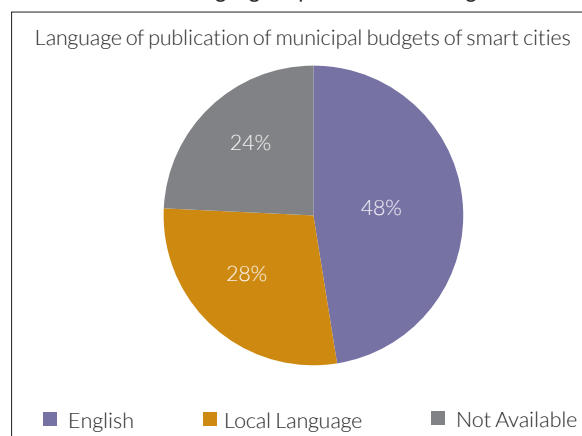
Coding as per prescribed accounting manual

56 of the 100 smart cities' municipalities published their budget documents with codes given in the national/state municipal accounting manual. 20% of the municipalities did not publish their budgets with account codes. When codes are assigned, the line items become clearer and comparable across city corporations.

Chart 4- Compliance with National /State Municipal Accounting Manual

Budget documents of municipalities Coded as per NMAM/SMAM

- 56% Coded as per NMAM/SNAM
- 20% Not Coded as per NMAM/SNAM
- 24% Documents Not Available

Functional presentation of budgets

Only 29 of the 100 smart cities municipalities published a functional classification of budget documents, segregating revenues and expenditure for various functions such as water supply, public health, street lighting, general administration and so on.

Municipalities of Karnataka, Madhya Pradesh, Telangana, Kerala and Maharashtra present their budgets functionally. In many other states, only an account head wise presentation is available, which does not provide context to the financial information.

Chart 5- Extent of functional presentation of budgets

Functional presentation of budgets

- 29% Functionally Presented
- 47% Non- Functionally Presented
- 24% Documents Not Available
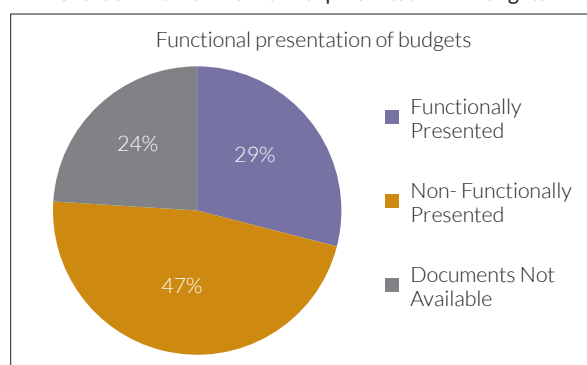
Presentation of Audited accounts

Audited financial statements are published in English language making for a more universal understanding.

Here too, adherence to National /State Municipal Accounting Code is not complete. Only 56 of the 100 municipalities present their accounts as per prescribed accounting manuals.

Accounts are not presented functionally at all, making it difficult to understand what the money has been spent on and what the outcomes are.

2.3. Government incentives to improve the availability of municipal financial data

As per the 15th Central finance commission, performance grants would be provided to urban local bodies for timely preparation of audited accounts. The exact provision reads as follows-

During the first two years- 2021-22 and 2022-23, States need to ensure online availability of unaudited accounts for the previous year and the audited accounts for the year before the previous year. This should be achieved for 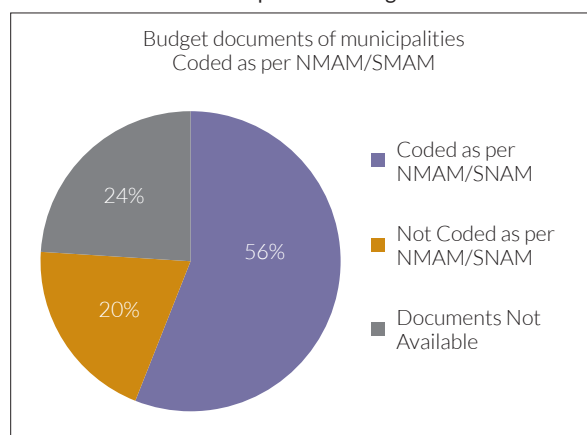25% of the ULBs in 2021-22 and 2022-23 and 100% of the ULBs in 2023-24 onwards by 15th August of the year to avail the full grants in that year. However, for the subsequent years, i.e. 2023-24 onwards, all the ULBs have to mandatorily prepare and make available online in the public domain annual accounts of the previous year and the duly audited accounts of the year before the previous year, by 15th May of each year to avail full grants in that year.

These efforts have improved the availability of audited accounts in some states, yet the sense of urgency is missing. With more than 4700 urban local bodies in the country, it will take a while to onboard all states into this reform plan.

2.4. Accounting Quality of financial statements

The system of revenue and expense recognition is as per accrual standards of accounting in the audited accounts. The budgets are not audited and is mostly cash based. Even allowing for these differences, the variance between 'Actuals' in budget and 'Audited accounts' is very high (refer Table 2).

The variation between historical figures presented in the budget and those in the audited accounts are presented below for 25 municipalities. For the remaining 75 municipalities, the data was not available for comparison. The figures represent net revenue surplus/deficit.

- The variation is wide. In 9 municipalities, the average variance was over 100%. The most significant variance stemmed from the recording of revenue grants (Income), and program expenses. It appears

Table 1: Net revenue surplus/deficit – variance between Actuals (Budgets) and Accounts

State	Municipality	2017-18 Accounts	2017-18 Actuals	Variance in %	2018-19 Accounts	2018-19 Actuals	Variance in %	2019-20 Accounts	2019-20 Actuals	Variance in %	Average variance in %
Chattisgarh	Raipur	6250	7021	-12%	104	1157	-1008%	119	-1025	964%	-19%
Gujarat	Ahmedabad	78427	72138	8%	63150	74649	-18%	80717	59243	27%	5%
Gujarat	Rajkot	12267	3832	69%	16976	9926	42%	13500	4699	65%	58%
Gujarat	Vadodara	6526	6612	-1%	18508	17247	7%	18974	7983	58%	21%
Himachal Pradesh	Shimla	-672	-3236	-382%	-840	-1023	-22%	-1259	-3166	-151%	-185%
Karnataka	Belagavi	-534	-633	-19%	3056	971	68%	3065	959	69%	39%
Karnataka	Bengaluru	401215	94481	76%	433749	109556	75%	50793	129298	-155%	-1%
Karnataka	Hubballi-Dharwad	7023	3343	52%	8625	4068	53%	7035	7675	-9%	32%
Karnataka	Mangaluru	6477	6598	-2%	7255	4706	35%	11634	5701	51%	28%
Karnataka	Shivamogga	2172	862	60%	2373	2385	-1%	2741	1705	38%	33%
Karnataka	Tumakuru	210	1311	-526%	88	551	-528%	1464	2080	-42%	-365%
Kerala	Kochi	1435	13603	-848%	3255	2059	37%	1290	-819	163%	-216%
Kerala	Thiruvananthapuram	2082	6243	-200%	7818	3559	54%	-598	7625	1376%	410%
Madhya Pradesh	Bhopal	35337	21181	40%	33136	-4872	115%	26464	-19079	172%	109%
Madhya Pradesh	Ujjain	5919	1037	82%	3966	-913	123%	3552	-3512	199%	135%
Odisha	Rourkela	907	882	3%	2217	-101	105%	27	626	-2191%	-694%
Rajasthan	Jaipur	-804	828	203%	-19625	-14526	26%	-18633	-13026	30%	86%
Tamilnadu	Greater Chennai	-5885	-25232	-329%	80100	-29434	137%	36320	-15848	144%	-16%
Tamilnadu	Salem	769	1208	-57%	-11140	11647	205%	3935	5354	-36%	37%
Tamilnadu	Tiruchirappalli	2362	2005	15%	7205	6647	8%	8382	3197	62%	28%
Tamilnadu	Tiruppur	960	2052	-114%	10828	5315	51%	-9501	20	100%	12%
Telangana	Greater Warangal	5092	3883	24%	6983	3728	47%	4232	4513	-7%	21%
Uttar Pradesh	Kanpur	613	-1468	340%	2716	-1069	139%	8996	3220	64%	181%
Uttar Pradesh	Prayagraj	-413	370	190%	-1496	-1377	8%	348	1325	-280%	-28%
Uttar Pradesh	Varanasi	2378	-9207	487%	-233	-12296	-5181%	3855	-16326	524%	-1390%

Notes- the expenditure does not include depreciation and the surplus is before transfer to reserves.

that there is an overlap between revenue and capital items in these areas, and these have not been correctly recognised in the budget documents.

- Further, pension, being an accrued amount does not appear in the budget document which is largely prepared on cash basis.

3. Approach

Given the high level of variance between actuals reported in budget documents and audited statements, the approach to the analysis was as follows-

a) Analyse only those municipalities where both budgets and audited accounts are available

b) Analyse based on audited accounts available for revenue based ratios. For comments on capital expenditure and capital inflows, we have used actuals data from the budget documents.

