# TABLE OF CONTENTS

## 01 Introduction

- What was the impetus for creating the Toolkit? 8
- How is the Toolkit organized? 9

## 02 Executive Summary

## 03 Enumeration

- Key Messages 8
- What are the current practices? 9
- What are the key challenges? 10
- What are the recommendations? 11
- How to implement the recommendations? 12
04 Valuation
Key Messages 31
What are the current practices? 31
What are the key challenges? 34
What are the recommendations? 35
How to implement the recommendations? 36

05 Assessment
Key Messages 41
What are the current practices? 41
What are the key challenges? 42
What are the recommendations? 43
How to implement the recommendations? 44
06
Billing and Collection

Key Messages
What are the current practices?
What are the key challenges?
What are the recommendations?
How to implement the recommendations?

07
Reporting

Key Messages
What are the current practices?
What are the recommendations?

08
Annexures

Annexure 1: List of reports for reference/additional reading
Annexure 2: List of State Acts that were referred for the Toolkit
Annexure 3: List of Cities studied for the Toolkit
Consultative Group of Ministers on Property Tax Reforms in India

• **Shri Hardeep Singh Puri**
  Hon'ble Minister of State (I/C), Ministry of Housing and Urban Affairs (Chairperson)

• **Shri Pratap Jena**
  Hon'ble Minister, Housing and Urban Development, State of Odisha

• **Shri Brahm Mohindra**
  Hon'ble Minister (Cabinet Minister), Local Government, State of Punjab

• **Shri S.P. Velumani**
  Hon'ble Minister, Municipal Administration and Rural Development, State of Tamil Nadu

• **Shri Ashutosh Tandon**
  Hon'ble Minister, Urban Development, Urban Employment and Poverty Alleviation, State of Uttar Pradesh

• **Shri Vijay Rupani**
  Hon'ble Chief Minister and Minister for Urban Development, State of Gujarat

• **Shri Biplab Kumar Deb**
  Hon'ble Chief Minister and Minister for Urban Development, State of Tripura

Supported by

Steering Committee of Secretaries

• **Shri Durga Shanker Mishra**
  Secretary, Ministry of Housing and Urban Affairs (Chairperson)

• **Shri Mukesh Puri**
  Additional Chief Secretary, Urban Development and Housing Department, Govt. of Gujarat

• **Shri G. Mathi Vathanan**
  Principal Secretary, Department of Housing and Urban Development, Govt. of Odisha

• **Shri Sarvjit Singh**
  Principal Secretary, Housing and Urban Development, Govt. of Punjab

• **Shri Harmander Singh**
  Principal Secretary, Housing and Urban Development, Govt. of Tamil Nadu

• **Shri Gitte Kiran Kumar**
  Special Secretary, Urban Development, Govt. of Tripura

• **Shri Deepak Kumar**
  Principal Secretary, Urban Development, Govt. of Uttar Pradesh

Knowledge Partner:
Janaagraha Centre for Citizenship and Democracy
The Government of India’s flagship schemes and missions have since 2014 set our cities on a path of unprecedented transformation. However such transformation is sustainable over the long-term only if our Cities progressively achieve greater degrees of financial self-sufficiency. Urban Local Bodies need to therefore urgently improve the share of own revenues in their total revenues to sustain the current trajectory of urban transformation. This Toolkit is a step in that direction and marks a new phase of sustained focus on the agenda of municipal finance reforms. Atmanirbhar Bharat certainly needs Atmanirbhar Cities, and our Ministry is committed to catalysing them in partnership with States.

Property tax is presently the single highest contributor to own revenues of Urban Local Bodies. The emphasis of both the XV Finance Commission and the Atmanirbhar Bharat Abhiyan on property tax reforms is therefore pertinent and timely. I am certain that this Toolkit will serve States and Cities well in designing and implementing much needed reforms in property tax. We will continue to sharpen focus on municipal own revenue enhancement, create an enabling ecosystem for municipal borrowings and strengthen municipal capacities by leveraging www.cityfinance.in, the national platform for municipal finance which our Ministry launched in June 2020.
01
INTRODUCTION
WHAT WAS THE IMPETUS FOR CREATING THE TOOLKIT?

XV Finance Commission report for 2020-21 and the Atmanirbhar Bharat Abhiyan (additional borrowing of 2% of GSDP to States for 2020-21) call for reforms in Property Tax

The XV Finance Commission in its Report for 2020-21 States that for Urban Local Bodies (ULBs) to qualify for grants from 2021-22 onwards, States have to notify floor rates for property tax and thereafter show consistent improvement in collection in tandem with the growth rate of State’s own GSDP. The Ministry of Finance, as part of the additional borrowing of 2% of GSDP to States for 2020-21 under the Atmanirbhar Bharat Abhiyan, has also called for States to reform property tax valuation (linked to 0.25% of the additional borrowing), by linking floor rates to prevailing guidance values/circle rates and putting in a system for periodic revision of property tax rates (similarly for user charges) in line with increase in price.

The Ministry of Housing and Urban Affairs is the nodal Ministry for monitoring compliance with property tax reforms under both of the above

The Ministry of Housing and Urban Affairs (MoHUA) has constituted a Consultative Group of State Urban Development Ministers with regional representation from Gujarat, Odisha, Punjab, Tamil Nadu, Tripura and Uttar Pradesh, under the chairmanship of Union Minister of State (I/c), Housing and Urban Affairs. To support the Consultative Group, a Steering Committee has been constituted under the chairmanship of Secretary, MoHUA, with Principal Secretaries, Urban Development Departments of the above mentioned 6 States as members. The Consultative Group of Ministers supported by the Steering Committee of Secretaries will study the various available models for effective estimation, periodical review and collection of property tax and thereafter, propose required reforms in process and amendments, if any, in State Municipal Laws to improve property tax collections.

In order to assist the Consultative Group and Steering Committee, MoHUA has entrusted Janaagraha Centre for Citizenship and Democracy to undertake a landscape study of property taxation in Indian States and Cities with a focus on best practices that are scalable. For this study, property tax provisions of Municipal Acts of 28 States and property tax Rules of 30 cities were reviewed. Current and best practices of 20 Urban Local Bodies (ULBs) in 7 States (Chhattisgarh, Jharkhand, Karnataka, Maharashtra, Odisha, Punjab and Telangana) were studied in detail through field visits and interviews of over 50 stakeholders ranging from Principal Secretaries to Revenue Officers. These 20 cities are spread across different population categories.
The Toolkit organizes the reform agendas into 5 sections to cover the 5 stages of the lifecycle of property tax

It is important to note that each of the 5 sections are inter-related, thus making it essential for reforms to be undertaken in each stage in a lifecycle approach, rather than in a piecemeal fashion.

Each section covers the following –
1. Landscape of current legislative and on-ground practices in property taxation
2. Issues and implementation challenges with current practices
3. Reform recommendations that States/ULBs can undertake to overcome these issues and
4. Step-wise implementation plans
Reform recommendations in each stage of the lifecycle have been framed as responses to issues and implementation challenges, sharply addressing what needs to be done and how it needs to be done.

In each section, reform recommendations have been framed as responses to issues and implementation challenges, sharply addressing the most relevant “what to do” and “how to do” questions; our endeavor has been to make this most actionable and easy-to-use for practitioners on the ground. Best practices of select States and ULBs have also been provided as templates that can be replicated or built upon. These best practices have been provided in the form of Boxes at relevant places in the chapters for ease of reference. The Toolkit provides a list of reports and case studies for further reading.

As a first step to enable these reforms, MoHUA has published this Toolkit that will be available in both print and digital formats.

MoHUA has published this Toolkit to provide an easy to use handbook for policymakers who are interested in property tax reforms. This is the first step towards enabling the reforms envisaged under the XV Finance Commission and additional borrowing of 2% of GSDP to States. This Toolkit will also be available in digital format on www.cityfinance.in.
ULBs do not generate sufficient own revenues to meet their infrastructure expenditure obligations

India is urbanising rapidly, with urban population expected to rise from approximately 40 crores presently to over 60 crores by 2030 and over 80 crores by 2050, by which time urban population is likely to constitute over 50% of the total population. The High Powered Expert Committee for Estimating the Investment Requirements for Urban Infrastructure Services estimated the expenditure required to finance urban infrastructure and services at Rs. 39.2 lakh crores during 2011-2031. However, ULBs that bear a large percentage of this expenditure obligation currently do not generate sufficient own revenues to finance this expenditure, even after considering fiscal transfers and various forms of assistance from Central and State Governments.

The aspiration for property tax collections should be to reach Rs. 40,000 crores in 2024 from the current estimate of approximately Rs. 20,000 crores

Property tax forms a majority of the own revenues of ULBs. An estimate of property tax from the financial statements of over 1,000 ULBs pegs the national property tax collections at approximately Rs. 20,000 crores. This is far lower than peer countries and investment required in urban infrastructure. Subject to COVID-19 impact, ULBs should aspire to double this to Rs 40,000 crores by 2024 (Compounded Annual Growth Rate (CAGR) of approximately 18%).