We have 23 municipalities where both actuals and audited figures are available from 2015-16 to 2019-20. There were 2 other municipalities- Bruhat Bengaluru Mahanagar Palike, Rajkot municipal corporation- where audited figures were available from 2017-18 to 2019-20. We used these 25 municipalities for our analysis.

The population projection for the cities are based on the urban population projections of the Ministry of Health and Family welfare[1].

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[1]*Population projections for India and States-2011-2036. Report of the Technical Group on Population Projections, July 2020, National Commission on Population, Ministry of Health and Family Welfare.*

ANALYSIS OF THE MUNICIPALITIES OF SMART CITIES

The municipal corporations of 25 smart cities have been analysed on specific criteria as detailed below.

A. Share of own revenue to total revenue.

This ratio conveys the extent of self-reliance. Cities that have their own source of revenue have a greater freedom to spend as compared to cities that are dependent on the state government for support. Own revenue includes tax revenues and non-tax revenues such as fee and user charges, rental income, sale of assets and investment income. Own revenues exclude assigned revenues from the state government and receipts from grants. When own revenues/total revenues are higher than 90%, it is an indicator of a self-reliant city government. A ratio lower than 70% would be considered insufficient.

Table 2: Own revenue ratios

S.no	State	Municipalities	Own revenue/ Total revenue Average 2015-16 to 2019-20	Property tax/ Own revenue Average 2015-16 to 2019-20	Own revenue/ Revenue expenditure Average 2015-16 to 2019-20
1	Chhattisgarh	Raipur Nagar Nigam	46%	35%	37%
2	Gujarat	Ahmedabad Municipal Corporation	62%	40%	77%
3	Gujarat	Rajkot Municipal Corporation	74%	36%	85%
4	Gujarat	Vadodara Municipal Corporation	54%	30%	56%
5	Himachal Pradesh	Municipal Corporation Shimla	48%	36%	41%
6	Karnataka	Belagavi City Corporation	34%	49%	31%
7	Karnataka	Bruhat Bengaluru Mahanagara Palike	58%	41%	51%
8	Karnataka	Hubballi-Dharwad City Corporation	44%	45%	47%
9	Karnataka	Mangaluru City Corporation	61%	27%	74%
10	Karnataka	Shivamogga City Corporation	44%	37%	55%
11	Karnataka	Tumakuru City Corporation	40%	41%	36%
12	Kerala	Kochi Municipal Corporation	44%	54%	46%
13	Kerala	Thiruvananthapuram Municipal Corporation	40%	38%	42%
14	Madhya Pradesh	Bhopal Municipal Corporation	40%	46%	51%
15	Madhya Pradesh	Ujjain Nagar Nigam	18%	30%	17%
16	Odisha	Rourkela Municipal Corporation	36%	19%	24%
17	Rajasthan	Jaipur Municipal Corporation	46%	48%	40%
18	Tamilnadu	Greater Chennai Corporation	63%	51%	48%
19	Tamilnadu	Salem City Municipal Corporation	56%	19%	46%
20	Tamilnadu	Tiruchirappalli City Municipal Corporation	60%	17%	63%
21	Tamilnadu	Tiruppur Municipal Corporation	54%	27%	45%

S.no	State	Municipalities	Own revenue/ Total revenue	Property tax/ Own revenue	Own revenue/ Revenue expenditure
			Average 2015-16 to 2019-20	Average 2015-16 to 2019-20	Average 2015-16 to 2019-20
22	Telangana	Greater Warangal Municipal Corporation	87%	47%	94%
23	Uttar Pradesh	Kanpur Municipal Corporation	38%	77%	36%
24	Uttar Pradesh	Prayagraj Nagar Nigam	32%	79%	32%
25	Uttar Pradesh	Varanasi Nagar Nigam	21%	70%	21%

- Gujarat based MCs such as Vadodara, Ahmedabad, Rajkot had own revenue of 54%, 62% and 74% respectively. These municipal corporations show a significant fee and user charges particularly from town planning and construction levies.
- Tamilnadu based MCs' own revenue ratios were in the range of 54% to 63%. They enjoy significant water tax and development charges.
- Karnataka based municipal corporations' ratio was in the range of 34%-61%, trailing Tamilnadu and Gujarat.
- The MCs of other states show a significantly low ratio indicating a high dependence on their state governments for finances. Varanasi (21%) and Ujjain (18%) municipal corporations fared the lowest in terms of self-reliance.
- Greater Warangal Municipal Corporation had own revenue/total revenue of over 70%.It has a significant amount of user charges (building development charges, water charges) contributing to own income.
- Property tax contributes on an average, about 42% of own revenues. This is lower for Tamilnadu based city corporations that also handle water supply and elementary education functions. Their receipts include water charges and education tax broadening their resource base.
- Property tax contribution to own revenue is low in Rourkela as the tax has not been fully exploited. Its property tax contribution have grown over the years nonetheless from 7% in 2015-16 to 25% in 2019-20.

B. Own revenue to Revenue expenditure

Ideally, the revenue expenditure of a city corporation should be fully covered by its own revenues. At least three fourths of the expenditure should be met by own revenues.
- Only 4 MCs have own revenues that can meet three fourths of their revenue expenditure-Ahmedabad,

Greater Warangal, Mangaluru, Rajkot.
- Bengaluru and Chennai trail Ahmedabad significantly in terms of their ability to meet their revenue expenditure from own resources.
- MCs of Uttar Pradesh, Chattisgarh, Odisha are very dependent on the state government to meet their operational expenditures.
- Not even half the revenue expenditure is covered by own revenue in the case of Tamilnadu (with the exception of Tiruchirappalli). Even progressive states find it challenging to create self-reliant local governments.

C. Property tax per capita

As this tax is the primary source of revenue for a municipal corporation, the ability to earn from property tax becomes key. Property tax is studied as per capita (Property tax revenue/population) to make comparison across municipal corporations possible. This also evens out the variations in the area of the municipal corporation.

- Small MCs like Rourkela, Ujjain, Raipur, Tiruchirappalli which started with a very small base have reported high growth rates.
- Among the larger cities, Ahmedabad's property tax revenues have been stagnant. Bengaluru on the other hand, shows a healthy growth rate.
- Jaipur shows very low property tax per capita and decreasing as well.
- Overall, most of the MCs show a positive growth rate. Some of the property tax reforms undertaken by the MCs in the recent years include self-assessment of property tax, online payment of tax as opposed to offline payments, GIS mapping of properties to ensure that all properties are brought correctly into the tax net. The fifteenth finance commission has also linked property tax reforms to the devolution of performance grants.

Table 3: CAGR in Property tax per capita

S.No	State	Municipalities	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	CAGR
1	Chhattisgarh	Raipur Nagar Nigam	257	369	436	474	482	17%
2	Gujarat	Ahmedabad Municipal Corporation	1525	1346	1523	1328	1571	1%
3	Gujarat	Rajkot Municipal Corporation		643	1131	1246	1528	33%
4	Gujarat	Vadodara Municipal Corporation	773	818	829	794	825	2%
5	Himachal Pradesh	Municipal Corporation Shimla	1321	874	665	754	756	-13%
6	Karnataka	Belagavi City Corporation	314	436	490	508	580	17%
7	Karnataka	Bruhat Bengaluru Mahanagara Palike			1223	1059	2160	33%
8	Karnataka	Hubballi-Dharwad City Corporation	518	519	427	454	496	-1%
9	Karnataka	Mangaluru City Corporation	484	456	514	610	608	6%
10	Karnataka	Shivamogga City Corporation	330	328		427	438	7%
11	Karnataka	Tumakuru City Corporation	336	406	465	449	463	8%
12	Kerala	Kochi Municipal Corporation		863	863	1043	1264	14%
13	Kerala	Thiruvananthapuram Municipal Corporation	434	403	392	426	351	-5%
14	Madhya Pradesh	Bhopal Municipal Corporation		484	855	845	928	24%
15	Madhya Pradesh	Ujjain Nagar Nigam	139	142	230	343	381	29%
16	Odisha	Rourkela Municipal Corporation	22	93	61	198	151	61%
17	Rajasthan	Jaipur Municipal Corporation	374	440	252	355	334	-3%
18	Tamilnadu	Greater Chennai Corporation	892	897	911	2246	1495	14%
19	Tamilnadu	Salem City Municipal Corporation	148	152	161	281	172	4%
20	Tamilnadu	Tiruchirappalli City Municipal Corporation	189	197	210	362	673	37%
21	Tamilnadu	Tiruppur Municipal Corporation	527	516	730	1103	623	4%
22	Telangana	Greater Warangal Municipal Corporation	738	595	554	630	632	-4%
23	Uttar Pradesh	Kanpur Municipal Corporation	410	413	424	467	540	7%
24	Uttar Pradesh	Prayagraj Nagar Nigam	351	342	314	453	489	9%
25	Uttar Pradesh	Varanasi Nagar Nigam	226	233		302	408	16%

- While property tax revenues are showing growth, the rate of growth is not higher than the growth of the state GDP, as seen below.
- Only 11 MCs had an increasing property tax/GSDP trend. Some of those showing an increasing trend are smaller cities such as Raipur, Rourkela, Ujjain, Tiruchirappalli. Bengaluru has also shown an increase in the recent years.

- In all other cases, the growth in property tax has trailed the growth in state GDP.
- Bengaluru had the highest property tax/GSDP of 0.135%, significantly better than Ahmedabad and Chennai. Of concern is Ahmedabad municipal corporation which shows a decreasing trend.

Table 4- Trends in Property tax /GSDP

S.No	State	Municipalities	2015-16	2016-17	2017-18	2018-19	2019-20	Trend
1	Chhattisgarh	Raipur Nagar Nigam	0.014%	0.017%	0.020%	0.020%	0.019%	Increasing
2	Gujarat	Ahmedabad Municipal Corporation	0.095%	0.075%	0.077%	0.061%	0.068%	Decreasing
3	Gujarat	Rajkot Municipal Corporation		0.009%	0.014%	0.014%	0.016%	Increasing
4	Gujarat	Vadodara Municipal Corporation	0.015%	0.014%	0.013%	0.012%	0.011%	Decreasing
5	Himachal Pradesh	Municipal Corporation Shimla	0.021%	0.013%	0.009%	0.009%	0.009%	Decreasing
6	Karnataka	Belagavi City Corporation	0.002%	0.002%	0.002%	0.002%	0.002%	Stagnant
7	Karnataka	Bruhat Bengaluru Mahanagara Palike			0.090%	0.071%	0.135%	Increasing
8	Karnataka	Hubballi-Dharwad City Corporation	0.005%	0.005%	0.003%	0.003%	0.003%	Decreasing
9	Karnataka	Mangaluru City Corporation	0.003%	0.003%	0.003%	0.003%	0.003%	Stagnant
10	Karnataka	Shivamogga City Corporation	0.001%	0.001%		0.001%	0.001%	Decreasing
11	Karnataka	Tumakuru City Corporation	0.001%	0.001%	0.001%	0.001%	0.001%	Stagnant
12	Kerala	Kochi Municipal Corporation		0.011%	0.010%	0.012%	0.013%	Increasing
13	Kerala	Thiruvananthapuram Municipal Corporation	0.010%	0.008%	0.008%	0.008%	0.006%	Decreasing
14	Madhya Pradesh	Bhopal Municipal Corporation		0.016%	0.026%	0.023%	0.023%	Increasing
15	Madhya Pradesh	Ujjain Nagar Nigam	0.001%	0.001%	0.002%	0.003%	0.002%	Increasing
16	Odisha	Rourkela Municipal Corporation	0.000%	0.001%	0.000%	0.001%	0.001%	Increasing
17	Rajasthan	Jaipur Municipal Corporation	0.019%	0.020%	0.011%	0.014%	0.012%	Decreasing
18	Tamilnadu	Greater Chennai Corporation	0.046%	0.043%	0.039%	0.088%	0.054%	Increasing
19	Tamilnadu	Salem City Municipal Corporation	0.001%	0.001%	0.001%	0.002%	0.001%	Stagnant
20	Tamilnadu	Tiruchirappalli City Municipal Corporation	0.001%	0.001%	0.001%	0.002%	0.004%	Increasing
21	Tamilnadu	Tiruppur Municipal Corporation	0.002%	0.002%	0.002%	0.003%	0.002%	Stagnant
22	Telangana	Greater Warangal Municipal Corporation	0.012%	0.009%	0.007%	0.007%	0.007%	Decreasing

S.No	State	Municipalities	2015-16	2016-17	2017-18	2018-19	2019-20	Trend
23	Uttar Pradesh	Kanpur Municipal Corporation	0.011%	0.010%	0.010%	0.010%	0.011%	Stagnant
24	Uttar Pradesh	Prayagraj Nagar Nigam	0.004%	0.003%	0.003%	0.004%	0.004%	Stagnant
25	Uttar Pradesh	Varanasi Nagar Nigam	0.003%	0.002%		0.003%	0.004%	Increasing

Notes
GSDP is nominal GSDP

Note: Increasing trend is where the average y.o.y growth is more than 5%, Decreasing trend is where the average y.o.y growth is negative, stagnant trend is where the y.o.y growth is less than 5%

D. Establishment expenditure to Revenue expenditure

The establishment expenditure refers to the salary payments and is fixed in nature. The higher the establishment expenses, the lower the funds available for operations and maintenance of city infrastructure.

- 8 of the 25 corporations, notably the MCs from Uttar Pradesh, spent more than half of their revenue expenditure on salaries and administrative expenditure.
- The ratio is low for Karnataka based MCs such as Tumakuru (12%), Mangaluru (15%), Bengaluru (20%), Belagavi (23%). These MCs have a significant amount of outsourced operation and maintenance expenditure. It is possible that the establishment expenditure is low because the third party is paying the salary of the maintenance staff.

- The ratio is reasonable (one third roughly) for the MCs of Kerala.

E. Trends in Revenue surplus

A healthy revenue surplus is an indicator of the financial strength. If the revenue expenditure such as salaries, administration expenses, maintenance of infrastructure for delivering services, and interest expenses are not met by revenues earned, the financial position of the municipality is not sustainable. If the municipality has shown a revenue surplus in each of the past 5 years, its financial strength would be considered good. If it has a surplus position for 2 years or less, the financial profile would be considered as weak.

- The trend of revenue surplus is not a secular trend. All the MCs show a volatile performance, indicating that the performance is highly dependent on a few

Chart 6- Share of Establishment and administrative expenditure in total revenue expenditure

Establishment exp/Revenue exp

Raipur 32%, Ahmendabad 42%, Rajkot 47%, Vadodara 53%, Shimla 50%, Belagavi 23%, Bengaluru 20%, Hubballi-Dharwad 33%, Mangaluru 15%, Shivamoggo 27%, Tumakuru 12%, Kochi 32%, Thiruvananthapuram 34%, Bhopal 49%, Ujjain 33%, Rourkela 41%, Jaipur 53%, Chennai 41%, Salem 59%, Tiruchirappalli 52%, Tiruppur 24%, Warangal 36%, Kanpur 72%, Prayagraj 79%, Varanasi 69%
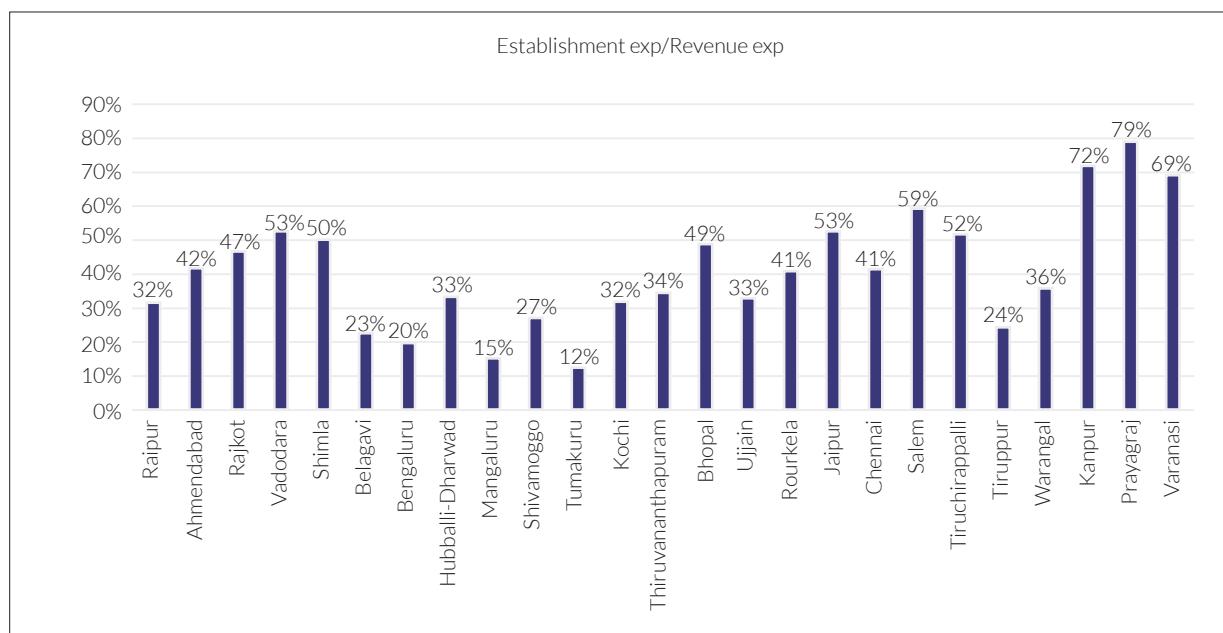
Table 5- Trends in Revenue Surplus (Amt in Rs. Lakhs)