Estimate contribution to total:

<table>
<thead>
<tr>
<th>Popl. Category</th>
<th>41%</th>
<th>15%</th>
<th>12%</th>
<th>16%</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;4M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1M-4M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500K-1M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100K-500K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;100K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To achieve this aspiration, a “Whole of Systems” transformation is required comprising the entire lifecycle of property tax

In order to meet such an aspiration, a comprehensive approach to property tax reforms is required as opposed to a piecemeal approach. This would involve simultaneous reforms in all 5 stages of the property tax lifecycle given below.

1. **Enumeration** - Count of properties is complete and accurate, and updated regularly
2. **Valuation** - All properties are valued appropriately for the purpose of taxation
3. **Assessment** - All self-assessments are adequately verified on the field, and reassessments are done periodically and captured in the property register
4. **Billing and Collections** - All properties are billed/self-assessed and property tax is collected from all properties that have been billed/self-assessed
5. **Reporting** - Property tax data is reported accurately and reviewed systematically as part of MIS reports and dashboards that inform decision-making
The current landscape and associated issues and recommendations have been summarized below.

<table>
<thead>
<tr>
<th>Stage of Property Tax Lifecycle</th>
<th>Current Practice</th>
<th>Issues</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| **Enumeration**                 | Manual creation of property records | Incomplete and inaccurate records; no single source of truth | Proper implementation and adoption of GIS-based digital property register including -  
  • GIS mapping is completed  
  • Field survey is conducted to check the veracity of GIS maps  
  • Existing records are digitized and integrated with the GIS maps  
  • Adequate capacity is built within the ULB to maintain the digital register |
<p>| <strong>Creation of digital property records by digitizing existing property records through manual input of data with or without field survey</strong> | Prone to human errors leading to incomplete and inaccurate records | | |
| <strong>Manual updation of property registers</strong> | Ad-hoc at the discretion of revenue officials; staff shortages leading to incomplete and inaccurate records | | Single digital property database used by all Municipal Depts. and eventually relevant State depts. as well (stamp duties and registration, power etc.) |
| <strong>Most State Acts do not have a robust legal provision for regular enumeration</strong> | Ad-hoc updation of property registers leading to incomplete records | | Enumeration to be mandated in State Acts/Rules |</p>
<table>
<thead>
<tr>
<th>Stage of Property Tax Lifecycle</th>
<th>Current Practice</th>
<th>Issues</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation</td>
<td>11 States follow Annual Rental Value method (ARV)</td>
<td>Criteria used for arriving at the ARV is not prescribed and ARV is generally assigned on ad-hoc basis; There is no credible source for assessing market rental values</td>
<td>All cities adopt the capital valuation method with modifications to ensure minimal multiplicative factors and a provision for regular updation of property tax in line with increase in guidance value</td>
</tr>
<tr>
<td></td>
<td>9 States follow Unit Area Value method (UAV) with or without direct linkage to guidance value</td>
<td>UAV is prescribed without clear linkage to underlying factors If guidance value is not prescribed as one of the underlying factors, property tax is not buoyant</td>
<td>العالم</td>
</tr>
<tr>
<td></td>
<td>3 States follow Capital Value method (CV)</td>
<td>Guidance values are not updated for property tax calculation Use of several multiplicative factors complicates the formula and reduces ease of compliance</td>
<td>العالم</td>
</tr>
<tr>
<td>Stage of Property Tax Lifecycle</td>
<td>Current Practice</td>
<td>Issues</td>
<td>Recommendations</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Assessment</td>
<td>Physical assessment is conducted for all properties</td>
<td>At the discretion of the revenue official; staff shortages may also lead to incomplete and inaccurate records</td>
<td>An online Self-Assessment mechanism with a system for raising demand/sending reminders and conducting random scrutiny of assessment forms</td>
</tr>
<tr>
<td></td>
<td>Self-Assessment is conducted without a system for scrutiny</td>
<td>No check in place for inaccurate information;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-Assessment is conducted without a system for raising demand/sending reminders</td>
<td>Compliance rates are low</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Broad-based exemptions without a well-defined rationale</td>
<td>Depressed tax base; inequity in tax burden</td>
<td>Exemptions should be based on a rationale that is clearly defined in the State Acts. Revenue foregone as a result of exemptions should be included in annual budgets of Municipalities</td>
</tr>
<tr>
<td></td>
<td>Weak dispute redressal mechanism - no mechanism OR civil courts OR assessment tribunals/property tax boards (last of which are generally ineffective)</td>
<td>Increased administrative burden; depressed tax base</td>
<td>Dispute redressal mechanism to be simplified with involvement of Commissioner/Divisional or Regional Commissioners or DMs (depending on the State)/DMAs or DLBs; include provision for upfront remittance of 50% of disputed amount</td>
</tr>
<tr>
<td>Stage of Property Tax Lifecycle</td>
<td>Current Practice</td>
<td>Issues</td>
<td>Recommendations</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Billing and Collection</td>
<td>No process for billing or reminders</td>
<td>Low compliance rates</td>
<td>Automatic digital bills are generated from the digital database and reminders are sent via SMS</td>
</tr>
<tr>
<td></td>
<td>Paper-based billing with door-to-door distribution</td>
<td>Staff shortages leading to incomplete billing</td>
<td>Technological interventions combining - a digital property tax register + integrated billing + digital payments (mobile + internet + handheld point of sale devices) + a dedicated cadre of tax collectors / Outsourcing of collections</td>
</tr>
<tr>
<td></td>
<td>Manual door-to-door collections with cash-heavy transactions</td>
<td>Low collection efficiency; weak collection system prone to leakages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weak provisions for penalizing defaulters</td>
<td>Low compliance rates</td>
<td>Stronger penal provisions mandated in State Acts</td>
</tr>
<tr>
<td>Reporting</td>
<td>No MIS OR MIS not reviewed at periodic intervals OR not integrated with decision making and performance management of teams/individuals</td>
<td>Ad-hoc decision making; no performance management</td>
<td>Quarterly reviews of property tax MIS at city/ward/revenue official level; Ranking of revenue officials based on the MIS to motivate through rewards and recognition, foster adoption of best practices</td>
</tr>
<tr>
<td></td>
<td>Demand and Collection data is not available in public domain</td>
<td>Low compliance rates</td>
<td>Publish ward-wise demand and collection data, especially defaulters' data, in public domain</td>
</tr>
</tbody>
</table>

MoHUA will support implementation of property tax reforms through a National initiative of technical assistance to States and ULBs called PRAPTI-Policy and Reforms for Augmentation of Property Tax in India. A PRAPTI unit will be set up at MoHUA as a dedicated team that focuses on effective implementation of property tax reforms. Under this initiative, MoHUA will implement a PRAPTI Fellowship to provide a cadre of trained Fellows to States for technical assistance and human resource support. Along with this, the following will be enabled on www.cityfinance.in (an online portal of the MoHUA focused on municipal finance) -

1. **National/State Ranking of ULBs/Wards/Revenue Officials**, and peer learning and rewards and recognition program to motivate revenue officials
2. **Quarterly** Property Tax MIS
3. **Modeling tools** for estimating property tax potential and valuation scenarios
KEY MESSAGES

There is still widespread use of manual, paper-based systems for creation and maintenance of property registers. Adoption of GIS-based digital register has been patchy with no process in place for regular updation. Proper implementation and adoption of GIS-based digital property registers, creation of a single digital property register for all municipal taxes, fees and user charges and also other purposes (eventually also across databases of power/water utilities, stamps and registration dept etc.) and a legal mandate for periodic updation can ensure complete and accurate property records.

WHAT ARE THE CURRENT PRACTICES?

Enumeration means counting of properties for the purpose of taxation. In practical terms, this entails the creation and maintenance of a property register. The ideal process of enumeration should ensure completeness and accuracy of records. Thus, all properties that are legally in the tax net should be recorded in the tax register and this register should be regularly updated to capture any new properties or changes to existing properties’ attributes. The existing landscape of current practices in enumeration has been described in the flowchart below (good practices have been highlighted in green).
WHAT ARE THE KEY CHALLENGES?

Physical registers maintained through manual updation lead to incomplete and inaccurate records

Manual records are generally prone to errors, both in terms of completeness and accuracy. They could also result in greater degrees of discretion of officials.

While GIS-based property mapping has been adopted by several States and cities, implementation has been patchy and there is no coherent plan for regular updation

While GIS mapping ensures completeness of property records to a large extent, four principal gaps remain. First, there is no provision for regular updation post GIS mapping is complete either by mandatory linkage to other department databases or otherwise. Second, there is no institutional mechanism to ensure continuity beyond a one-time exercise, including knowledge transfer and creation of capabilities within the ULB or State intermediaries. Third, some cities have undertaken GIS-based surveys but have not integrated the survey data with their existing property tax database, rendering the exercise futile. Fourth, the smaller cities, which are largely dependent on grants to keep pace with their daily expenditure cannot afford even a one-time GIS mapping exercise.

The lack of a robust provision for periodic enumeration in State Acts results in incomplete property registers over a period of time

Majority of the State Acts do not have clear provisions for regular enumeration of properties. Only 5 States i.e. Andhra Pradesh, Chhattisgarh, Goa, Madhya Pradesh and Manipur have a provision for “periodic assessment of city areas” within a fixed period of time. 5 States i.e. Gujarat, Karnataka (only in Municipal Corporation Act), Tamil Nadu (only in Municipal Councils), Uttar Pradesh and Uttarakhand have a provision for “creation of a new assessment list” or “revision of assessment” at a fixed interval of time. This ensures revision of assessment of existing properties but does not include coverage of new properties.

There is a lack of standardized address nomenclature in cities making it difficult to integrate different property databases

There is a lack of standardized address nomenclature in Indian cities. Even street names in cities may not be unique, resulting in difficulty in integration across databases. This challenge also results in difficulties in a wide range of field activities such as surveys, reassessments etc. Few States and cities are beginning to adopt standardized door numbering linked to GIS/other tech enabled back end systems to overcome this challenge.
The staffing deficit in ULBs render regular field work difficult
There is generally fairly acute staffing deficit in ULBs i.e. the number of working posts against sanctioned posts (average of 35% for 25 of the largest ULBs including State capitals, sometimes going beyond 60% for smaller ULBs). This applies to the revenue department as well, impacting both assessment and collections in a substantially non-digital environment.

WHAT ARE THE RECOMMENDATIONS?

Recommendation 1

Creation of a GIS-based digital property register – This has been undertaken by several States and cities. One such case is the Raipur Municipal Corporation that has been illustrated in Box 1 below.

Box 1 – GIS-based Municipal Tax and Fee Collections System in Raipur

Pre-Project Situation

Raipur Municipal Corporation (RMC) up until FY 17-18 had a manual system for property enumeration, assessment and billing. The coverage of properties in the tax net was low. The manual billing system led to delayed billing and leakages.

Project Details

In 2018 RMC launched a GIS based and IT enabled property tax software under Capacity Building for Urban Development programme of the Ministry of Housing and Urban Affairs. With the support of an external agency, RMC created GIS maps of the city through drone imaging and supported this with door-to-door surveys conducted using a specially developed mobile app. Data was ratified by the ULB authorities and a digital property register was created. The legacy demand and collection books were also digitized and integrated with the GIS-based digital register.

Results

This system is now being used to generate demand and collect taxes. The new system led to introduction of about 54,000 new properties into the tax net within a single financial year. RMC also recorded an additional property tax demand of Rs. 41 crores, a 74% increase from the previous year’s demand. The survey also enabled classification of properties basis usage i.e. commercial, residential and mixed-use that helped in better enforcement.
Few States like Odisha and selected cities in different States are also embarking on Digital Door Numbering with linkages to GIS-based mapping to ensure all properties are mapped and assigned Unique Property IDs (UPIDs)

Recommendation 2

Mandate, periodic enumeration in State Acts

Recommendation 3

Maintenance of a single digital property database - This has been undertaken in part by a few States and cities. Andhra Pradesh has created a single digital property register for property tax, and water and sewerage charges. Punjab is in the process of integrating the property tax register to the electricity distribution database. Both the cases have been summarized in Boxes 2 and 3 below.

Box 2: Creation of a Single Digital Repository of Property Data in Andhra Pradesh

Pre-Project Situation

Separate bills were generated by all Municipal Departments prior to FY 17-18. There was no single version of truth to ascertain the number of properties in the tax net, property tax demand figure, tax collection and arrear data. Property tax administration was not based on data-driven decision making. Collection efficiency and the coverage of properties were low.

Project Details

The State Government partnered with eGovernments Foundation, a non-profit organization in FY 15-16 to, among other things, digitize property tax records, increase channels and modes of payments and introduce data-based performance management system for the tax collectors. The property tax records were corrected through a field survey to ensure that accurate and complete records were digitized. Digital integrated billing for property tax, water and sewerage charges was enabled that ensured timely billing within the first week of the FY. GIS based property tax module was created that had revenue dashboards for tracking tax collector wise performance. Multiple channels of payment like ward offices, bank branches and citizen service centers were introduced. Online payments system through website and mobile based app was created to boost digital payments.
The property database used by the property tax departments of ULBs was not integrated with any utility database. Property tax department relied on manual surveys or costly technological interventions for updation of property records. 99% of the properties have electricity connections. Thus, electricity distribution database is largely complete.

While this survey is complete, PMIDC is yet to integrate the information collected from the surveys to the existing property tax registers. They plan to extend this project to other cities in Punjab.

### Box 3: Database Integration of Property Tax Database with Electricity Distribution Database in Punjab (Work initiated and in progress)

#### Pre-Project Situation

The property database used by the property tax departments of ULBs was not integrated with any utility database. Property tax department relied on manual surveys or costly technological interventions for updation of property records. 99% of the properties have electricity connections. Thus, electricity distribution database is largely complete.

#### Project Details

The Punjab Municipal Infrastructure Development Company (PMIDC), a non-profit company constituted by the Department of Local Self-Government, Government of Punjab is currently undertaking a project to integrate the electricity distribution database of Punjab State Power Corporation Ltd. with the property tax database of ULBs. This project has been piloted in two cities, Khanna and Hoshiarpur. The methodology adopted by PMIDC is to first create GIS base maps of the city and provide each property a UPID. These maps are used by contracted surveyors to conduct physical surveys. The surveyors identify individual properties against the map, note down the electricity meter numbers of the property and make requisite corrections in the map. The information thus collected enables mapping of property tax IDs to electricity meter numbers. These meter numbers are then verified with electricity distribution companies and information regarding the property attributes and owner details are obtained. The property tax register is accordingly updated.

#### Results

These interventions led to 25% increase in coverage and improved collection efficiency by 30% between FY 15-16 and FY 18-19. There was a 111% increase in revenues. Single digital annual bill is generated with property, water & sewerage charges reducing the number of bills from 7 to 1 per year.
HOW TO IMPLEMENT THE RECOMMENDATIONS?

For Recommendation 1
- Adoption of GIS-based digital property register

Step 1
Selecting an entity to implement GIS mapping

Tender out creation of digital GIS-based register to a private agency OR commission the same to an existing institution with the required capabilities. This can be done as a State-wide project for all ULBs to make it economically viable for smaller Municipalities. For example, Punjab Municipal Infrastructure Development Company is a non-profit making company constituted by the Department of Local Government that is undertaking GIS mapping of cities in Punjab. Large Municipal Corporations may choose to tender out/commission the work separately as well.

Step 2
Procure high-resolution satellite images and create a digital base map of the city

The first step for GIS mapping involves procuring high-resolution satellite images of all areas of the city. Our interviews with select agencies that undertake GIS mapping ULBs revealed the following options provided in table 1 below (a more systematic study may be required to compile a complete list with further details) -

Table 1: Available options for procurement of satellite images for GIS mapping

<table>
<thead>
<tr>
<th>Option</th>
<th>Resolution</th>
<th>Cost</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archive satellite images from Google open source platform</td>
<td>Very low</td>
<td>Minimal processing cost</td>
<td>Minimum features like property location are available- can be used by smaller Councils/Nagar Panchayats (For e.g. – Mandi Nagar Parishad)</td>
</tr>
<tr>
<td>Archive satellite images from National Remote Sensing Centre (NRSC)</td>
<td>50 cm (low)</td>
<td>Rs 3,000-4,000 per sq. km.</td>
<td>Few features like property location and property size are available; manual field survey is necessary to ensure accuracy</td>
</tr>
<tr>
<td>Latest updated satellite images from NRSC</td>
<td>30 cm (high)</td>
<td>Rs. 7,000-8,000 per sq. km.</td>
<td>Few features like property location and property size are available; manual field survey is required to establish usage of property (For e.g. – Ludhiana Municipal Corporation)</td>
</tr>
<tr>
<td>Drone imaging</td>
<td>Very high</td>
<td>Rs. 10,000-12,000 per sq. km.</td>
<td>Several features like property location, property size, individual floor size and even usage of property can be discerned; minimizes the need for a field survey (For e.g. – Raipur Municipal Corporation)</td>
</tr>
</tbody>
</table>

Source: Interviews with private agencies that undertake GIS mapping in ULBs
The next step is to digitize the images and create a city-wide base map that captures all the required physical features of the city including geo-tagged property locations. Contour-based height modelling can also be done to ascertain the height of individual properties and the number of floors at the mapping stage itself.

**Step 3**

**Creation of a digital database of properties**

Creation of a digital database of properties involves the following sub-steps -

1. Divide the city into equal-sized blocks/sectors with similar count of properties in each block.
2. Assign each property a UPID which encapsulates the sector or block number and the geo-tagged coordinates.
3. Digitize existing property records and assign UPIDs to the properties in the record.