S.no	State	Municipalities	2015-16	2016-17	2017-18	2018-19	2019-20	Financial strength
1	Chhattisgarh	Raipur Nagar Nigam	-8006	-7752	-2704	-9039	-17621	Weak
2	Gujarat	Ahmedabad Municipal Corporation	130886	74211	65764	48732	65803	Strong
3	Gujarat	Rajkot Municipal Corporation		5474	8321	12843	8913	Moderate
4	Gujarat	Vadodara Municipal Corporation	8142	2366	-6530	4225	2506	Moderate
5	Himachal Pradesh	Municipal Corporation Shimla	2435	-6201	-2405	-2291	-2968	Weak
6	Karnataka	Belagavi City Corporation	1350	-2395	-4892	-2146	-1312	Weak
7	Karnataka	Bruhat Bengaluru Mahanagara Palike			87163	97034	-311352	Moderate
8	Karnataka	Hubballi-Dharwad City Corporation	6117	1894	1185	1787	-609	Moderate
9	Karnataka	Mangaluru City Corporation	7297	1855	1808	2213	7106	Strong
10	Karnataka	Shivamogga City Corporation	1880	1681	-1895	2373	2741	Strong
11	Karnataka	Tumakuru City Corporation	1435	-943	-2004	-2488	-1418	Weak
12	Kerala	Kochi Municipal Corporation	2937	1188	618	2030	1290	Strong
13	Kerala	Thiruvananthapuram Municipal Corporation	2573	5040	1044	5636	-2876	Moderate
14	Madhya Pradesh	Bhopal Municipal Corporation	14810	17186	23626	20129	13241	Strong
15	Madhya Pradesh	Ujjain Nagar Nigam	-497	-656	-690	-2634	-3378	Weak
16	Odisha	Rourkela Municipal Corporation	-1372	-3250	-2884	-1711	-3979	Weak
17	Rajasthan	Jaipur Municipal Corporation	-3712	-132	-4303	-27696	-21755	Weak
18	Tamilnadu	Greater Chennai Corporation	-45910	-88824	-155600	-26167	-57079	Weak
19	Tamilnadu	Salem City Municipal Corporation	-484	-152	-2451	-11140	1094	Weak
20	Tamilnadu	Tiruchirappalli City Municipal Corporation	2673	2622	-3074	1986	3304	Strong
21	Tamilnadu	Tiruppur Municipal Corporation	-4737	-4164	-5662	4143	-16123	Weak
22	Telangana	Greater Warangal Municipal Corporation	2425	599	-503	2936	25	Moderate
23	Uttar Pradesh	Kanpur Municipal Corporation	-8575	-5186	-1940	219	6543	Weak
24	Uttar Pradesh	Prayagraj Nagar Nigam	-935	965	-585	-1646	66	Weak
25	Uttar Pradesh	Varanasi Nagar Nigam	-1834	-872	1486	-1302	2751	Weak

Notes- Rajkot accounts for 2016-17 is unaudited
Rajkot, Vadodara, Warangal has been marked as moderate because of the sharp dip in net income in 2019-20 followed by a deficit in 2020-21.
The revenue surplus is before the transfer to reserves. The expenditure includes depreciation.

key factors such as property tax collections, stability of government grants, level of establishment expenditure.

- Gujarat based MCs such as Ahmedabad, Rajkot and Vadodara come across as relatively strong in their revenue profile. All of them had posted a revenue surplus during the period 2015-16 to 2019-20.
- Most of the Tamilnadu based MCs- Chennai, Salem, Tiruppur had a weak financial profile, posting a revenue deficit during the period of analysis, mainly because property tax had not been revised during the period of analysis.
- The following MCs show a significant revenue deficit over the years-Tumakuru, Shimla, Jaipur. Tumakuru's revenue profile has worsened on account of the losses in its water supply fund. The user charges and grants received are not sufficient to cover the expenditure incurred. Jaipur MC's financial position deteriorated from 2017-18 onwards on account of a steep increase in salary payments without any significant increase in its revenues. Shimla MC has shown a reduction in fee and user charges income since 2017-18, contributing to the revenue deficit.
- Karnataka based MCs show a mixed performance. Belagavi and Tumakuru had a weak performance, Bengaluru and Hubli had a moderate financial strength, while Mangaluru and Shivamogga showed a strong performance.
- Chattisgarh, Uttar Pradesh, Odisha MCs show a weak financial profile.

F. Operating ratio (Revenue Expenditure/ Revenue Income)

The higher the ratio, the weaker the financial profile. A ratio less than 75% would be considered good, as there would be some surplus left to meet capital expenditure.

The operating ratio is over 75% in all the cases. In fact, It is over 100% (meaning revenue deficit) in 14 of the 25 cases.

Chart 8- Aggregate operating ratio
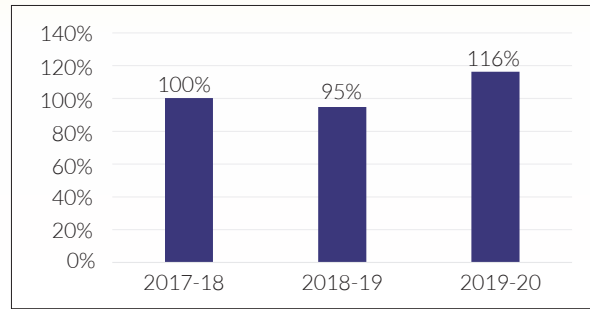
Notes– Operating ratio calculated as Aggregate Revenue expenses for 25 MCs/Aggregate revenue income for 25 MCs

Aggregate operating ratio shows a marked deterioration in 2019-20. Aggregate revenues showed a negative growth in that year while expenses continued to grow. The dip in revenues was on account of a negative growth in revenue transfers from the state government.

Chart 9- Revenue transfers and revenue surplus
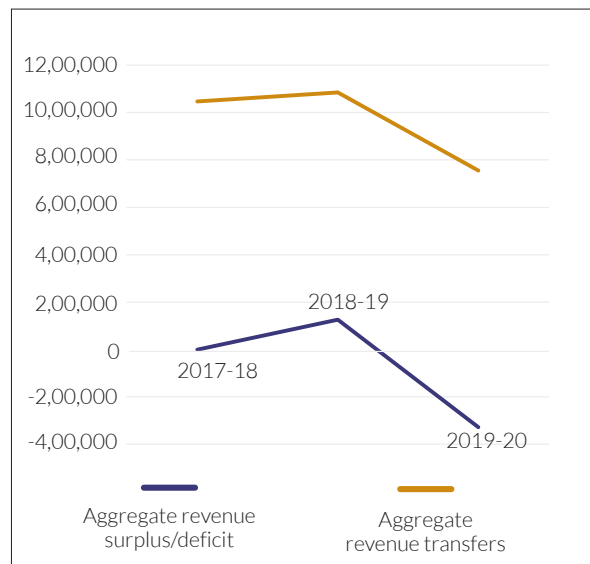
Chart 7- Operating ratio
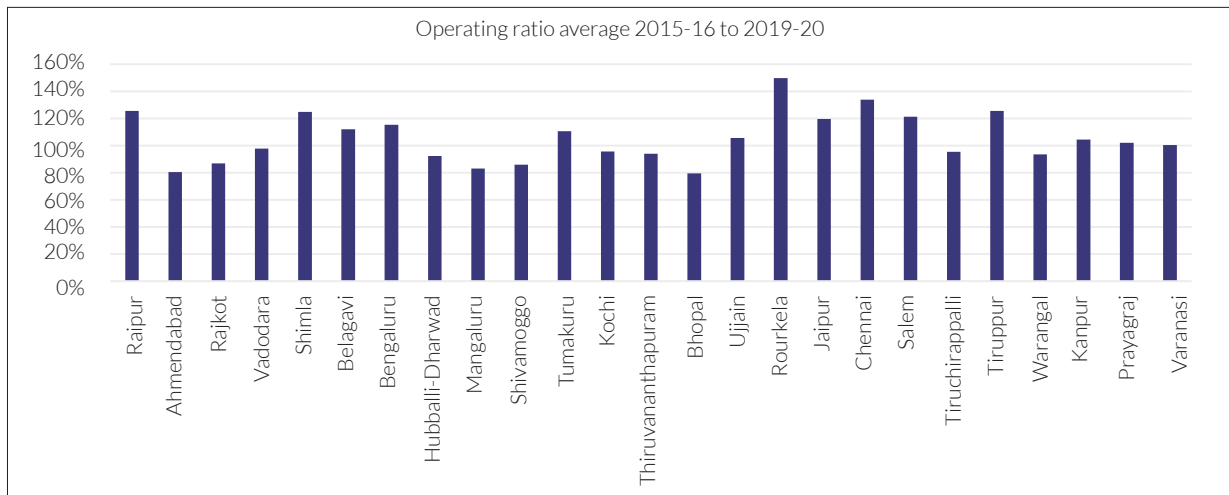
G. Capital Expenditure/Total Expenditure

The expenditure of a city corporation should focus on both revenue and capital. A ratio of 25-40% of capital expenditure/total expenditure, would be considered good while a ratio of less than 10% indicates that the municipality is too financially weak to spend on infrastructure. An overly aggressive ratio would mean that the city corporation is not spending enough on maintenance of the infrastructure. This ratio should be read along with the corporation's performance on existing service levels.