**Step 4**

**Conduct door-to-door survey for on-ground verification**

The following are the sub-steps required for conducting door-to-door survey -

1. Create a web-based database and a complementary mobile application with the records of the existing properties and the UPIDs of the new properties identified through GIS mapping.
2. Send surveyors equipped with mobile devices for accessing the application for on-ground field survey. The surveyors conduct a thorough door-to-door survey that captures all attributes of the properties. The surveyors can also obtain digital signature of property owners/occupiers on the captured attributes and render more transparency to the process.
3. The data captured in the survey needs to be updated in real-time in the digital property register.

**Step 5**

**Build capacities within the staff/hire contractual staff/outsource to maintain GIS-based digital property register**

Capacity Building would be required to ensure that existing staff are adequately equipped to manage and maintain the GIS-based digital property database. Alternatives for ULBs include hiring contractual GIS experts or outsourcing the maintenance to agencies or firms specialized in the same.
Prima facie, 19/28 State Acts do not have a clear provision for periodic enumeration of city areas for bringing new properties into the tax net. However, from close examination of the statutory provisions, it has been ascertained that the following actions are required—

1. **State Acts that need to supplement existing provisions with rules specifying the technology to be used for periodic enumeration**
   5/28 States have a provision for periodic assessment of city areas within a fixed period of time. (4 States specify for all ULBs and 1 State for only Municipal Corporations (MCs)). These States need to supplement these provisions with rules, including specification of methodology and/or technology to be used for such periodic enumeration.

2. **State Acts that need to supplement existing provisions with rules specifying that ALL properties in the Municipal area should be assessed and the technology to be used for periodic enumeration**
   5/28 States have a provision for creation of a ‘new assessment list’ or revision of assessment at a fixed interval of time (3 States specify for all ULBs, 1 State for only MCs and 1 State for only Municipal Councils). These provisions cover revision of assessment of existing properties i.e. re-assessment, but do not cover periodic enumeration of city areas for bringing new properties into the tax net. These States need to supplement existing provisions with rules specifying that ALL properties in the Municipal area should be assessed, and the methodology and technology to be used for such periodic enumeration. 10/28 States have a provision for revision of tax value at fixed interval of time (8 States specify for all ULBs, 1 State for only MCs and 1 State for only Municipal Councils). These ensure that existing properties are re-assessed basis the revised valuation but do not cover periodic enumeration. The rules for these States should be supplemented in a similar way as above.

3. **State Acts that require amendments**
   13/28 States do not have a provision for periodic enumeration or assessment or valuation (8 States for all ULBs, 3 only for Municipal Councils and 2 only for MCs). These States require amendments to the Acts.

The Table 2 below summarizes the State-wise statutory provisions for periodic enumeration and the subsequent actions required for each category of State Acts.
### Table 2: Summary of State-wise statutory provisions and actions required for periodic enumeration

<table>
<thead>
<tr>
<th>Existing types of provisions</th>
<th>Reform required</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for periodic assessment of city areas within a fixed period of time</td>
<td>Property tax rules to include - Methodology and technology to be used for surveys. For e.g. GIS mapping to be undertaken every fixed number of years OR field manual survey to be conducted every fixed number of years</td>
<td>Andhra Pradesh (only MCs), Chhattisgarh, Goa, Madhya Pradesh, Manipur</td>
</tr>
<tr>
<td>Provision for creation of a ‘new assessment list’ or revision of assessment at a fixed interval of time. These provisions allude to revision of assessment of existing properties but do not cover periodic enumeration of city areas for bringing new properties into the tax net.</td>
<td>Property tax rules to include 1. Physical survey/GIS mapping to be conducted for property survey along with assessment list revision 2. Fixed period in which this should be done</td>
<td>Gujarat, Karnataka (only MCs), Tamil Nadu (only Councils), Uttar Pradesh and Uttarakhand</td>
</tr>
<tr>
<td>Provision for revision of tax value at fixed interval of time (while this ensures existing properties are re-assessed basis revised valuation this doesn’t provide for coverage of new properties through periodic enumeration).</td>
<td>Property tax rules to include 1. Physical survey/GIS mapping to be conducted for property survey along with assessment list revision 2. Fixed period in which this should be done</td>
<td>Haryana (only MCs), Himachal Pradesh, Kerala, Maharashtra, Meghalaya, Nagaland, Odisha, Punjab (only Councils), Sikkim, West Bengal</td>
</tr>
<tr>
<td>No provision OR left to the discretion of the State/ULB</td>
<td>State Act to be amended to include a provision for periodic survey of all areas of ULB within a fixed period of time using GIS technology/field survey</td>
<td>Andhra Pradesh (only Councils), Arunachal Pradesh, Assam, Bihar, Haryana (only Councils), Jharkhand, Karnataka (only Councils), Mizoram, Punjab (only MCs), Rajasthan, Tamil Nadu (only MCs), Telangana, Tripura</td>
</tr>
</tbody>
</table>

*Source: Statutory provisions in State Acts as per the list provided in Annexure 2 below*
Mandate the use of UPIDs for the purpose of creation and maintenance of property databases as well as for property tax billing and collections.

Digitise existing property records of other Municipal databases like water, sewerage, electricity, trade license, building permission, etc.

Conduct field survey OR get property owners to compulsorily provide utility information at the time of property tax assessment to map UPIDs to utility reference numbers like electricity meter number, water meter number, trade license number, building permission ID, etc.
**Step 4**
Integrate other municipal databases with property tax database using the UPID

**Step 5**
Use the single digital property database for billing of all properties for taxes and other fees and user charges
A Toolkit for Property Tax Reforms

KEY MESSAGES

There are three valuation methodologies i.e. Annual Rental Value (ARV), Unit Area Value (UAV) and Capital Value (CV) that are used by States, with multiple variations. These methodologies vary across States and cities, both in legislation and in practice. ARV is the most commonly used valuation methodology. The common aspect between ARV and UAV is that in most States that use these methodologies, the values are prescribed in an ad-hoc manner without clear linkage to underlying factors. The CV system, which is followed in a few States, directly links property tax to the prevailing guidance value as published by the Stamp Duties and Registration Department. However the property value is generally depressed by virtue of several multiplicative factors that make the system non-buoyant. Moreover, property tax valuations are not revised regularly in tandem with increase in guidance values i.e. outdated guidance values may be used for property taxation. To overcome these challenges, all cities should adopt the CV system with minimum multiplicative factors and a provision for periodic increase linked to increase in guidance value.

WHAT ARE THE CURRENT PRACTICES?

Three methods i.e. the annual rental value method (ARV), unit area value method (UAV) and the capital value method (CV) are currently used by States in India

Valuation refers to the methodology used for assigning values to all properties for the purpose of taxation. Three methods i.e. the annual rental value method (ARV), unit area value method (UAV) and the capital value method (CV) are currently used by States in India. Annual Rental Value is the most widely used valuation method in Indian States. Table 3 tabulates the provisions on valuation methodology as per 28 State Acts.

<table>
<thead>
<tr>
<th>Methodology</th>
<th>No. of States</th>
<th>State Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Value method</td>
<td>2</td>
<td>1. Karnataka (all ULBs except Bengaluru)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Nagaland</td>
</tr>
<tr>
<td>Unit Area Value method</td>
<td>9</td>
<td>1. Delhi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Gujarat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Himachal Pradesh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Kerala</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Mizoram</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Odisha</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Sikkim</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Tripura</td>
</tr>
<tr>
<td>Methodology</td>
<td>No. of States</td>
<td>State Names</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------</td>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>
| Annual Rental Value method                      | 12            | 1. Andhra Pradesh  
2. Assam (Guwahati)  
3. Bihar  
4. Chhattisgarh  
5. Goa  
6. Haryana  
7. Jharkhand  
8. Madhya Pradesh  
9. Meghalaya  
10. Tamil Nadu  
11. Uttar Pradesh  
12. Uttarakhand |
| Flat Rate                                       | 1             | 1. Punjab |
| Provide multiple options for valuation methodology | 4             | 1. Maharashtra (Capital Value or Annual Rental Value)  
2. Rajasthan (Unit Area based method or by any other method)  
3. Telangana (Capital Value or Annual Rental Value or any such method as prescribed)  
4. West Bengal (Annual Rental Value or Capital Value where Annual Rental Value cannot be estimated) |
| State Acts where valuation methodology is unclear or not mentioned | 2             | 1. Arunachal Pradesh (not mentioned)  
2. Manipur (unclear) |

Source: Statutory provisions in State Acts as per the list provided in Annexure 2 below

The valuation models used across States and cities vary in statutory provisions and in practice

The interpretation of the definition of the methodologies in theory and in statutory provisions and their implementation vary across States and even cities. Table 4 explains each valuation methodology from the lens of theoretical definition, legislative interpretation and on-ground practice.
### Table 4: Variation in Valuation Methodologies in theory, in legislation and in practice

<table>
<thead>
<tr>
<th>Valuation Model</th>
<th>In Legislation</th>
<th>In Practice</th>
</tr>
</thead>
</table>
| **Annual Rental Value (ARV)** (followed in 12 States) Charged basis perceived rent | • Criteria used is prescribed  
• Not formulaic  
• Left to the discretion of the ULB (Andhra Pradesh State Acts mention the criteria to be used for prescribing the annual rental value and leave it to the discretion of the ULB to define the way in which the criteria will be incorporated) | • Ad-hoc basis  
• Without clear linkage to criteria (All States) |
| **Unit Area Value (UAV)** (followed in 9 States) Formula based system where unit area value is prescribed basis structure, usage, age, location, guidance value, etc. | • City is divided into homogenous blocks (Delhi/Kolkata)  
• State/Property Tax Board assigns unit area values basis different factors | • UAV prescribed without clear linkage to factors (All States)  
• Flat rate is prescribed (Punjab)  
• Unit area value of land is either directly linked to guidance value (Bengaluru) or there is no direct linkage (Delhi – guidance value is mentioned as one of the criteria basis which unit area value is prescribed) |
| **Capital Value (CV)** (followed in 2 States) Charged basis market rate | • Direct (Karnataka ex-Bengaluru)/indirect linkage (Nagaland) to guidance value  
In Nagaland, guidance value is mentioned as one of the criteria to be used for arriving at the land value. But it is not stated how the criteria will be applied. | • Guidance values not revised for property tax calculation (All ULBs in Karnataka except Bengaluru)  
• Several multiplicative factors added making formula complex (Mumbai- like structural characteristics, location, age, floor factor, usage, occupancy) |
WHAT ARE THE KEY CHALLENGES?

Valuation methodology should be buoyant and equitable, should minimize cost of implementation and discretion, and should be easy to comply with. The methodology used for arriving at the value of a category of properties should ensure that the basic principles of local taxes (Bird, 1994) i.e. buoyancy and equity are upheld. To ensure that property taxes are buoyant sources of revenues, the valuations used should reflect the actual (market) value of the property. The notions of horizontal and vertical equity should be applicable as far as possible. Horizontal equity means that people in identical situations are given equal treatment. Vertical equity implies that people with higher income pay more taxes. Achieving horizontal and vertical equity will encourage willingness of citizens to pay taxes. The valuation methodology should leave room for minimum or no discretion. High discretionary powers residing with revenue officers at the time of assessment can lead to lower transparency, rent-seeking behavior, reduce willingness of citizens to pay and consequently result in lower compliance rates and collection efficiencies. Also, valuation methodology should be easy to administer and comply with, with minimum cost of implementation.

The ARV method does not have a clear linkage to underlying factors and is prescribed in an ad-hoc manner making the system less buoyant and increasing the degree of discretion. In ARV method, there is a very tenuous linkage between the perceived rental values and the actual market values. This is primarily due to the lack of credible database on market rental values. In some cases actual rental receipts are considered, but they are at the discretion of the taxpayers and might not represent the true rent payable. Moreover, large discrepancies are caused by discretionary powers residing with revenue officials, potentially depressing the tax base.

In most States, UAV is prescribed without a clear linkage to underlying factors and may not directly link property tax to guidance value. In UAV method, property tax might or might not be directly linked to guidance value. Without clear linkage to underlying factors, UAV system becomes susceptible to high degree of discretion of the property tax assessor.

Use of several multiplicative factors in UAV and CV method increases complexity thus increasing cost of implementation and reducing ease of compliance. Multiplicative Factors (MF) are required to maintain equity. However, numerous multiplicative factors increase complexity and cost of implementation and reduce ease of compliance. The tricky aspect of the CV method is maintaining balance between keeping the system equitable through reasonable MFs on the one hand, and increasing complexity along with cost of implementation by introducing more MF categories than can be assessed comfortably, on the other.

1. Mohanty et al., 2007
2. Nath, S. 1987
Linkage to guidance value may not be sufficient condition to keep property tax buoyant if guidance values are not updated for the purpose of taxation.

While the CV method and in some cases UAV method use guidance value as a principal basis, the linkage between guidance value and the market value cannot be established with certainty. The State is responsible for prescribing the guidance values of different categories of properties and for different areas, and in several cases guidance values are not updated in congruence with market values. Market values themselves are hard to ascertain if there is understatement of property/transaction values for the purposes of stamp duties and registration. It is also important to ensure that guidance values are updated regularly for the purpose of property taxation.

### Table 5: Comparison of the Valuation methodologies

<table>
<thead>
<tr>
<th>Criteria</th>
<th>ARV</th>
<th>UAV</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equitability</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Buoyancy</td>
<td>Low</td>
<td>Moderate to High</td>
<td>High</td>
</tr>
<tr>
<td>Cost of Implementation</td>
<td>Moderate to High</td>
<td>Low</td>
<td>Low to High</td>
</tr>
<tr>
<td>Ease of Compliance</td>
<td>High</td>
<td>High</td>
<td>Moderate to High</td>
</tr>
<tr>
<td>Degree of Discretion</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

### WHAT ARE THE RECOMMENDATIONS?

**Recommendation 1**

**Adoption of Capital Value Method**

All cities should adopt the Capital Value method with-
1. Direct linkage to guidance value
2. Minimum multiplicative factors

**Recommendation 2**

**Institutional mechanism for periodic rate revision**

The State Acts should have a provision for regular updation of property tax in line with increase in guidance value. Several States have Property Tax Boards or Municipal Valuation Committees/Organizations for periodic re-valuation of properties. However, these institutions may not be functioning as envisaged in most States and there may be a need for re-imagining an institutional design for property tax valuation.
HOW TO IMPLEMENT THE RECOMMENDATIONS?

For Recommendation 1  
- Adoption of Capital Value Method

Step 1
Conduct valuation modelling for arriving at a suitable formula that links property tax to guidance value with minimum multiplicative factors

Collect information on property-wise attributes and current collection figures of representative areas from a few ULBs of each category (Municipal Corporations, Municipal Councils, Nagar Panchayats). Create a valuation formula that directly links land value to guidance value for each of the above mentioned regions and ULBs.

A model valuation formula is provided below –

Annual Value of Property = (Size of land in sq. unit.) X (Guidance value of land in sq. unit.) + (Size of building in sq. unit.) X (Cost of Construction of the building)

Where, Guidance value of land is the value of land as prescribed by the Stamp Duties and Registration Department of the State.

Cost of Construction of the building may be prescribed by the Public Works Department

Property Tax = Annual Value X Multiplicative Factors X Tax Rate

Create a valuation model with different tax rates to project possible increase in tax for different types of properties. Introduce minimum multiplicative factors like age of building or usage of building that are not already taken into account in the formula.

Step 2
Finalise the formula

Finalise the formula keeping in mind that -
1. The formula should encompass all possible categories of properties i.e. residential, commercial, industrial, hotels/malls, stadiums, vacant land, apartments, houses with appurtenant land etc.
2. The formula should not be too complicated to administer
3. All the variables of the formula should be clearly defined so as to not leave any room for discretion
**Step 3**

Make amendments to the statutory provisions in the Acts and/or Rules as required to implement the new valuation system

Introduce transition provisions to smoothen the impact of incremental tax liability if any over a period of time. For example, The Maharashtra State Act introduced transition provisions when the State moved to the Capital Value system to reduce the anticipated increase in tax demand. These transition provisions included the ceiling of the tax value for the first five years of implementation of the Capital Value method. ‘For the period of 5 years from the date on which property tax is first levied on capital value, the tax shall not exceed (i) in case of residential building, 2 times, (ii) in case of non-residential building, 3 times the amount of the property tax leviable in respect thereof in the year immediately preceding such date. Provided that property tax levied on the basis of capital value of any buildings or lands shall not exceed 40% of the amount of the property tax payable in the year immediately preceding the year or such revision.’ Table 6 below provides summaries of the existing statutory provisions as per State Acts and actions required for enabling linkage to guidance value.