- The mega cities- Ahmedabad, Bengaluru Chennai, have high levels of capital expenditure. This is also borne out by the high level of fixed assets per capita (drawn from the audited accounts).
- Most of the Karnataka based MCs show a significant capital spend and asset creation.
- In Kerala based MCs, the level of fixed asset creation and capital spend is low. Most of the spend is revenue in nature.
- Tamilnadu based MCs also show a high level of capital expenditure.
- In the case of Rajkot, Raipur, Rourkela, Varanasi while

Table 6: Extent of focus on Capital expenditure

State	Municipalities	Average Capex/total exp	Average incremental fixed assets created per capita (Column B)	Average Revenue exp per capita (Column C)	Ratio (Column B/ (B+C)
Chattisgarh	Raipur Nagar Nigam	54%	859	3506	20%
Gujarat	Ahmedabad Municipal Corporation	40%	3176	4814	40%
Gujarat	Rajkot Municipal Corporation	51%	206	3628	5%
Gujarat	Vadodara Municipal Corporation	15%	2346	4930	32%
Himachal Pradesh	Municipal Corporation Shimla	28%	851	6526	12%
Karnataka	Belagavi City Corporation	13%	1207	3117	28%
Karnataka	Bruhat Bengaluru Mahanagara Palike	56%	3584	7064	34%
Karnataka	Hubballi-Dharwad City Corporation	35%	1432	2298	38%
Karnataka	Mangaluru City Corporation	41%	1558	2670	37%
Karnataka	Shivamogga City Corporation	44%	878	1957	31%
Karnataka	Tumakuru City Corporation	51%	1067	2888	27%
Kerala	Kochi Municipal Corporation	16%	566	4220	12%
Kerala	Thiruvananthapuram Municipal Corporation	18%	417	2584	14%
Madhya Pradesh	Bhopal Municipal Corporation	24%	1900	3160	38%
Madhya Pradesh	Ujjain Nagar Nigam	63%	2280	5329	30%
Odisha	Rourkela Municipal Corporation	33%	433	2236	16%
Rajasthan	Jaipur Municipal Corporation	25%	325	1923	14%
Tamilnadu	Greater Chennai Corporation	42%	2458	5038	33%
Tamilnadu	Tiruchirappalli City Municipal Corporation		1294	2837	31%
Tamilnadu	Tiruppur Municipal Corporation	46%	3711	5755	39%
Telangana	Greater Warangal Municipal Corporation	25%	687	1446	32%

State	Municipalities	Average Capex/total exp	Average incremental fixed assets created per capita (Column B)	Average Revenue exp per capita (Column C)	Ratio (Column B/(B+C)
Uttar Pradesh	Kanpur Municipal Corporation	21%	414	1616	20%
Uttar Pradesh	Prayagraj Nagar Nigam	36%	1081	1563	41%
Uttar Pradesh	Varanasi Nagar Nigam	40%	178	1941	8%

Notes–Tiruchirappalli municipal corporation budget does not have the capital expenditure figures (actuals)
Fixed assets, revenue expenditure are from audited accounts while capital expenditure /total expenditure (capex/total exp) has been taken from budget documents.
Capital expenditure = fixed assets + capital work in progress. Total expenditure is revenue + capital expenditure.
Revenue expenditure in accounts includes depreciation.
Fixed assets include both assets created as well as capital work in progress.
Average means average for the years 2015-16 to 2019-20.
In the case of Rajkot, the audited accounts was available only for the period 2017-18 to 2019-20.

Chart 10- CAGR revenue expenditure and fixed assets
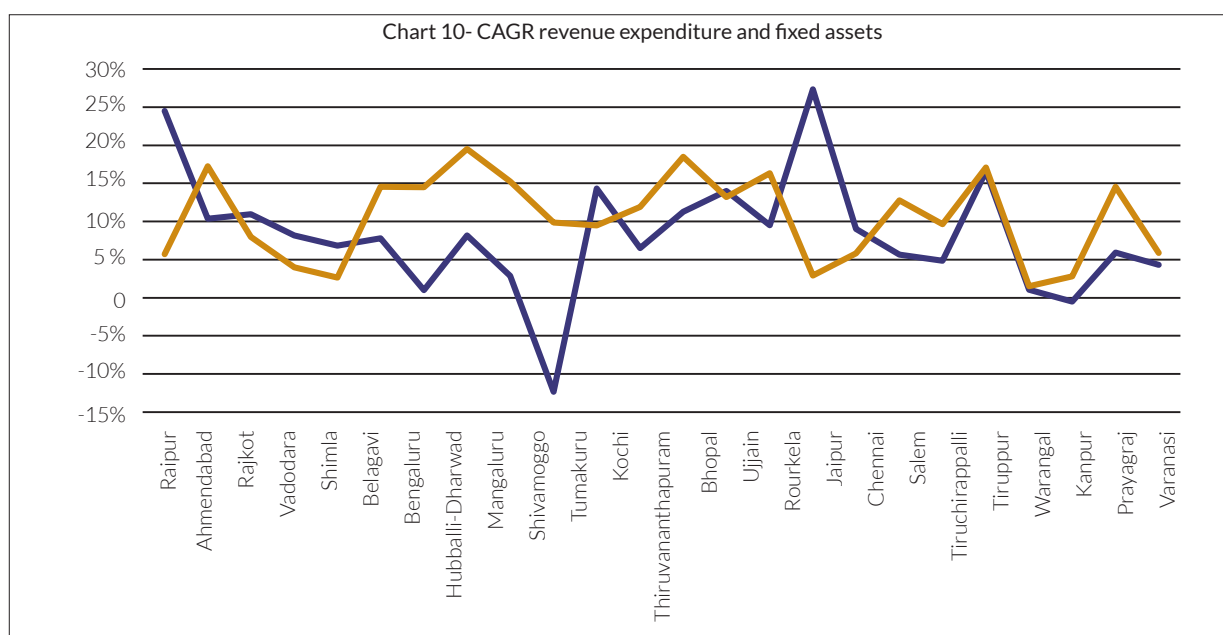
the ratio of capex/Total expenditure is high, the fixed assets creation per capita is low. It is likely that the budget document in these cases, does not reflect capital expenditure correctly and there has been a mix up between revenue and capital items.

- In the case of Vadodara, while the average capital expenditure/total expenditure seems low, the average incremental fixed assets creation is still healthy.
- In Ujjain, Prayagraj and Tiruppur, the extent of capital spend and fixed asset creation is very high.
- In 60% of the MCs analysed, the CAGR of fixed assets creation was higher than the CAGR of revenue expenditure, indicating a focus on infrastructure creation (see chart 10).

H. Capital Expenditure/Capital Receipts

This ratio indicates the extent to which the capital receipts have been utilised to create infrastructure. If the utilisation is low, it could indicate a weak project execution capacity. A ratio of less than 75% would be considered a low utilisation while a ratio of more than 90% would be considered as a high utilisation.

The utilisation of capital receipts is below 75% only for 5 MCs- Warangal, Rourkela, Shimla, Thiruvananthapuram and Varanasi.

As Warangal was financially stable during the years under review, a low ratio indicates a weak project execution capacity.

Rourkela, Shimla, Varanasi have a weak financial profile as they have net revenue deficit. In such cases, a portion of the capital grants has been utilised to fund the revenue deficit.

The ratio is higher than 100% in many cases. This is because of the mismatch in capital expenditure and receipts. If the capital expenditure could not be

Chart 11- Extent of utilisation of capital receipts for capital expenditure
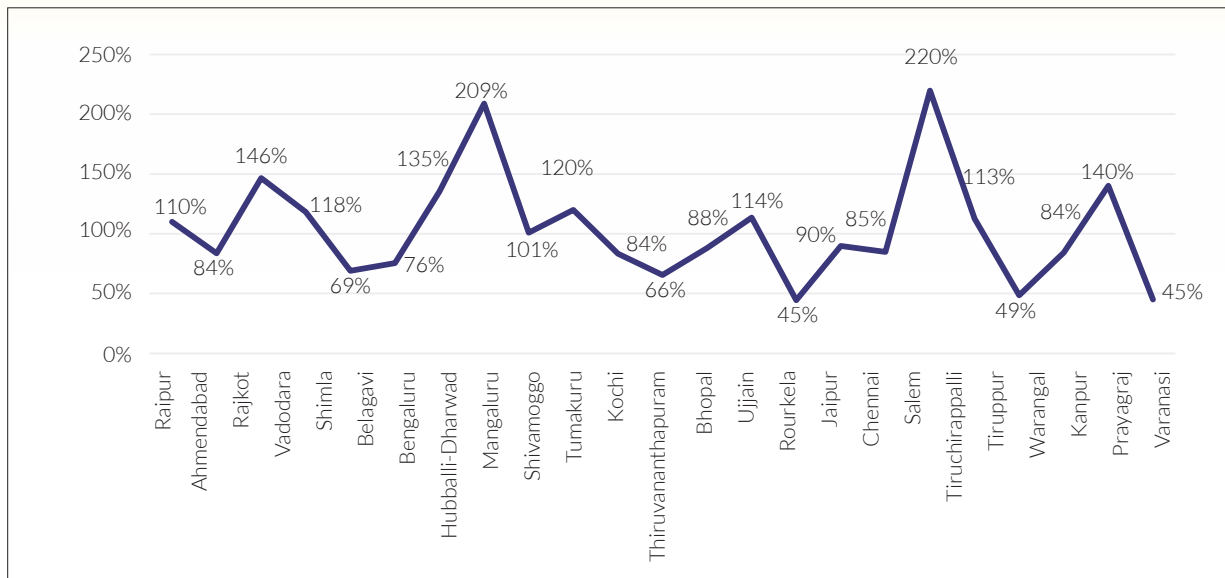
Notes: Capital receipts includes funds received for earmarked reserves, grants and borrowings.
Amounts are from budget documents.
Capital expenditure/Capital receipts have been plotted for the average of the ratios for the years 2015-16 to 2019-20.

fully incurred in a year, it can take place in a following year and would be funded from the unutilised capital receipts. If the ratio is consistently higher than 100%, it means that a portion of the revenue surplus is also utilised for capital expenditure.