**Table 6: Summary of enabling statutory provisions for linkage of property tax to guidance value**

<table>
<thead>
<tr>
<th>Existing Provision</th>
<th>Reform Required</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property tax valuation formula is directly linked to guidance value</td>
<td>Revision of multiplicative factors in Property Tax Rules</td>
<td>Karnataka, Maharashtra (provides it as an option along with annual rental value), Nagaland, Punjab (only for MCs and self-occupied properties but on ground flat-rate system is followed)</td>
</tr>
<tr>
<td>Tax value is prescribed basis some criteria, one of the criteria is guidance value</td>
<td>The rules should clearly define the formula basis which property tax will be directly linked to the guidance value with min. multiplicative factors</td>
<td>Gujarat (only MCs), Odisha, Tamil Nadu (provides CV as an option), Uttar Pradesh and Uttarakhand (only for Councils)</td>
</tr>
<tr>
<td>Valuation is basis ARV but in case the ARV cannot be determined, ‘estimated market value’ is considered/or ‘estimated market value is used only in case of certain types of properties</td>
<td>The State Act should be amended to allow for valuation basis market value as defined by the guidance value for ALL properties with minimum multiplicative factors</td>
<td>Assam, Punjab (only Councils; on ground flat rate system is followed), Goa (only MCs), Haryana (only MCs), Tamil Nadu, Uttar Pradesh and Uttarakhand (only MCs)</td>
</tr>
</tbody>
</table>
There should be a provision for periodic updation of property tax in line with increase in guidance value. The provision should include the fixed period in which the property tax will be directly linked to the guidance value with min. multiplicative factors. Ideally, for ease of administration, property tax should be increased by a fixed percentage for a range of 3-5 years; besides updating guidance values used for property tax to reflect latest guidance values published by the State, and consequent re-assessments.

### Table 7: Existing Provision and Reform Required

<table>
<thead>
<tr>
<th>Existing Provision</th>
<th>Reform Required</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria used for arriving at the taxation value is determined by the State/Property Tax Board/Valuation Board or Committee basis rules</td>
<td>Rules should be amended to include guidance value as a criteria and formula basis which property tax will be directly linked to the guidance value with min. multiplicative factors</td>
<td>Andhra Pradesh, Chhattisgarh, Gujarat (only Councils), Madhya Pradesh, Manipur, Mizoram, West Bengal, Tripura</td>
</tr>
<tr>
<td>Criteria used for arriving at the taxation value are fixed in the State Act and does not mention guidance value</td>
<td>State Act should be amended</td>
<td>Bihar, Himachal Pradesh, Jharkhand, Kerala</td>
</tr>
<tr>
<td>Criteria used for arriving at the tax value are left to the discretion of the ULB/or not defined</td>
<td>State Act should be amended</td>
<td>Arunachal Pradesh, Goa (only Councils), Haryana (only Councils), Meghalaya, Rajasthan, Sikkim</td>
</tr>
</tbody>
</table>

Source: Statutory provisions in State Acts as per the list provided in Annexure 2 below

---

**For Recommendation 2 - Institutional mechanism for periodic rate revision**

**Step 1**

**Provide for periodic increase of property tax in line with increase in guidance value**

There should be a provision for periodic updation of property tax in line with increase in guidance value. The provision should include the fixed period in which the property tax will increase and the criteria that will be used for deciding extent of increase. Ideally, for ease of administration, property tax should be increased by a fixed percentage for a range of 3-5 years; besides updating guidance values used for property tax to reflect latest guidance values published by the State, and consequent re-assessments.

**Step 2**

**Make amendments to statutory provisions in Acts and/or Rules as required to implement new system for periodic revision of property tax**

Table 7 below provides summaries of existing statutory provisions as per State Acts and actions required for periodic increase in line with increase in guidance value.
Table 7: Summary of enabling statutory provisions for periodic increase in property tax

<table>
<thead>
<tr>
<th>Existing Provision</th>
<th>Reform Required</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for periodic increase in property tax linked to increase in guidance value</td>
<td>No reform required</td>
<td>No State</td>
</tr>
<tr>
<td>Provision mentions that property tax valuation is to be revised at a fixed percentage every fixed number of years</td>
<td>Rules should clearly define that the increase in property tax should be commensurate to increase in guidance value or fixed percentage (whichever is higher)</td>
<td>Bihar, Karnataka, Kerala, Odisha, Punjab (only MCs), Haryana (only MCs), Himachal Pradesh, Jharkhand, Maharashtra (only for ULBs that have adopted CV method), Meghalaya, Sikkim, West Bengal</td>
</tr>
<tr>
<td>Provision for re-valuation to be undertaken at fixed/periodic intervals without mention of process for re-valuation will be undertaken or whether it will be based on increase in guidance value</td>
<td>Rules should clearly define that increase in property tax should be commensurate to increase in guidance value</td>
<td>Haryana (only MCs), Himachal Pradesh, Jharkhand, Maharashtra (only for ULBs that have adopted CV method), Meghalaya, Sikkim, West Bengal</td>
</tr>
<tr>
<td>Provision for State/Property Tax Board/Valuation Committee or Board to decide method for revision of property tax will be undertaken, and at what interval via rules</td>
<td>Rules should clearly define that increase in property tax should be commensurate with increase in guidance value</td>
<td>Goa (only MCs), Haryana (only Councils), Manipur, Mizoram</td>
</tr>
<tr>
<td>No provision for periodic increase in property tax/left to the discretion of the ULB</td>
<td>Act should be amended to include provision for periodic increase in property tax linked to guidance value</td>
<td>Arunachal Pradesh, Assam, Andhra Pradesh, Chhattisgarh, Goa (only Councils), Gujarat, Madhya Pradesh, Nagaland, Punjab (only Councils), Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand</td>
</tr>
</tbody>
</table>

Source: Statutory provisions in State Acts as per the list provided in Annexure 2 below
05

ASSESSMENT
KEY MESSAGES

Assessment can be undertaken by tax assessors through physical survey or by property owners through self-assessment. Due to staffing deficits in ULBs and generally as a better administrative mechanism, self-assessment method has been implemented by several States. However, self-assessment system is still not fully automated and there is no system for periodic scrutiny that gives way to discretionary powers and makes the system susceptible to leakages. This can be overcome by an online self-assessment system with a provision for random scrutiny. Broad-based exemptions without an underlying rationale reduce the tax base and increase the tax burden on non-exempt taxpayers. To discourage this, revenue foregone due to exemptions should be published in city budgets. Dispute resolution mechanism should be re-designed to be timely and effective and take into account costs and benefits.

WHAT ARE THE CURRENT PRACTICES?

Assessment of properties refers to the exercise of assessing the value of a particular property within the parameters defined by ULB or State for the purpose of taxation. The rules and formulae for assigning value to all properties within the city are defined by valuation. Assessment is the application of those rules and formulas to individual properties. The strength of the assessment process can be judged by the completeness and veracity of the assessment records.

The process of assessment has three aspects to it –
1. Assessment methodology used for assessing property tax payable by individual properties
2. Exemptions as defined by statutory provisions
3. Dispute resolution mechanisms

The flowchart below provides the current landscape of assessment practices (some good practices have been marked in green).
Property tax laws in India are generally seen to provide a number of exemptions without well-defined criteria. Some examples of broad-based exemptions are: in Jalandhar in Punjab, approximately 50% of the properties have been exempt from paying property tax. This is primarily because of property size-based exemptions (all properties smaller than 125 square yards). Mumbai recently introduced size-based exemptions of 500 square feet. In Chhattisgarh, all self-occupied properties get 50% rebate. In Karnataka, all buildings or vacant lands belonging to Development Authorities or any local authority are exempted.

Dispute resolution mechanism mostly relies on civil courts in majority of the States. As per State Acts, either there is no mechanism in place for dispute resolution or there are three institutional systems by which property tax assessment disputes are resolved – (i) Civil courts, (ii) Assessment Tribunals (iii) Property Tax Boards. In most States where the Act provides for an Assessment Tribunal or Property Tax Boards, both the Tribunal and the Board are not effectively functional.

WHAT ARE THE KEY CHALLENGES?

Manual system of assessment is cumbersome to administer and is vulnerable to leakages that could accompany a discretionary system. Prima facie, there are two fundamental problems with manual system of assessment. Firstly, this system is highly discretionary and susceptible to leakages. It can also lead to disputes between the taxpayer and the Municipality over the assessment value, further encumbering Government resources with costly and time-consuming court cases. Secondly, it is operationally cumbersome requiring significant human resources and related coordination and management.

Self-Assessment scheme without a clear system for scrutiny and verification does not provide complete and accurate assessment records. While a self-assessment scheme might reduce the burden on Government resources and increase transparency to a large extent, there are a few challenges that need to be addressed. The first concerns the methodology for scrutinizing the self-assessment forms. In Karnataka, for example, the assessment registers are not linked to the GIS-based property database created as part of enumeration. Thus, there is no way of verifying the information provided in the self-assessment forms other than physical verification. Physical verification suffers from the familiar issues of discretion and operational challenges. Moreover, lack of well-defined provisions for random checking of assessment forms (similar to the method for scrutinizing income tax returns) has led to ad-hoc checking, no regularization and therefore weaker compliance and enforcement.
Broad-based exemptions without a well-defined underlying rationale reduce the tax base and widen the tax burden on non-exempt taxpayers. Property tax provisions in India are generally seen to provide a number of exemptions. A tax system is considered good if it has a very broad base and a low rate. Any limitation in the base due to exemption and exclusion results in a higher tax burden on non-exempt taxpayers. In the context of property tax, exemptions (a) create complexity in the tax system, (b) encourage fraudulent behavior, and (c) increase administrative burden for the local bodies.

The existing dispute-resolution mechanism is cumbersome, increases administrative burden and reduces tax base. Dispute resolution mechanism in most States is dependent on civil courts. The other mechanisms like Assessment Tribunals and Property Tax Boards or Valuation Committees are largely ineffective. Part of the reason is that these mechanisms involve creation of a State-level entity that consist of not just existing Government officials but private sector experts or retired judges. In an already resource starved situation, it seems to have become difficult for departments to create and sustain yet another institution or institutional process. At the same time, large number of cases in the civil courts mean untimely decisions, reduced tax base and administrative burden for the ULBs.

**WHAT ARE THE RECOMMENDATIONS?**

**Recommendation 1**

An online Self-Assessment mechanism with a system for raising demand/sending reminders and a process for random scrutiny of Self-Assessment forms.

**Recommendation 2**

Exemptions to property tax should be based on a rationale that is clearly defined in the State Acts. Revenue foregone as a result of exemptions should be included in annual budgets of Municipalities, so it is measured and reviewed for any further action.

**Recommendation 3**

The dispute redressal system for property tax should be systematic and timely. This may require a new institutional design. Dispute redressal mechanism to be simplified with involvement of Commissioner/Divisional or Regional Commissioners or District Magistrates (depending on the State) or Director of Municipal Administration or equivalent. Furthermore, there should be a provision for 50% of the property tax assessed to be paid under protest, on the lines of central taxes.
HOW TO IMPLEMENT THE RECOMMENDATIONS?

For Recommendation 1
- Adoption of Online Self-Assessment System

An online Self-Assessment mechanism with a system for raising demand/sending reminders and a process for random scrutiny of Self-Assessment forms.

Step 1

Introduce statutory provisions in State Acts/Rules mandating random scrutiny of fixed percentage of self-assessment forms

Introduce statutory provision that mandates random scrutiny or audit of assessment forms. The provision should clearly define the process for such scrutiny, based on risk-assessments of processes and internal controls, and using random sampling methodology. Results of such random scrutiny should be published and appropriate action taken based on the same, both with respect to individual instances of deviations as well as with respect to processes and internal controls.
**Step 2**

**Integrate assessment database with property records of other utilities for automatic verification of property attributes and assessment records**

Administratively, seamless integration of assessment databases with the property registers and the databases of other utilities would ensure automatic verification of all assessment records against existing records of properties (in fact they should all be linked to/be part of a single property register). An illustrative process flow is presented below.

1. **Taxpayer submits self-assessment form online**
2. The assessment details are automatically verified against existing property records
3. Any changes from existing records are flagged and require the taxpayer to submit supporting documents (e.g., lease deed) before taxpayer can proceed to the payment window
4. A request for verification of the documents is also flagged in the system wherein the concerned authority has stipulated time for verifying and consequently amending the records
BILLING AND COLLECTION
KEY MESSAGES
Billing and collection is one stage of the property tax lifecycle that has received the most attention from both policy makers and administrators, however, progress of reforms could be accelerated through technology and process innovations. A combination of staffing deficits, incomplete property registers and poorly designed processes are the major cause of low collection efficiencies. Technological interventions like digital integrated billing, digital payments and creation of a dedicated cadre of collectors for all taxes, user charges, and fees can transform the billing and collection process and lead to immediate results. This should be backed by well-defined and strong penal provisions that strengthen the hands of administrators.

WHAT ARE THE CURRENT PRACTICES?
The primary task at this stage of the property tax lifecycle is to ensure that all the properties that have been assessed are billed and tax is collected in a timely manner. The method of billing and collection should be transparent. It should also be easy to administer and comply with. The current landscape of billing and collection practices is illustrated in the flowchart below (some good practices have been marked in green).
WHAT ARE THE KEY CHALLENGES?

Collection efficiency only measures the ability of the ULB to collect tax from those properties that have been assessed and billed. It does not account for properties that have not been assessed but are taxable. Collection efficiency of property tax ranged from 32% to 72% for five States for which data was available from CAG audit reports for the period from 2011-12 to 2015-16. While in Karnataka, Madhya Pradesh and West Bengal, collection efficiency was 65-70%, in Himachal Pradesh it was 52% in 2013-14, the only year for which data was available, and 32% in Jharkhand from 2011-12 to 2015-16.

To put this data into perspective, it is important to first understand the term collection efficiency and its implications.

**Tax Collection Efficiency = Tax collected/Demand raised**

The denominator in the above equation has profound implications. As mentioned in Chapter 1 on Enumeration, in the absence of updated and complete property tax registers, it is impossible to know the accurate number of properties in any city. Demand cannot be raised from properties which do not exist in the register to begin with. Thus, collection efficiency only measures the ability of the ULB to collect tax from those properties which have been assessed and exist in the property tax register. It does not measure the tax potential of the city. This is being cited here as a challenge to re-emphasise that a singular focus on collection efficiency alone will not suffice.

**Collection efficiency is correlated to administrative efficiencies and staff strength**

Collection efficiency is dependent on the completeness of billing and administrative efficiencies in the collection process. In many ULBs, there is no process in place to ensure completeness of billing, timely billing and issuance of reminders for payment. Several ULBs continue to maintain manual records that are vulnerable to errors. In certain cases significant staff vacancies in revenue departments directly impact collection efficiencies, besides reallocation of revenue staff for other duties. In some cities that have an online system for billing and collection, the online systems have been built by an external agency. The transfer of knowledge and requisite capacity building has lacked serious attention. Adoption of online payment of property tax has been relatively slow. The adoption rates vary across cities. They have been high for some cities like Pune (more than 55% of the collections are done digitally) and low in cities like Raipur (both cities with relatively stronger property tax systems, in other cities it is likely to be far lower).
Weak penal provisions impact compliance and affect collection efficiencies
From a policy standpoint, penal provisions too have been weak, with several State Acts not even making a reference to them.

WHAT ARE THE RECOMMENDATIONS?

Recommendation 1
Digital Billing and online system for collection

The most obvious solution to the problem of lack of transparency is creation of an online system for billing and collection. Andhra Pradesh has been fairly successful in building a centrally run online portal for billing and collection (Refer to Box 1 above). An online system should ensure that all bills are distributed electronically to property owners and automatic periodic reminders are sent via SMS.

Recommendation 2
Technological Interventions

Technology can radically transform collections in the immediate term. Combining the below interventions can transform the current collection process -

- A digital property tax register with integrated billing for taxes and other utility charges such as water, sanitation and electricity charges, and even trade licence fees
- Digital payments (mobile + internet + handheld point of sale devices) and
- A dedicated cadre of tax collectors (like Uber, Swiggy), including outsourcing of collections, may be considered as appropriate, with incentives based on incremental collections and coverage

The success story of Ranchi Municipal Corporation (summarized in Box 4 below), where there was a fourfold increase in collections between FY 14-15 and FY 17-18 post outsourcing of collection, merits serious evaluation for adoption. Several cities like Ludhiana and Amritsar have tackled the issue of staff deficit by outsourcing collection centres. They have created Citizen Facility Centers (CFC) in zonal offices responsible for filling the assessment forms of all walk-in taxpayers and collecting taxes through cash, online and digital channels. Some States like Odisha have experimented with use of hand-held Mobile Point of Sale (MPOS) devices to build transparency in the collection process and boost digital payments. Box 5 below, illustrates the case of Odisha.
Staffing in Ranchi Nagar Nigam had not kept pace with the growth in number of properties in the city. This directly impacted property tax collections that remained stagnant at Rs 5 to 6 crores from 2010 to 2013 even as the city grew rapidly. The collection efficiency fluctuated between 15%-24% which was below average when compared to other cities in India.

In 2014, Ranchi Nagar Nigam entered into an agreement with a private agency for providing managed services for collection of property tax from properties within the jurisdiction of the ULB. An agency was selected through a tender process and entrusted with the enumeration of properties, assessment of new properties, and billing and collection of property tax. The private agency deployed a team of over 148 personnel, including supervisors and managerial staff, across 55 wards in the city. These areas were earlier serviced by only 22 tax collectors.

These steps significantly enhanced the coverage of properties. Number of properties per tax collector dropped from 4,273 to around 873 on average, owing to number of personnel deployed by the agency. This enabled better coverage and follow up. Within 3 years, property tax collection in Ranchi increased more than fourfold from Rs 9 crores in 2014 to Rs 43 crores in 2017. The assessment base of properties under the tax net rose from 96,000 properties to 1.6 lakh properties, a growth of 67 per cent. Better coverage and professional supervision resulted in a significant jump (CAGR of 27% in 8 years) in the revenue collections for Ranchi Nagar Nigam.

Collections were largely done via Cash/Cheque payments through door-to-door or in-office collections. High cash handling charges and issues of cash rotation were prevalent. ULBs did not offer multiple modes of digital payments.