Funding of capital receipts
Capital receipts are mostly in the form of grants. In 17 out of the 23 MCs, grants constituted more than 80% of the capital receipts. It was lower in the case of Salem (73%), Bhopal (69%), Ahmedabad (54%),   Chennai (37%), Vadodara (15%), Kanpur (7%). All these MCs had significant borrowings.

I. Interest coverage ratio.
This ratio is defined as (Revenue surplus + interest paid for the year)/Interest paid for the year. The higher the cover, the greater the ability to make timely interest payment on the debt. An interest cover of less than 1.5 times would be considered as weak.

- 10 of the 17 city corporations with borrowings, had an average interest cover of less than 1.5 times
- Of concern are Greater Chennai, Salem, Tumakuru municipal corporations that have a high gearing ratio and a low interest cover.

Chart 12: Contribution of capital grants in capital receipts
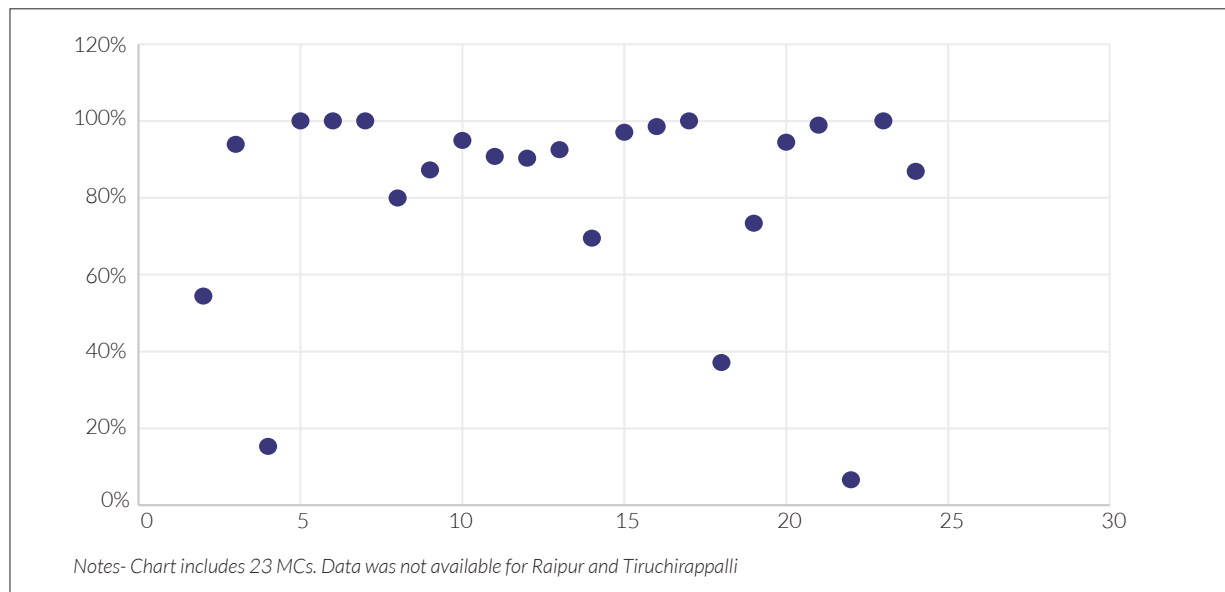
Notes- Chart includes 23 MCs. Data was not available for Raipur and Tiruchirappalli

Table 7- Interest cover and borrowings

S.no	State	Municipalities	Average interest cover	Borrowings as at March end 2020 (Rs. Lakhs)	2019-20 Gearing ratio
1	Chhattisgarh	Raipur Nagar Nigam	-388	8621	3%
2	Gujarat	Ahmedabad Municipal Corporation	21	65226	2%
3	Gujarat	Rajkot Municipal Corporation	301	276	0%
4	Gujarat	Vadodara Municipal Corporation	3	9854	1%
5	Himachal Pradesh	Municipal Corporation Shimla	-4970	0	0%
6	Karnataka	Belagavi City Corporation	-398	0	0%
7	Karnataka	Bruhat Bengaluru Mahanagara Palike	-19	57360	3%
8	Karnataka	Hubballi-Dharwad City Corporation	306	0	0%
9	Karnataka	Mangaluru City Corporation	29	0	0%
10	Karnataka	Shivamogga City Corporation	334	0	0%
11	Karnataka	Tumakuru City Corporation	0.4	14769	58%
12	Kerala	Kochi Municipal Corporation	25	2906	5%
13	Kerala	Thiruvananthapuram Municipal Corporation	6266	7233	8%
14	Madhya Pradesh	Bhopal Municipal Corporation	25	33656	7%
15	Madhya Pradesh	Ujjain Nagar Nigam	-27	6020	8%
16	Odisha	Rourkela Municipal Corporation	-10487	368	1%
17	Rajasthan	Jaipur Municipal Corporation	-89	25681	9%
18	Tamilnadu	Greater Chennai Corporation	-6	264065	30%
19	Tamilnadu	Salem City Municipal Corporation	-0.5	18238	14%
20	Tamilnadu	Tiruchirappalli City Municipal Corporation	2	13308	9%
21	Tamilnadu	Tiruppur Municipal Corporation	-9	5326	5%
22	Telangana	Greater Warangal Municipal Corporation	2743	0	0%
23	Uttar Pradesh	Kanpur Municipal Corporation	-4	43452	7%
24	Uttar Pradesh	Prayagraj Nagar Nigam	-54	0	0%
25	Uttar Pradesh	Varanasi Nagar Nigam	-2038	0	0%

Notes
Average interest cover is average for the period 2015-16 to 2019-20.
Interest cover is Net income before interest /interest payment

Gearing is calculated as Loans outstanding/(Outstanding of Municipal Funds+Grants+Loans)

▪ MCs that have zero borrowings have relied solely on capital grants to fund their capital expenditure.

An analysis of the aggregate borrowings show that these are largely secured loans from commercial banks, HUDCO, state level financial institutions. A few of these MCs (Ahmedabad, Bhopal) had raised municipal bonds during the period under review.

1. Conclusions

There are concerns in accounting quality and availability of financial information in many MCs. Budget documents are not prepared as per generally accepted accounting principles. The variance between the historic figures (Actuals) given in the budget documents and the audited statements is very high. Budget documents ought to carry a statement

Chart 13- Composition of aggregate borrowings
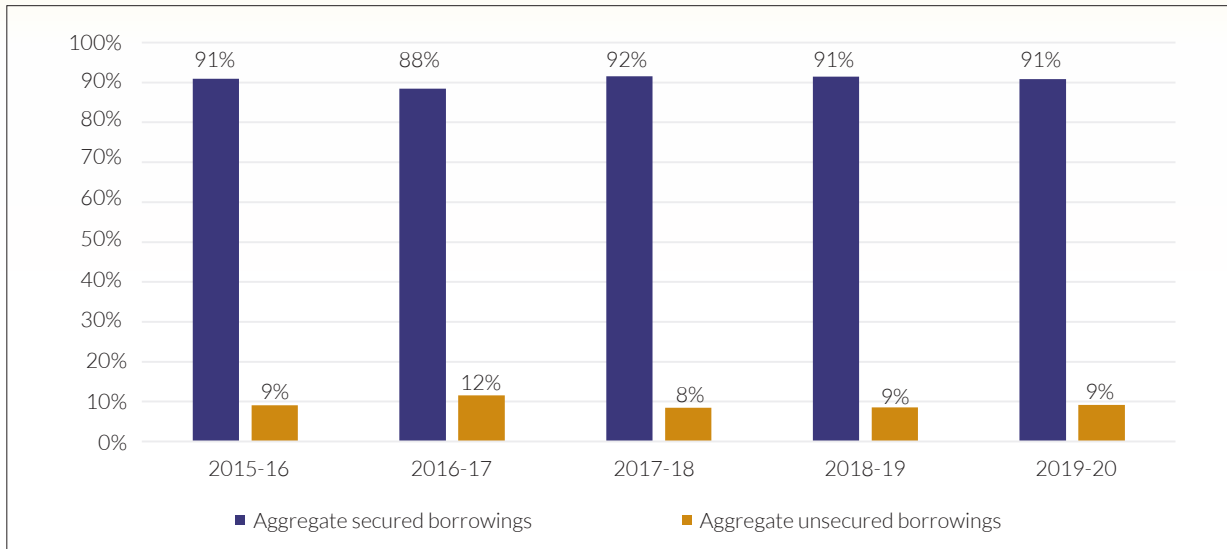
reconciling the actuals with the audited figures. Further, a functional representation of both the budgets and the financial statements is necessary to provide context to the financial information such as income and expenditure relate to water supply, town planning, education and so on.