Box 4: Optimization of Tax Collection- The Case of Outsourcing in Ranchi Nagar Nigam

Pre-Project Situation

Project Details

Results

Box 5: Easing Property Tax Collection process using Hand-Held Mobile Point Of Sale devices in Odisha (Work initiated and in progress)

Pre-Project Situation
In Feb’20, MPOS devices were deployed in 9 AMRUT cities. Procurement of devices was supported by partner banks. An integrated payment solution with a tailor-made app pre-configured on MPOS device was deployed. This solution enables a universal payment platform for payment acceptance that allows for payment through debit/credit cards, UPI, Bharat QR and remote or SMS pay, cash and cheque. It’s an integrated solution with data-pull from existing digital property database at server level and allows for real-time data posting and auto-reconciliation. MPOS devices also come in a configuration that supports a printable receipt.

This solution enhanced agent efficiency by removing person-hours required for manual input of collection data (2 hours per person per day). It led to cost optimization as no workforce was required for MIS generation and manual account reconciliation. A two month pilot with MPOS led to 43% of total transactions happening through digital mode. 500 MPOS devices have been deployed in 30 ULBs till date with a plan to scale them to all ULBs. The State was also able to empower Self-Help Groups by training and engaging them in property tax collections.

State Acts require stronger penal provisions for defaulters. These provisions will strengthen the hands of the revenue officials in ensuring compliance. Defaulters’ list should be published and disseminated. International examples have also shown that vigorous emphasis on improving administrative processes leads to an uptake in collections. Philippines represents a case study for this. In the case of Quezon City, the strategy of facilitated collection and strict enforcement, accompanied by improved taxpayer service, substantially improved revenue yield.

Early bird discounts and late payment penalties have also shown positive results in Pune and Hyderabad. They have increased the frequency of the cash-flow which otherwise used to hit its peak in the last quarter of the financial year.
HOW TO IMPLEMENT THE RECOMMENDATIONS?

Recommendation 2
Technological Interventions

Step 1
Creation of single digital property register
The creation of a single digital property register that integrates all Municipal databases and eventually integrates Municipal databases with State stamp duties and registration records is the backbone. The process for this has been described in the Chapter on Enumeration.

Step 2
Integrated digital billing for all taxes, fees and user charges
As each household or commercial property is liable not just for property tax but also a variety of user charges such as water, sewerage, trade licence fees etc., it could prove efficient and more citizen-friendly to undertake integrated billing and collection. ULBs and other agencies will not have to duplicate efforts, citizens will have a single relationship from the Government side to liaise with and may also potentially encourage better compliance.

Step 3
Increase channels and modes of payments
Payment of property tax has to be made as easy and smooth as possible for citizens. Therefore, multiple channels should be made available ranging from cash, cheque, demand draft, internet banking and mobile payment. Similarly, payment should be facilitated in ward offices, other citizen service centres, bank branches and also through MPOS (for door to door collections) and through all feasible modes referred to above.
De-link the functions of assessment and billing and collections

There is a strong case to delink assessment and billing and collections both from the perspective of internal controls (segregation of duties) but also from the perspective of outsourcing and specialisation. A unified cadre of collectors who focus on collections from specific categories of properties (residential, commercial, high value), or different categories of taxpayers (defaulters, and within that hard, soft buckets etc.) or geographies (by ward, by ULB) and who are enabled by MPOS with a map and timetabling can deliver transformative results in collections (adapting Uber, Swiggy models to collection function) and also drive operational efficiencies within ULBs at a broader level. Given below is a diagrammatic representation of the process flow for technological interventions that the States and cities can undertake for improving billing and collection.
07
REPORTING
KEY MESSAGES
In most States where a digital property register exists, there is a system for MIS reporting. However, the MIS has not been integrated with decision making and performance management. An MIS system that is used for periodic reviews of tax official performance and publishing of demand and collection data especially defaulters’ data in the public domain can boost collection efficiency, bring transparency in the assessment and collection process and motivate tax officials.

WHAT ARE THE CURRENT PRACTICES?
While a MIS exists in all ULBs that have an online property register integrated with payment channels, it has generally not been integrated with decision-making for improving coverage and collections. There are very few examples (if any) of States in which MIS systems are used by different levels of Municipal and State authorities for decision-making and/or performance management. Property tax collection and pendency data is not available in public domain in majority of the ULBs.

WHAT ARE THE RECOMMENDATIONS?

Recommendation 1
- Creation of a MIS System
Data-driven decision making and performance management are essential for a robust property tax system. Quarterly reviews of property tax MIS at city/ward/revenue official level should be institutionalised.

Recommendation 2
- Ranking of Revenue Officials
Ranking of revenue officials based on the above MIS would create healthy competition, motivate revenue officials through rewards and recognition and foster adoption of best practices. Recently, the State of Odisha conducted a competition, ‘Municipal Premier League’ (MPL) among tax officials of 9 AMRUT cities in the last quarter of FY 19-20. It measured the performance of the tax officials on parameters like collection efficiency, arrear collections, new and re-assessments and digital payments. MPL was a success in motivating tax officials and improved revenues by 7% in the State in less than two months.

Recommendation 3
- Publishing data in public forum
Publishing ward-wise demand and collection data, especially defaulters’ data, in public domain can help in building transparency and accountability.
ANNEXURE 1: LIST OF REPORTS FOR REFERENCE/ADDITIONAL READING


**ANNEXURE 2: LIST OF STATE ACTS THAT WERE REFERRED FOR THE TOOLKIT**

1. Andhra Pradesh Municipalities Act, 1965 (as modified up to 2014)
2. Andhra Pradesh Municipal Corporation Act, 1994 (as modified up to 2014)
3. Arunachal Pradesh Municipal Act, 2007
5. Guwahati Municipal Corporation Act, 1969 (as modified up to 2012)
8. The Punjab Municipal Corporation (Extension to Chandigarh) Act, 1994
11. Goa Municipalities Act, 1968 (as modified up to 2010)
12. The Goa, City of Panaji Corporation Act, 2002 (as modified up to 2006)
13. Gujarat Municipalities Act, 1963 (as modified up to 2006)
15. Haryana Municipal Corporation Act, 1994 (as modified up to 2013)
17. Himachal Pradesh Municipal Act, 1994 (as modified up to 2007)
22. Karnataka Municipalities Act, 1961 (as modified up to 2005)
23. Karnataka Municipal Corporation Act, 1976 (as modified up to 2001)
27. Maharashtra Municipal Corporation Act, 1949 (as modified up to 2014, and including amendment of 2015)
28. Maharashtra Municipal Councils, Nagar Panchayats & Industrial Townships Act, 1965 (as modified up to 2013)
29. Manipur Municipalities Act, 1994 (as modified up to 2012)
30. Meghalaya Municipal Act, 1973
31. Mizoram Municipalities Act, 2007 (as modified up to 2014)
32. Nagaland Municipal Act, 2001
34. Odisha Municipal Act, 1950 (including amendment of 2015)
35. Punjab Municipal Act, 1911 (as modified up to 2003)
36. The Punjab Municipal Corporation Act, 1976 (as modified up to 2017)
37. Rajasthan Municipalities Act, 1911 (as modified up to 2003)
38. Sikkim Municipalities Act, 2007
39. Tamil Nadu - Chennai City Municipal Corporation Act, 1919 (Coimbatore is same - extends to other 9 corporations) (including amendment of 2011 and 2012)
40. Tamil Nadu District Municipalities Act, 1920 (including amendment of 2011 and 2012)
41. Telangana Municipal Act, 2019
42. Tripura Municipal Act, 1994 (as modified up to 2016)
43. Uttar Pradesh Municipalities Act, 1917
44. Uttar Pradesh Municipal Corporation Act, 1960 (as modified up to 2008)
45. Uttarakhand Municipalities Act, 1916
46. Uttarakhand Municipal Corporation Act, 1960 (as modified up to 2008)
47. West Bengal Municipal Corporation Act, 2006
48. West Bengal Municipal Act, 1993 (as modified up to 2015)

ANNEXURE 3: LIST OF CITIES STUDIED FOR THE TOOLKIT

<table>
<thead>
<tr>
<th>Popln Cat</th>
<th># cities</th>
<th>List of cities</th>
</tr>
</thead>
</table>
| 4M +      | 2        | Bengaluru (Karnataka)  
           |           | Hyderabad (Telangana)  |
| 1M – 4M   | 5        | Raipur (Chhattisgarh)  
           |           | Ranchi (Jharkhand)  
           |           | Pune (Maharashtra)  
           |           | Ludhiana & Amritsar (Punjab)  |
| 500K – 1M | 4        | Bhubaneswar & Cuttack (Odisha)  
           |           | Jalandhar & Sahibzada Ajit Singh Nagar i.e. Mohali (Punjab)  |
| 100K – 500K| 8       | Badlapur & Khopoli (Maharashtra)  
           |           | Berhampur, Sambalpur, Puri & Bhadrak (Odisha)  
           |           | Patiala & Khanna (Punjab)  |
| <100K     | 1        | Paradip (Odisha)  |