Our analysis of the municipal corporations of 25 smart cities shows that the MCs are dependent on grants for both revenue and capital expenditure. This trend of meeting revenue expenditure through government transfers and creating infrastructure through large scale grants is not sustainable in the long run.

More long term solutions could be a one-time recapitalisation of the balance sheets of the MCs, mandated state government transfers to maintain revenue balance and a share in the GST revenues.

A vibrant municipal bond market is possible only if the balance sheets of the municipalities is strong. Nearly two thirds of the MCs surveyed in this report had debt in their balance sheet as of March end 2020. 58% of the MCs with outstanding debt, had a low or even negative interest cover. The credit quality of the municipal issuers is paramount in the development of the municipal credit markets.

ANNEXURES

1. Annexure- Financials of City Corporations

<div align="center">AHMEDABAD</div>

					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	2375	2303	2540	2430	2687
Government grants and assigned revenues	1454	1351	1404	1824	1708
Total Revenue Receipts	3829	3654	3943	4254	4395
Municipal Revenue Expenditure					
Establishment and Administrative Exp	1016	1201	1444	1542	1573
Operations & Maintenance Exp	659	633	716	985	950
Total Revenue Expenditure	2520	2912	3286	3767	3737
Revenue Surplus	1309	742	658	487	658
Capital Receipts	**2591**	**1712**	**3490**	**2236**	**1974**
Capital Expenditure	**1982**	**1769**	**1648**	**1856**	**2156**
Projected population	**6382186**	**6546198**	**6711728**	**6878990**	**7047769**

<div align="center">BELAGAVI</div>

					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	49	44	49	57	71
Government grants and assigned revenues	100	111	93	116	100
Total Revenue Receipts	150	155	142	173	170
Municipal Revenue Expenditure					
Establishment and Administrative Exp	39	44	41	36	36
Operations & Maintenance Exp	60	93	103	101	79
Total Revenue Expenditure	136	179	191	195	184
Revenue Surplus	14	-24	-49	-21	-13
Capital Receipts	**27**	**24**	**41**	**21**	**45**
Capital Expenditure	**26**	**31**	**33**	**13**	**4**
Projected population	**544904**	**555731**	**566660**	**577694**	**588851**

BENGALURU					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	NA	NA	3705	3358	3680
Government grants and assigned revenues	NA	NA	4546	3878	739
Total Revenue Receipts	NA	NA	8250	7236	4419
Municipal Revenue Expenditure					
Establishment and Administrative Exp	NA	NA	1282	1299	1550
Operations & Maintenance Exp	NA	NA	1917	1421	1453
Total Revenue Expenditure	NA	NA	7379	6265	7532
Revenue Surplus	NA	NA	872	970	-3114
Capital Receipts	**1715**	**2697**	**3271**	**2923**	**1923**
Capital Expenditure	**2134**	**2768**	**4101**	**4176**	**3487**
Projected population	**9425423**	**9612695**	**9801754**	**9992599**	**10185589**
BHOPAL					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	273	336	363	389	410
Government grants and assigned revenues	381	481	573	611	578
Total Revenue Receipts	655	817	936	1001	988
Municipal Revenue Expenditure					
Establishment and Administrative Exp	282	314	322	361	415
Operations & Maintenance Exp	139	165	221	251	270
Total Revenue Expenditure	506	645	699	799	855
Revenue Surplus	148	172	236	201	132
Capital Receipts	**176**	**147**	**209**	**317**	**383**
Capital Expenditure	**116**	**165**	**215**	**256**	**301**
Projected population	**2131446**	**2171038**	**2210726**	**2250701**	**2290868**

CHENNAI					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	1039	1178	1372	2294	1836
Government grants and assigned revenues	1116	903	654	832	852
Total Revenue Receipts	2155	2081	2026	3126	2688
Municipal Revenue Expenditure					
Establishment and Administrative Exp	1111	1167	1288	1482	1483
Operations & Maintenance Exp	522	766	649	671	660
Total Revenue Expenditure	2614	2970	3582	3388	3259
Revenue Surplus	-459	-888	-1556	-262	-571
Capital Receipts	**1832**	**1818**	**1900**	**1637**	**1664**
Capital Expenditure	**1743**	**2034**	**1194**	**1296**	**1249**
Projected population	**6104971**	**6187274**	**6269901**	**6353335**	**6437255**
HUBBALLI-DHARWAD					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	100	130	131	118	116
Government grants and assigned revenues	168	131	152	157	162
Total Revenue Receipts	269	261	282	275	278
Municipal Revenue Expenditure					
Establishment and Administrative Exp	87	95	84	71	76
Operations & Maintenance Exp	86	107	126	109	115
Total Revenue Expenditure	208	242	271	257	284
Revenue Surplus	61	19	12	18	-6
Capital Receipts	**9**	**10**	**0**	**1**	**90**
Capital Expenditure	**84**	**102**	**96**	**110**	**106**
Projected population	**1053522**	**1074455**	**1095587**	**1116918**	**1138490**

JAIPUR					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	287	283	268	245	232
Government grants and assigned revenues	255	280	305	337	369
Total Revenue Receipts	542	562	573	582	601
Municipal Revenue Expenditure					
Establishment and Administrative Exp	293	310	310	445	456
Operations & Maintenance Exp	214	180	236	236	232
Total Revenue Expenditure	579	564	616	859	818
Revenue Surplus	-37	-1	-43	-277	-218
Capital Receipts	**188**	**256**	**121**	**364**	**209**
Capital Expenditure	**143**	**112**	**143**	**318**	**261**
Projected population	**3427203**	**3493356**	**3560051**	**3627286**	**3694702**
KANPUR					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	166	167	170	217	222
Government grants and assigned revenues	293	297	304	294	378
Total Revenue Receipts	460	463	475	511	600
Municipal Revenue Expenditure					
Establishment and Administrative Exp	323	330	373	411	428
Operations & Maintenance Exp	193	153	91	66	79
Total Revenue Expenditure	545	515	494	509	535
Revenue Surplus	-86	-52	-19	2	65
Capital Receipts	**104**	**203**	**290**	**177**	**159**
Capital Expenditure	**152**	**85**	**112**	**210**	**123**
Projected population	**3092520**	**3154832**	**3217704**	**3280948**	**3344628**

KOCHI					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	158	145	149	185	166
Government grants and assigned revenues	195	155	165	283	262
Total Revenue Receipts	352	300	314	467	428
Municipal Revenue Expenditure					
Establishment and Administrative Exp	93	99	113	142	116
Operations & Maintenance Exp	80	60	77	111	106
Total Revenue Expenditure	323	288	308	447	416
Revenue Surplus	29	12	6	20	13
Capital Receipts	**39**	**117**	**35**	**141**	**61**
Capital Expenditure	**84**	**29**	**36**	**31**	**33**
Projected population	**771166**	**805678**	**840228**	**874740**	**909102**
MANGALURU					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	138	131	139	143	159
Government grants and assigned revenues	101	68	95	96	97
Total Revenue Receipts	239	199	234	239	257
Municipal Revenue Expenditure					
Establishment and Administrative Exp	26	27	28	32	32
Operations & Maintenance Exp	101	107	136	126	101
Total Revenue Expenditure	166	180	216	217	185
Revenue Surplus	73	19	18	22	71
Capital Receipts	**38**	**60**	**58**	**41**	**74**
Capital Expenditure	**91**	**86**	**144**	**119**	**93**
Projected population	**693936**	**707724**	**721643**	**735694**	**749902**

PRAYAGRAJ					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	55	63	53	70	81
Government grants and assigned revenues	115	130	151	131	146
Total Revenue Receipts	171	194	204	200	227
Municipal Revenue Expenditure					
Establishment and Administrative Exp	134	137	174	170	194
Operations & Maintenance Exp	42	42	33	44	29
Total Revenue Expenditure	180	184	210	217	227
Revenue Surplus	-9	10	-6	-16	1
Capital Receipts	**33**	**59**	**109**	**438**	**102**
Capital Expenditure	**124**	**38**	**54**	**363**	**130**
Projected population	**1248499**	**1273655**	**1299038**	**1324570**	**1350279**
RAIPUR					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	117	127	167	183	197
Government grants and assigned revenues	115	100	207	224	375
Total Revenue Receipts	232	226	374	408	571
Municipal Revenue Expenditure					
Establishment and Administrative Exp	115	116	114	127	214
Operations & Maintenance Exp	77	82	108	137	139
Total Revenue Expenditure	312	304	401	498	748
Revenue Surplus	-80	-78	-27	-90	-176
Capital Receipts	**148**	**201**	**241**	**224**	**379**
Capital Expenditure	**173**	**187**	**244**	**281**	**432**
Projected population	**1210575**	**1243408**	**1276594**	**1310132**	**1344201**

RAJKOT					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	NA	359	529	515	594
Government grants and assigned revenues	NA	176	198	177	150
Total Revenue Receipts	NA	535	728	692	745
Municipal Revenue Expenditure					
Establishment and Administrative Exp	NA	0	275	292	297
Operations & Maintenance Exp	NA	0	195	202	203
Total Revenue Expenditure	NA	480	644	563	656
Revenue Surplus	NA	55	83	128	89
Capital Receipts	**401**	**346**	**312**	**323**	**456**
Capital Expenditure	**535**	**474**	**557**	**480**	**615**
Projected population	**1514170**	**1553082**	**1592353**	**1632036**	**1672079**
ROURKELA					
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	12	21	16	22	23
Government grants and assigned revenues	18	27	34	42	53
Total Revenue Receipts	30	48	50	65	75
Municipal Revenue Expenditure					
Establishment and Administrative Exp	25	29	26	25	55
Operations & Maintenance Exp	7	12	14	17	19
Total Revenue Expenditure	44	80	79	82	115
Revenue Surplus	-14	-32	-29	-17	-40
Capital Receipts	**32**	**192**	**43**	**47**	**53**
Capital Expenditure	**23**	**53**	**19**	**22**	**17**
Projected population	**342988**	**349204**	**355465**	**361814**	**368207**

SALEM					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	87	83	74	114	86
Government grants and assigned revenues	81	87	129	0	105
Total Revenue Receipts	168	170	204	114	191
Municipal Revenue Expenditure					
Establishment and Administrative Exp	92	98	104	158	129
Operations & Maintenance Exp	50	51	63	51	18
Total Revenue Expenditure	173	172	228	225	180
Revenue Surplus	-5	-2	-25	-111	11
Capital Receipts	**58**	**133**	**392**	**20**	**170**
Capital Expenditure	**96**	**131**	**68**	**142**	**177**
Projected population	**896692**	**908781**	**920917**	**933172**	**945498**
SHIMLA					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	63	61	52	29	30
Government grants and assigned revenues	48	47	42	51	53
Total Revenue Receipts	111	108	94	80	84
Municipal Revenue Expenditure					
Establishment and Administrative Exp	54	52	60	59	58
Operations & Maintenance Exp	14	84	41	28	38
Total Revenue Expenditure	87	170	118	103	113
Revenue Surplus	24	-62	-24	-23	-30
Capital Receipts	**45**	**44**	**45**	**56**	**91**
Capital Expenditure	**50**	**17**	**29**	**46**	**45**
Projected population	**1,78,075**	**1,79,792**	**1,81,264**	**1,82,981**	**1,84,453**

SHIVAMOGGA					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	35	49	32	37	45
Government grants and assigned revenues	81	50	46	41	40
Total Revenue Receipts	116	100	78	79	85
Municipal Revenue Expenditure					
Establishment and Administrative Exp	16	17	16	24	23
Operations & Maintenance Exp	37	30	35	29	30
Total Revenue Expenditure	98	83	97	55	58
Revenue Surplus	19	17	-19	24	27
Capital Receipts	**51**	**60**	**39**	**47**	**39**
Capital Expenditure	**56**	**74**	**39**	**26**	**45**
Projected population	**385897**	**393564**	**401305**	**409118**	**417020**
THIRUVANANTHAPURAM					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	122	140	136	152	155
Government grants and assigned revenues	164	190	162	436	216
Total Revenue Receipts	286	330	298	588	371
Municipal Revenue Expenditure					
Establishment and Administrative Exp	100	110	116	127	121
Operations & Maintenance Exp	37	36	36	105	45
Total Revenue Expenditure	261	279	287	532	400
Revenue Surplus	26	50	10	56	-29
Capital Receipts	**60**	**61**	**65**	**170**	**197**
Capital Expenditure	**40**	**69**	**64**	**38**	**59**
Projected population	**1238227**	**1293642**	**1349116**	**1404530**	**1459704**

TIRUCHIRAPPALLI					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	148	139	138	206	224
Government grants and assigned revenues	123	131	94	105	105
Total Revenue Receipts	271	270	232	310	328
Municipal Revenue Expenditure					
Establishment and Administrative Exp	107	110	123	171	190
Operations & Maintenance Exp	65	61	73	55	63
Total Revenue Expenditure	244	244	262	290	295
Revenue Surplus	27	26	-31	20	33
Capital Receipts	**NA**	**NA**	**NA**	**NA**	**NA**
Capital Expenditure	**NA**	**NA**	**NA**	**NA**	**NA**
Projected population	**916286**	**928638**	**941040**	**953562**	**966158**
TIRUPPUR					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	91	97	113	197	136
Government grants and assigned revenues	89	97	77	142	121
Total Revenue Receipts	179	194	190	340	257
Municipal Revenue Expenditure					
Establishment and Administrative Exp	50	51	65	85	95
Operations & Maintenance Exp	96	109	108	123	180
Total Revenue Expenditure	227	235	246	298	419
Revenue Surplus	-47	-42	-57	41	-161
Capital Receipts	**81**	**132**	**67**	**161**	**678**
Capital Expenditure	**109**	**161**	**90**	**131**	**613**
Projected population	**480481**	**486958**	**493461**	**500028**	**506633**

TUMAKURU					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	29	34	41	45	48
Government grants and assigned revenues	62	61	50	55	67
Total Revenue Receipts	90	94	91	100	116
Municipal Revenue Expenditure					
Establishment and Administrative Exp	11	11	11	16	17
Operations & Maintenance Exp	35	48	59	61	62
Total Revenue Expenditure	76	104	111	124	130
Revenue Surplus	14	-9	-20	-25	-14
Capital Receipts	**81**	**70**	**42**	**45**	**58**
Capital Expenditure	**85**	**70**	**64**	**63**	**58**
Projected population	**361370**	**368550**	**375799**	**383116**	**390515**
UJJAIN					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	30	71	51	42	67
Government grants and assigned revenues	167	390	236	255	190
Total Revenue Receipts	197	461	286	297	257
Municipal Revenue Expenditure					
Establishment and Administrative Exp	64	85	105	111	127
Operations & Maintenance Exp	52	82	55	67	64
Total Revenue Expenditure	202	467	293	324	291
Revenue Surplus	-5	-7	-7	-26	-34
Capital Receipts	**222**	**359**	**150**	**297**	**112**
Capital Expenditure	**222**	**413**	**170**	**265**	**168**
Projected population	**570795**	**581398**	**592026**	**602731**	**613488**

VADODARA					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	487	496	537	669	716
Government grants and assigned revenues	468	451	487	505	505
Total Revenue Receipts	955	946	1024	1174	1221
Municipal Revenue Expenditure					
Establishment and Administrative Exp	451	474	596	616	608
Operations & Maintenance Exp	165	150	157	163	204
Total Revenue Expenditure	873	923	1089	1132	1196
Revenue Surplus	81	24	-65	42	25
Capital Receipts	**242**	**183**	**93**	**95**	**122**
Capital Expenditure	**242**	**153**	**182**	**108**	**118**
Projected population	**2005034**	**2056560**	**2108563**	**2161110**	**2214134**
VARANASI					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	41	45	51	64	84
Government grants and assigned revenues	180	233	228	206	227
Total Revenue Receipts	221	278	279	270	311
Municipal Revenue Expenditure					
Establishment and Administrative Exp	179	176	189	174	219
Operations & Maintenance Exp	54	100	65	96	51
Total Revenue Expenditure	240	287	264	283	284
Revenue Surplus	-18	-9	15	-13	28
Capital Receipts	**196**	**249**	**399**	**336**	**307**
Capital Expenditure	**80**	**81**	**230**	**192**	**119**
Projected population	**1343186**	**1370250**	**1397557**	**1425027**	**1452685**

WARANGAL					
					Rs. Cr
Municipal Revenue Receipts	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Own Revenues	138	95	112	162	148
Government grants and assigned revenues	35	16	16	21	8
Total Revenue Receipts	173	112	138	183	156
Municipal Revenue Expenditure					
Establishment and Administrative Exp	46	43	42	60	58
Operations & Maintenance Exp	21	42	43	51	54
Total Revenue Expenditure	149	106	143	153	156
Revenue Surplus	24	6	-5	29	0
Capital Receipts	**29**	**167**	**114**	**80**	**65**
Capital Expenditure	**38**	**32**	**27**	**33**	**20**
Projected population	**931656**	**954034**	**976592**	**999447**	**1022542**

Notes